

LIFE Integrated projects 2015

Stage 2 – FULL PROPOSAL

Technical application forms

Part A – administrative information

* * * * LIFE 2015	FOR ADMINISTRATION USE ONLY
* 20	LIFE15 IPE/

PROJECT

Project title (max. 120 characters):

Po Regions Engaged to Policies of AIR

Project acronym (max. 25 characters):

LIFE-IP PREPAIR

The project will be implemented in the following Country(s) and/or Administrative region(s):

COUNTRIES: ITALY, SLOVENIA.

ADMINISTRATIVE REGIONS: Emilia-Romagna, Piedmont, Lombardy, Veneto, Autonomous Province of Trento, Autonomous Region of Friuli Venezia Giulia, Autonomous Region of Valle d'Aosta, Slovenia

Expected start date: 01/02/2017 Expected end date: 31/01/2024

PROJECT POLICY AREA	
You can only tick one of the following options:	
LIFE Integrated Project Nature : Integrated project contributing to the achievement of the objectives of the EU Birds and Habitats Directives (Directives 2009/147/EC and 92/43/EEC) and to achieving target 1 of the EU Biodiversity Strategy by implementing the Prioritized Action Frameworks (Article 8 of 92/43/EEC)	
LIFE Integrated Project Environment : Integrated project contributing to the achievement of the objectives of the:	
 Waste Directive by implementing Waste Management Plans (WMP) (Article 28 of Waste Framework Directive 2008/98) and/or Waste Prevention Programmes (WPP) (Article 29 of Waste Framework Directive) 	
 Water Framework Directive by implementing implement a/parts of a River Basin Management Plan (RMBP) (Annex VII of Directive No. 2000/60/EC) 	
- Air Directive by implementing Air Quality Plans (Directive 2008/50/EC)	

The project will implement the following plan/strategy (full copy is to be provided if modified since Concept Note submission):

Accordo di programma per l'adozione coordinata e congiunta di misure per il miglioramento della qualità dell'aria nel bacino Padano

http://www.mit.gov.it/mit/site.php?p=cm&o=vd&id=3050

Nuovo Accordo di Programma per l'adozione coordinata e congiunta di misure per il miglioramento della qualità dell'aria nel bacino padano

http://www.minambiente.it/sites/default/files/archivio/allegati/inquinamento_atmosferico/accordo_bacino padano 09 06 2017.pdf

Region Emilia-Romagna:

- PAIR2020 (PIANO ARIA INTEGRATO REGIONALE)

http://ambiente.regione.emilia-romagna.it/aria-rumore-elettrosmog/temi/pair2020

- PSR (PROGRAMMA DI SVILUPPO RURALE)

http://agricoltura.regione.emilia-romagna.it/psr/temi/programma-di-sviluppo-rurale-2014-2020

- POR FESR (Programma operativo regionale del Fondo europeo di sviluppo regionale)

http://fesr.regione.emilia-romagna.it/2014-2020/por-fesr

Region Veneto:

- Piano Regionale di Tutela e Risanamento dell'Atmosfera

http://www.consiglioveneto.it/crvportal/pdf/pratiche/9/pda/PDA 0092/1000 5Ftesto 20presentato.pdf

- PSR (PROGRAMMA DI SVILUPPO RURALE)

http://www.regione.veneto.it/web/agricoltura-e-foreste/sviluppo-rurale-2020

- POR (Piano Operativo Regionale del Fondo Europeo di Sviluppo Regionale)

http://www.regione.veneto.it/web/programmi-comunitari/documenti-di-programmazione1

Region Lombardia:

- Piano Regionale degli Interventi per la qualità dell'Aria (PRIA)

http://www.reti.regione.lombardia.it/cs/Satellite?c=Redazionale_P&childpagename=DG_Reti %2FDetail&cid=1213538141708&packedargs=NoSlotForSitePlan%3Dtrue%26menu-to-render %3D1213277017319&pagename=DG_RSSWrapper

- POR FESR (Programma operativo regionale del Fondo europeo di sviluppo regionale)

http://www.ue.regione.lombardia.it/cs/Satellite?

c=Redazionale P&childpagename=ProgrammazioneComunitaria

%2FDetail&cid=1213716412728&packedargs=NoSlotForSitePlan%3Dtrue%26menu-to-render %3D1213294569099&pagename=PROCOMWrapper

- PSR (PROGRAMMA DI SVILUPPO RURALE)

http://www.agricoltura.regione.lombardia.it/cs/Satellite?

c=Redazionale_P&childpagename=DG_Agricoltura%2FDetail&cid=1213666661822&packedargs =NoSlotForSitePlan%3Dtrue%26menu-to-render%3D1213277491324&pagename=DG_AGRWrapper

Region Piemonte:

- Piano Regionale per la Qualità dell'Aria - P.R.Q.A

 $\underline{\text{https://www.regione.piemonte.it/web/temi/ambiente-territorio/ambiente/aria/aria-piano-regionale-per-qualita-dellaria-prqa}$

- PSR (PROGRAMMA DI SVILUPPO RURALE)

https://www.regione.piemonte.it/web/temi/agricoltura/programma-sviluppo-rurale-2014-2020

- POR FESR (Programma operativo regionale del Fondo europeo di sviluppo regionale) https://www.regione.piemonte.it/web/temi/fondi-progetti-europei/fondo-europeo-sviluppo-regionale-fesr/programma-operativo-por-fesr-2014-2020

Autonomous Region Friuli Venezia Giulia:

- Piano di miglioramento della qualità dell'aria

http://www.regione.fvg.it/rafvg/cms/RAFVG/ambiente-territorio/pianificazione-gestione-territorio/

- Programma Operativo del Fondo europeo di sviluppo regionale 2014-2020 "Investimenti a favore della crescita e dell'occupazione"

http://www.regione.fvg.it/rafvg/cms/RAFVG/fondi-europei-fvg-internazionale/por-fesr/FOGLIA128/

- Programma di Sviluppo Rurale

http://www.regione.fvg.it/rafvg/cms/RAFVG/economia-imprese/agricoltura-foreste/psr-programma-sviluppo-rurale/

Autonomous Province of Trento:

- Piano provinciale di tutela della qualità dell'aria

http://www.appa.provincia.tn.it/pianificazione/Piano_tutela_aria/-Pianotutela_aria_2018/

- POR FESR (Programma operativo regionale del Fondo europeo di sviluppo regionale) http://www.europa.provincia.tn.it/europa_2014_2020/fesr/

Autonomous Region Valle d'Aosta: Piano regionale per il risanamento, miglioramento e mantenimento della qualità dell'aria

http://www.regione.vda.it/territorio/ambiente/aria/piano aria i/default i.asp

Republic of Slovenia:

- All Governmental Ordinances on Air Quality Plans (Uradni list Republike Slovenije – Ur.I. RS) http://www.mop.gov.si/si/zakonodaja in dokumenti/veljavni predpisi/okolje/zakon o varstvu okolja/ka kovost zraka/

- Slovenian Climate Change Fund

http://www.mop.gov.si/si/zakonodaja in dokumenti/veljavni predpisi/okolje/zakon o varstvu okolja/ka kovost zraka/

- Operational Programme for the Implementation of the European Cohesion Policy in the 2014-2020

www.eu-skladi.si/sl/ekp/kljucni-dokumenti (http://www.eu-skladi.si/sl/dokumenti/kljucni-dokumenti/op ang final web.pdf)

Municipality of Bologna - Municipality of Turin - Municipality of Milan:

- Programma Operativo Nazionale "Città Metropolitane 2014 - 2020

http://www.ponmetro.it/home/ecosistema/viaggio-nei-cantieri-pon-metro/pon-metro-milano/

- PUMS: https://pumsbologna.it/

- PGTU: http://www.comune.bologna.it/trasporti/servizi/2:4036/46182/

BENEFICIARIES

Name of the coordinating beneficiary (1): Emilia-Romagna Region, General Directorate for Territorial and Environmental Care

Name of the associated beneficiary (2): Veneto Region - Environment Department

Name of the associated beneficiary (3): Lombardy Region

Name of the associated beneficiary (4): Piedmont Region, Environment, Energy and Territory Department

Name of the associated beneficiary (5): Friuli Venezia Giulia Autonomous Region Environmental Protection, Energy and Sustainable Development

Name of the associated beneficiary (6): Autonomous Province of Trento

Name of the associated beneficiary (7): **Regional Agency for Environmental Protection and Energy in the Emilia-Romagna Region**

Name of the associated beneficiary (8): Regional Agency for Environment of Veneto

Name of the associated beneficiary (9): Regional Agency for Environment of Piedmont

Name of the associated beneficiary (10): Lombardy Regional Agency for Environmental Protection

Name of the associated beneficiary (11): Environmental Protection Agency of Valle d'Aosta

Name of the associated beneficiary (12): Environmental Protection Agency of Friuli Venezia Giulia

Name of the associated beneficiary (13): Ministry of Environment and Spatial Planning, Slovenian Environment Agency

Name of the associated beneficiary (14): Municipality of Bologna

Name of the associated beneficiary (15): Municipality of Milan

Name of the associated beneficiary (16): City of Torino, The Management Infrastructure and Mobility

Name of the associated beneficiary (17): ART-ER S. Cons. P.A.

Name of the associated beneficiary (18): Lombardy Foundation for the environment

PROJECT BUDGET AND REQUESTED EC FUNDING

Total integrated project budget: 16.688.439 €

Total LIFE eligible project budget: 16.625.439 €

EC LIFE financial contribution requested: 9.974.624 € (= 60 % of total eligible budget)

		Coordinat	ing Bene	ficiary	Pro	ofile Info	rmati	on		
Short Name	RER						Ben	eficiary n°		1
Legal information on t										
Legal Name	EMILIA-ROMAGNA REGION GENERAL DIRECTORATE FOR TERRITORIAL AND ENVIRONMENTAL CARE			Legal Status						
VAT No	8006	80062590379			Public body			Х		
Legal Registration No	NOT	T APPLICABLE			Private commercial					
Registration Date	NOT	APPLICABL	.E		Private non- commercial					
PIC No.	9994	999482375			V	VAT reimbursement Ye			Yes:X	No:
Legal address of the										
Street Name and No	VIALE ALDO MORO, 52							РО Во	x NA	
Post Code	40127	40127 Town/City			BOLOGNA					
Country Code	IT	Country Na	ame	ITALY						
Coordinating Beneficia	ary conta	ct person in	formation							
Function	TECHN	TECHNICAL EXPERT OFFICER								
Surname	RAFFAE	RAFFAELLI				First Nai	me	KATIA		
E-mail address	Ambpia	Ambpiani@Regione.Emilia-Romagna.it								
Department / Service	GENERAL DIRECTORATE FOR TERRITORIAL AND ENVIRONMENTAL CARE									
Street Name and No	VIALE A	VIALE ALDO MORO 30						РО Во	х	
Post Code	40127				BOLOGNA					
Country	ITALY									
Telephone No	0039 0515276980 Fax No				lo 0039 0515276874					
Coordinating Beneficia	ary detail	S								
Website	http://ambiente.regione.emilia-romagna.it/									
Brief description of the	e Coordir	nating Benefi	iciary's ac	tivities a	and	experie	nce in	the area c	of the	

Brief description of the Coordinating Beneficiary's activities and experience in the area of the proposal

Emilia-Romagna Region is a public body with exclusive competences in many fields of activity, as legally established by the Italian Constitution (art. 117). It has about 3.000 employees and a total budget of, approximately, 12 billions of Euro. It is organized in directorates working on the sectors of regional competences. The Directorate General for Territory and Environment Protection has more than 800 employees; it is equipped with PCs, printers, phones, internet as well as library with environmental literature. It has competences, among the others, in atmospheric, noise and electromagnetic rehabilitation. The Region has a long experience in European Projects. Among the others, the DG is now Coordinating Beneficiary in 2 LIFE projects (RII, EREMITA) and associated beneficiary in 4 LIFE projects (PRIMES, AGREE, WI-GIM, RINASCE), one Alpine Space programme (GEOMOL), one MED programme (COAST-GAP), one SOUTH EAST EUROPE (Snap-SEE). Other projects to be mentioned are: Life+ OPERA, MHYBUS, I.MO.S.M.I.D., Climate ChangER, Biomether, Interreg IVC projects LoCaRe and EPTA, IPA Adriatic ALTERENERGY. Since 2002, the Region signed Air Quality Program Agreements to coordinate public bodies involved in the management of air quality in Emilia-Romagna. The last one has been signed in 2012 and contains several measures which aim at reducing pollutant emissions, as foreseen by the EU Directive 2008/50. According to the criteria defined by the Region, since 2006 all the 9 Provinces adopted Air Quality Plans. In 2014, the first Regional Air Quality Plan has been adopted and it contains several measures in all the activities impacting on air quality. In 2005 and 2007 the Regions of the Po basin (Emilia-Romagna, Piedmont, Lombardy, Veneto, Friuli Venezia Giulia, Trento and Bolzano, Valle d'Aosta) signed two Agreements on air quality with common actions to be implemented. In December 2013 the Po Valley Agreement for Air Quality was signed and involves the relevant national Ministries. Emilia-Romagna is a member of Air Quality Initiative of the Regions founded in 2011 and representing 12 Regions from 7 EU Member States, which includes some of the most populated areas of the EU that have been at the forefront of air quality management over recent years.

YOU MAY NOT DUPLICATE THIS PAGE



COORDINATING BENEFICIARY DECLARATION

The undersigned hereby certifies that:

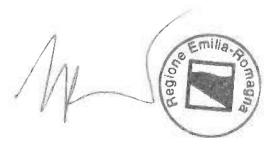
- The specific actions listed in this proposal do not and will not receive aid from the European Structural and Investment Funds or other European Union funding programmes. In the event that any such funding will be made available after the submission of the proposal or during the implementation of the project, my organisation will immediately inform the Contracting Authority.
- 2. My organisation EMILIA-ROMAGNA REGION, GENERAL DIRECTORATE FOR TERRITORIAL AND ENVIRONMENTAL CARE has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 3. My organisation (which is legally registered in the European Union) will contribute 797.500,00 € to the project. My organisation will participate in the implementation of the following actions: A2, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, D1, E1, E2, E3, E5, E6, F1, F2, F3. The estimated total cost of my organisation's part in the implementation of the project is 1.981.000,00 €.
- 4. My organisation will conclude with the associated beneficiaries and co-financiers any agreements necessary for the completion of the work, provided these do not infringe on their obligations, as stated in the grant agreement with the Contracting Authority. Such agreements will be based on the model proposed by the Contracting Authority. They will describe clearly the tasks to be performed by each associated beneficiary and define the financial arrangements.
- 5. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative Guidelines provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At	Bologna	on	9	.11	201	6	
		~					



Signature of the Coordinating Beneficiary:

Name(s) and status of signatory Paolo Ferrecchi - General Director for Territorial and Environmental Care

7



PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation EMILIA-ROMAGNA REGION, GENERAL DIRECTORATE FOR TERRITORIAL AND ENVIRONMENTAL CARE is either

A. State or regional or local authority,

OF

- B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; it fulfils all four following criteria and will prove it by providing evidence upon first request::
 - 1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
 - 2. it has a legal personality and
 - 3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
 - 4. in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body.

It should be therefore considered a "public body" for the purpose of this LIFE 2015 call for integrated project proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Bologna on 9, 11, 2016

Signature of the Coordinating Beneficiary:

Name(s) and status of signatory: Paolo Ferrecchi - General Director for Territorial and Environmental Care

I, the undersigned, Nicola Dell'Acqua,

representing,

Veneto Region - Protection and Development of the Territory Area (Veneto Region), Public Body, Cannaregio, 99, 30121 - Venezia, ITALY, VAT number 02392630279,

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia Romagna Region, General Directorate for Terrirory and Environment Protection (Emilia Romagna Region) – Public Body - official registration Not applicable - Viale Aldo Moro, 52 - BOLOGNA, IT – 40127 – VAT number 80062590379,

represented by Paolo Ferrecchi, General Director for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

 The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

2. The associated beneficiary will contribute 464.812,00 € to the project.

My organisation will participate in the implementation of the following actions: A2, C4, C5, C6, C7, C8, C10, C11, C12, C13, C14, C15, C16, C17, D1, E1, E3, E4, E6, F1, F3.

The estimated total cost of my organisation's part in the implementation of the project is 1.162.031,00 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Venezia on November 23rd, 2020

Signature of the Associated Beneficiary

Name(s) and status/function of signatory:

Nicola Dell'Acqua, Head of Protection and Development of the Territory Area

I, the undersigned,

Mario Nova, in the role of General Director of the General Directorate "Environment, Energy and Sustainable Development".

representing.

Lombardy Region, Public body, piazza Città di Lombardia, n. 1, 20124 Milan, Italy, VAT number n. 12874720159, fiscal code n. 80050050154,

hereinafter referred to as "the associated beneficiary".

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE.IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number N. 80062590379

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- The associated beneficiary will contribute 197.079 € to the project.

My organisation will participate in the implementation of the following actions: A2, C4, C5, C6, C7, C8, C9, C13, C16, D1, E1, E2, E3, E6, E6, F1, F3.

The estimated total cost of my organisation's part in the implementation of the project is 492.598 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Milan, on 9.11.2016

Signature of the Associated Beneficiary:

IL DIRETTORE GENERALE

Ambiente, Energia e Sviluppo Sostenibile
(ling, Marlo Noya)

Name(s) and status/function of signatory: Mario Nova General Director of the General Directorate "Environment, Energy and Sustainable Development".

I, the undersigned,

STEFANIA CROTTA

representing,

Piemonte Region, Environment, Energy and Territory Department Via Principe Amedeo 17, 10123 Torino - VAT number n. 0284360012

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

EMILIA-ROMAGNA REGION, General Directorate for Territory and Environment Protection (Emilia-Romagna Region), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number N. 80062590379

represented by PAOLO FERRECCHI, General Director for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever occuments or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

 The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

2. The associated beneficiary will contribute 698.789,00 € to the project.

My organisation will participate in the implementation of the following actions:

- A: Preparatory actions, elaboration of management plans and/or action plans : A2.
- C: Concrete (conservation/ implementation) actions: C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17.
- D: Monitoring of the impact of the project actions D1.
- E: Public awareness and dissemination of results E1, E2, E3, E4, E5, E6.
- F: Project management and monitoring of project progress F1, F3.

The estimated total cost of my organisation's part in the implementation of the project is 1.746.974,00 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Torino (ITALY) on October 22, 2020

Signature of the Associated Beneficiary:

Name and status/function of signatory:

Stefania Crotta

General Director of Environment, Energy and Territory Department (Piemonte Region)

I, the undersigned, MASSIMO CANALI,

representing,

AUTONOMOUS REGION FRIULI VENEZIA GIULIA, CENTRAL DIRECTORATE FOR ENVIRONMENTAL PROTECTION, ENERGY AND SUSTAINABLE DEVELOPMENT - RAFVG

PUBLIC BODY

official registration Not applicable

Via Carducci, 6 TRIESTE, IT - 34133

80014930327

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement [Title] with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

EMILIA ROMAGNA REGION, DIRECTORATE GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION (EMILIA ROMAGNA REGION)

PUBLIC BODY

official registration Not applicable

Vial Aldo Moro, 52 BOLOGNA, IT – 40127

80062590379

represented by PAOLO FERRECCHI, DIRECTOR GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 344.110 € to the project.
 My organisation will participate in the implementation of the following actions: A2, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, D1, E1, E3, E4, E5, E6, F1, F3
 The estimated total cost of my organisation's part in the implementation of the project is 860.274 €.
- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At TRIESTE on 23.10.2020

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

II. DIRETTORE CENTRALE ing. Massimo Canali

I, the undersigned,

MAURIZIO FUGATTI,

representing, Autonomous Province of Trento (Province of Trento), Public Body, Piazza Dante 15, 38122 – Trento, ITALY, VAT number 00337460224

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement Po Region Engaged to Policies of AIR (LIFE IP PREPAIR) with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region), Public Body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number N. 80062590379

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 472.747,00 € to the project.
 My organisation will participate in the implementation of the following actions: A1, A2, A3, C4, C5, C6, C7, C8, C13, C15, C16, C17, D1, D2, D4, E1, E2, E3, E4, E5, E6, F1, F3
 The estimated total cost of my organisation's part in the implementation of the project is 1.170.618 €.
- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

	2	3	OT	in the same	2020	
At Trento on	4000					
Signature of th	e As	ะรด	ciate	d F	Reneficiar	v.

Name(s) and status/function of signatory:

I, the undersigned, Carlo Cacciamani

representing,

Agenzia regionale per la prevenzione, l'ambiente e l'energia dell' Emilia – Romagna *Arpae*Pubblic body
Via Po, 5 – 40139 Bologna ITALY
VAT number IT 04290860370

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia – Romagna Region – Directorate General for Territory and Environment Protection *RER*Pubblic body
Viale Aldo Moro, 52 – 40127 Bologna ITALY *VAT number* IT 80062590379

represented by Paolo Ferrecchi - Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated

beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- 1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 613.797 € to the project.

My organisation will participate in the implementation of the following actions:

A1, A2, A3, A4, C1, C3, C15, C16, C17, D2, D5, D6, E1 e E6

The estimated total cost of my organisation's part in the implementation of the project is 1.534.492 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Bologna on 18.11.2020

Signature of Associated Beneficiary

Dr Carlo Cacciamani

Director of HydroMeteoClimate Service of Arpae

I, the undersigned, Riccardo Guolo, Responsible of the Planning and Control, Education for Sustainability, Transparency and Anti-corruption Service, following the Delegation act of the Legal representative dott. Luca Marchesi, prot. number 058424 of 06/07/2020, representing Regional Agency for Environment of Veneto (ARPA Veneto), Public Body, Via Ospedale Civile, 24, 35121 Padova, Italy, VAT number 03382700288,

hereinafter referred to as "the associated beneficiary", for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement") hereby:

1. Mandate Emilia Romagna Region, General Directorate for Terrirory and Environment Protection (Emilia Romagna Region) – Public Body - official registration Not applicable - Viale Aldo Moro, 52 - BOLOGNA, IT – 40127 – VAT number 80062590379, represented by Paolo Ferrecchi, General Director for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- 1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 278.899,00 € to the project.

My organisation will participate in the implementation of the following actions: A1, A3, A4, C1, C2, C3, D2, D3, D5, D6, E1, E2, E5, E6, F1,

The estimated total cost of my organisation's part in the implementation of the project is 668.072,00 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

GUOLO RICCARDO 20:11:2020 13:15:17 UTC

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

Riccardo Guolo

Responsible of the Planning and Control, Education for Sustainability, Transparency and Anticorruption Service REGIONE EMILIA-ROMAGNA: GIUNTA

PG.2018. 0640898 del 22/10/2018 Mitt.: ARPA - PIEMONTE

LIFE Integrated Projects 2015 - A4/9



MANDATE DENERICIARY DECLARATION and MANDATE

I, the undersigned, Ing. Angelo Robotto,

representing Regional Agency for Environment of Piedmont (ARPA Piemonte), Public body, Via Pio VII 9, 10135 Turin – ITALY, VAT number 07176380017,

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR) with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number No 80062590379

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

 The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

- The associated beneficiary will contribute 491.102 € to the project.
- 3. My organisation will participate in the implementation of the following actions: A1, A2, A3, A4, C1, C3, C5, D2, D4, D5, D6, E1, E5, E6, F1.

The estimated total cost of my organisation's part in the implementation of the project is 1.197.753 €.

- 4. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Turin on 1:7 011, 2018

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

IL DIRETTORE SÉNERALE

Ing. Angelo Robotto

I, the undersigned, Michele Camisasca, representing Agenzia Regionale per la Protezione dell'Ambiente della Lombardia (ARPA LOMBARDIA), public body, Via Rosellini 17, VAT Number 13015060158

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number N. 80062590379

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 544.613 € to the project.

My organisation will participate in the implementation of the following actions: A1, A2, A3, A4, C1, C2, C3, D2, D5, D6, E1, E3, E6, F1

The estimated total cost of my organisation's part in the implementation of the project is 1.361.533 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Milano on 23.11.16 Signature of the Associated Beneficiary:	ARPA Se
Name(s) and status/function of signatory:	LOMBARDIA S

I, the undersigned,

Giovanni Agnesod,

representing,

Agenzia Regionale per la Protezione dell'Ambiente della Regione Valle d'Aosta ARPAVdA Public body

Loc. Grande Charrière 44, Saint Christophe, 11020, Italy VAT number: IT 00634260079,

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement Po Regions Engaged to Policies of AIR with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region),
Public body
Viale Aldo Moro 52, 40127 Bologna, Italy
VAT number 80062590379.

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated

beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- The associated beneficiary will contribute 96'338,00 € to the project.

My organisation will participate in the implementation of the following actions: A1, A3, A4, C1, C3, D2, D5, D6, E1, E6, F1.

The estimated total cost of my organisation's part in the implementation of the project is 240'845,00 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work
 Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Saint Christophe on 23/11/2016

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory: Giovanni Agnesod, General Director of ARPA Valle d'Aosta

28

RETTORE GENERALE t. Giovanni AGNESOD).

I, the undersigned,

Vatta Stellio,

representing,

Agenzia Regionale per la Protezione dell'Ambiente del Friuli Venezia Giulia (ARPA FVG) Associated beneficiary - Pubblic Body LIFE15 IPE/IT/000013
Via Cairoli, 14 – 33057 – PALMANOVA (UDINE) - ITALIA Vat:02096520305,

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged of policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

EMILIA ROMAGNA REGION, DIRECTORATE GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION (EMILIA ROMAGNA REGION)
PUBLIC BODY - official registration Not applicable
Vial Aldo Moro, 52
BOLOGNA, IT – 40127 - 80062590379
represented by PAOLO FERRECCHI, DIRECTOR GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated

beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- 1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute **96.338,00.-** € to the project.

My organisation will participate in the implementation of the following actions:

A1, A3, A4, C1, C3, D2, D5, D6, E1, E6, F1.

The estimated total cost of my organisation's part in the implementation of the project is **240.845,00.**€.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At: Palmanova

Signature of the Associated Beneficiary:

Firmato digitalmente da:Stellio Vatta Motivo:Direttore Generale ARPA FVG Luogo:Palmanova Data:21/12/2020 15:48:41

I, the undersigned,

Iztok Slatinšek,

representing,

Slovenian Environment Agency (ARSO)

Body of the Ministry of the Environment and Spatial Planning (Public body)

Registration No.:

2482878000

Address:

Vojkova 1b, SI-1000 Ljubljana, SLOVENIA

VAT No.:

SI18945082.

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region – General Directorate for Territorial and Environmental Care (RER)
Public body

Address:

Viale Aldo Moro 52, 40127 Bologna, ITALY

VAT No.:

80062590379.

represented by Paolo Ferrecchi, General Director of the General Directorate for Territorial and Environmental Care

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated

beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- The associated beneficiary will contribute 192.632,00 € to the project.

My organisation will participate in the implementation of the following actions:

A1, A3, A4, C1, C3, C8, D2, D4, D5, D6, E1, E6, F1

The estimated total cost of my organisation's part in the implementation of the project is 479.906.00€.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

REPUBLIKAS

At Ljubljana on 22 October 2020

Signature of the Associated Beneficiary:

Name and status/function of signatory:

Iztok Slatinšek, Director General

I, the undersigned, Roberto Diolaiti representing,

Comune di Bologna [COBO] Public Body Piazza Maggiore, 6 – 40124 Bologna - IT-Italy 01232710374

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

EMILIA ROMAGNA REGION, DIRECTORATE GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION (EMILIA ROMAGNA REGION)
PUBLIC BODY
official registration Not applicable
Via Aldo Moro, 52
BOLOGNA, IT – 40127
80062590379

represented by PAOLO FERRECCHI, DIRECTOR GENERAL FOR TERRITORY AND ENVIRONMENT PROTECTION

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 325.662,00€ to the project.

My organisation will participate in the implementation of the following actions: C9, C11, C17, E1, E4, F1.

The estimated total cost of my organisation's part in the implementation of the project is 814.154,00€.

3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Bologna on 23 / 11 / 2020

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

Roberto Diolaiti Environmental Department Director

I, the undersigned,

Sabina Banfi Area Director "School and educational services"

representing,

Comune di Milano (MIL) Public Body Piazza Scala 2 – 20121 Milano VAT number 01199250158

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement [Title] with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region Directorate General for Territory and Environment Protection (Emilia-Romagna Region) Public Body

Viale Aldo Moro 52, 40127 Bologna ITALY

VAT number: 80062590379

represented by Paolo Ferrecchi, General Director for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- 1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 195.584,00 € to the project.

My organisation will participate in the implementation of the following actions: C.9-E.1-E.4-E.6-F.1

The estimated total cost of my organisation's part in the implementation of the project is $488.961.00 \in$.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- 4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Milano,

Signature of the Associated Beneficiary:

Sabina Banfi Area Director "School and educational services"

(firmato digitalmente)

Firmato digitalmente da: SABINA BANFI Ruolo: DIRIGENTE Organizzazione: COMUNE DI MILANO Data: 13/11/2020 13:25:44

Pratica trattata da Sabina Uberti-Bona

ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

Mr. Roberto Bertasio

representing,

City of TORINO
Divisione Infrastrutture e Mobilità
(public Body)
Piazza San Giovanni, 5
10122 Torino

VAT: 00514490010

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR)** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

EMILIA-ROMAGNA REGION, GENERAL DIRECTORATE FOR TERRITORIAL AND ENVIRONMENTAL CARE (EMILIA-ROMAGNA REGION), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number No 80062590379

represented by Paolo Ferrecchi, General Director for Territorial and Environmental Care

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

- 2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.
- I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.
- I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 223.022,00 € to the project.

My organisation will participate in the implementation of the following actions: C9, C10, C11, E1, E4, E6, F1.

The estimated total cost of my organisation's part in the implementation of the project is 546.306,00 €.

3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Torino on 14th November 2016

Signature of the Associated Beneficiary

Name(s) and status/function of signatory:

In Roberte BERTA

Mr. Roberto Bertasio, General Director of Infrastructure and Mobility Department

ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

Giovanni Anceschi

representing,

ART-ER S.Cons.p.a. - ART- ER - Private non commercial - BO-546154 - Via Piero Gobetti, 101 -Bologna - 40129 - VAT 03786281208

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions Engaged to Policies of AIR (LIFE-IP PREPAIR**) with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia – Romagna Region, Directorate General for Territory and Environment Protection (Emilia – Romagna Region), Public Body, viale Aldo Moro 52, 40127 Bologna, Italy, VAT 80062590379.

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection.

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

- 2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.
- I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

 The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

2. The associated beneficiary will contribute 403.013,00 € to the project.

My organisation will participate in the implementation of the following actions: A2, C1, C17, D1, E1, E2, E6, F1.

The estimated total cost of my organisation's part in the implementation of the project 1.007.532,00 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Bologna on 3 0 AGO. 2019

Signature of the Associated Beneficiary:

ART-ER S.cons.p.a.

sede legale

_ Via P. Gobetti, 101

40129 Bologna - Italy CF e P.IVA: 03786281208

Name(s) and status/function of signatory:

Giovanni Anceschi - President

ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned, Matteo Fumagalli, representing,

Fondazione Lombardia per l'Ambiente - FLA Private non-commercial - Fondazione privata senza scopo di lucro

Official registration No: MB - 1892921

Address: Largo 10 Luglio 1976, 1 - 20822 Seveso (MB)

VAT number: 08365380156 (fiscal code),

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **Po Regions**Engaged to Policies of AIR (LIFE-IP PREPAIR) with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Emilia-Romagna Region, Directorate General for Territory and Environment Protection (Emilia-Romagna Region), Public body, Viale Aldo Moro 52, 40127 Bologna ITALY, VAT number N. 80062590379

represented by Paolo Ferrecchi, Director General for Territory and Environment Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

- The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
- 2. The associated beneficiary will contribute 277.778 € to the project.

My organisation will participate in the implementation of the following actions: C6, C7, C8, C9, C13, E1, E2, E3, E5, E6, F1

The estimated total cost of my organisation's part in the implementation of the project is 694.445 €.

- 3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
- I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2014-2017 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At	Seveso	November	r 7 th 2016
		1-	per l'Amblenie
Sign	ature of the Associate	Beneficiary:	<u>.</u>
Nam	e(s) and status/function	n of signatory: Matteo Fumagalli, Pres	ident

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code 30121 Town/City Venezia	Legal Information on the Associated Beneficiary Veneto Region - Environment Department VAT No 02392630279 Public body Private commercial Registration No Private non-commercial PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Post Code 30121 Town/City Venezia Country Code Provide Town/City Venezia Country Code Post Code IT Country Name Italy	X Yes: X	No
Veneto Region - Environment Department VAT No 02392630279 Public body X Legal Registration No Private commercial Registration Date Private non-commercial PIC No. 999465691 VAT reimbursement Yes: No X Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code 1T Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Legal Name Veneto Region - Environment Department Legal Status VAT No 02392630279 Public body Legal Registration No Private commercial Registration Date Private non-commercial PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy	Yes:	No
Department VAT No Department O2392630279 Public body X Legal Registration No Private commercial Registration Date Private non-commercial PIC No. 999465691 VAT reimbursement Yes: No X Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Department VAT No Department 02392630279 Public body Private commercial Private non-commercial PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	Yes:	No
Legal Registration No Private commercial Private commercial Private non-commercial Priva	VAT No Legal Registration No Registration Date PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Post Code Town/City Country Code Country Code Private commercial Private non-commercial VAT reimbursement PO Box PO Box Italy Brief description of the Associated Beneficiary's activities and experience in the area	Yes:	No
Legal Registration No Private commercial Private commercial Private non-commercial Priva	Legal Registration No - Private commercial Registration Date - Private non-commercial PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	Yes:	No
Registration Date — 999465691 VAT reimbursement Yes: X Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Registration Date - Private non-commercial PIC No. 999465691 VAT reimbursement Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	X	No
PIC No. 999465691 VAT reimbursement Yes: X Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	PIC No. 999465691 Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	X	No
Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box NA Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Legal address of the Associated Beneficiary Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	X	No
Street Name and No Cannaregio,99 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Street Name and No Cannaregio,99 PO Box Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	-	
Country Code IT Country Name Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Post Code 30121 Town/City Venezia Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area	NA	
Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Country Code IT Country Name Italy Brief description of the Associated Beneficiary's activities and experience in the area		
Brief description of the Associated Beneficiary's activities and experience in the area of the proposal Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves	Brief description of the Associated Beneficiary's activities and experience in the area		
Coordination of the Regional Plan for Air Quality and management of environmental issues related to air pollution, noise, light and electromagnetic pollution. Coordination of actions related to the Air Quality Plan with the regional structures with specific competence implementation in related sectors (agriculture, energy, transport, etc.). Management of subsidies for actions directly related, such as: sustainable mobility, bike sharing, car conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating systems, subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating stoves			
	Management of subsidies for actions directly related, such as: sustainable mobility, bike sha conversion from petrol to gas, scrapping impacting vehicles, energy efficiency of heating sys subsidies to the Municipalities for the days of traffic restrictions, scrapping domestic heating	stems,	

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	A	ssociated Ben	eficiary profil	e information			1_
Short name LOMBA	RDY RI	EGION			Beneficiary n		3
	Lega	l information o	on the Associ	ated Beneficia	ry		
Legal Name	LON	BARDY REGIO	ON	Legal Status	8		
VAT No	8008	37670016			Public body	Х	M
Legal Registration No	Not	applicable		Private	commercial		1
Registration Date	Not	applicable		Private non	-commercial		
PIC No.	9996	54065		VAT reimbu	rsement	Yes:	No
Legal address of the A	Associa	ted Beneficiar					
Street Name and No	Piazza	a Città di Lomba	ardia, n. 1		PO Box	Not applic	able
Post Code	20124	Latt.	Town/City	Milan			
Country Code	IT	Country Na	ame				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Lombardy Region is a Public Administration with institutional commitments concerning the definition and implementation of policies in many fields, included the competence about the achievement of air quality targets. These specific competence is legally established by the Italian Constitution.

The air quality issue is one of the different competence of one of the General Directorate of Lombardy, the "Environmental, Energy and Sustainable Development GD".

Lombardy Region provided a first consistent Air Quality Plan in 1998, and since then several update and new plans have been built and applied to achieve the air quality targets defined by the EU Directives.

Currently, from the 2013, the Regional Action Plan for the Air Quality (PRIA) is in force. The Plan has been adopted by the Regional Government in September 2013 with the deliberation n. 593.

It contains numerous measures concerning the main pollutions sources in the regional territory among which agriculture, traffic, industry, etc. The application of those measures is planned until 2020 from 2013, with different steps of short, medium and long time.

Moreover, in 2005 and 2007 the region of the Po Valley (Lombardy, Emilia Romagna, Piedmont, Veneto, Friuli-Venezia Giulia, Valle d'Aosta and the Provinces of Trento and Bolzano) signed two agreements on air quality characterised by common actions to be implemented in a coordinated and synergic way.

Those activities and this common approach were further developed in December 2013 when the same regions and Provinces signed a new Po Valley Agreement for Air Quality involving in the same time four Ministries at the Regional level, including the Environmental and Health Ministries.

Air quality monitoring and management is supported and developed by the Regional Environmental Protection Agency, as in the other region in Italy, on behalf of the region.

Lombardy Region, together with other Italian Regions (Emilia Romagna, Piedmont and Veneto), is member of the Air Quality Initiative of Regions (AIR) founded in 2011.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

		Ass	ociated Ben	eficiary p	rofile	information				
Short name	Piedmo	ont Regi	ion				Ben	eficiary n°	•	4
		Legal i	nformation o	on the As	sociat	ted Beneficia	ry			
Legal Name			nte Region, E and Territory			Legal Statu	s			
VAT No		02843	860012				Puk	olic body	X	
Legal Registra	tion No	NOT A	PPLICABLE			Private Private nor		mmercial		
Registration Date NOT APPLICABLE						Filvate noi	11-001	IIIIeiciai		
PIC No.		999476943			VAT reimbu	ırsen	nent	Yes	: No:	
Legal address	of the As	ssociated	d Beneficiary	/						
Street Name a	nd No	Via Princ	cipe Amedeo	17				PO Box	NA	
Post Code		10123		Town/C	ity	Torino				
Country Code		IT	Country Na	ame	ITAL	Υ				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Regional Government of Piemonte is the administrative body in charge to implement Air Quality Plan and Programs at regional level. His Environmental Directorate is in charge to prepare the AQ Plan proposal before the Regional Council approval. We also manage the negotiation with stakeholders.

Our task is to coordinate all regional plans and programmes related to territory and urban development (landscape included) and related to all environmental issues (air quality included).

We assess (during impact assessment procedures) all regional plans related to other issues (i.e. agriculture, energy, mobility, industry, research, etc.) that can involve air quality or reduction of pollution emissions.

We coordinate regional measures, established in other plans and programs (even when are subsidies), that can involve Air Quality.

Such as measures that involve: sustainable mobility, bike sharing, fuel conversion, scrapping impacting vehicles, energy efficiency of heating systems, district heating, subsidies to the Municipalities for traffic management, congestion charges, low emission zones, scrapping domestic stoves, etc.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

		Asso	ociated Ben	eficiary p	rofile	information				
Short name	RAFVG						Bene	eficiary n°		5
		Legal ir	nformation o	on the As	sociat	ed Beneficia	iry			
Legal Name		AUTON(ENVIRO	/ENEZIA GIL DMOUS REC NMENTAL F Y AND SUST DPMENT	GION PROTECT		Legal Statu	IS			
VAT No		800149	30327				Pub	lic body	X	
Legal Registrat	ion No	NOT A	PPLICABLE			Privat	e com	nmercial		
Registration Da	ate	NOT A	PPLICABLE			Private no	n-com	nmercial		
PIC No.		983174347			VAT reimbu	ursem	ent	Yes:	No:	
Legal address	of the As	sociated	I Beneficiary	y						
Street Name an	nd No	Via Card	ucci 6					PO Box	NA	
Post Code 34133 Town/City					ity	Trieste				
Country Code		IT	Country Na	ame	ITAL	Υ				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

The Friuli Venezia Giulia Autonomous Region, as legally established by the Italian Constitution in 1963, is a Public body with different competences in many fields of activity such as Production, Public Health, Education, Mobility, Energy, Environment and others and it is organized in Central Directorates which work on sectors of regional competences. The Directorate Central for Energy and Environment has about 217 employees and its first allocation for year 2016 is about 181.816.961,03 €. It is equipped with PCs, printers, phones, internet connection as well as several libraries with books and database.

The DC for Energy and Environment is organized in different Units with relevant competences: Geologic, Water management, Atmospheric, noise and electromagnetic rehabilitation, Waste and reclamation, Environmental Assessments, Energy, Sustainability and environmental protection. The FVG Region has a long history and expertise in European Projects, as a Lead partner, as a Partner and even as an Associate.

In 2010, with the Act n. 913, the FVG Regional Government formally approved "the Regional Plan for the improving of the air quality": the main objectives have been established with medium and long term planning which foreseen specific goals and measures to reduce pollutants' concentration in the most critical areas. Thus, the Regional territory have been split in different areas with particular care and attention towards the ones with future critical issues. Measures have been listed in medium and long term and selected by the emission sources as for mobility and energy measures and communication, Plan management and air quality know how.

In February 2013 the Regional Government updated the Plan with Act n. 288, and in March same year it definitely approved the Plan's final version with Act. N. 47. In December 2013 the FVG Region also signed the "Coordinated and joint adoption of measures for improving the air quality in the Po Valley Program Agreement" which affiliates are different Italian Ministries and several Regions of Northern Italy. It aims to coordinate the improvement of short, medium and long term measures against pollutants in the Po Valley and the focus is on biomass combustion, freight transport, passengers transport, civil heating, industry and energy production, agriculture.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	. 24	Ass	ociated Ben	eficiary	profile	information				
Short name Pro	ovince	of Tren	ito				Beneficiary i	n°	6	
		Legal i	nformation o	on the A	ssocia	ted Beneficiar	ý	5	J.	
Legal Name		Provin	cia Autonoma	di Trent	to	Legal Status				
VAT No		003374	460224			•	Public body	Х		
Legal Registration	No	Not ap	plicable			Private	commercial			
Registration Date		Not ap	plicable			Private non-	commercial		v	
PIC No.		99785	9662			VAT reimbur	sement	Yes:	No:	
Legal address of th	e Ass	ociate	d Beneficiary) //.						
Street Name and No Piazza Dante, 15							PO Box	Not applie	able	
Post Code	ost Code 38122 Town/City									
Country Code	ľ	Τ	Country Na	ame	Italy					

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

The Autonomous Province of Trento is a small and almost entirely mountainous Italian region (6,200 km2) located in North-East of Italy. The total population is approx. 500,000, scattered in more than two hundred municipalities, only five of which have a population of over 10,000.

By virtue of a special Statute signed in 1972, PAT government competencies are wider than those of other Italian Ordinary Regions: PAT enjoys a very wide legislative, administrative and financial autonomy in all the most important fields of public government, including energy saving, use of renewable energy sources, environmental protection and safeguarding, health, education, welfare and transport infrastructure. For each of these sectors, it is responsible for planning, programming and implementing the regional energy policy in its territory.

The institutional structure of reference for the project is the Provincial Agency for Environmental Protection (APPA). APPA was established in 1995 and it is an institution of the Province of Trento, created on the model of other regional agencies, with a management, administrative, technical and accounting autonomy.

APPA meets the need to ensure in all the national territory the presence of the autonomous technical organizations, in order to make smooth and homogeneous collection and processing data on the environment and allow the independent exercise of the activity of advice and technical control on protection of soil, water, air, protection from noise pollution and from radiation, waste management.

During the project, APPA will co-operate with the Provincial Agency for Water resources and Energy (APRIE), established in 2006, which is responsible for the coordination of the energy sector. APRIE provides consultancy and technical and administrative support to the provincial government and to the local administrations on matters related to energy and energy planning. APRIE manages the collection of data and the analysis and evaluation of the efficiency of the services provided. APRIE also implements technical and administrative obligations relating to the rational use of energy and the promotion of energy renewable sources, such as issuing permits and licenses, providing control of heating systems and building energy certification, etc.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Asso	ociated Ben	eficiary profile	e informatio	n	لفاطا		
Short name Arpae			11.58-54		Ber	neficiary n	>	7
	Legal ir	nformation	on the Associ	ated Benefic	iary	- Western		
Legal Name	prevenz	a regionale p zione, l'amb ia dell'Emilia	iente e	Legal Stat	tus			
VAT No	042908	360370			Pu	blic body	Х	
Legal Registration No	N.A.			Priva	ate co	mmercial		
Registration Date	N.A.			Private non-commercial				
PIC No.	999454	1633		VAT reiml	VAT reimbursement			
Legal address of the As	sociated	d Beneficiar	у		21	2	Х	
Street Name and No	Via Po, n	1. 5				PO Box	N.A.	
Post Code	40139		Town/City	Bologna				
		1						
Country Code Brief description of the proposal Arpae stands for "Agenz (Regional Agency for En	IT Associa zia Regio	nale per la l	ame ITA iary's activitie	s and experi	Energi	ia dell'Emil	ia-Rom	

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

TAX TOWNS IN	Ass	sociated Ben	eficiary p	rofile	information		311	
Short name ARPAV			22721		Be	eneficiary n	0	8
	Legal	information o	on the As	social	ted Beneficiary	The House		
Legal Name	Region of Ver	nal Agency fo ieto	r Environn	nent	Legal Status			
VAT No	IT0338	82700288			P	ublic body	Х	
Legal Registration No	Not a	pplicable			Private c	ommercial		
Registration Date	Not a	oplicable			Private non-c	ommercial		W
PIC No.	99962	999625159			VAT reimburs	ement	Yes:	No:
Legal address of the A	ssociate	d Beneficiary	y i		THE R. P.			
Street Name and No	edale Civile, 2	lale Civile, 24			РО Вох	Not applicable		
Post Code	35121	35121 Town/City		ty	Padova			
Country Code	İT	Country Na	ame	Italy				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

ARPAV (Regional Agency for Environmental Protection and Prevention of Veneto) is a Public Administration founded in 1996 as technical branch of the Veneto Region on environmental protection issues. The main goal of the Agency is to control and preserve the environment in order to help the identification and elimination of risks to the public health and to the environment.

The Regional Air Observatory (RAO) is the Agency's section specialized on air quality/air pollution issues. Founded in 1999 through a co-financing by EU structural funds, it gives technical support on air quality topics to public administrations settled in Veneto, such as the Region, the Provinces and, in some cases, the Municipalities. The RAO is the contact point with the National Environmental Protection Agency (ISPRA) and the Italian Ministry of Environment on air quality management and control themes on behalf of the Veneto Region and it is involved in the drafting of the Regional Air Quality Plan according to the Directive 2008/50/EC. RAO carries out regularly the following tasks:

- · air quality data management, elaboration and reporting on behalf of the Veneto Region;
- · air quality and emissions indicators elaboration and reporting;
- development and updating of the Regional Emission Inventory for estimating air pollutant emissions from sources located in the Veneto territory;
- · implementation and running of Chemical Transport Models for air pollution assessment and source apportionment analysis;
- implementation and running of local air dispersion model for air impact assessment of different pollutant sources (road and navigation transport, industrial plants, etc.);
- technical support to the Veneto Region in planning policies and actions for the reduction of atmospheric pollution;
- support to the Regional Public Authority, through the use of dispersion models for impact assessment, when the decision making process involves projects that undergo to an Environmental Impact Assessment (EIA).

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

		Ass	ociated Ben	eficiary pr	ofile	information	PIEM	1	
Short name	ARPA F	PIEMONT	ΓE			Ве	neficiary n	•	9
		Legal	information c	on the Ass	ociat	ted Beneficiary	STILL OF		
Legal Name		Region of Pied	nal Agency for dmont	r Environm	ent	Legal Status		_	
VAT No		07176	380017			P	ublic body	Х	
Legal Registra	ation No	Not ap	plicable			Private c	ommercial		
Registration D	ate	Not ap	plicable		1	Private non-c	ommercial		
PIC No.		99946	8892			VAT reimburse	ement	Yes:	No:
Legal address	of the A	ssociate	d Beneficiary						
Street Name a	nd No	Via Pio	VII 9			55	РО Вох	Not applica	able
Post Code		10135		Town/Cit	y	TORINO			
Country Code		IT	Country Na	me	Italy				
Brief descripti	on of the	Associa	ated Benefici	arv's activ	ities	and experience	in the area	of the	

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Arpa Piemonte is a public body with administrative, technical-legal, financial and accounting independence. It is supervised by the President of the Regional Council to guarantee the implementation of the programmes of Piedmont Region on the issue of forecast, prevention and environmental protection. The aims and institutional duties of the Agency are established by national and regional regulations in application of European Union Programmes. This is performed implementing technical-scientific support activities to the institutional actors in Piedmont, ranging from environmental defence and control to preventing and forecasting natural risks.

Arpa Piemonte is established at central and territorial level. It has approx 1000 employees, many of them with technical-scientific training, employed in laboratory activities or involved in the production of environmental services and in local environmental protection.

The activities are focused mainly on the air quality, water, soil, waste and sites contaminated by pollutants and micropollutants, nature and biodiversity, noise and radiation, technological and natural risks. In particular the "Sistemi Previsionali" Department of Arpa Piemonte carries out processes related to the systematic study, organization and dissemination of information associated to the elements of physical and chemical environment and climate of the Piedmont, aimed to the forecasting and the prevention of natural and environmental risks.

Regarding the issue of air quality, the Department manages the regional network of air quality monitoring, develops and implements modelling systems for the yearly assessment of air quality in Piedmont and for the scenario analysis in support of the regional Plans.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Ass	ociated Ben	eficiary p	rofile ii	nformation		D. TI	
Short name AR	PA LOMB					Beneficiary n	•	10
	Legal i	nformation o	on the Ass	ociate	d Beneficiar	У		# 4
Legal Name	REGIO PROT	LOMBARDIA DNALE PER L EZIONE DEL LOMBARDIA	_A L'AMBIEN		Legal Status	3		
VAT No	13015	060158				Public body	Х	
Legal Registration	No Not A	pplicable			Private	commercial		
Registration Date	Not A	pplicable			Private non	-commercial		
PIC No.	95411	954110431				rsement	Yes:	No:
Legal address of t	he Associate	d Beneficiary	y		***		NI.A	
Street Name and N	Via Rose	ellini 17				PO Box	Not Appli	cable
Post Code	23900		Town/Ci	ty	MILANO			
Country Code	IT	Country Na	ame	ITALI	A			_

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

ARPA Lombardia is the Lombardy Regional Agency for Environmental Protection. It is an autonomous public-sector Agency. It was established by Regional Law 16/1999 (subsequently supplemented by R. L. 14/2010).

ARPA Lombardia has an administrative, organizational, technical and accounting autonomy (budget of 100M€ per year). ARPA Lombardia carries out technical and scientific activities (monitoring and controlling), supporting the political and administrative action of the Region, the Provinces, the Municipalities and other public bodies on environmental matters.

ARPA Lombardia is part of a National network of Regional Agencies. It has 1.100 Employees divided in one central structure, based in Milan, and 12 Departments, one for each one of the 12 provinces, organized in 25 Offices with 1 Representative Office in Brussels.

In short, ARPA Lombardia:

- carries out all scientific and technical activities necessaries to support environment-related administrative work of competent local authorities,
- monitors reference data (relating to air, water, soil, nature and biodiversity) and environmental pressures (deriving from economic activities, waste production, noise, transport and energy generation),
- provides environmental information, promotes environmental education and encourages the adoption of innovative techniques.

About air quality field, ARPA Lombardia manages the Air Quality Monitoring Network, with more than 140 stations. It assures instruments maintenance, the implementation of QC/QA procedures, the validation and publication of all relevant data. ARPA Monitoring network includes special measurements finalized to study the processes of pollution formation and transport. ARPA also uses air pollution models to perform near real time, forecast and scenario evaluations. ARPA manages Air Pollutant Emission Inventory too.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

		Ass	sociated Bend	eficiary p	rofile	information			
Short name	ARPA V	/DA				Ве	neficiary n	•	11
		Legal i	information o	n the As	social	ed Beneficiary	77	. "	
Legal Name		Protez	ia Regionale p ione dell'Amb d' Aosta		a	Legal Status			
VAT No		IT 006	34260079			Pι	ıblic body	х	
Legal Registrat	ion No	Not ap	pplicable			Private co	mmercial		
Registration Da	ite	Not as	pplicable			Private non-co	mmercial		
PIC No.	SW41_5	998883303				VAT reimburse	ment	Yes:	No:
Legal address	of the A	ssociate	d Beneficiary						
Street Name and No Località Grande Charrière							РО Вох	Not applie	cable
Post Code		11020 Town/City			ity	Saint Christophe	3		
Country Code	İ	IT	Country Na	me	Italy				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

ARPA Valle d'Aosta is the technical support of local and regional administrations for environmental protection activities. It's operative since 1997. The main activities of ARPA concerns the control of the physical, chemical and biological processes that characterize the environment in its different components: air, water, soil, etc.; for the specific geographical conditions of the region, situated in the middle of the Alps, the activities concerning the evaluation of the effects of the climate change global dynamics are very relevant. It ensures dissemination of information on environmental issues, through the publication of technical reports and environmental datas, also by online website. ARPA Valle d'Aosta, through its Air Quality and Energy Section, is responsible for monitoring air quality in the Aosta Valley Region, operating within the regulatory framework defined at different levels of government, Italian and regional levels, which descends from the European legislation. Monitoring activities are redefined annually in response to new needs or cognitive demands and territorial regulations. These are the main activities:

- The air quality control through measurement systems of the Regional Monitoring Network
- Interpretation of the pollution phenomena with the use of modelling tools that correlate all the factors that contribute to the dynamics of air quality: the pollution sources, the orography and weather conditions.
- Compilation and periodical update of regional pollutant emissions inventory, including greenhouse gases (GHG);
- technical support in the application of regional energy policies;
- Information to citizens by:
- Publishing every day the measured data;
- Spreading a report of air quality forecasting;
- Drawing up reports on the state of air quality
- Define technical requirements to industry in order to reduce pollutant air emissions.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

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(a)	551=	Ass	sociated Ben	eficiary	profile	information			
Short name	Arpa F\	√ G					Beneficiary n	0	12
0		Legal	information	on the A	Associa	ted Beneficia	ry		
Legal Name		Prote	zia Regional zione dell'Ar Venezia Giu	mbiente		Legal Statu	S		
VAT No		02096	520305				Public body	X	
Legal Registr	ation No	NA				Private	e commercial		
Registration I	Date	NA				Private nor	n-commercial		
PIC No.		95003	7595			VAT reimbu	rsement	Yes:	No:
Legal address	s of the A	ssociate	d Beneficiar	у		THE PERSON NAMED IN			
Street Name a	and No	Via Cairoli, 14				PO Box	NA		
Post Code		I-33057		Town	/City	Palmanova	***		
Country Code)	IT	Country N	ame	Italy				
proposal ArpaFVG is the regional policy ArpaFVG, amount Air qual	ne Region making, e ong its fac ality monit	nal Agence environmentilities and coring net	cy for Enviror ental monitori	nmental ing and ges:	Protect control r	tion of Friuli V management in		and su	
	The second secon			lly upda	ted acco	ording to the E	U and Italian le	gislation	n

- Operational air quality chemical-transport numerical model
- Operational meteorological numerical model.

ArpaFVG dealt with several EU-funded projects, among which the following deserve particular interest for environmental planning:

· Interreg Alpine Space Programme:

Imonitraf Project (http://www.imonitraf.org/i4Def.aspx?TabId=364&lang=en)

Foralps Project (http://www.ing.unitn.it/~foralps/)

Life Programme:

WARBO Project (http://www.warbo-life.eu/)

· Interreg Italy-Slovenia Programme:

TRECORALA (http://www.trecorala.eu/it-IT/7-avvio-del-progetto-trecorala)

Programme Adriatic IPA:

SHAPE (http://www.shape-ipaproject.eu/)

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Ass	ociated Ben	eficiary p	rofile	information	Seal wall o			
Short name ARSO						Beneficiary n	٥	3	
	Legal i	nformation	on the As	socia	ted Beneficia	ry			
Legal Name	Spatial	Spatial Planning, Slovenian Environment Agency			Legal Status	tus			
VAT No	SI1894	SI18945082			Public body				
Legal Registration No	2482878000				Private commercial				
Registration Date	NA				Private non	-commercial			
PIC No.	920448	3812			VAT reimbu	rsement	Yes:X	No:	
Legal address of the A	ssociate	d Beneficiar	ý		VI 20 - 1		N = T = T		
Street Name and No	Vojkova	Vojkova 1b				PO Box	NA		
Post Code	1000	1000 Town/City			LJUBLJANA				
Country Code	SI	SI Country Name SLOV			VENIA				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Slovenian Environment Agency (ARSO) is a body of the Ministry for Environment and Spatial Planning (MOP). It has been established in 2001 by joining several Slovenian national institutions dealing with environmental issues. MOP/ARSO includes four offices: Meteorological Office, Hydrology and State of the Environment Office, Seismology and Geology Office, and Environment and Nature Conservation Office. It performs the tasks of National Meteorological and Hydrological Service, and within official duty covers monitoring, analysing and forecasting of meteorological, hydrological and air quality phenomena, and warnings on related hazards. This includes development and maintenance of national monitoring networks, quality control and historical analysis of data, modelling, preparation of future scenarios, forecasting, warnings and support to special users (agriculture, energetics, transport, health, construction, etc.).

MOP/ARSO has a long record of activities in the field of Air Quality. It is responsible for emission inventories, and for monitoring, analysing, modelling and forecasting of air quality in Slovenia. It maintains national air quality network of 18 stations, monitoring different pollutants (PM10, PM2.5, O3, NOx, SO2, CO, benzene, benzo(a)pyren and other PAHs, arsenic, cadmium, nickel, and lead), and cooperates strongly with municipalities and industry performing additional air quality monitoring. It has its own Chemical-Analytical Laboratory for air quality analysis, certificated according to SIST ISO/IEC 17025. It runs a photo-chemical model CAMx coupled to meteorological NWP model ALADIN-SI. MOP/ARSO was also heavily involved in the preparation of Air Quality Plans (AQP) for seven areas in Slovenia, where the problem of PM10 was identified. Together with corresponding municipalities it is responsible for realisation of related Programs of identification of causes for PM10 pollution and monitoring of efficiency of measures proposed in AQP.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Ass	ociated Bene	ficiary profil	e informatior	V	I and		
Short name COBO				Beneficiary n°			14	
	Legal i	nformation o	n the Associ	ated Benefic	iary			
Legal Name	Comur	ie di Bologna		Legal Stat	us			
VAT No	12327	1232710374			Public body X			
Legal Registration No	NA			Private commercial				
Registration Date	NA			Private non-commercial				
PIC No.	999590)239		VAT reimb	Yes:	No:		
Legal address of the A	ssociated	d Beneficiary	Š					
Street Name and No	Piazza N	Maggiore, 6			PO Box	NA		
Post Code	40124	40124 Town/City			BOLOGNA			
Country Code	IT	Country Na	me ITA	LY	1754050			

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

The Municipality of Bologna plays a leading role in national and European environmental policies and has frequently received international acknowledgement for its achievements. It is a founder member if ICLEI, local governments for sustainability, and partner of Eurocities and of Italian cities network Local Agenda 21 Italy.

The 40 experts of the environment Department work actively with other Departments towards the goal of urban sustainability.

Currently main activities of the environment Department are as follows:

Preventive environmental and territorial impact assessment, concerning urban projects and urban planning development programs, having the reference the regional law on Environmental Impact Assessment;

Environmental evaluation of different scenarios defined by the Structure Plan of the City, comparing the environmental effects according to the Strategic Environmental Assessment;

Implementation and monitoring of the Municipality Energy Programme and Action Plan for the Kyoto target. Among the actions are included green and climate proof Codes application on residential building;

Elaboration and management of the municipal Ecobudget (integrating environmental dimension into the master budget);

Elaboration and management of educational and dissemination projects (e.g. the Show-room "Energy and Environment" dedicated to promote renewable energy and energy saving technologies, by means of an attractive and communicative interface).

Bologna has a good experience in participate or coordinate LIFE projects (see complete list in Other LIFE...). The Department is now coordinating "BLUEAP – Bologna Local Urban Environment Adaptation Plan".

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

Short name Milan					Beneficiary n°			15		
	Lega	l information o	on the A	ssoci	ated Beneficiary					
Legal Name	Muni	cipality of Milar	1		Legal Status					
VAT No	0119	01199250158			Public body X					
Legal Registration N	o Not	Not applicable			Private commercial					
Registration Date	Not a	Not applicable			Private non-commercial					
PIC No.	9987	02204			VAT reimbursement			No		
Legal address of the	Associat	ted Beneficiar	ý.	L CU	222	I Hell of				
Street Name and No	Piazza	Scala 2				PO Box	NA			
Post Code	20121	20121 Tow		City	Milan		•			
Country Code	IT	Country Na	ame	Italy	/					

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

The Municipality of Milan is an Italian authority responsible for delivering a large number of services across the city (education, social services, economic development, etc.). The Municipality is strongly committed to achieving the ambitious targets to protect health and improve the environment quality and guarantee a sustainable development of mobility in Milan and its hinterland. On sustainable transport and mobility issues Milan City Council has adopted an action plan focused on increasing public transport supply, incentives for public transport use, congestion charge, restricted zones and entrance-hours for commercial vehicles circulation, mobility management measures, promoting sustainable mobility systems (extension of bicycle path, bike-sharing, car-sharing). The City has implemented a programme of cycle improvement and a comprehensive programme of mobility management. Through its Sustainable Urban Mobility Plan (PUMS), the city has been increasing actions for improving the infrastructure and environment for walking and cycling. Milan has been taking part in the EU project Stars (Sustainable Travel Accreditation and Recognition for Schools) which gives the chance to increase experience in delivering cycle promotions in the primary and secondary schools. The city is also carrying on different projects to test and promote electric vehicles both for citizens and commercial trips, such as e-moving project, e-mobility project, Fr-Evue and CityMobil2. The objectives of these projects are to reduce air pollution and noise, to raise awareness of low emission vehicles, and to save money spent on fossil fuels.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Ass	ociated Ben	eficiary p	rofile	information			
Short name CDT					Be	° 16	;	
	Legal i	nformation o	on the As	socia	ted Beneficiary	200		10.00
Legal Name		City of Torino, The Management Infrastructure and Mobility			Legal Status			
VAT No	00511	005114490010			Pι	X		
Legal Registration No	Not applicable				Private commercial			66
Registration Date	Not ap	plicable			Private non-co	ommercial		
PIC No.	98653	792	A-11-1-		VAT reimburse	Yes:	No:	
Legal address of the A	ssociate	d Beneficiary		N.				
Street Name and No	Piazza S	Piazza San Giovanni, 5				PO Box	NA	
Post Code	10123	10123 Town/City			Torino			
Country Code	ľΤ	Country Na	ame	Italy				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Torino is an important business and cultural centre in northern Italy, capital city of the Piedmont region. The population of the city is around 900.000. It has a 130 sq km surface and therefore the density is around 7.000 inh/sq km. It is part of a larger Metropolitan area, that includes 316 towns and around 2.300.000 inhabitants

Torino is a major touristy city as well as an academic pole, an R&D centre, a national health centre and a financial/insurance centre. Torino is a node of the Ten-T corridors, therefore in the future it will become a more and more important interchange hub for people and goods. The challenge its to ensure its growth in an environmentally sustainable way. For that reason, the City Government during the last years approved the following programme plans:

- "TAPE" Torino Action Plan for Energy: a plan, approved in 2008, identifying 45 key actions aiming at reducing the CO2 emissions of 20% by 2020.
- "SUMP" Sustainable Urban Mobility Plan: a plan, approved in 2010, detailing guidelines for a sustainable and safe mobility.
- "BICIPLAN": a plan concerning the development and the growth of bike mobility in order to achieve the goals of the "Charter of Brussels".
- "SMILE": a plan defining 40 actions to transform Torino into a Smart City.

Furthermore the city is now working on a new, environmentally and economically sustainable, freight delivery plan.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

		Ass	ociated Bend	eficiary p	rofile	information				
Short name	ART-ER	1				E	Beneficiary n	° 1	7	
		Legal in	nformation o	on the As	sociat	ted Beneficiary	У			
Legal Name		ART-E	R S.Cons.p.A	١.		Legal Status				
VAT No		037862	03786281208			Public body				
Legal Registra	tion No	BO-546	BO-546154			Private commercial				
Registration D	ate	01/05/2	01/05/2019			Private non-commercial X				
PIC No.		899261	899261102			VAT reimbur	sement	Yes X	: No:	
Legal address	of the As	ssociated	d Beneficiary	/						
Street Name a	nd No	Via P. G	obetti, 101				PO Box	Not app	licable	
Post Code		40129		Town/C	ity	Bologna				
Country Code		IT	Country Na	ame	Italia	l				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

ART-ER is a Joint Stock Consortium with the purpose of fostering the region's sustainable growth by developing innovation and knowledge, attractiveness and internationalization of the Emilia-Romagna region system.

Activities:

- Coordination and development of the regional ecosystem for innovation and knowledge, support to startups and boosting business;
- Sustainable territorial development, internationalization and attractiveness of the community and promotion of investments in Emilia-Romagna;
- Promotion of the region's productive systems and cities through projects on infrastructure, social innovation, skills development and environmental sustainability
- Supporting the shareholders in planning their activities in the following fields: designing, management, monitoring and assessment of strategic programs and projects; participation in and development of national, European and international networks; research and studies on the region's social and economic assets; designing, construction and management of infrastructure for the region's development.

The core activities of the **Sustainable Regional Development Division** focus on the support of regional programming and planning, cooperation, and promotion of collaboration with economic and social players in order to promote the sustainable development.

The Division develops activities and projects for regional development and the promotion of investments in the region, including foreign ones, with particular focus on raising funds and assisting investors.

The Division carries out studies and research on the production sectors, and on institutional, environmental, local, economic and social structures and processes; it provides technical and scientific support to the identification, implementation and monitoring of regional policies for a sustainable management of the area and of the green economy; it is also the main point of reference for regional sectors as concerns international policies and local cooperation.

In the past, ART-ER as ERVET, supported the Emilia-Romagna Region spreading the Covenant of Mayors among local authorities and elaborated guidelines for the development of climate change plans and economic valorisation of carbon credits.

Moreover, ARTE-ER like ERVET is supporting the Emilia Romagna Region in the elaboration and development of the Regional Air Quality Plan.

ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

	Ass	ociated Benef	iciary profil	e information			
Short name FLA					Beneficiary n		
	Legal i	nformation on	the Associ	ated Beneficia	ry		
Legał Name	Fonda: l'Ambie	zione Lombardi ente	a per	Legal Statu	S	· 6 (2) 25 (20)	***************************************
VAT No	08365	380156 (fiscal o	ode)) Public t			i i
Legal Registration No	MB 1892921			Private commercial			
Registration Date	25/10/2	25/10/2013		Private nor	Х		
PIC No.	95104	1351		VAT reimbu	ırsement	Yes	No:X
Legal address of the <i>i</i>	Associate	d Beneficiary	3. 35.				
Street Name and No	Largo 10	Largo 10 Luglio, 1976, 1			PO Box	NA	
Post Code	20822		Town/City	Seveso	,		
Country Code	IT	Country Nan	ne Ital	у			

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

The Lombardy Foundation for the Environment is a non-profit scientific institution, established by the Lombardy Region and the main regional Universities to provide policy-makers with a science-based expertise for the development and implementation of environmental legislation and policies. FLA with Regione Lombardia coordinated the "Piano Regionale di Risanamento della Qualità dell'Aria", offered a synthesis of knowledge on the different types of air pollutants and the weather/climatic characteristics that influence the spread of pollutants. FLA coordinated the "Kyoto Lombardia Project" on the climate change mitigation and adaptation strategies in Lombardy. The project carried out also technological, economic and environmental assessments of efficient and clean use of wood biomass. FLA worked in the project "Analisi di rischio connesso alla qualità dell'aria della Valtellina" with the main objectives to plan and develop a census of the heating systems involving the citizens and their sensitivity to environmental issues, and also to develop of fine particulate emission maps for municipalities investigated. FLA was partner of EU PROFORBIOMED project aimed at a sustainable use of forest residual biomass as a renewable energy source, where it developed a new traceability protocol for forest biomass and a web portal to favour a stricter cooperation, between users and producers, FLA promoted a voluntary agreement named "Biomass for Energy Pact" addressed to an international network of stakeholders interested in the use of biomass. FLA was partner of European ALPSTAR focused on the development of best local practices in the perspective of a carbon-neutral Alpine region. FLA implemented a Pilot Action based on an assessment of the existing biomass energy systems and aimed at a better exploitation of the local biomass potential. The Scientific Coordinator of FLA is the leader of a Research Unit in the European FP7 project "BioMaxEff" that is developing new advanced technologies for small-size boilers fuelled by wood biomass with high energy performance and very low emissions.

CO-FINANCER PROFILE AND COMMITMENT FORM

	Legal Name and	full address of the c	o-financer						
Legal Name				LANSII					
Legal address of the	co-financer								
Street Name and No				PO Box					
Post Code		Town/City							
Country Code		Country Name							
Financial commitment									
We will contribute t amount to the proje			Euro						
fill fall full fil	Status of th	e financial commit	ment						
Confirmed		To be confirmed		• ***					
	Signature o	f the authorised pe	rson	7266-11					
Name and status of person (obligatory):									
Date of the signatur (obligatory):	е								
Authorised signatur	e (obligatory):								
	44 // 12	Comment	est e	20 15 15					
			—·						

OTHER PROPOSALS SUBMITTED FOR EUROPEAN UNION FUNDING

Please answer each of the following questions:

 Have you or any of your associated beneficiaries already benefited from previous LIFE cofinancing? (please cite LIFE project reference number, title, year, amount of the cofinancing, duration, name(s) of coordinating beneficiary and/or partners involved):

<u>LIFE14 CCA/IT/001280 - LIFE PRIMES, 01.10.2015-31.07.2018,€ 2.366,767, Region Emilia-</u>Romagna (AB).

<u>LIFE 14 NAT/IT/000209 - LIFE EREMITA, 01.01.2016-31.12.2020, € 2.126.987,00, Region Emilia-Romagna (CB).</u>

<u>LIFE13 NAT/IT/000115–AGREE</u> 2013, 01.06.2014-30.04.2019, € 2.178.901, Region Emilia-Romagna (AB).

<u>LIFE13 ENV/IT/000169–LIFE RINASCE</u>, 2013, 02.07.2014-21.12.2018, € 1.135.000, Region Emilia-Romagna (AB).

<u>LIFE 11 ENV/IT/000243</u>–<u>LIFE RII</u>, 2011, 3.9.2012-31.12.2016, € 600.000, Region Emilia-Romagna (CB).

<u>LIFE12 ENV / IT / 001 033 - Wi-GIM Life</u>, 2012, 01.01.2014-30.09.2018, Region Emilia-Romagna (AB).

<u>LIFE07ENV/IT/000388</u>, <u>CARBOMARK</u>, 2007, € 544.014, 36 months, Region Veneto; Region FVG, UNIUD, UNIPD.

<u>LIFE09ENV/IT/000078, MANFOR C.BD</u>, 2009, € 2.483,271, 60 months, CNR di Monterotondo (RM); Università del Molise, CRA, Regione Veneto, Regione Molise, Istituto Forestale Sloveno. <u>LIFE12NAT/IT/000807, WOLFALPS</u>, 2012, € 430.613, 57 months, Region Veneto; Parco Naturale delle Alpi Marittime (CB);

<u>LIFE12 ENV/IT/000153</u>, <u>LIFE InBioWood</u>, € 1.185.816,00 , 54 months, Consorzio di Bonifica Veronese (CB), Beneficiari associati: Regione del Veneto

LIFE12ENV/IT/000578, HELPSOIL, 2012, € 1.308.381, 48 months, CB: Regione Lombardia.

LIFE11 NAT/IT/000044, GESTIRE, 2011, 1,626,916.00 €, 01-10-2012 to 30-09 -2015, Regione Lombardia (CB).

<u>LIFE11 ENV/IT/000256, COSMOS-RICE</u>, 2011, 659,224.00 €, 01-01-2013 to 31-12-2015, Centro Servizi Multisettoriale e Tecnologico (CB), Regione Lombardia.

<u>LIFE11 NAT/IT/000188, CON.FLU.PO</u>., 2011, 3,496,809.00 €, 01-12-2012 to 30-06-2017, Regione Lombardia.

<u>LIFE 13 NAT/SI/000550,DINALP BEAR</u>, 2014, 01/07/2014 – 30/06/2019, Budget PAT: 248.011,00, Eu: 173.608,00, Co-beneficiary: Provincia di Trento.

<u>LIFE11 NAT/IT/187,TEN</u>, 2012, 01/07/2012 - 31/12/2016, Budget PAT: 1.367.668,00,Eu: 683.971,00,Co-beneficiary: Provincia di Trento.

<u>LIFE11 ENV/IT/002,CLEAN ROADS</u>: 2012, 01/09/2012 - 01/01/2016, Budget PAT: 652.750,00, Eu: 359.600,00, Co-beneficiary: Provincia di Trento.

LIFE09 ENV/IT/000092, OPERA, 405 831.00 €, sep. 2010 to sep. 2013, CB: Arpae-ER.

<u>LIFE12 ENV/IT/000404 - ClimateChangER</u> : Regione Emilia Romagna (CB), Arpae ER (Beneficiary) - 76.675,00 - 42 months.

<u>LIFE13/ENV/IT/225 GIOCONDA</u> CB: Istituto di Fisiologia Clinica, CNR, Beneficiary: Arpae, 106.584.00 - 30 months.

<u>LIFE10 ENV/IT/331 – HIA21</u> - CB: C.N.R. Istituto di Fisiologia Clinica , Beneficiary: Arpae, € 122.500,00 - 40 months.

<u>LIFE00/ENV/IT/000184 GIADA</u> - 01-feb-2001 to 31-jan-2004 / € 616.813,54,00 /36 months / CB and/or partners: Comune di Vicenza, Comune di Arzignano, ARPAV e ENEA.

<u>LIFE06/EN/D/00477, PARFUM</u> - 01/10/2006 to 30/03/2009 / € 971.182,00 / 30 months / CB and/or partners: Regional Environmental Protection Agency.

LIFE03 ENV/IT/000343, DesAir Budget: 562,554.00 €, 251,278.00 €, 01-OCT-2003 to 30-

SEP-2005, CB Università Bocconi, Partners: ARPA Lombardia, Regione Lombardia.

<u>LIFE12ENV/IT/000834, MED-HISS</u>, 2013, EC euro 790,788.00, 36 months. CB: ARPA Piemonte.

<u>LIFE+10ENV/IT/00000327, MED-PARTICLES</u>, 2011, euro: 901,579.00, Duration 24 months CB ASL RME – Partners: ARPA Piemonte, Arpae ER.

<u>LIFE12 ENV/IT/000393 PREFER PRoduct,</u> CB Scuola Sant'Anna, Partner: ERVET, Lombardy Region, 01/10/2013-31/12/2016, Budget: € 1.541.845.

<u>LIFE+11 ENV/IT/119 – BLUEAP</u>, 01/10/12 – 30/09/15, 493,024 EUR, CB: Comune di Bologna, Partner: Ambiente Italia, Kyoto Club, Arpae.

LIFE09 ENV/IT/074-GAIA, 10/10/2010-30/04/2013, 600,000 EUR, CB: Comune di Bologna.

<u>LIFE09 ENV/IT/200–LAIKA</u>, 01/10/2010 – 30/09/2013, 926,327 EUR, CB: Comune di Milano, Partner: Comuni di Bologna e Torino.

<u>LIFE14 CCA/IT/000663 IRIS</u>, CB: ERVET, Partner: Consorzio Attività Produttive, Carlsberg Italia, ERGO, SIPRO, Scuola Sant'Anna, TerrAria, 15/09/2015-15/03/2019, € 1.658.680

<u>LIFE09ENVIT000105</u>, <u>ETABETA</u>, CB: Milano Metropoli, Partner: Liguria Ricerche, Conser, Emilia-Romagna Region, Sardegna Region, IAT, Ambiente Italia, 01/09/2010-30/04/2013, € 1.960.000

<u>LIFE08 INF/IT/000312, PROMISE</u>, CB: Liguria Region, Partner: ERVET, Lazio Region, ANCC-COOP, Confindustria Genoa and Liguria, 01/01/2010-30/06/2012, € 1.417.400

<u>LIFE07 ENV/IT/000515, ECCELSA</u>, CB: Scuola Sant'Anna, Partner: ERVET, SIGE, GEMINI, Ambiente Italia, IEFE Bocconi, 01/01/2009–31/12/2011, € 1.597.748

<u>LIFE98 ENV/IT/000098, ISOLA</u>, CB: Municipality of Modena, Partner: ERVET, Arpae ER, AUTODESK, 19/11/1998–19/05/2002, € 1.085.718

 Have you or any of the associated beneficiaries submitted any request for financing for actions or part of this project to other European Union financial instruments? To whom?
 When and with what results?

<u>ALCOTRA 2007-2013</u>: strategic project <u>AERA</u> (Air Environment Regions ALCOTRA), started in 2010 and finished 2013, where main goals was to improve the efficiency of protection plans for air quality and identify joint preservation strategies in cross-border areas in accordance with the 2008/50/EC (http://www.aera-alcotra.eu/). Piedmont Region beneficiary.

PART'AERA (ALCOTRA Programme 2007-2013): The project PART'AERA (January 2013-December 2015) aims to respond to the Community objectives relating to the improvement of knowledge on air pollution, both in terms of its sources and their specific contribution, comparing at the same time the issues metrological across borders and allowing the harmonization of policies and management plans to reduce joint transboundary pollution. Coordinator: AIR Rhone-Alpes; Partners: AIR PACA, ARPA Piemonte, Regione Liguria.

SH'AIR (ALCOTRA Programme 2007-2013): The project SH'AIR (Système d'échange Atmosphérique Inter Regional sur la zone ALCOTRA) has two main objectives: the identification of emission sources and the role of exogenous transport in air pollution of ALCOTRA territory; on the other, the development of an educational project to increase awareness of the air quality - with the involvement of teachers, students, entertainers and experts - to make available on the web a series of teaching modules on air pollution. ARPA Piemonte beneficiary.

<u>iMONiTRAF!</u> (Alpine Space Programme 2007-2013): Implementation of MONITRAF (Monitoring of road traffic related effect), objectives are to develop common strategies for transalpine traffic and to put them into action: a long-lasting political network was established, evaluation instruments was developed, regional indicators was interpreted to assess effects of Alpine traffic, innovative measures for modal shift improvements was assessed, a web-GIS system to visualise past trends and effects of measures was built. ARPA Piemonte beneficiary. FLA participated as project's partner at two EU projects related with PREPAIR themes:

<u>PROFORBIOMED</u>-Promotion of residual forestry biomass in the Mediterranean basin. The project is linked to the promotion of the use of renewable energy through the development of an integrated strategy for the use of forest biomass as energy source. The strategy includes

key points: the sustainable use of unused potential of forest biomass, the development of the technical and legal principles and the promotion of the use of forest biomass for energy production through the involvement of key stakeholders in the supply chain forest-wood-energy. The strategy must take into account sustainability and compatibility with other uses of biomass in Mediterranean forests and offers new economic opportunities in rural areas.

<u>ALPSTAR-Toward Carbon Neutral Alps</u> – Make Best Practice Minimum Standard. The project aimed to define such good practices in preparation and implementation of strategies, action plans and measures toward carbon neutrality in the Alpine regions. In this project FLA is implementing a Pilot Action that has the main objective to assess in detail the current state of existing systems from the energetic, environmental and economic point of view; to assess the potential maximum development of the various "bioenergy" across the province, depending on the availability of actual and sustainably used and propose various scenarios of development of new systems, quantifying the potential benefits of energy, environmental and economic benefits.

Municipality of Turin:

<u>2010-2012 - CITY LOG – FP7</u> – Partner - http://www.city-log.eu/ -Sustainability and efficiency of city logistic.

<u>2012-2015 - PUMAS- Alpine Space</u> - Partner - http://www.pumasproject.eu/ SUMPS for a Sustainability and efficiency city logistics

<u>2013–2016 – OPTICITIES FP 7-Partner - http://www.opticities.com</u> - Traveler information service Decision support tools.

<u>2015–2018 – SOCIALCAR – H2020</u> – Development of Intelligent Trasport System for the implementation of a Car pooling in urban area.

<u>2015–2018 – NOVELOG – H2020</u> – Testing new policies to improve the transport of goods in urban areas.

Friuli Venezia Giulia:

"COME – Energy efficiency way for municipalities" Interreg IV Italy-Austria, total budget € 1.102.574;

"ALTERENERGY - Energy Sustainability for Adriatic Small Communities", IPA ADRIATIC CB Programme, total budget € 12.499.600;

"CEP REC - Introduction of Regional Energy Concepts", Interreg Central Europe, total budget € 2.164.900,00.

Referring to MOP/ARSO, the content of SINICA project (Nadgradnja sistema za spremljanje onesnaženosti zraka, ugotavljanje vzrokov •ezmernih obremenitev in analizo u•inkov ukrepov za izboljšanje - Upgrade of the system for the air quality monitoring, analysis of the factors leading to excessive pollution levels and abatement measures evaluation) is included in the adopted Operational Programme for the Implementation of the EU Cohesion Policy in 2014-2020. The project proposal was sumbited to the competent authority in February 2016.

Title of the LIFE Integrated Project								
Title: Po Regions Eng	gaged to Po	licies of A	IR- LIFE-II	PREPAIR		and the second		
Legal inform	nation on the	MANAGI	NG/COMP	ETENT AU	THOR	ITY/EN	ITITY	
Legal Name	Emilia Rom dell'impresa Economy)	agna Regio a, (General	on – Direzio Directorate	ne Economia for Knowled	della o ge, Lab	conosce	enza, del lavoro e	
Legal address of the M			NT AUTHO	RITY/ENT	I I Y	PO Bo		
Street Name and No	Viale Aldo M			Delegan		PUBL		
Post Code	40127		own/City	Bologna				
Country Code	IT Co	untry Nam		У		- 25		
		Coi	nfirmation		= =		10 14 2.3	
We confirm that the complementary actions identified in this proposal and intended to be financed by the ERDF Emilia Romagna (Fund) are in principle eligible for financing.			Commen		es 🗖	No		
We confirm that the proposal indicates correctly the potential financial contribution from the ERDF Emilia Romagna (Fund).			Yes No Comments:					
We confirm that the proposal indicates correctly the timing of potential funding from the ERDF Emilia Romagna (Fund).			Yes No 🗆					
We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the			Yes No Comments: Feasibility to be verified					
LIFE integrated pro	Stat	us of the	financial c	ommitmer	it	- 5- 1		
Committed/confirmed To be committed/confirmed Comments: The OP ERDF has been granted on 12/2/2015. The specific funds identified for implementation of the complementary actions of the project are being currently assigned through the specific procedures.						identified for		
	Sigi	nature of		ised perso	11			
Name and status of person (obligatory)		sed	Economy	Director for I			bour and Enterprise	
Date of the signature (obligatory):	re		Illere	ero Di	250		M.M.2016	
Authorised signatu	re (obligato	гу):		<u> </u>				

Title of the LIFE Integrated Project								
Title: Po Regions Engaged to Policies of AIR- LIFE-IP PREPAIR								
Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY								
Legal Name	Emilia Romagna Region Wildlife Activities	on – General Directorate for Agriculture, Fishery and						
Legal address of the M		NT AUTHORITY/ENTITY						
Street Name and No	Viale della Fiera 8	PO Box						
Post Code		Town/City Bologna						
Country Code	IT Country Nam	721. 3.34						
Confirmation								
We confirm that the cactions identified in tintended to be financed Emilia Romagna (Full eligible for financing	this proposal and ted by the EAFRD and) are in principle	Yes No Comments:						
We confirm that the potential contribution from the Romagna (Fund).	al financial	Yes No Comments:						
We confirm that the particle correctly the timing of from the EAFRD Emi	of potential funding	Yes ■ No □ Comments:						
We confirm that during of applications for furneceived by our authorion account that the LIFE integrated projections.	nding (to be) ority, we (will) take y are linked to the	Yes ■ No □ Comments:						
	Status of the f	inancial commitment						
Comments: The OP E	Committed/confirmed To be committed/confirmed Comments: The OP EAFRD has been granted on 26/5/2015. The specific funds identified for implementation of the complementary actions of the project are being currently assigned throug							
	Signature of the	he authorised person						
Name and status of t person (obligatory):	he authorised	Valtiero Mazzotti General Director of Agriculture, Fishery and Wildlife Activities						
Date of the signature (obligatory):		7/11/2016						
Authorised signature	(obligatory):	VMfre "						

Title of the LIFE Integrated Project								
Title: Po Regions En	gaged to Policies of	AIR- LIFE-IP	PREPAIR					
Legal infor	mation on the MANAG	ING/COMPE	TENT AUTHO	ORITY/ENTITY				
Legal Name	Emilia Romagna Regi Environmental Care	on – General	Directorate for	Territorial and				
Legal address of the N	ANAGING/COMPETE	NT AUTHOR	RITY/ENTITY					
Street Name and No	Viale Aldo Moro, 30	·						
Post Code		Fown/City	Bologna					
Country Code	IT Country Nan	THE RESERVE AND DESCRIPTION OF THE PERSON NAMED IN						
	Со	nfirmation						
We confirm that the actions identified in intended to be finance Emilia Romagna (Fureligible for financing	Comments	Yes !	No 🗆					
We confirm that the correctly the potential contribution from the Romagna (Fund).	Yes No Comments:							
We confirm that the porrectly the timing of from the PAA Emilia	Comments		■ No □					
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	Comments	Yes I	■ No □					
	Status of the f	inancial con	nmitment	The second				
Committed/confirmed Comments: to be gran		To be com	mitted/confirm	ned [
	Signature of tl	ne authorise	d person					
Name and status of t person (obligatory):	e and status of the authorised on (obligatory): Paolo Ferrecchi General Director for Territorial and Environment							
Date of the signature (obligatory):		1	1/10-	7/11/3016				
Authorised signature	e (obligatory):							

	Title of the LII	FE Integrated Project
Title: Title: Po Region	ns Engaged to Policie	es of AIR - LIFE-IP PREPAIR
Legal infor	mation on the MANAGI	NG/COMPETENT AUTHORITY/ENTITY
Legal Name	Veneto Region – Dire:	zione Programmazione Unitaria
Legal address of the M	ANAGING/COMPETE	NT AUTHORITY/ENTITY
Street Name and No	Dorsoduro, 3494/A	PO Box
Post Code	30123	Fown/City Venice
Country Code	IT Country Nam	The second secon
22	Со	nfirmation
We confirm that the actions identified in intended to be financip (Fund) are in princip financing.	this proposal and ced by the ERDF	Yes 🖾 No 🗆
We confirm that the correctly the potential contribution from the	al financial	Yes No 🗆
We confirm that the correctly the timing of from the ERDF (Fund	of potential funding	Yes No 🗆
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	inding (to be) ority, we (will) take by are linked to the	Yes No 🗆 Comments:
	Status of the t	financial commitment
Committed/confirmed Comments: the OP ER	RDF has been granted	To be committed/confirmed on 17/08/2015
LAUS CALL	Signature of t	he authorised person
Name and status of t person (obligatory):	the authorised	Pietro Cecchinato – Direttore della Direzione Programmazione Unitaria
Date of the signature (obligatory):		2 3 NOV. 2016
Authorised signature	e (obligatory):	Per Con Line Pietro Cegotina

		itle of the L	IFE Inte	grate	d Project	The Company of				
Title: Po Regions En	gaged to	Policies of	FAIR - L	IFE-IF	PREPAIR	2,012				
Legal inform	nation or	the MANA	GING/CC	MPE	TENT AUTHOR	ITY/ENTITY				
Legal Name	Veneto	Region - Ad	IG FEASR	R, Parc	hi e Foreste					
Legal address of the M	ANAGIN	G/COMPET	ENT AU	THOF	RITY/ENTITY					
Street Name and No	Via Torir	Via Torino, 110 PO Box								
Post Code	30172		Town/City Venezia Mestre							
Country Code	IT	Country Na	AND DESCRIPTION OF	Italy	9 8					
		C	onfirmat	ion		administration of				
We confirm that the complementary actions identified in this proposal and intended to be financed by the EAFED (Fund) are in principle eligible for financing.			Comn	nents:		No 🗆				
We confirm that the proposal indicates correctly the potential financial contribution from the Fund).			Comp	Yes ☒ No ☐						
141		* ** *	Oomin	iiciiis.						
We confirm that the proposal indicates correctly the timing of potential funding from the Fund).			Comn	nante:	Yes ⊠	No 🗆				
We confirm that during of applications for fureceived by our authorists account that the LIFE integrated projections.	nding (to ority, we y are link	be) (will) take	Comme and 10 Autorith	ents: th .1.2 1 a ny can'i	Yes — e RDP allocated re- are already committ- t set up such select	No				
THE RESERVE OF THE PARTY OF THE	St	tatus of the	financia	l com	nmitment					
Committed/confirmed Comments: The OP EA	s been gran		To be committed/confirmed and confirmed and confi							
Signature of the authorised person										
Name and status of ti person (obligatory):	ne autho	rised	,		arin - Direttore de chi e Foreste	lla Direzione AdG				
Date of the signature (obligatory):			16	VON 3	2016					
Authorised signature	(obligat	ory):	100	ranco	Contarin					

LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

PROFILE AND COMMITMENT FORM

	Title of the LI	FE Integrated Project	
Title: LIFE IP-PREPA	IR		
Legal infor	nation on the MANAG	ING/COMPETENT AUTHORITY/ENTITY	
Legal Name	Innovation - U.O Mar	eneral Direction-University, Research and Open laging Authority of the OP ERDF 2014-2020	
Legal address of the M	ANAGING/COMPETE	NT AUTHORITY/ENTITY	
Street Name and No	Piazza Città di Lombard	dia. N. 1 PO Box	
Post Code	20124	Fown/City Milan	
Country Code	Country Nam	ne italy	
	Co	nfirmation	
We confirm that the cactions identified in intended to be finance. Regional Developme in principle eligible for	this proposal and sed by the European nt Fund (ERDF) are or financing.	Yes X No Comments: We confirm that the actions intended to be financed by the Action IV.4.e.1.1 (Lombardy Region ERDF Fund) are closely linked to the Life IP PREPAIR since both contribute to the implementation of the Air Quality Plan. The grant has been applied for, but not yet granted. Financial contributions on "Cycling mobility" will be assigned to beneficiaries at the end of 2016	
We confirm that the proposal indicates correctly the potential financial contribution from the European Regional Development Fund (ERDF).		Comments: Maximum amount of potential funding 20.000.000 eur to be confirmed during the operational phase of fund assignment that will occur according to specific procedure. Therefore only at the end of the preliminary activity and of the re-planning of the funds we could specify the real funds mobilized.	
We confirm that the p correctly the timing of from the European R Development Fund (E	f potential funding legional	Yes X No Comments: Temporal development of the Life IP PREPAIR is in line with temporal development of the ERDF.	
We confirm that during of applications for full received by our authorists account that they LIFE integrated projections.	ority, we (will) take are linked to the	Yes X No C Comments: To be really confirmed during the operational phase of fund assignment that will occur	

	according to specific procedure. Therefore only at the end of the preliminary activity and of the re- planning of the funds we could specify the real funds mobilized.	
Status of th	ne financial commitment	
Committed/confirmed Comments:	To be committed/confirmed	
Signature o	of the authorised person	
Name and status of the authorised person (obligatory):	Rosetta Gagliardo - Managing Authority of the Lombardy Region OP ERDF 2014-2020	
Date of the signature (obligatory):	21/14/16	
Authorised signature (obligatory):	ROSETTA GAGLIARDO CONEODEN	

LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

PROFILE AND COMMITMENT FORM

	Title of the L	LIFE Integrated Project
Title: LIFE IP-PREPA	IR	
Legal infor	nation on the MANA	GING/COMPETENT AUTHORITY/ENTITY
Legal Name	Lombardy Region - Semplificazione Am	DG Agricoltura – U.O. Programmazione Sviluppo Rurale e ministrativa
Legal address of the M		ENT AUTHORITY/ENTITY
Street Name and No	Plazza Città di Lomba	ardia. N. 1 PO Box
Post Code	20124	Town/City Milan
Country Code	Country Na	
Book Battle	C	onfirmation
We confirm that the cactions identified in the intended to be finance. Fund are in principle financing.	his proposal and ed by the EAFRD	Yes X No C Comments: Moreover we confirm that the actions intended to be financed by the operations 8.6.02 and 10.1.10 (EAFRD fund) are in closely linked to the Life IP PREPAIR since both contribute to the Implementation of the Air Quality Plan. The grant has not yet been applied for.
We confirm that the p correctly the potential contribution from the	I financial	Yes X No Comments: Maximum amount of potential funding 5.800.000 eur to be confirmed during the operational phase of fund assignment that will occur according to specific procedure. Therefore only at the end of the preliminary activity and of the re-planning of the funds we could specify the real funds mobilized.
We confirm that the p correctly the timing of from the EAFRD Fund	f potential funding	Yes No Comments: Temporal development of the Life IP PREPAIR is in line with temporal development of the EAFRD.
We confirm that durin of applications for fun received by our authorist account that they LIFE integrated project	iding (to be) rity, we (will) take are linked to the	Yes No Comments: To be really confirmed during the operational phase of fund assignment that will occur according to specific procedure. Therefore only at the end of the preliminary activity and of the replanning of the funds we could specify the real

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100	М	r.

ALL ALL	funds mobilized.	
Status of	the financial commitment	
Committed/confirmed Comments:	To be committed/confirmed	
Signature	of the authorised person	
Name and status of the authorised person (obligatory):	Pietro Buonanno – Managing Authority of the Lombardy Region EAFRD Fund	
Date of the signature (obligatory):	1. 6. 1100. 2016	
Authorised signature (obligatory):	Aurigente Aurigente	

Title of the LIFE Integrated Project							
Title: LIFE15 IPE/IT PREPAIR "Po Regions Engaged to Policies of AIR"							
Legal infor	nation on the MANAG	NG/CO	MPET	ENT AUTHOR	TY/ENTITY		
Legal Name	Piemonte Region – I	Directora	te Con	npetitivness			
Legal address of the M	ANAGING/COMPETE	NT AUT	HORI	TY/ENTITY			
Street Name and No	Via Piasano n. 6				PO Box		
Post Code		Fown/Cit		ORINO			
Country Code	IT Country Nan	ne	ITALY				
	Co	nfirmati	on	<u> </u>			
We confirm that the actions identified in intended to be finance. Program for Piemont principle eligible for	this proposal and ced by the Operative te (ERDF) are in	Comm	ents:	Yes 🔼	No 🗆		
We confirm that the potential contribution from the for Piemonte (ERDF)	al financial Operative Program	Comm	ents:	Yes 🕾	No 🗆		
We confirm that the porrectly the timing of from the Operative P Piemonte (ERDF).	of potential funding	Comm	ents:	Yes 🗗	No 🗆		
We confirm that duri of applications for fu our authority, we will that they are linked to integrated project.	nding received by take into account	Comm	ents:	Yes 🗷	No 🗆		
	Status of the f	inancia	comr	mitment			
Committed/confirmed Comments:	Ø	To be	comm	itted/confirmed			
	Signature of t	he autho	orised	person			
Name and status of t person (obligatory):	he authorised			Giuliana General Di			
Date of the signature (obligatory):		Tell	alve S	3/3/	2016		
Authorised signature	e (obligatory):	1.6		While	Alle		

Example 1	Title of the LII	FE Integrated Project	
Title: LIFE15 IPE/IT I	PREPAIR "Po Region	ns Engaged to Policies of AIR"	
Legal infor	nation on the MANAG	ING/COMPETENT AUTHORITY/ENTITY	de in
Legal Name	Piemonte Region – Di	Pirectorate Agricolture	
Legal address of the M	ANAGING/COMPETE	ENT AUTHORITY/ENTITY	
Street Name and No	C so Stati Uniti n. 21	PO Box	
Post Code	10128	Town/City TORINO	
Country Code	IT Country Nan	me ITALY	BOOK 0000
	Co	enfirmation and the second sec	
We confirm that the actions identified in intended to be finance (European Agricultus Development) are in financing.	this proposal and ced by the EAFRD rai Fund for Rural	Yes 🖾 No 🗆	
We confirm that the correctly the potential contribution from the Agricultural Fund for Development).	al financial E EAFRD (European	Yes ☒ No ☐ Comments:	
We confirm that the correctly the timing of from the EAFRD (Europe Fund for Rural Development)	of potential funding ropean Agricultural	Yes X No 🗆	
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	nding (to be) ority, we will take y are linked to the	Yes ☒ No ☐ Comments:	ar Balanaha
		financial commitment	
Committed/confirmed Comments.	×	To be committed/confirmed	
	Signature of t	the authorised person	
Name and status of t person (obligatory):	he authorised	Gaudenzio De Paoli General Director	
Date of the signature (obligatory):		\$ 5 MAR. 2016 (500)	
Authorised signature	(obligatory):	1 St Viero	100

CEGE I	Title of the LIFE Integrated Project						
Title: Po Regions En	gaged to Policies of	AIR- LIFE-IP PREPAIR					
Legal inform	mation on the MANAG	ING/COMPETENT AUTHORITY/ENTITY					
Legal Name		Friuli Venezia Giulia – Central Directorate Production,					
Logal address of the M		ation – Manufacturing area ENT AUTHORITY/ENTITY					
Street Name and No	Via Trento, 2	PO Box					
Post Code		Town/City TRIESTE					
Country Code	IT Country Nam						
		nfirmation					
We confirm that the cactions identified in tintended to be finance. Friuli Venezia Giulia principle eligible for	this proposal and ced by the ERDF (Fund) are in	Yes ■ No □ Comments:					
We confirm that the p correctly the potential contribution from the Venezia Giulia (Fund	al financial ERDF Friuli	Yes ■ No □ Comments:					
We confirm that the p correctly the timing of from the ERDF Friuli (Fund).	of potential funding	Yes ■ No □					
We confirm that during of applications for furneceived by our authorito account that the LIFE integrated projections.	inding (to be) ority, we (will) take y are linked to the	Yes ■ No □ Comments:					
	Status of the f	financial commitment					
Committed/confirmed		To be committed/confirmed					
Comments: The OP El	RDF has been granted	d on 14/07/2015 Decision CE(2015) 4814					
	Signature of the	he authorised person					
Name and status of t person (obligatory):	he authorised	Lydia Alessio Vernì – Deputy director of Central Directorate Production, Tourism and Cooperation – Manufacturing area – Managing authority of the ERDF OP					
Date of the signature (obligatory):	×	23/93/2016 ERIULI					
Authorised signature	(obligatory):	LA VICEDIRETTRICE CENTRALE					

Title of the LIFE Integrated Project								
Title: Po Regions Engaged to Policies of AIR- LIFE-IP PREPAIR								
Legal infor	mation on the MANAG	ING/COMPETENT AUTHORITY/ENTITY						
Legal Name	forestali e ittiche – are							
Legal address of the M	IANAGING/COMPETE	ENT AUTHORITY/ENTITY						
Street Name and No	Via Sabbadini, 31	PO Box						
Post Code	33100	Town/City UDINE						
Country Code	IT Country Nan	neITALY						
	Co	nfirmation						
We confirm that the actions identified in intended to be finance. Friuli Venezia Giulia principle eligible for	this proposal and ced by the EARDF (Fund) are in	Yes ■ No □ Comments:						
We confirm that the correctly the potential contribution from the Venezia Giulia (Fund	al financial EARDF Friuli	Yes No 🗆						
We confirm that the correctly the timing of from the EARDF Friu (Fund).	of potential funding	Yes ■ No □ Comments:						
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	nding (to be) ority, we (will) take y are linked to the	Yes ■ No □ Comments:						
		financial commitment						
Committed/confirmed		To be committed/confirmed						
	ARDF has been grante	ed on 24/09/2015						
	Signature of t	he authorised person						
Name and status of t person (obligatory):		Serena Cutrano – Vice Direttore centrale - direzione centrale risorse agricole, forestali e ittiche – area sviluppo rurale						
Date of the signature (obligatory):)	Q3.03.2016						
Authorised signature	e (obligatory):	S STUDIE CENTIOREUS TRALE domissa Serena Guirano						
YOU MAY DUPL CATE THIS PAGE								

Title of the LIF	E Integrated Project					
Title: Po Regions Engaged tO Polices of AIR – LIFE IP PREPAIR						
Legal information on the MANAGI	NG/COMPETENT AUTHORITY/ENTITY					
	Trento – Servizio Europa					
Legal address of the MANAGING/COMPETE						
Street Name and No Via Gilli 4	PO Box					
	own/City Trento					
Country Code IT Country Nam	e Italy					
Cor	firmation					
We confirm that the complementary actions identified in this proposal and intended to be financed by the European Regional Development Fund (ERDF) are in principle eligible for financing.	Yes X No Comments: part of the funds of ERDF provincial Operational Programme will be used for energy efficiency of buildings in line with the strategy to reduce polluting emissions. In detail: Axis 3. Action 3.1.1. incentives for reducing energy consumption of enterprises. Axis 3. Action 3.2.1 Promotion of eco-efficiency and reduction of primary energy consumption in buildings and public facilities. Possible revisions both in financial allocation and in the content of energy efficiency actions could be possible during the implementation of the Operational Programme.					
We confirm that the proposal indicates correctly the potential financial contribution from the European Regional Development Fund (ERDF).	Comments: the amount indicated in the FP (financial plan of the AF LIFE IP Prepair relates to the financial contribution of the provincial Operational Programme ERDF as a whole (it is composed by 50% European fund, 35% Italian state fund, 15% provincial fund)					
We confirm that the proposal indicates correctly the timing of potential funding from the European Regional Development Fund (ERDF).	Yes X No Comments: it is expected to enable the measures to improve energy efficiency within the duration of the project LIFE IT Prepair					

We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.	Yes X No Comments:					
The second secon	e financial commitment					
Committed/confirmed Comments:	To be committed/confirmed X					
Energy efficiency measures are foreseen in	the provincial Operation Programme approved by 015, but funds have not yet been committed. They ojects or tender procedures.					
Signature of t	he authorised person					
Name and status of the authorised person (obligatory):	Mr. Michele Michelini Head of Servizio Europa					
Date of the signature (obligatory):	44 MHK 2016					
Authorised signature (obligatory):	Middle Miller					



Datum: - 9 -11- 2016

LIFE Integrated Projects 2015 - A8/13

LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

odpis:	pis: PROFILE AND COMMITMENT FORM					
	Title of the LIF	E Integrate	d Project	L ME		
Title:	Po Regions Engaged	to Policies	of AIR- LiFE	-IP PREF	PAIR	
Legal infor	nation on the MANAGI	NG/COMPE	TENT AUTH	HORITY/E	NTITY	
Legal Name	Republic of Slovenia					
Logal address of the M	Government Office for IANAGING/COMPETE				on Policy	
Street Name and No	Kotnikova 5	NI AUTHO	KI I I / E IVI I I	POE		
Post Code	1000 T	own/City	Ljubljana			
Country Code	SI Country Nam	e Slov	enia			
	Сот	nfirmation	(A) (A)		- 44	
We confirm that the actions identified in intended to be financiand Cohesion Fund eligible for financing	this proposal and ced by the ERDF are in principle	Comments		No.		
We confirm that the correctly the potentic contribution from the Cohesion Fund.	al financial	Comments		No No		
We confirm that the correctly the timing of from the ERDF and C	of potential funding	Comments	1,000	■ No		
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	ority, we (will) take y are linked to the	Comments	Yes	■ No		
The State of the S	Status of the f	inancial co	mmitment	distant.		
Committed/confirmed		To be con	nmitted/confi	rmed [
by European Commis	ESI 2014-2020 that inc sion on 15/12/2014. The ns of the project are	ne specific f	unds identifie	ed for imp	lementation of the	
	Signature of the	ne authoris	ed person			
Name and status of t person (obligatory):	the authorised	BOJAN	5 V VOR	OV,MS	DIRECTOR	
Date of the signature (obligatory):	O S O S O S O S O S O S O S O S O S O S	4++	Marc Ju	h/20	146	
Authorised signature	Service Control	T	,	pm	M	
	YOU	DUPLICATE TH	IS PAGE	/		

	Title of the LIFE Integrated Project						
Title: Po Regions Engaged to Policies of AIR- LIFE-IP PREPAIR							
Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY							
Legal Name	Repub	olic of Sloven	ia, Mir	nistry of the Env	ironmer	nt and Spa	tial Planning
Legal address of the M	ANAGIN	G/COMPET	ENT A	UTHORITY/EN	TITY		
Street Name and No	Dunajsk	ka 47	NOAESEN.	4:505.00.5%-4:50.00 to 15:112		PO Box	
Post Code	1000		Town	/City Ljubljar	na		
Country Code	SI	Country Na	me	Slovenia			
Confirmation							
We confirm that the identified in this propries of the Slover Fund are in principle	posal and enian Cli	d intended t imate Chang	o be ge	Comments:	Yes	■ No	
We confirm that the potential from the Slovenian C	al financi	ial contribut		Comments:	Yes	■ No	
· · · · · · · · · · · · · · · · · · ·				Comments.			
We confirm that the p correctly the timing of the Slovenian Climat	of potent	ial funding	from	Comments:	Yes	■ No	
We confirm that duri	na the ec			Comments.			
We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.			by that	Comments:	Yes	■ No	
March 1	S	tatus of the	financ	cial commitme	of.	Service and in	
Committed/gapfirmed	-	tatus of the	Contract of the last of		1-2-11	d 🗆	
Committed/confirmed To be committed/confirmed Dominited To be committed/confirmed To be approved To be approved To be approved To be committed/confirmed To be committed/confirmed To be approved To be approved To be committed/confirmed To be committed/confirmed To be committed/confirmed To be approved To be							
	Si	ignature of	the au	thorised perso	n		
Name and status of t person (obligatory):	he autho	rised		ia Bolte, M.Sc ctor General at th	e Enviro	onment Dire	cțorate
Date of the signature (obligatory):				9.4.616			
Authorised signature	(obligat	ory):			b .	Lin	Liubhana

Title of the LIFE Integrated Project									
Title: Po Regions En	Title: Po Regions Engaged to Policies of Air – LIFE – IP PREPAIR								
Legal infor	mation on the MANAG	ING/COMPE	TENT AUTHOR	ITY/ENTITY					
Legal Name	Comune di Bologna								
Legal address of the N	IANAGING/COMPETE	NT AUTHO	RITY/ENTITY						
Street Name and No	Piazza Maggiore, 6			PO Box					
Post Code	40124	Town/City	Bologna						
Country Code	IT Country Nan	ne Italy	300						
	Co	nfirmation							
We confirm that the actions identified in intended to be finance. Metropolitan Cities in principle eligible for the second secon	this proposal and ced by the OP Bologna (Fund) are	Comments		No 🗆					
We confirm that the correctly the potential contribution from the Cities – Bologna (Fu	al financial OP Metropolitan	Comments		No 🗆					
We confirm that the proposal indicates correctly the timing of potential funding from the OP Metropolitan Cities – Bologna (Fund).		Yes ☒ No ☐ Comments:							
We confirm that duri- of applications for fu- received by our auth- into account that the LIFE integrated project	nding (to be) ority, we (will) take y are linked to the	Comments		No 🗆					
	Status of the f	inancial cor	nmitment						
Committed/confirmed Comments: granted or	,	To be com	mitted/confirmed	H 🗌					
	Signature of t	ne authorise	ed person						
Name and status of to person (obligatory):	he authorised	Giacomo Ca General Dire Body	'	i Bologna, Intermediate					
Date of the signature (obligatory):		18/11/2016							
Authorised signature	(obligatory):	(my &	DI BO					

الأنبيط التبطيق	6	itle of the LII	FE Integra	ted Project			
Title: PREPAIR							
Legal infor	mation or	the MANAG	ING/COMP	ETENT AUT	HOR	ITY/ENTITY	
Legal Name	Munici	pality of Milan					
Legal address of the N	IANAGIN	IG/COMPETE	NT AUTHO	DRITY/ENTIT	Y		
Street Name and No	Piazza S					PO Box	
Post Code	20121	7	Town/City	Milan			
Country Code	IT	Country Nam			-7		
		Col	nfirmation				
We confirm that the actions identified in intended to be finance METRO are in principlinancing.	this prop ced by th	osal and e PON	Commen		Å	No 🗆	
We confirm that the correctly the potential contribution from the	al financ	ial	Commen		Ŕ	No 🗆	
We confirm that the proposal indicates correctly the timing of potential funding from the PON METRO		Yes ♥ No □					
We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.			Yes No Comments: From when we wrote the proposal, there has been a change in the areas where the cycle paths will be strenghtened. The areas will be all within the Municipality territory and there won't be any intervention in the Metropolitan Area. The amount foreseen is now € 6.837.500 and there might be an extra funding for € 1.312.500, but it's still				
	S	tatus of the f	not sure.	nmitment	70		
Committed/confirmed Comments:		tatab or the r	A STATE OF THE PARTY OF THE PAR	mmitted/confi	rmed	R	
	S	ignature of th	ne authoris	sed person	Wh.		
Name and status of t person (obligatory):	he autho	orised		ucci – Directo gy Policies De		Mobility, Environmental ment	
Date of the signature (obligatory):			6/	11/2016			
Authorised signature	e (obligat	tory):	Yel	11 50	_		

LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

PROFILE AND COMMITMENT FORM

45-21-2 (J.S.	Title of the Li	FE Integrated	d Project
Title: PREPAIR	-10		
Legal infor	mation on the MANAG	ING/COMPET	TENT AUTHORITY/ENTITY
Legal Name	City of Torino, The M	anagement Infra	astructure and Mobility
Legal address of the N	IANAGING/COMPETE	NT AUTHOR	RITY/ENTITY
Street Name and No	Piazza San Giovanni, 5)	PO Box
Post Code	10123	Town/City	Torino
Country Code	IT Country Nar	ne Italy	
	Co	nfirmation	
We confirm that the actions identified in intended to be finance METRO are in princifinancing.	this proposal and ced by the PON	Comments:	Yes X No □
We confirm that the correctly the potentic contribution from the	al financial	Comments:	Yes 🗓 No 🗆
We confirm that the	oronogal indicator		
We confirm that the proposal indicates correctly the timing of potential funding from the PON METRO			Yes 🛛 No 🗆
		Comments:	
We confirm that duri of applications for fu received by our auth into account that the LIFE integrated proje	inding (to be) ority, we (will) take by are linked to the	Comments:	Yes 🛛 No 🗀
	Status of the	financial com	nmitment
Committed/confirmed Comments:		To be comm	mitted/confirmed 🗵
	Signature of t	he authorised	d person
Name and status of t person (obligatory):	the authorised	Roberto Berta Infrastructure	asio, the Director of The Management a and Mobility
Date of the signature (obligatory):	24/11/2016	22	
Authorised signature	(obligatory):		
	YOU MAY DUP	LICATE THIS PAGI	SE SE



LIFE Integrated projects 2015

Stage 2 – FULL PROPOSAL

Technical application forms

Part B – technical summary and overall context of the project

SUMMARY DESCRIPTION OF THE PROJECT (English version)

1. Overall context/background/geographical scope

IP itself:

The Po Valley (northern Italy) represents an important non attaining zone for PM, NO_2 and O_3 thus the enforcement of the air quality limit values. This zone covers the territory of Italian northern Regions and includes several urban agglomerates such as Milan, Turin, Venice and Bologna. The area is densely populated and heavily industrialized. About 450.000 tons of NOx, 90.000 tons of PM and 250.000 tons per year of NH3 are emitted in the atmosphere by a wide variety of pollution sources mainly related to traffic, domestic heating, industry and energy production sectors. Another important pollution source is related to the nitrogen and ammonia cycle, coming mainly from fertilizers, breeding and farming activities.

Meteorological conditions and the transport and dispersion of pollutants are strongly influenced by the morphological characteristics of the Po Valley and the northern Adriatic Basin. The transport of pollutants is limited by the Alps, the Apennines and the Dynaric Alps. Pollutants are transported across the Adriatic sea, which influences the atmospheric circulation and the photochemical processes representing main drivers of ozone and secondary PM. Due both to the meteorological conditions and the morphologic characteristics of the Po valley, the rural background concentration of pollutants are often high, while a large part of the PM is due to secondary production, as several studies report. As a matter of fact, all Regions started implementing air quality plans over the last decade, however they were not fully effective in achieving a sufficient reduction of PM, NO₂ and O₃ concentration levels below the EU limit values. This experience demonstrates that coordinated and large scale actions should be undertaken in the Po valley area. In order to further reduce the levels of background air pollution, all the regions have clustered in the so-called Po Basin Board and planned actions to be taken with the aim of reducing emissions over the next years. The need of coordinated actions led the National and Regional governments to sign an agreement in December 2013 aimed at developing and coordinating short and long term actions for improving the air quality of the Po valley. The Po Valley Agreement identifies the main sectors where actions will be taken: biomass burning, transportation of goods and passengers, domestic heating, industry and energy, agriculture. All the regional governments involved in the agreement have their own Plans for the improvement of air quality. PREPAIR will implement the measures foreseen in the regional plans and in the Po Valley agreement at a larger scale so to strengthen the sustainability and durability of results: the geographical coverage of the IP is the Po Valley with the regions and cities that mainly influence air quality in the basin.

The IP actions will also be extended to Slovenia in order to assess and reduce pollutants transportation across the Adriatic sea. Regarding air quality, all the regions located south of the Alps face the same adverse climatic conditions, which require higher technical and financial efforts to resolve compliance problems compared to other regions. Therefore, a transnational cooperation would be beneficial, especially in the field of capacity building. This will allow to compare the problems, methodologies and results so as to identify and realize actions and tools that are effectively replicable in other EU territories. Partners from the two areas have scientific competences and expertise in the issues addressed by the IP.

Main GAPs in achieving the objectives of air quality plans in the target areas are related to the high complexity of the regions from a geographical, metereological and socio-economic point of view, which make the resource-demanding of measures to be adopted consistent. GAPs are identifiable in the need to coordinate measures in a widespread area, to strengthen multi-level and cross-sector governance and to increase the capacity building of public and private operators. A further GAP is related to the insufficient coordination between the regions on monitoring, modeling, assessing and forecasting air quality. Common technical tools are necessary for the design of the actions and monitoring of the

environmental effects of the measures. The project PREPAIR falls under the definition of IP because it extends measures that are included in the air quality plans (AQPs) to a larger territorial scale, thus enhancing the vertical integration among different levels of governance, and realising the horizontal integration among the main sectors that have an impact on air quality. The project will also integrate a wide set of technical tools (emissions inventories, air quality models, enhanced monitoring stations, etc.) now working independently in the several regions. This goal will be realized establishing a permanent networking structure between the environmental agencies of the Po Valley and Slovenia.

Complementary actions:

All the public bodies engaged in PREPAIR are involved in the implementation of the Operational Programmes financed by ESIF 2014-2020, mainly ERDF, EAFRD and ESF. Lots of the actions foreseen in the regional air quality plans are included in the OPs. So these measures are actually complementary with the actions that will be developed through the IP. The measures identified are "win-win" for climate change and air quality, such as those on energy efficiency, sustainable mobility, reducing emissions from breeding and agriculture, maximizing synergies among the various plans and programs. The ERDF OPs organize their strategies on priorities that reflect the thematic objectives provided by Regulation (EU) No. 1303/2013 in close relation with the Europe 2020 Strategy and in coordination with the ESF and EAFRD. Relevant for the IP objectives are the measures aiming to promote low-carbon strategies, especially in urban areas as well as in the transport sector. The priority axis "smart cities, sustainable and attractive" promotes sustainable urban mobility and measures for adaptation and mitigation in towns. Specifically for metropolitan cities, such as those involved in the IP, funds will be addressed in Italy by the National Operational Programme.

2. Project objectives:

IP itself:

The IP aims at realizing actions in the territory of the Po Valley and Slovenia in order to improve air quality and comply with Dir. 2008/50/EC and the European strategy "Clean Air for Europe". The IP will also contribute to reach compliance with the National Emission Ceilings Reduction Commitments at national level. General objectives are:

- 1. The implementation of measures included in the AQPs and in the Po Valley Agreement;
- 2. Spreading the intervention area of AQPs acting on background levels in a synergic way;
- 3. Increasing the know-how and capacity building of public bodies and private operators;
- 4. Strengthening the coordination among Po Basin authorities in the field of air quality;
- 5. Establishing a permanent networking structure between the environmental agencies of the Po valley and of the eastern border regions and Northern Adriatic basin, as Slovenia.
- 6. Creating homogeneous assessment reports about the effectiveness of PREPAIR concrete actions on air quality in Po Valley and Northern Adriatic basin, replicable in other similar regions, for an effective and efficient management of air quality;
- 7. Measuring the effectiveness and the resource-need of measures aiming at improving air quality so as to replicate the most effective in the project area and in other EU regions;
- 8. Raising awareness of citizens and socio-economic actors so as to create a community well-conscious of the criticalities related to air pollution, the risks for human health and for the environment:
- 9. Creating a durable network among national, regional and local governments, socioeconomic actors, research centers and all the other stakeholders.

Among all the measures foreseen in the Regional AQPs, the IP focuses on 4 main sectors, these are biomass burning, energy efficiency, transport and agriculture, in line with the themes addressed by the Po Basin Agreement. Specific goals are:

- promoting the use of public transport and the use of bicycle;
- informing and training citizens, local administrators, professionals and mobility managers on sustainable mobility challenges and advantages (e.g. electric mobility, eco driving, etc.);

- developing innovative processes for the optimization of freight transport;
- increasing the awareness of people and policy makers on the correct use of biomass;
- encouraging the substitution of domestic heating biomass stoves to high-efficiency and low-emission ones;
- dissemination of best-practices and increasing of know-how about the installation and maintenance of domestic heating devices, energy efficiency in civil and industrial sectors;
- adoption and transferring of know-how about the correct use of fertilizers in agriculture and promoting the spread of best technologies in agriculture and livestock so as to reduce ammonia emissions from the sector basing on common evaluation tools.

Complementary actions:

Many complementary actions are included in the OPs ERDF and EAFRD. As general framework, the ERDF aims at strengthening economic and social cohesion in the EU by correcting imbalances between regions, while EAFRD aims at contributing to the competitiveness of agriculture, the sustainable management of natural resources and climate actions and the balanced territorial development of rural areas, both under the Common Strategic Framework of Europe 2020. Many measures provided for the OPs of PREPAIR partners aim at improving air quality through the promotion of a low carbon economy, the support to renewable energy and sustainable mobility, the improvement of public transport service, the restoration of urban areas, the development of ICTs and the reduction of ammonia emissions from agriculture and livestock. At the same time, complementary measures financed by national and regional funds will be developed, such as the maintenance and improvement of regional monitoring tools, the realization of pathways and pedestrian areas, measures to improve the public transport and electric mobility facilities and services, the diffusion of BATs in the productive sectors.

3. Actions and means involved:

IP itself:

LIFE-IP PREPAIR actions are structured in 5 groups - A, C, D, E and F - and in 3 phases: the first and second of 2 years and the third one of 3 years.

Action A - PREPARATORY ACTIONS

This group of actions has the general goal to collect the input data needed for designing and implementing the air quality plans monitoring infrastructure. Actions A will deliver: a common data set of emissions data for the Po valley and Northern Adriatic basin; a data set containing a list of quantitative data about all actions/measures planned by the regional/local AQPs and by the IP itself and a common system for the periodic upgrading of the actions/measures data; a preliminary assessment of the expected pollutant levels in the target areas after the full implementation of all local AQPs. Moreover the transboundary effects of the Po valley AQPs on the Slovenia target area will be preliminary evaluated. Preparatory actions will realize a data flow analysis and the definition of procedures for estimate an improved emission inventory on Po basin. These evaluations will be the base for the definition of informative tools able to collect existing emission inventories and their update, analyzing the data and reducing discontinuities among regions for the main pollution sources. The preliminary evaluation will also provide the base for designing and implementing the air quality plans monitoring infrastructure (e.g. the data sharing infrastructure and the air quality models).

Action C - CONCRETE ACTIONS

Main actions connected to PREPAIR objectives will be focused on four different sectors: agriculture, biomass burning, transports and energy efficiency. A group of C actions is dedicated to implement the permanent data sharing infrastructure and the air quality model.

DATA INFRASTRUCTURE

The IP will realize a common and permanent infrastructure for data sharing, monitoring and evaluate air quality at the Po and northern Adriatic basin scale, where applicable. The tools that will be implemented on the whole target area are:

- a common system for monitoring the environmental effects of the IP and the AQPs;
- a modelling system and data processing tool for the assessment of the effects of PREPAIR and the regional air quality plans and the trans-boundary effects between Po Valley and Slovenia;
- an Integrated Assessment Model for evaluating the cost-effectiveness of the actions. Today those tools are available for each of the regions of the Po valley and Slovenia. The actions will integrate most of the existing tools at a basin scale. The Italian and Slovenian air quality models will be extended to the whole target area. The results will be applied for improving the means applied in the two target areas. This action will be realized also with the support of the Integrated Assessment Tool RIAT+ developed by the Life+ OPERA project according to the model GAINS-Italy and implemented on the Po valley domain. This infrastructure will be managed by the IP partners also after the end of the project.

References to the AQPs: Emilia-Romagna: ch. 9.8 p. 168 "Le misure sovra regionali"; ch. 12.1 p. 184 "Gli strumenti di gestione del piano". Lombardy: ch. 1.4 p. 17 "Azioni di coordinamento sovra-regionali; ch. 5 p. 238 "Il sistema di monitoraggio". Bolzano: annex I Disposizione 1.3c "Inventario delle emissioni" – p. 11; Disposizione 1.3d "Attività di gestione della qualità dell'aria" - p. 12. Piemonte: L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, pag. 5,6). Veneto: ch. 6.2.11 "Misure a carattere scientifico, conoscitivo, informativo, educativo", Azione B2.1 [a,b,c], p. 323. Trento: AC2, p.66, "Predisposizione di un sistema di simulazione numerica per la qualità dell'aria": Valle d'Aosta: LR 30 gennaio 2007, n. 2: Disposizioni in materia di tutela dall'inquinamento atmosferico ed approvazione del Piano regionale per il risanamento, il miglioramento ed il mantenimento della qualità dell'aria per gli anni 2007/2015. Art. 5 "Sistema informativo sulla qualità dell'aria" / Comma 3; Friuli Venezia-Giulia: Capitolo 7 "Le azioni del Piano" - -Paragrafo 7.1.1 "Misure riguardanti la comunicazione, la gestione del Piano e le attività conoscitive dello stato della qualità dell'aria", pagg. 431-432; Slovenia: Governmental Ordinances for Air Quality Plans for Ljubliana, Celie, Krani, Novo mesto, Zasavie, Murska Sobota - Parag. 5, and for Maribor - Parag .7: Short term measures, Governmental Ordinances for Air Quality Plans for Ljubljana, Celje, Kranj, Novo mesto, Zasavje, Murska Sobota - Parag. 7, and for Maribor - Parag. 8: Programme for analysing causes and monitoring effects of measures.

AGRICULTURE

As far as agriculture is concerned, capacity building and demonstrative actions are foreseen in order to develop a common evaluation model applicable to breeding cattle, pigs and poultry at the Po basin level, through a "whole farm" approach, aimed at enforcing the implementation of the IED Directive and other rules connected to air pollution. This tool will be based on a shared dataset, which will allow to assess the environmental sustainability of livestock and its improvement perspectives and the emissions resulting from farming. An analysis on the best techniques of usage of fertilizers will be realized and aimed at the reduction of emissions through case studies with different cropping systems, together with actions aiming at verifying (also through field-based analysis) the opportunity of replacing urea with other nitrogen fertilizers or with organic substance, with an assessment of the environmental costs and benefits. The action will also set up a system for providing assistance to farmers about the choice of the BATs with respect to the meteorological and soil conditions, in order to minimize the emissions of ammonia in the atmosphere.

References to the AQPs: Emilia-Romagna: ch. 9.5.3 p. 154 "Misure nel settore degli allevamenti zootecnici"; Ch. 9.5.4 p. 157 "Misure inerenti l'utilizzo dei fertilizzanti in campo agronomico". Lombardy: Ch. 2.4.2.4 p. 91 "Settore agricolo"; Ch. 3.5.3 page135 "Attività agricole e forestali"; Attach. 3 p. 5 and 9; Ch. 2.4.2.4 p. 91 "Settore agricolo"; Ch. 3.5.3 p.135 "Attività agricole e forestali"; Attach. 3 p. 5 and 9. Piemonte: L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, pag. 5,6). Veneto: ch. 6.2.9, p. 309-318 "Interventi su agricoltura ed ammoniaca". Trento: AC10, p. 79, "Valutazione delle migliori pratiche di gestione per una riduzione delle emissioni di ammoniaca dal settore agricolo".

BIOMASS BURNING

Capacity building actions will concern the training on the correct use of biomass in the areas covered by the project including information about the impact of biomass plants on air quality and the definition of an overall and comprehensive regulatory framework. Training for a correct maintenance of biomass-burning appliances is foreseen together with actions for promoting high efficiency systems of pellets production and biomass burning, enhancement of the control of domestic biomass burning plants and their maintenance. Actions for enhancing the role of "qualified chimney sweep" for the control and maintenance of biomass domestic systems will be realized. Capacity building actions will also aim at optimizing the local supply chain management and production of biomass for energy use through the implementation of suitable management plans, the application of traceability protocols, the stakeholder engagement and the comparison of good practices.

References to AQPs: Emilia-Romagna: ch. 9.3.4.1 p. 128 "Misure per la riqualificazione energetica"; ch. 9.3.4.2 p. 130 "Regolamentazione degli impianti di combustione a biomassa per riscaldamento civile". Lombardy: Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili"; Att. 3 page 51; Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili"; Att. 3 p. 51; Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili". Bolzano: Ann. I: Disposizione 3e "CasaClima" - p. 32; Disposizione 3d "Riduzione delle emissioni da impianti a biomassa" - p. 31. Piemonte: DGR 4 agosto 2009, n. 46-11968, ch.1.4 "Prescrizioni specifiche sugli impianti termici negli edifici", ch. 1.5 "Generatori di calore" (B.U 7 agosto 2009, 4° suppl. al numero 31, pag. 102); LR 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° suppl. al numero 15, pag. 5,6). Veneto: ch. 6.2.2, p. 254-265 "Utilizzazione delle Biomasse in piccoli impianti civili e combustioni incontrollate", Action A2.3bis; ch. 6.2.11 "Misure a carattere scientifico, conoscitivo, informativo, educativo", Action B1.1 "Promozione di studi scientifici volti alla definizione e quantificazione delle sorgenti del particolato atmosferico" (p. 322). Trento: Alc2, p.104, "Incentivazione alla sostituzione degli impianti a legna domestici più inquinanti con tecnologie ad alta efficienza"; Friuli Venezia-Giulia: Capitolo 7 "Le azioni del Piano" - - Paragrafo 7.1.2 "Misure riguardanti il settore dell'energia", pagg. 428-43; Slovenia: Governmental Ordinances for Air Quality Plans for Ljubljana, Celje, Kranj, Novo mesto, Zasavje, Murska Sobota - Parag. 6, and for Maribor - Parag. 9: Detailed plan of measures.

TRANSPORTS

Capacity building actions are mainly focused on the improvement of local public transports and passenger's convenience. These concern ICT tools for passengers (e.g. apps for smartphones), training of citizens and insiders (local administrators, professionals and mobility managers) on both public transport and electric mobility challenges and advantages. Another capacity building action foresees the training of public and private drivers for a more efficient and sustainable driving system aiming at the reduction of pollutants (eco-driving). Pilot/demonstrative actions concern: the conversion of the fuelling system of old engines for busses from diesel to electric; actions promoting cycling mobility with measures to tackle bicycles theft and to act more knowingly on the issue of cyclists safety, connecting the bike-stations of the main cities in the area and improving quality and usability of cycle paths; actions aimed at promoting innovative processes that can affect the optimization of freight transport.

References to AQPs: Emilia-Romagna: ch. 9.1.3.2 p. 96 "Misure per la riduzione dei flussi veicolari nei centri abitati"; ch. 9.2.3.4 p. 110 "Interventi per l'interscambio modale"; ch. 9.2.3.1 p. 108 "Rinnovo parco autobus con sostituzione dei mezzi più inquinanti con autobus a minore impatto ambientale e rinnovo materiale rotabile"; ch. 9.2.5 p. 117 "Le azioni per una gestione sostenibile delle merci"; ch. 9.2.3.6 p. 111 "Sviluppo dell'ITS e di progetti di infomobilità"; ch. 9.2.4.1 p. 114 "Promozione dell'utilizzo di veicoli elettrici"; ch. 9.2.6 p. 119 "Utilizzo ottimale dei veicoli: Eco driving". Lombardy: Ch. 2.4.2.1 p. 84 "Trasporto stradale"; Ch. 3.5.1.1 p.116-121 "Trasporto privato" e "Trasporto pubblico locale"; Attach. 3 p. 106, 107; Ch. 2.4.2.1 p. 84 "Trasporto stradale"; Ch. 3.5.1.1 p. 116-118 "Trasporto privato"; Attach. 3 p. 93. Bolzano: Annex I: Disposizione 2.1f "Disposizioni varie a livello comunale" - p. 18; Disposizione 4d "Incentivazione del trasporto pubblico" - p. 37.

Piemonte: L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, pag. 5,6); L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, pag. 5,6). Veneto: ch. 6.2.7 "Interventi sul trasporto passeggeri", Actions A.7.14 e A7.14bis, p. 297; ch. 6.2.7 "Interventi sul trasporto passeggeri", Actions A7.8,p. 296; ch. 6.2.8 "Interventi sul trasporto merci e multi modalità", Actions A8.1, A8.2, A8.4, A8.5 p. 306; ch. 6.2.7 "Interventi sul trasporto passeggeri", Action A7.10,p. 296; ch. 6.2.11 " Misure a carattere scientifico, conoscitivo, informativo, educativo", Action B5.3,p. 325. Trento: APt 5, p.117, "Promozione della mobilità ciclistica"; Friuli Venezia-Giulia: Capitolo 7 "Le azioni del Piano" - Paragrafo 7.1.2 "Misure riguardanti il settore dei trasporti", pagg. 425-428.

ENERGY EFFICIENCY

As far as the energy sector is concerned, only capacity building actions are foreseen as investments are already enclosed in the complementary measures. Training and supporting activities in the industrial sector will be focused on the reduction of energy consumption through education programs and follow ups organized within companies; these programs will concern energy efficiency in industrial processes and buildings, and CHP and regeneration in order to promote the efficient use of energy according to EU directives IED and 2012/27/UE and to BREFs on energy efficiency. Activities involving operators aim at reaching "zero-emission-buildings" and will be realized through educational activities and new management systems of the building sector. Specifically addressed to public authorities, guidelines, educational programs and e-learning modules will be developed in order to foster the GPP (green public procurement) according to the Environmental Minimum Requirements and energy efficiency in public buildings.

References to AQPs: Emilia-Romagna: ch. 9.3.4.3 "Misure di efficientamento nel settore industriale"; ch. 9.3.4.1 p 128 "Misure per la riqualificazione energetica"; ch. 9.6 p. 162 "Acquisti verdi nelle pubbliche amministrazioni". Lombardy: Ch. 3.5.2 p.125-131 "Sorgenti stazionarie ed uso razionale dell'energia"; Att. 3 p. 28, 29. Bolzano: Allegato I: Disposizione 3e "CasaClima" - p. 32. Piemonte: L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supp. al numero 15, pag. 5,6). Veneto: ch. 6.2.6 "Interventi di riconversione del patrimonio edilizio in funzione del risparmio energetico", Act. A6.9; ch. 6.2.6 "Interventi di riconversione del patrimonio edilizio in funzione del risparmio energetico", Act. A6.2; Trento: Alc 1, p.102, "Incentivazione al risparmio energetico nel settore edilizio"; Friuli Venezia-Giulia: Capitolo 7 "Le azioni del Piano" - Paragrafo 7.1.2 "Misure riguardanti il settore dell'energia", pagg. 428-431.

Action D - MONITORING AND EVALUATION

The monitoring and evaluation of the impact of the project actions will be guaranteed for the overall duration of the project. Actions D will periodically collect data about the successful implementation of the measures of the Air quality plans and of PREPAIR Actions. Furthermore, monitoring and evaluation tools created to assess the impact of the project actions will be the basis to assure a concrete long lasting effect starting from the phase 2 of the project. During actions D the technical tools set-up by the concrete actions will be applied on a regular basis for upgrading the common data bases on emissions and the air quality assessment by monitoring and modeling data. The air quality and emissions data collected on a regular basis by the data sharing infrastructure will be used for producing reports on air quality assessment on the Po Valley and Slovenia.

Action E - COMMUNICATION AND DISSEMINATION

Communication and dissemination of PREPAIR objectives have a primary importance for the implementation of the project. The communication actions are developed on 3 levels: the first level foresees the preparation of project communication tools, the second one the development of tools in support to training and capacity building activities and thematic communication campaigns, and the third one the creation of specific communication campaigns. The coordinating beneficiary, in agreement with the associated, will develop a communication plan, all the communication tools (web portal, leaflets, notice boards and roll-ups) will be realized and promotional events will be organized. The communication campaign will involve local media (such as local radios, TVs and press) and projects activities will be highlighted through the project website. Specific actions will be realized on

the IP thematic issues. During action E the reports about the air quality concentration levels, and population exposure delivered by actions D will be disseminated by the environmental agencies web sites and by the project web portal.

Action F - PROJECT MANAGEMENT AND COORDINATION

Project management will be guaranteed on a day-to-day basis by the coordinating beneficiary. It will include the daily management and the financial management of the project. A good communication system within the consortium will be assured and regular communication with the European Commission will be established. Each partner will be responsible of the actions that it coordinates thus the partner will be in charge of its management and coordination. The networking will ensure a continuous and effective exchange with other LIFE or non LIFE projects so to share results and maximize synergies.

Complementary actions:

AGRICULTURE: Complementary actions related to agriculture will be implemented within the Regional Rural Development Plans and other Regional funds. These mainly concern an efficient use of energy in agriculture and in the food sector, a support in the use and supply of renewable energy from waste and non-food products, a reduction of GHG emissions and ammonia deriving from agriculture and the adoption of agricultural methods addressed to the reduction of GHG and ammonia in pig, poultry and cattle farms. Complementary actions also aim at the development of rural areas and on interventions on agricultural vehicles.

BIOMASS BURNING: These activities include renewal of domestic wood biomass plants and control of biogas and bio-methane plants. Complementary actions related to biomass will be implemented within the Regional Rural Development Plans or other EU funds.

TRANSPORTS: There are different sources other than LIFE involved in the development of actions connected to transports, these are the Regional funds addressed by AQPs, the OP ERDF, National Operative Plans-Metropolitan Cities included. Complementary actions aim at increasing sustainable mobility in the urban areas, improving the regional and local public transports through the renewal of the public vehicles fleet. Measures of traffic restriction to the high emission vehicles are also foreseen.

ENERGY EFFICIENCY: Regional funds addressed by AQPs, OP ERDF are the means other than LIFE connected to the energy sector. These measures concern energy efficiency in the productive sector, energy requalification of civil buildings, renewal of heating plants and energy requalification of public buildings.

4. Expected results (main outputs and achievements, qualitative and quantitative):

Linked to Actions of LIFE IP (short and long term):

Action A - PREPARATORY ACTIONS

The actions will deliver basic data sets, technical specifications for software development and assessment, some preliminary reports and a software tool. Main outputs are: a data set containing a list of actions and measures for the Po Valley AQ plans with indicators and a data set of emissions for the Po Valley in the reference year. Such data will provide the information for a preliminary assessment of the AQ plans impact on air quality and for preparing the informative platform for collecting the data for the accountability of measures and designing the data sharing infrastructure. A protocol for realizing experimental campaigns to observe tracers of atmospheric processes not monitored by fixed stations will also be delivered. Actions A will realize a preliminary assessment of the expected pollutant levels in the target areas after the full implementation of all local AQPs and the estimation of trans-boundary effects of the AQPs between Po Valley and Slovenia. Such preliminary assessment will be improved and updated by actions D during the phase 2 and 3.

Action C - CONCRETE ACTIONS

DATA SHARING INFRASTRUCTURE: A permanent infrastructure for sharing air quality and emissions data and air quality models for the evaluation process will be realized. The common database will contain both raw (i.e. observed) and processed (i.e. modelled) air quality data. The database will be updated in near real time, and it will be accessible by

means of a web interface. One or more air quality models (including post processing tools for air quality and population exposure assessment) and an integrated assessment model (RIAT+) will be implemented.

AGRICULTURE: At least one guidelines for the usage of fertilizers with a high content of urea based on field analysis; at least one tool for the adoption of the best available technologies applicable to livestock. Approximately, using BATs for urea-based fertilizers could lead to a reduction of 18% of ammonia emissions, while through BATs in farms it is possible to reduce up to 40% of emissions from pigs breeding.

BIOMASS BURNING: Training initiatives for the correct maintenance of biomass heating plants; a research on woody biomass consumption in order to improve the logistics of its supply in northern Italy. With these actions it can be supposed a replacement of about 10% of the less efficient plants with high efficiency ones and it can be estimated a reduction of about 5% of emissions from domestic biomass combustion. The correct maintenance of plants could increase energy efficiency and reduce emissions of about 7%.

TRANSPORTS: Networking the bike-stations of the main cities of the Po Basin and development of bicycles infrastructures and of training of public officers and advisors aims at raising the awareness and provide technical information to the local authorities to ensure that their plans take into account, in an integrated way, all the type of sustainable transports existing or planned in a given territory; at least one demonstration project aiming at improved quality and usability of the cycle paths; at least one pilot initiative on public transports aimed at the conversion to electric engine; promote electric mobility through training activities for public transport companies and private drivers; at least three demonstrative actions aimed at improving the short-range freight transport; at least one training course for each territory involved aimed at promoting sustainable driving; a common app to promote public transports at the Po basin level. As far as expected results are concerned, given that nearly half of freight trips happen with empty loads, the optimisation of loadings and paths could lead to a decrease of driven vehicle kilometres with duty vehicles of 15%. Benefits from ITS technology application have been evaluated through experiences in EU and USA in a reduction of pollutants emissions about of 10%. ENERGY EFFICIENCY: at least one training initiative for each territory involved on the efficient use of energy in the industrial systems; at least one initiative addressed at operators at the basin level on energy saving in the civil sector; operative tools and initiatives for increasing capacity building in the local administrations on GPP and energy efficiency in public buildings. In general a reduction of 3-5% of thermal consumptions would correspond to an equal percent reduction of emissions in industrial sector. The effect on emissions reduction of the rise of knowledge and skills of the designers has been estimated

Action D - MONITORING AND EVALUATION

in a decreasing of at least 1% from domestic heating.

Main outputs will be: Reports and the related numerical datasets on the account of measures and upgraded emissions inventories. Reports and related dataset on the biomass burning in the Po valley. Reports and related dataset on the traffic fluxes in the Po valley. Annual assessment reports and related datasets on the air quality and population exposure in the Po valley and Northern Adriatic basin. Periodic reports on air quality in the Po valley and Slovenia. Reports on the cost-effectiveness analysis and corrective measures (if need). Reports and related datasets on the intensive observation campaigns at selected monitoring sites in Po valley and Slovenia.

Action E and F - COMMUNICATION AND DISSEMINATION, PROJECT MANAGEMENT AND COORDINATION

In accordance to the three communication levels described above, main results will be: project communication, tools in support to activities and campaigns and specific communication campaigns. Reports on air quality assessment on the Po Valley and Slovenia will be disseminated by the environmental agencies web sites and by the project web portal. A technical and financial management will be established as to guarantee a good implementation of the project, together with a steering board which will be in charge of the supervision of the project.

Linked to complementary actions (short and long term):

For the definition of the expected results of complementary actions that refer to ERDF and EARDF, the framework valid for all regions of the Po Basin created by the National Partnership Agreement has been adopted (version submitted to the EC in July 2014). Below the specific targets of the Partnership Agreement are reported, with reference to the topics of PREPAIR. The quantification of the following targets, however, is not foreseen until 2023.

AGRICULTURE: Expected results are the reduction of greenhouse gas emissions and increase of carbon sequestration in agriculture. The following main actions are foreseen:

- solar plants will be a priority for the production of electricity and heating, and the production of energy from livestock and agricultural wastes will be subsidized (4.7);
- reduced risk of desertification (5.2): restoring, preserving and enhancing ecosystems dependent on agriculture and forestry; better management of water resources, including the management of fertilizers and pesticides. Agro-climatic-environmental and forest-environmental actions will be taken with the aim of encouraging agricultural crops and practices with a reduction of consumption and an increase of organic substance in the soil. These actions will be supported through programs of technical and economic assistance and the dissemination of information among agricultural and forestry enterprises.

BIOMASS BURNING: Expected result is the increase the sustainable exploitation of bioenergy. The agriculture, agroindustrial and forestry sectors have indeed a great potential for the production of renewable energy, which will be supported through a sustainable use of bio-energies. Energy production will be fostered by an active management of forests so as to ensure the beginning of short chains, realizing also logistic platforms and networks for the collection and reuse of agricultural and agro-industrial residuals. At this purpose the use of forestry biomass for the production of heating and energy will be subsidized (4.5). In order to contribute to halting the loss of terrestrial and marine biodiversity, also linked to the rural landscape and maintaining and restoring ecosystem services (6.5) the following actions will be pursued: restoring, preserving and enhancing ecosystems dependent on agriculture and forests to safeguard restoration and improvement of biodiversity. Actions will aim at reducing habitats fragmentation and maintaining or restoring green infrastructures according to the tools of regional planning (Natura 2000 network, ecologic networks, etc.).

TRANSPORTS: the expected results will concern the increase of sustainable mobility in urban areas through the strengthening of sustainable collective mobility services which will be inserted in planning tools aiming at discouraging the use of individual means of transport (4.6) and the integration of transport and improvement of multi-modal connections with major urban nodes, production and logistics and the core network, global and local (7.3).

ENERGY EFFICIENCY: The main expected results are:

- the decrease in annual consumption of primary energy in public buildings (4.1) Energy efficiency will be reached through the integration of renewable sources of electric and thermal energy and will be applied also to public illumination;
- the reduction of energy consumption and emissions in businesses and integration of renewables, especially for agricultural and agro-food businesses, where interventions will aim at energy saving (4.2).

Complementary actions included in AQPs aim to the following main results: increase of cycling paths and pedestrian areas, renewal of public transport fleets with more sustainable vehicles, regulation of circulation of high emitting vehicles in urban areas, decrease of emissions from biomass burning through prohibition of low efficiency systems and regulations of control devices, renewal of public lightening devices towards more efficient systems, maintenance of air quality monitoring networks, reduction of emissions from industries.

The possibility to quantify the expected reduction of emissions achievable through the implementation of the complementary actions will be evaluated during the preparatory

actions A1, A2 and A3 on the basis of the method applied for the project and air quality plans actions.

Within the possible output indicators to be used as input for updating the Air Quality Plans and for reallocating the funds of the next European programming, we identify the followings:

ERDF - PM10 emissions and NOx emissions savings, reduction of GHG emissions, number of buildings that achieved an improvement on energy certification, bike paths extension, number of low emissions/electric vehicles.

EARDF - Agricultural land under management contracts targeting reduction of GHG and/or ammonia emissions (ha).

5. Expected contribution of the project to the implementation of the target plan/strategy

LIFE IP:

The measures identified in the IP will allow the implementation of some of the actions included in the Regional AQPs in a coordinate way, so to achieve a multiplier effect on the air quality improvement in the interested areas. The contribute will consist in demonstrative actions and in the improvement of capacity building that will be disseminated all over the territories of beneficiaries and in the development of studies and tools that will increase actions efficiency and will be used homogeneously. Monitoring and air quality evaluation will be led on a basin scale and will identify the most effective actions among those contained in Plans giving a wide area feedback to local policies. A coordinated communication and information will focus the public attention on the main themes impacting on air quality, orienting people attitude and politics awareness towards the same objectives in a very wide area. These measures will increase the efficiency of the Po Valley Agreement, for they will act as support to its fulfilment. The partners of the IP are the subjects in charge of air quality planning, management and monitoring, as regional governments, municipalities and environmental agencies. In this way the contribution of the IP on AQPs will be effective and direct. The involvement of the Italian Ministry for Environment ensures the direct connection with the Po Basin Agreement. The involvement of all the relevant stakeholders will lead to the actual implementation of Air Quality Plans.

Complementary actions:

The IP actions will integrate the OP ERDF and EARDF measures, focusing on actions similar to those financed by the Regional programmes on common targets for specific sectors and on actions different but complementary to those implemented by the OPs.

6. Main stakeholders involved in the project:

The Italian Ministry for Environment, the Ministry for Transports, the Ministry for Agriculture, the Ministry for Economic Development and the Ministry for Public Health and the Slovenian respective Ministries will be involved in the project given their institutional role. Local authorities will be involved as main stakeholders due to their role in the implementation of AQPs. Other Regions and Municipalities will be involved, as the members of AIR, ENCORE and EUROCITIES networks. Specific stakeholders will be involved referring to the thematic pillars of the IP:

MONITORING AND EVALUATION: Main research institutions in Italy and Slovenia will be involved as end users of the services. The members of the RIAT+ OPERA consortium will also be involved for implementing the tool. APPA Bolzano will be involved as "active" stakeholder, providing data on emissions, level of pollutants and measures.

AGRICULTURE: Fertilizers producers will be directly involved for assisting farmers in the usage methods; farmers and their representatives; Research Centers and Universities will be directly involved especially in the development of the evaluation model.

BIOMASS BURNING: ANFUS (The Association of Chimney Sweeps), AIEL (Association of Agroforestry Energy), Craftsmen Association, Local Authorities and private operators.

TRANSPORTS: Local Public Transport Agencies, Logistic operators, operators in cycle mobility field (such ONG or no-profit organizations), Suppliers and installers of electric

conversion systems, Regulatory, safety and homologation bodies, Academic and research institutes, Environment and technology parks, ICT companies, driving schools and environmental associations, citizens, schools, teachers and students.

ENERGY EFFICIENCY: Local authorities, operators and craftsmen association, Energy Managers of Public and Private bodies, experts and researchers.

7. Long term sustainability (including capacity building)

Partners will ensure the long last effects of the project after the end of financing thanks to the creation of a network where sharing all the experiences and knowledge aimed at promoting synergies. Thanks to PREPAIR the lack of adequate instruments and of the coordination of the existing tools will be overcome and partners will be able to continue implementing and enhancing project objectives by the insertion of PREPAIR results in their own local and regional governance policies. PREPAIR will allow to create useful tools for air quality management that could be used after the project by the partners and all potential air quality managers in Europe as a "toolbox". A specific action will be realized in order to ensure the maintenance of the data sharing and monitoring common infrastructure realized by PREPAIR. Many actions of the IP aim at increasing the capacity building of the subjects relevant for air quality, policy makers and experts working for public administrations, engineers and professionals, industrial managers, farmers. Improving awareness of civil society and socio-economic actors is a focal goal of PREPAIR and it will lead to a more conscious community about air themes and so creating the conditions for the project durability. This will assure a concrete long lasting effect in the interested areas, and partners aim to widen it to the other territories that have not taken part in the IP. The sustainability of PREPAIR will be also ensured by the participation of partners in associations and networks, such as AIR, EUROCITIES and ENCORE networks.

8. a) Is your project significantly climate related?	Yes	No	
b) Is your project significantly biodiversity-related? If you consider your project to be significantly climate or 'yes'), please explain why:		 No related	 marked

The actions proposed have a direct impact on the quality of the environment, they condition the industrial and agricultural processes affecting also human habits thus resulting in a strong impact on human health and quality of life. Many actions included in PREPAIR are synergic to strategies for reducing GHG emissions, so that IP project has significant and direct effects on climate change. As air quality is affecting not only human health but also ecosystems, the IP will also have positive effects on biodiversity.

GENERAL DESCRIPTION OF THE AREA(s) TARGETED BY THE PROJECT

Name(s)/Definition of the project area(s):

Italian northern area of Po Basin (Emilia-Romagna, Lombardy, Piedmont, Veneto, Friuli Venezia Giulia, Valle d'Aosta regions, Province of Trento) and Slovenia.

Comments:

General description

The IP will be implemented in the whole area covered by the Air Quality Plans of the Regions and Provinces of the Po Basin.

The Po Basin has a population of about 25 millions (40% of the national population), and it also produces a significant share of Italian wealth (more than 50% of the Italian GDP), with a production based mainly on small and medium-sized enterprises. The population density is over 1500 inhabitants per km² in large areas of the Po Basin, but it can be as high as 3600 inhabitants per km² in the biggest cities.

The IP will also support some of the elements included in the 7 Air Quality Plans, which were adopted by the Government of Slovenia to reduce PM10 levels in over polluted areas.

Meteorological conditions

The Po Basin is surrounded by mountains on three sides, and it often experiences meteorological conditions which can be very adverse for the dispersion of pollutants. The average wind speed is one of the lowest in Europe (frequently less than 2 m/s in the plain), therefore winter mixing height is also often very low. Temperature inversions are very frequent in the winter, and they can occur both on the surface and in the boundary layer. Finally, large-scale anti-cyclonic systems are common in winter and summer, leading to severe episodes of air pollution, with high concentrations of ozone in the summer and PM10 in the winter.

Slovenia is located SE of the Alps, and is therefore sheltered from westerly and northerly synoptic winds. Since those synoptic wind directions are prevailing, Slovenia is often in the lee of the mountain ridges. Similar as the Po Valley, the climate in Slovenia is characterised by high percentage low wind speed, stable atmospheric conditions as well as frequent and intense temperature inversion, during the autumn and winter in particular.

Emissions

In the Po Basin about 450.000 tons per years of NOX, 90.000 tons per year of PM and 250.000 tons per year of NH₃ are emitted in the atmosphere by a wide variety of pollution sources, mainly related to traffic, domestic heating, industry, energy production and agriculture sectors. Almost 60-65% of the particulate substance observed in the Po Valley is of secondary origin: it is produced by chemical reactions occurring in the atmosphere and transforming "precursor" gases (mainly NOx, VOC and ammonia) into aerosols. The remaining part of PM10 ("primary" component) is linked with woods combustion, motor vehicle fuel and "non exhaust" traffic emissions (brake and tire wear, abrasion roads), each providing roughly equal contributions. The consumption of diesel fuel for trucking is responsible of a large part (63%) of NOx emissions, while solvents used in industrial and non-industrial activities are the main source of volatile organic compounds. Ammonia is mainly emitted by agriculture activities which involve breeding, farming and the use of fertilizers. Nevertheless, it has to be noted that the per-capita and per-GDP-unit emissions of SO₂, NOX, CO, PM10, PM2.5 and CO₂-equivalents in the Po Basin are lower than both the EU-15 and EU-27 average figures, and similar to the figures provided by the most advanced Member States.

The combustion of wood in the small residential heating appliances accounts for the two thirds of the total PM10 emissions in Slovenia. Those emissions are released during the

cold part of the year, when there are often unfavorable meteorological conditions for the dispersion of pollutants. The combined influence of local emissions and supra-regional background pollution lead to exceedances of the PM10 daily limit value; this happens almost exclusively during autumn, winter and early spring months.

Air quality

Most of the Po Valley inhabitants are exposed to pollution levels exceeding the EU and WHO limit values. The most critical situations are related to the exceedance of the PM10 daily limit for the protection of human health. The highest number of exceedances is usually recorded in traffic stations, but also urban background concentrations are very often higher than the legislative threshold. During summer, ozone levels systematically exceed the target values for health protection in most of the Po Basin; particularly high ozone concentrations were observed in the hotter years, such as 2003 and 2012 (respectively the first and the second hottest summers on record). Concentrations of NO₂ have a high spatial variability, and the highest concentrations are observed close to main roads, industrial and urban agglomerates. Some exceedances of the annual limit value were recorded in traffic stations during 2010 and 2015, while background concentrations are usually below the limit value. The spatial distribution of PM2.5 concentrations is rather uniform, due to the prevailing secondary origin of this pollutant; roadside concentrations can nevertheless be significantly higher, sporadically exceeding the limit value that has been enforced in 2015. Although local emission peaks exist, a significant part of PM and ozone pollution in the Po Basin is due to regional background concentration: levels of these pollutants often appear to be homogeneously spread over the whole territory, with high concentrations observed even at rural background monitoring stations. The transport of pollutants between different areas of the Po Basin seems therefore to play an important role, together with meteorological conditions. This is confirmed by the analysis of PM composition, and by the good temporal correlation between values observed at distant monitoring stations.

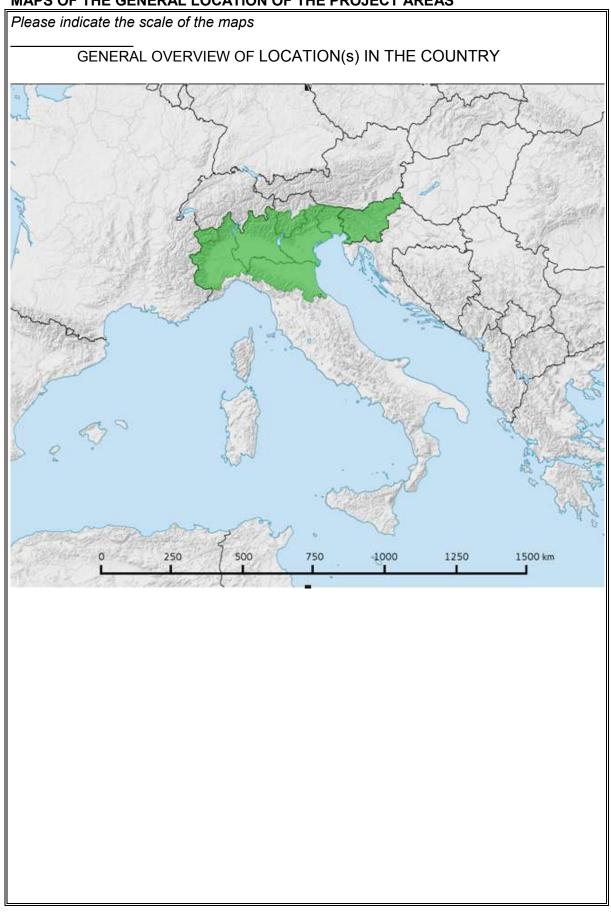
Like in the Po Basin, also in Slovenia the main air quality issue is PM10. So called "non-attainment areas" were defined. Statutory provisions for emission reduction in those areas were defined by the 7 Air Quality Plans. The PM "non-attainment areas" comprise 1.178 km² and include the largest cities and about one quarter of the Slovenian population.

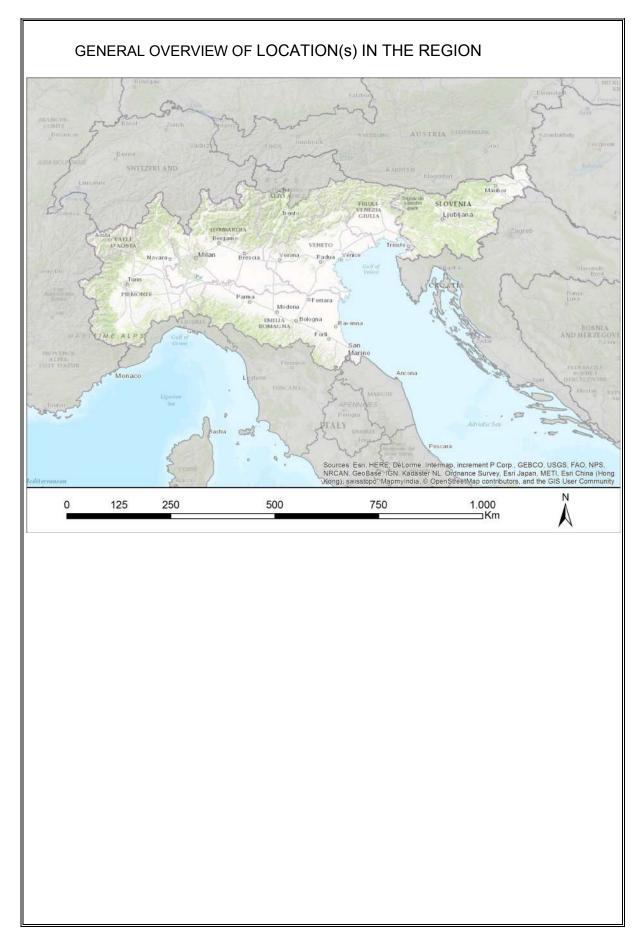
It should finally be noted that background concentrations of pollutants, linked with supraregional transport of pollutants in the South Eastern Alpine forelands, are also important in determining the observed exceedances.

In the last decade, efforts to apply EU Directives and implement plans to improve air quality produced a significant reduction of observed pollution levels in the Po Basin. Also in Slovenia air quality has improved due to the implementation of abatement measures. Due to the unfavourable meteorological conditions and topography, both in Po Basin and Slovenia, levels of PM10 and ozone are still above the EU limit and target values; nonetheless, levels of primary pollutants such as CO, SO₂ have been significantly reduced and are now well under the LVs.

Besides the successful implementation of various emission reduction measures, Slovenia and the Po Basin still need to further increase their efforts towards emission reduction in key economic activities (biomass combustion, road transport and agriculture), in order to be able to fully comply with the air quality targets in future years.

MAPS OF THE GENERAL LOCATION OF THE PROJECT AREAS





All maps must be provided in an A4 or A3 format

DESCRIPTION OF THE STRATEGY FOR THE IMPLEMENTATION OF THE OVERALL PLAN

The IP aims at implementing the Air Quality Plans (AQPs) of 8 European Regions, 7 Italian regions and autonomous provinces of the Po Basin and Slovenia. All the AQPs foresee a set of measures to be realized in the timeframe of the IP and beyond in order to reach the full compliance with directive 2008/50/CE.

In the Po area all the AQPs emphasise the necessity to apply common measures at the basin scale. The past experience has in fact shown that coordinated and large scale actions should be undertaken on the large Po valley area. A comprehensive policy, acting on a large scale and on several sources of pollutant precursors of PM and O3, is essential in order to further reduce pollution levels of PM and NO2. The necessity of coordinated actions led the National and Regional governments to sign an agreement in December 2013 aimed at developing short and long term actions to improve air quality in the Po valley. Due to the exceedances happened in the last winter season in Italy, as well as in Europe, for the unfavourable metereological conditions, in December 2015 a Memorandum of Understanding has been signed among the National Government, the Regional Governments and the representatives of Municipalities (ANCI), which contains measures to adopt in case of exceedances and structural measures financed by national funds related to electric mobility, safe home-school and home-job movements and public transport.

Some of the IP actions will be implemented also in Slovenia, given the similarities of the two basins. Regarding air quality, all regions south of the Alps face the same adverse climatic conditions, which require higher technical and financial efforts to resolve compliance problems as compared to other regions. Therefore, a transnational cooperation will be beneficial, especially in the field of capacity building. This will allow to compare problems, methodologies, and results so to identify and realize actions and tools that are effectively replicable in other European territories. Partners from the two areas are characterized by a high-level of scientific competences and great expertise on the issues addressed by the IP.

The main GAPs in achieving the objectives of air quality plans in the target areas are related to the high complexity of the regions, from a geographical, meteorological and socio-economic point of view, which consequently make the resource-demanding of measures to be adopted consistent. As a consequence GAPs are identifiable in the need to coordinate measures in a widespread area, to strengthen multi-level and cross-sector governance and to increase the capacity building of public and private operators. A further gap is related to the insufficient coordination between the regions on monitoring, modeling, assessing and forecasting air quality and assessing the impact on air quality of the emission reduction actions. Common technical tools are necessary for the design of the actions and monitoring of the environmental effects of the measures.

The IP will realize measures foreseen in the AQPs and in the Po Valley agreement, implementing them at a larger scale so to strengthen the sustainability and durability of results. Thanks to the IP a web based platform with all the actions implemented by the Regions in their AQPs and in the IP will be realized and constantly updated during the project implementation. It will contain also the measures adopted by the Regions in synergy to the Po Valley Agreement and thus it will be a tool for an effective monitoring of actions. Due to this "basin approach", the measures adopted by the Regions in their own AQPs will lead to a comprehensive framework and strategy necessary to improve air quality in the whole area.

Complementary actions are foreseen in the OPs of the beneficiary regions and provinces in the fields of agriculture, energy, transport, biomass.

Short term (at least first 2.5 years):

In the short term, preparatory actions will be realized during the phase 1 of the project in order to collect the data necessary for a preliminary assessment of the expected pollutant

levels in the target areas after the full implementation of all local AQPs. Such preliminary assessment will be improved and updated within actions D during the phase 2 and phase 3 of the project. The preparatory actions will also provide the information needed for the design of the technical tools that will be realized by actions C1, C2, and C3. Such tools, including the building of a permanent data sharing infrastructure, the tool for improved, emission inventory and the implementation of the integrated assessment model RIAT+ for the integrated assessment, will be extensively applied during the monitoring activities (actions D1, D2, D5). Moreover a protocol for realizing experimental activities to observe tracers of atmospheric processes not monitored by existing fixed stations will be prepared. The monitoring by a network of special stations of the environmental effects of the plan will provide periodic report about the source apportionment of PM starting from the phase 2 of the project.

At the same time, concrete actions will be launched. In the short term main activities will concern the common definition of standards, contents and procedures for the actions to be realized in a coordinated and comparable way in the project area.

The first actions that will be developed are the ones that will create tools or models to be used for the implementation and evaluation of complementary measures, e.g. the common evaluation tool for reducing emissions in farms, the training initiatives aiming at increasing capacity building of public and private operators in energy requalification or the support to local authorities in accessing to public funds.

Other actions will be realized in more specific areas as demonstrative or pilot actions, although the results are interesting for all the beneficiaries in order to make them implement or further update their AQPs, like the demonstrative action on electric conversion technology.

Monitoring and communication tools will be also developed in the early project phase and will continue for the whole project duration.

Coordination structures will be established at the beginning of the IP, such as the Steering Committee, working thematic groups, stakeholder boards, Po Valley board inside the IP.

Long term (beyond 2.5 years):

In the long term, the IP will focus on the full implementation of concrete actions. Many of them concern the implementation of actions included in AQPs to all the project area through a common and coordinated approach. These actions are for examples training initiatives on energy efficiency or sustainable mobility. Also actions to promote cycling mobility are included in this category, as the management and interconnection of bike stations that will be realized in the main cities of the Po Basin trough complementary actions.

Other actions are related to the creation of common tools to be used in all the project area, like the study on logistic of woody biomass or ICT tools for the Po Basin. These actions will be implemented in parallel to the related complementary actions so as to increase the effects of both in a synergic way.

In the long term, the monitoring procedure will be fully implemented so as to have the measure of the effects of the IP on air quality in the project areas. As the end of the IP is quite aligned with the conclusion of OPs, at this stage the effective implementation of both measures will be realized and quantified.

The monitoring activities will deliver periodic reports with the implementation rate of concrete actions (action D1), the emissions of pollutants (action D2) and the state of the air quality (action D5). These reports will be used, at the beginning of the phase 3, for checking the effectiveness of concrete actions realized by PREPAIR and AQs plans on air quality in the Po Valley and Slovenia. The results will be evaluated by the steering committee (action F3) and the Po Basin Board which will decide about the need of further and/or corrective actions. These actions can be assessed by the support of the Integrated assessment model RIAT+ implemented on the target area.

The final check will be realized at the end of the project by the steering committee (action F3) that will produce a final report and a long term action plan in order to ensure the sustainability of the project's results after the end of PREPAIR.

In the long term, also communication activities will become more consistent and intensive. In this phase thematic conferences and workshops will be realized in order to give a wide diffusion of the project results and to fully realize the involvement of stakeholders.

During the last phase of the project, agreements will be signed by the beneficiaries to ensure the duration of the cooperation beyond the end of the IP.

EU ADDED VALUE OF THE PROJECT AND ITS ACTIONS

Extent and quality of the contribution to the objectives of LIFE

The Italian northern Po Basin is one of the most critical areas in Europe for air quality, as European institutions know very well. The Slovenian territory presents similar peculiarities and criticalities. LIFE-IP PREPAIR will act on these areas contributing to the implementation of the Air Quality Plans adopted by the involved Regions with concrete and measurable results. In this way the IP will directly contribute to the objectives of LIFE programme with an improved environment in Po Basin and Slovenia.

The IP concerns a very wide area, covering the majority of northern Italian sectors and so the contribution to LIFE objectives is relevant due to the very high number of institutions, professionals, workers and citizens involved. The added value of the IP contribution is even higher when considering that it will act as a multiplier effect for the interested areas and outside. From one side, the IP will implement measures in wide and critical areas of Europe contributing to the effective improvement of air quality, and on the other side actions will be implemented and tested in the project area and will then be widely disseminated in other European regions and countries. This will happen also thanks to the networks where beneficiaries are already involved and to the participation of national institutions as key stakeholders.

Extent and quality of the mobilisation of other funds

LIFE-IP PREPAIR complementary actions amount at more than 850 Million Euro, which is a very large sum comparing to the project budget which is less than 17 Million Euro. As a matter of fact, the relation between IP itself measures and complementary measures is of about 1:50 which is a relevant result. Main funds that are mobilized by the IP, a part from LIFE fund, are ERDF, EARDF, national and regional funds. Each territory involved in the project will mobilize at least a fund for implementing complementary measures. The quality of complementarity is not limited to the big amount of other funds. IP will realize actions that are complementary and synergic to the ones realized with other funds. These have been defined by the IP regions through an exchange with relevant sectors in charge of other funds and solutions have been identified to maximise the synergic effect of both kind of actions.

For example, the IP actions in the Agriculture field will lead to the realization of an evaluation model and other tools that can be used by farmers in the implementation of measures financed by Rural Development Plans. The actions realized in the field of Energy aim at increase the competences and ability both of private and public operators to accede and implement the measures financed by the Regional Development Fund. The actions related to cycling mobility are synergic to the measures included in the National Operational Programme for Cities (PON "Aree Metropolitane") where, for example, infrastructures are realized, while the IP implements communication and training activities in the same field, or realizes a survey aiming at better planning the infrastructures.

The implementation of the complementary actions will be monitored during the IP through a continuous and effective exchange of data, information and results with the Managing Authorities and with the Environmental Authorities that are involved in the monitoring of the Regional Operational Programmes. A common format for collecting the data by the beneficiaries involved will be elaborated at the beginning of the IP, and it will be shared among the beneficiaries in the Steering Committee. A document including the details of complementary activities implemented will be sent together with the foreseen project reports.

Quality of multi-purpose mechanism, synergies and integration

The IP has been designed considering air quality objectives in synergy with other relevant environmental strategies. Only to mention the most relevant, the IP will support the implementation of Directive "IED" 2010/75/EU, with particular reference to BREFs adopted for "intensive rearing of pigs and poultry" and energy efficiency. The IP actions related to agriculture will also contribute to support the implementation of the UNECE code for the sector. The IP will also furnish a direct effect on the reduction of greenhouse gases so as acting in synergy with European and national strategies on climate change, that can be in particular be found in the IP actions developed under the themes "Energy" and "Transports". For the same reasons the IP will contribute to the implementation of the Directive 2012/27/EU. Furthermore, IP actions focusing on urban areas will support the implementation of local Sustainable Urban Mobility Plans and, as collateral effects, they will have positive effects in reducing noise in urban areas.

Synergic effects and the multi-purpose mechanism have been considered since the beginning of the IP idea, as the associated Regions/Provinces have defined actions and means in cooperation with people in charge of relevant sector policies and funding sources, like agriculture, energy, industry, transport. The cross-sector coordination will be ensured by the IP beneficiaries all over the project activities.

To this aim, each Region/Province will ensure the coordination with the sectors in charge of other relevant policies through the institution of a project cross-sector working group. A common matrix will be realized at the beginning of the project in order to identify the relevant sectors that have to be considered for each project action.

Replicability and transferability

In the long term, the actions proposed will contribute to the improvement of air quality on a larger scale and other European regions with similar geographical and environmental characteristics will be able to replicate them on their territories. The fact that more regions are involved in the project implementation is a key point for evaluating the replicability of project actions, that is even more relevant when considering that two countries, Italy and Slovenia, are involved. The IP actions have been selected by the beneficiaries also for their replicability and transferability as a necessary condition in the decision process. As matter of fact all the actions are replicable and transferable in European regions. The actions are in fact focusing on themes that are nowadays at the core of the discussion in European territory when speaking about air quality. Agriculture, biomass, transport and energy efficiency are priority for all European regions and countries. The IP beneficiary regions and province are all part of important networks, e.g. AIR and ENCORE, where the problems and possible solutions for managing air quality have been discussed and compared during several meetings and transnational conferences.

Transnational, green procurement, uptake of research results:

LIFE-IP PREPAIR has a transnational approach as it involves Italian and Slovenian beneficiaries. The geographic and meteorological conditions, the main sources of pollutants and the sectors of the most effective emission abatement measures correspond to each other in Po Valley and Slovenia. Both regions have a long tradition in preparing emission abatement strategies, implementing measures, and assessment of their outcomes. The crucial issue for both regions is the poor mixing of the air masses due to basin locations in the lee of the Alps and the high level of background pollution. Only due to this disadvantaged meteorological conditions, both regions have to make enormous additional efforts for a substantial air quality improvement as compared to other European regions.

Therefore, implementing the most efficient measures at the given resources will be the key to successfully lower the pollutant levels in both areas over the long term. Some of the partners from the Po Valley have already implemented a regional integrated assessment modelling tool and chemical transport models that helps policy makers and experts selecting optimal emission reduction measures for improving air quality at the minimum cost. On the other hand, Slovenia has expertise in the field of pollutant transport and

dilution models, and multi-scale model approaches for resolving background concentrations. The generation of a comparable data base and the exchange of experiences in the validation and assessment of emission inventories, AQ models and input data have an important role in PREPAIR. On the basis of such an experience exchange, both regions will be able to further improve the quality of their assessment procedures and to learn about the reproducibility of the applied assessment procedures. Due to the fact that Slovenia is at the east side of the Po Basin, the transnational cooperation will allow to evaluate and quantify cross-border air pollution, as well as cross-border traffic flows and biomass logistics, through the direct involvement of ARSO in the relative actions.

Regarding the implementation actions, there is a broad overlap of targeted areas. Both Slovenia and the Po Valley have to develop practicable and sustainable solutions for the reduction of PM10 emissions. The circumstances are similar so that the experiences from each project partner can be more or less directly applied to other regions. Therefore, it is expected that the outcome of the single actions of all partners will result in fruitful mutual process leading to the upgrade of the regional AQPs. For Slovenia, the participation in the PREPAIR project is a great opportunity for an intensive exchange of knowledge, experience and best practices with a region that is very similar with regard to the circumstances leading to excessive air pollution. The requested co-funding by LIFE will help to fully implement the measures of the Slovenian AQPs and its enhanced evaluation with respect to air quality, socioeconomic factors and long-term sustainability.

Green procurement is a key point of the IP. Not only it has been considered a cross-sector approach, but beneficiaries will also be involved in an action that is specifically dedicated to implement and disseminate Green Public Procurement on the project area.

Results will be used for the implementation of the actions, like the results of the project "Supersito" (www.supersito-er.it). In order to better understand the impact of air quality on environment and health, the Emilia-Romagna Region and its Agency for the Protection of the Environment are running this research project - called Supersito - the purpose of which is to gain further knowledge about the impact of the components of fine and ultrafine particles in the atmosphere.

BEST PRACTICE / INNOVATION / DEMONSTRATION CHARACTER OF THE PROJECT

BEST PRACTICE:

Many of the actions implemented by the IP are best practice implementation.

These are actions already realized by one of the beneficiary and extended to the project area thanks to the IP: this is the case of the action C7 "Enhancement of the role of chimney sweeps' for the control and maintenance of biomass domestic systems" that will be implemented in the project area, or the action C14 "Training on eco-driving" that will be applied on the project area on the basis of the previous experience of the Province of Trento, or the action C17 "Support to local authorities for energy saving initiatives in public buildings and for the enhancement of GPP" where the expertise of Emilia-Romagna will be strengthen and shared in the project area. Otherwise, best practice actions will be implemented by a complementary approach: this is the case of the action C9 "Action promoting cycling mobility" where bike stations will be realized in Lombardy through the ERDF and in Emilia-Romagna these will be equipped through the IP. Other best practice actions consist in the implementation in the project areas of experiences developed in other European regions taking into account the results of other previous Life projects: this is the case for example of action C15 "Training and support services to industries aimed at improving energy efficiency" or action C8 "Analysis of the logistics of consumption and supply of woody biomass" which take advantage from a previous project developed in Murcia. Many C actions are then dedicated to the diffusion and application in the project areas of best practices through training and dissemination actions: it is the case of actions C5, C6, C13, C14, C15, C16, C17, E3, E4 and E5.

DEMONSTRATION:

Some actions of the IP have a demonstration character, as they aim at implementing methods or techniques not fully known or applied in the project areas. This is the case of action C4 "Promoting an ammonia low-emission application of fertilizers based on urea in agriculture" where through case studies the effectiveness in reducing ammonia will be tested and compared among methodologies. Also the action C11 "Rationalization of short-range freight logistics in urban and extra/peri-urban areas" has a demonstrative character because it aims at realizing an innovative approach to the freight management at the pre-industrial scale that should be further supported by regional and local bodies through regulation or financing. Finally, action C12 "Development of ICT tools for public transport users" can be considered a demonstrative action, as it aims at creating common tools at the Po Basin scale for Local Public Transport users, that is new in the interested area.

PILOT (INNOVATION):

Action C10 "Demonstrative actions on Electric conversion technology" has a pilot character, as it will develop the project of a prototype that should lead to significant improvements for air quality and that could be replicable in the project area and outside. Highly sophisticated conversion solutions, together with other supporting technologies for keeping the engine operating at its most efficient point will be established on vehicles. A variety of software including CAD design, CAE analysis and optimization tools will be used to generate the optimal design solution and to evaluate performance. Engine and transmission study require different levels of model fidelity and simulation methodologies in order to obtain structural validation of support frame for electric motor and gear reduction unit and batteries frame (for example Finite element analysis FEA, durability, multi-body dynamics, integrated system simulation and so on). Modelling requires sufficient mesh fidelity and accurate material strain rate behaviour to provide realistic responses, as components evolve in the overall design. Special solutions will be designed based on the space available. It will be made a scan of bus engine compartment (provided already without the thermal engine) in order to get the CAD data engine compartment space useful to study the electric power

train vehicle integration possibility. Moreover a customized calibration of the electric device will be prepared as a function of the road conditions and the use of the vehicle, for obtaining the maximum result.

Then it will be defined a draft prototype manufacturing strategy and it will identified legal and regulatory requirements necessary for every kind of vehicle. Because of that, the application of electric platform must be developed for every kind of bus in every new fleet. The conversion cost is valued at least 70% less than the market price of electric bus. Furthermore public transport companies could replace their old vehicles and improve environmental performance of their fleet.

EFFORTS FOR REDUCING THE PROJECT'S "CARBON FOOTPRINT"

The effects of the project in terms of carbon emissions are direct and relevant. In fact, many actions foreseen in the IP as well as complementary actions have the reduction of CO2 and greenhouse gases as result. It is the case, for example, of actions increasing and promoting sustainable mobility, particularly the use of bicycles and public transport services, actions aiming at reducing the energy consumption in the civil and productive sector, and actions encouraging GPP. These are win-win solutions as they have positive effects for air quality as well as climate change.

The only potential conflict is related to the issue of biomass, as biomass burning is one of the measures often promoted in the strategies aiming at mitigating climate change while the effects of this practice could be critical for air quality. As matter of fact, PREPAIR objectives are not focused on reducing the consumption of biomass in the project area but aim at reducing the emissions of pollutants by the combustion of biomass through the modification of behaviours and technologies in a more sustainable practice. The IP aims, for example, to increase the use of pellet with respect to woody biomass and to evolve the obsolete burning stoves in more efficient and less emitting burning systems. In addition, PREPAIR aims at the rationalization of biomass supply chains in order to reduce the length of supplier travels and consequently the emission of pollutants. Further actions are aiming at the training of chimney sweepers and technicians.

In addition, project actions in the field of agriculture and livestock will reduce the emissions of methane and other GHG as to contributing to mitigate climate change effects. In order to avoid potential conflicts, the evaluation model produced by Action C5 will take into account the collateral effects of analyzed practices on CO2 emissions as well as on air pollutants.

As far as management is concerned, the tool of videoconference will be used whenever possible instead of face to face meetings. Public conferences and workshops will be arranged in sites easily reachable with public means in order to reduce the use of private vehicles by the participants at the events in so reducing the emissions of GHG. Preferential criteria will be adopted in the public tenders realized to acquire the assistance and consumables necessary to the IP in order to promote sustainable supply of goods and services and reducing the emissions of CO2. Therefore, the IP will reduce the carbon footprint in the project area and, through the diffusion of results and best practice, also in other EU territories.

STAKEHOLDERS INVOLVED IN THE PROJECT

The Italian Ministry for Environment and Land and Sea Protection, the Ministry for Transports and Infrastructures, the Ministry for Agriculture, the Ministry for Economic Development and the Ministry for Public Health and the Slovenian respectively Ministries will be involved in the project activities given their institutional role.

The Italian Ministry for Environment and Land and Sea Protection will be particularly involved in project meetings in order to evaluate the contribution of the IP to the national strategies and targets related to air quality and national emission ceilings. At the same time the Slovenian Ministry will be particularly involved in relation to the national strategies and objectives.

All local authorities (municipalities and their associations) will be involved as main stakeholders as they play a key role in the implementation of the Air Quality Plans. Many of the IP actions are specifically dedicated to increase the capacity building of public managers and civil servants through the involvement in training initiatives, workshops, working groups, the support in getting information and innovative solutions on technical/administrative/financial aspects, the creation of tools like guidelines, e-learning modules, evaluation models, etc.

Other Regions/Provinces interested in the project results will be involved as stakeholders and will be invited at the project conferences and workshops. Regions members of AIR network and ENCORE network, Municipalities members of EUROCUTIES network will be invited at the project events and will be directly involved, where appropriate, in project activities in order to collect, compare and disseminate good practices.

Specific stakeholders will be involved referring to the thematic pillars of the IP:

MONITORING AND EVALUATION: Main research institutions in Italy and Slovenia will be involved as end users of the services. The members of the RIAT+ OPERA consortium will also be involved for implementing the tool. APPA Bolzano will be involved as "active" stakeholder, providing data on emissions, level of pollutants and measures of the relative Air Quality Plan especially referring to the actions A1, A2, A3 and D5.

AGRICULTURE

Producers of fertilizers will be directly involved for assisting farmers in the usage methods; farmers and their representatives; Research Centers and Universities will be directly involved especially in the development of the evaluation model.

BIOMASS BURNING

ANFUS (The Association of Chimney Sweeps), AIEL (Association of Agroforestry Energy), Craftsmen Association, Local Authorities and private operators will all be involved in both in technical and communication activities.

TRANSPORTS

Local Public Transport Agencies, Logistic operators, operators in cycle mobility field (such ONG or no-profit organizations), Suppliers and installers of Electric conversion systems, Regulatory, safety and homologation bodies, Academic and research institutes, Environment and technology parks, ICT companies, driving schools and environmental associations will all be directly involved in transports activities. School teachers and students will be involved in actions to promote cycling mobility.

ENERGY EFFICIENCY

Local authorities, Energy agencies, operators, craftsmen and builders associations, Energy Managers of Public and Private bodies will all be involved in the actions foreseen, as well as experts and researchers.

All the above mentioned stakeholders will be asked to give their input in the IP activities, where relevant, through thematic workshops, working groups or direct auditions. Their involvement will be essential for collecting data and comparing experiences in order to define guidelines, e-learning modules, handbooks. Professionals and operators will be directly involved in many of the project actions, such as dedicated training initiatives which aim at increasing the capacity building of people and subjects called to implement the Air Quality Plans. At the end of the IP actions they will be involved in the dissemination of results and best practices through thematic conferences as well as through the dissemination tools of the project (web-site, etc.).

Two specific surveys will be conducted at the beginning and at the end of the project also in order to evaluate the effectiveness of the stakeholders involvement and their increased expertise.

A stakeholder list will be created and constantly updated by the IP coordinating and associated beneficiaries and will be used in the different phases of the project.

It's relevant to mention that all the stakeholders have been involved in prior consultations during the definition of the regional Air Quality Plans. In fact, the procedure to adopt Air Quality Plans includes the Environmental Strategic Assessment, that foreseen the involvement and direct consultation of all the stakeholders representing the sectors that have influence on air quality and that are interested by the measures of the Plans.

The local stakeholders will be involved through periodic meetings managed by the regional/provincial beneficiaries of the IP, which will institute, or will use where already existing, regional Stakeholder Boards (see IP Action F3). The link among the regional stakeholders will be ensured through the project meetings where the IP beneficiaries will be asked to explain their effective involvement.

The Stakeholder Boards will be called at the beginning of the IP and periodically during the project implementation (at least once in each project phase). The regional and provincial administrations will guarantee the maintenance of the Stakeholder boards also after the conclusion of the IP, so as to ensure the involvement of key stakeholders in the implementation of the regional Air Quality Plans. At least one Report for each Region about the involvement of stakeholders in the implementation of Air Quality Plans will be realized at the end of the IP, eventually containing proposals for a better involvement.



DIPARTIMENTO PER I TRASPORTI, LA NAVIGAZIONE , GLI AFFARI GENERALI ED IL PERSONALE

DIREZIONE GENERALE PER I SISTEMI DI TRASPORTO AD IMPIANTI FISSI E IL TRASPORTO PUBBLICO LOCALE

Letter of Support as Public Authority to the proposal LIFE-IP PREPAIR Po Region Engaged to Policies of AIR - Call "Life Integrated Projects Environment 2015 – Air quality" - LIFE15 IPE

Name, legal status and activities of the supporter:

Ministero delle Infrastrutture e dei Trasporti, MIT (Italian Ministry of the Infrastructure and Transport)

DIREZIONE GENERALE PER I SISTEMI DI TRASPORTO AD IMPIANTI FISSI E IL TRASPORTO PUBBLICO LOCALE (DGTPL)

Full address: Via Giuseppe Caraci, 36, 00157, Rome (Italy)

Tel. +39 06 4158 6213

Contact person (name and Functions): Enzo De Pietro

e-mail:enzo.depietro@gmail.com

Why you will support the project: PREPAIR project aims at realizing actions in an integrated way in the Po Valley territory, in order to improve air quality and comply with DIR 2008/50/EC and the new European strategy "Clean Air for Europe". General objectives of PREPAIR are to improve air quality at Po basin level and to implement a common monitoring system of the quality air, with the involvement of Slovenia for the evaluation of cross-border pollution.

The Regions involved will realize actions on reduction of emission due to mobility to safeguard a clean and environmental mobility. A number of these activities should improve environmental, energetic and economical performances of buses actually in force on public transport services companies.

For instance, old Euro III diesel vehicles will be converted into electric bus, ICT tools will be developed for public transport users, fuel saving training will be provided and technological solutions will be adopted in order to assist drivers with their eco driving performances.

Finally, particular importance will be attached to favour modal shift to public transport and cycling.

So that Regions will improve the efficiency of the transport system and meet important emission reduction targets. This is completely in line with the National strategy.

IL DIRETTORE GENERALE

17



Ministero delle politiche agricole alimentari e forestali

DIPARTIMENTO DELLE POLITICHE EUROPEE E INTERNAZIONALI E DELLO SVILUPPO RURALE DIREZIONE GENERALE DELLO SVILUPPO RURALE DISR III

Support letter for the proposal:
"LIFE-IP PREPAIR"
for the LIFE15 IPE

LIFE-IP PREPAIR Po Region Engaged to Policies of AIR Call "Life Integrated Projects Environment 2015 - Air quality" -

Name, legal status and activities of the supporter: Ministero delle politiche agricole alimentari e forestali

(Ministry of agricultural food and forestry policies of Italy)

Full address: Via XX Settembre n. 20 -00187 ROMA (ITALIA)

Tel.00390646655031

Fax.NO

Contact person (name and Functions): Maria Vittoria Briscolini - Head of Unit DISR III

e-mail: v.briscolini@politicheagricole.it

Why you will support the project: PREPAIR project aims at realizing actions in an integrated way in the territory of the Po Valley, in order to improve air quality and comply with Dir. 2008/50/EC and the new European strategy "Clean Air for Europe".

General objectives of PREPAIR are to improve air quality at Po basin level and to implement a common monitoring system of the quality of air, with the involvement of Slovenia for the evaluation of cross-border pollution.

The project will realize coordinated actions in the Po valley in so implementing the agreement signed in December 2013 among national and regional governments for joint and coordinated adoption of measures to improve air quality in several sectors including Agriculture.

With regard to agriculture in particular the project forsees the development of tools to facilitate the policies for the reduction of emissions from intensive rearing and fertilisation activities.

Dott Giuseppe Cacopardi Direttore Generale dello Sviluppo Rurale

Support letter for the proposal:

"LIFE-IP PREPAIR" for the LIFE15 IPE

LIFE-IP PREPAIR Po Region Engaged to Policies of AIR Call "Life Integrated Projects Environment 2015 - Air quality" -

Name, legal status and activities of the supporter: Ministero dell'ambiente e della tutela del territorio e del mare, MATTM (Ministry of the Environment and protection of land and sea of Italy)

Full address: via Cristoforo Colombo, 44 – 00144, Rome (Italy)

Tel. +39 06 57228615

Fax. +39 06 57228615

Contact person (name and Functions): Mariano Grillo - Head of Unit

e-mail: grillo.mariano@minambiente.it

Fabio Romeo e-mail romeo.fabio@minambiente.it

Why you will support the project: PREPAIR project aims at realizing actions in an integrated way in the territory of the Po Valley, in order to improve air quality and comply with Dir. 2008/50/EC and the new European strategy "Clean Air for Europe".

General objectives of PREPAIR are to improve air quality at Po basin level and to implement a common monitoring system of the quality of air, with the involvement of Slovenia for the evaluation of cross-border pollution.

The PREPAIR project partners will implement their regional air quality plans giving a relevant contribution to reaching limit values under Directive 2008/50/EC as well as to reducing emission for reaching compliance with the new National Emission Ceilings Reduction Commitments at national level.

The project will realize coordinated actions in the Po valley in so implementing the agreement signed in December 2013 among national and regional governments for joint and coordinated adoption of measures to improve air quality in particular on the sectors of Agriculture, Biomass burning, Sustainable mobility and Energy efficiency.

Date, 22/02/2016

Directorate General for waste and pollution

Support letter for the proposal: "LIFE-IP PREPAIR" for the LIFE15 IPE

LIFE-IP PREPAIR Po Region Engaged to Policies of Air Call "Life Integrated Projects Environment 2015 – Air quality"

Name, legal status and activities of the supporter: Agenzia Provinciale Per l'Ambiente della Provincia di Bolzano – APPABZ (Agency of Environment of Bolzano – South Tyrol).

Full address: Via A. Alagi, 5 – 39100 Bolzano (Italy)

Tel. +39 0471 417100 Fax. +39 0471 417119

Contact person (name and functions): Dr. Flavio Ruffini - Head of Unit

e-mail: flavio.ruffini@provincia.bz.it

Massimo Guariento – Technical expert officer e-mail: massimo.guariento@provincia.bz.it
Tel. +39 0471 411826

Why you will support the project:

As the competent regional public body for the management of air quality we are very interested in the results of the project PREPAIR in order to their replication at local level. In particular we would like to implement at local level the actions regarding the proper use of biomass and the development of best practices in the management of small heating systems using biomass. We also offer our contribution to the measures regarding the management of air quality and we intend to share our experience and expertise to develop the figure of the chimney sweep, and to develop relevant regulatory proposals.

How you will support the project:

[X] Activity of networking and dissemination of the project results

[X] Support for the implementation of the concrete actions during and after the project

[X] Collection of the documents/activities of the project for the implementation of regional policies

Detailed explanation of the support:

APPABZ will actively participate at the following actions A1 (Emissions data set), A2 (The "actions and measures" data set), A3 (Network of special stations for the monitoring of the plan's environmental effects / protocol for realizing experimental campaigns), D5 (Regular valuation (monthly / yearly) of the air quality of the Po basin) and C7 (Strengthening of chimney sweeps' role through specific training and legislative support).

Signature and date:

23/03/2016

Director of Agency of Environment

Dunajska cesta 47, SI-1000 Ljubljana

T: +386 1 478 74 00 F: +386 1 478 74 25 E: gp.mop@gov.si www.mop.gov.sl

Letter of Support for the proposal:

"LIFE-IP PREPAIR" for the LIFE15 IPE

LIFE-IP PREPAIR Po Region Engaged to Policies of AIR

Call "Life Integrated Projects Environment 2015 – Air quality"

Republic of Slovenia, Ministry for Environment and Spatial Planning

Full address:

Dunajska 47, SI-1000 Ljubljana

Tel.

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Fax.

+386 1 478 74 25

Contact person:

Tanja Bolte, M.Sc., Director General at Environment Directorate

Why you will support the project:

PREPAIR project aims at realizing actions in an integrated way in the territory of the Po Valley and Slovenia, in order to improve air quality and comply with Dir. 2008/50/EC and the European strategy "Clean Air for Europe".

General objectives of PREPAIR are to improve air quality through the implementation of air quality plans and the increase of capacity building. To this aim, PREPAIR will also realize a common monitoring system of the quality of air, with the evaluation of cross-border aspects.

The Slovenian Environment Agency (ARSO) plays a key role in monitoring local air quality plans and evaluating the effects of the measures in reducing air pollution. For this reason, ARSO fully represents the Ministry of Environment and Spatial Planning inside the project PREPAIR.

Date:

Signature:

REPUBLIKA SCOLENIA DE COLENIA DE

Agenzia per l'Energia Alto Adige - CasaClima Agentur für Energie Südtirol - KlimaHaus



Bolzano, 24 of March 2016

TO WHOM IT MAY CONCERN

Letter of Support: PREPAIR – Po Regions Engaged to Policies of Air, (Life Integrated Projects 2016)

With reference to the above named project, we would like to express our sincere interest in supporting and participating as **stakeholder** to the project activities.

We acknowledge the objective of PREPAIR to support the implementation of Directive 2008/50/EC as well as the European strategy "Clean Air for Europe", in order to improve air quality in an integrated way in the territory of the Po Valley.

In particular, the project PREPAIR, by appliying a needs based approach, seeks to implement energy efficiency measures in the industry and will involve small and medium enterprises and train the technical knowledge of the companies' staff. PREPAIR will encourage energy audits in SMEs or management systems according to ISO 50001. Also, Directive 2010/31/EU foresees that, starting from 2018, new buildings and major renovations will have to achieve "near zero energy building" standards. In order to achieve this goal, the sensibilization and the fostering of knowledge of professional figures in construction, is of utmost importance. PREPAIR will support the transfer of expertise by offering specialized training courses. Last but not least, we have interest in PREPAIR as it will give support local authorities to save energy in public buildings by setting up information offices.

For any further information, we remain at your disposal.

Yours Sincerely,

Dr. Ing. Ulrich Santa

Ulrich.santa@klimahausagentur.it

Agentur für Energie Südtirol - KlimaHaus
Agenzia per l'Energia Alto Adige - CasaClima

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EXPECTED CONSTRAINTS AND RISKS RELATED TO THE PROJECT IMPLEMENTATION AND MITIGATION STRATEGY

During the project realization some risks may emerge, mainly related to administrative constraints and the characteristics of an IP where many subjects are involved and several sectors must be addressed. These constraints can be identified in:

- 1. Managing multiple sectors at different territorial scale. The skills necessary for the implementation of the project are distributed among different levels of government. Therefore, the partners must identify the subjects with relevant competences and involve people with appropriate expertise.
- 2. Fulfilment of specific administrative procedures. It will be therefore activated a continuous monitoring and evaluation process of the project activities and supervisory boards will be established both at a political and managerial level.
- 3. Given the long duration of the project, possible variations of actions costs may arise throughout the development of PREPAIR. The numbers inserted, however, already consider the possible future socio-economic variations. In order to overcome this risk, a continuous monitoring of the budget will be ensured and a careful assessment will be done at the end of each project's phase.
- 4. In order to ensure a correct involvement of stakeholders, each region will establish a Stakeholder Board. The Steering Committee will supervise the effective establishment of the Board and will act with corrective actions if needed.
- 5. Possible competition with climate change policies in a limited number of actions. PREPAIR will ensure a continuous monitoring in order to guarantee consistency between all sectorial planning through the establishment of the appropriate cross-sector working groups and the general supervision. On the whole, the IP actions will have positive effects both on air quality and climate change.

Other constraints will be more strictly related to the implementation of the actions:

6. It is assumed that the regional Air Quality Plans and concrete PREPAIR actions will bring levels of PM10 and NO2 within the European limits in the whole project area. However, we currently do not have an overall assessment of the impacts of the measures foreseen in the Air Quality Plans and PREPAIR on the quality of air. A first overall assessment will be made through the preparatory action A3 and subsequently detailed and deepened during actions D5 and D6 and through the technical tools realized in actions C1, C2 and C3.

The risk is given by the fact that these assessments may show that criticalities in the Po basin could persist. In this case, corrective actions will be undertaken through a cost-benefit analysis conducted through the integrated assessment tool RIAT+ applied at the basin scale (action C3). Another risk is given by the fact that administrative difficulties may prevent the administrations from applying the foreseen measures on time. This risk will be constantly kept under control through preparatory action A2 and during the monitoring of the project (action D1). Moreover actions D2, D5, D6 will continuously monitor the impact of the AQ plans and concrete actions on emissions and air quality. As described in the form B2c, the results of the monitoring activities will be evaluated by the Po Basin Committee (action F3) for decide about the need of further and/or corrective actions.

- 7. The single dataset created within action A2 will have to comply with European Directives (2004/107/EC and 2008/50/EC) and will have to ensure compatibility with RIAT+ and AQ model standards. A strong interaction will have to be ensured also with actions A1 and A3.
- 8. Other projects financed by Life or other funds may work in the same field of the IP, so as overlapping must be carefully avoided and these projects shall be "used" as complementary and mutually reinforcing towards the same target of pollution reduction. Networking activities with other projects will be crucial in order to avoid overlaps, share projects results and enhance outputs.
- 9. As far as agriculture measures are concerned, possible difficulties could include the effective participation of all necessary parties and the feasibility of the actions that will be identified as the most effective. The participation of all parties involved should ensure the

search for the best solutions as it includes the different points of view. The difficulty of finding techniques able to ensure at the same time high effectiveness of emission reduction and good applicability and economic sustainability will be overcome by promoting and ensuring the practical application of the identified techniques.

- 10. Concerning the logistics of biomass, the technical risk related to the difficulty of recovering data is overcome through the participation as project partner of key players such as territorial regions belonging to the Po basin and the Slovenian Environmental Agency. These bodies are in possession or can collect the data and information relevant to the analysis and are in contact with local authorities directly involved in land management. The good implementation of technical action as the implementation of management plans and traceability protocol will be assured through the involvement of the external expert supporting the partnership in the implementation of these concrete actions. The risk of failing to involve local actors will be mitigated thanks to the implementation of targeted communication actions to raise awareness of local stakeholders with respect to the activities and objectives of the project.
- 11. As regards the involvement of private companies, the issues that can affect the attainment of the objectives and/or constitute a risk can be summarized mainly in: participation of organizations to the project; availability of grants for investments; general administrative obstacles; crisis liquidity of companies that invest only on the core business leaving out all the possible benefits to the boundary. A straightforward communication campaign will help overcoming these risks by emphasizing the project long term benefits in terms of environmental valorization of companies and financial saving.
- 12. Risks of the dissemination activities are mainly related to a low access rate to the website, scarce visibility of communication material, an unclear language of the layman's report, a low participation to the conferences and difficulties in reaching the local media for the communication campaign. To further reduce these risks, with reference to the main dissemination tools, it will be particularly paid attention to the following aspects: the website will have an attractive layout and will be continuously updated. The structure will be immediate and user-friendly, considering the heterogeneity of the audience. The contents will be presented in an attractive way. Notice boards will be synthetic, realized using a straight-forward language and placed in strategic locations. Layman's report: the difficulty to "condense" into a few pages such a complex project will be overcome by a selection of key contents, a good capacity of synthesis and the use of functional images. The location of the conferences will be planned with geographical considerations and with the purpose of simplifying the participation to the target audience. The communication campaign will be able to attract people's attention with short yet very significant messages. The video that will be realized will be translated in English and will be displayed in strategic locations. Dissemination material will be available also on the official websites of partners.

The support to communication campaigns and the organization of conferences will overcome the risk of non-homogeneity. The national survey will be conducted on the whole Po basin and the difficulty of coordinating such an extended work will be handled by partners thanks to their experiences. Site visits will make stakeholders and interested people aware of what has been done. The streaming of conferences will allow the spread of PREPAIR messages on a larger scale and will reach all interested people who could not participate to conferences. Capacity building and training activities will be efficiently developed through the use of the e-learning platform.

13. With reference to the biomass communication campaign, the critical aspect debating about the theme of biomass as fuel for domestic heating is of cultural profile: a sort of social objection to accept scientific data that underline the criticality and the impact of the wood when is burned. The need for action on increasing the level of awareness and information on the subject is born specifically from the need to tackle the cultural biases in the environmental field. Therefore, a communication action so broad and capillary goes in that direction. A second element to face when debating about biomass combustion for domestic heating, is the need to promote coordination between policies on air quality with those against climate change, pushing on technological improvement and energy/emission efficiency of the plants. Again, initiatives of information and communication of high scientific

level may help to clarify this point and to send the message also to policy-makers at all levels, from the EC to the national and local scale.

14. Possible knowledge gaps of teachers may prevent the full mastery of educational materials and paths defined. For this reason, the environmental educational paths foreseen allow teachers involvement also in the contents development phase.

Similarly, these constraints also exist for the implementation of the complementary actions foreseen by the Air Quality Plans, The Po Valley Agreement and the EU Operational Programs. Moreover, many of the complementary actions will be realized through calls for proposals thus it is currently impossible to estimate their effective realization rate in a very precise way. PREPAIR monitoring tools and the supervisory boards will take into consideration complementary actions too.

It is relevant to mention that Air Quality Plans and the other Programmes and Plans (e.g. for complementary funds) have been evaluated before their adoption with the Strategic Environmental Assessment (SEA) and the Assessment required by the Habitats Directive. Considering in particular the actions implemented during the IP itself, no Environmental Impact Assessment is necessary during the implementation of the project.

Anyway, all the concrete actions implemented in the IP will be concluded within 15 months before the end of the project. The only measures that continue after this time are the ones related to monitoring the implementation and effects of the actions and communicating their results. In this way, there will be a sufficient period of time as buffer in case of any delay in the implementation of some project actions or in the fulfilment of the administrative procedures and in case of changes in the starting date of the project.

CONTINUATION / VALORISATION AND LONG TERM SUSTAINIBILITY AFTER THE END OF THE PROJECT

How will you ensure the long term implementation of the plan and beyond?

The AQPs of involved regions/provinces are long term plans, almost all targeting at year 2020 and beyond. At the end of their duration, the plans will be updated and newly adopted, as a continuous mechanism to reach and maintain the EU targets.

Partners will ensure the long last effects of the project after the end of financing thanks to the creation of a network where sharing all the experiences and knowledge aimed at promoting synergies. Thanks to PREPAIR the lack of adequate instruments and of the coordination of the existing tools will be overcome and partners will be able to continue implementing and enhancing project objectives by the insertion of PREPAIR results and principles in their own local and regional governance policies. PREPAIR will also allow to create useful tools for air quality management that could be used after the project by partners and all potential air quality managers in Europe as a "toolbox".

Many actions of PREPAIR project aim at increasing the capacity building, both at institutional and citizens' level. Capacity building activities will be address to project partners as well as to actors who are relevant for air quality, such as policy makers and experts working for public administrations, engineers and professionals, industrial managers, farmers and their associations. Improving the awareness of civil society and socio-economic actors is one of the focal goals of PREPAIR and it will lead to have a more conscious community about air quality themes thus creating the conditions for the project durability. The involvement of partners at different levels (regional and local) will assure the duration of the project results, making the policy makers aware of the project benefits. This will assure to the project a concrete long lasting effect in the interested areas, and partners aiming to widen it to the other territories that have not taken part to the project. Moreover, PREPAIR already fully complies with national, regional and local policies, trying to merge and harmonize them, and this will assure the sustainability of its results, general principles that are already fully inserted in partners' own policies. The sustainability of PREPAIR will be also ensured by the participation of partners in existing associations and networks, such as the AIR network, EUROCITIES network and ENCORE network.

Which actions will have to be carried out or continued after the end of the project?

Some actions of the IP will be continued by project beneficiaries after the end of the IP. Referring to the monitoring and evaluation procedure these in particular are:

- C1 "Implementing the data sharing infrastructure and the AQ model"
- C2 "Tool for improved emission inventory on Po basin and emission data warehouse"
- C3 "Implementing the Integrated Assessment Model (RIAT+)"
- D.2 "Periodic update of emission data"
- D.5 "Regular Assessment (monthly/yearly) of the air quality".

In case of good evaluation some concrete actions will be continued after the IP with the support of regional and local authorities. These actions in particular are:

- C9 "Action promoting cycling mobility"
- C10 "Demonstrative action on conversion propulsion system from diesel to electric"
- C11 "Rationalization of short-range freight logistics in urban and extra/peri-urban areas". All concrete actions that will be implemented during the IP will create tools such as software, guidelines, models, e-learning modules, law schemes etc. that will be used also after the end of the project. All the partners are committed to continue the dissemination of these tools and of the results of the IP. To get these objectives other actions that will continue at the end of the IP through the initiative of the beneficiaries are:
- E1 "Information and awareness raising activities"

- F3 "Establishing the governance permanent platform".

• How will this be achieved? What resources will be necessary to carry out these actions and how will those capacities be ensured?

The IP includes within action F3 the project phase 'evaluate lessons learnt and formulate policy recommendations'. All beneficiary regions and provinces will evaluate their exchanged and transferred good practices (lessons learnt) and identify policy recommendations for updating and improving their Air Quality Plans. This action will lead to at least one Report for each Region about the lessons learnt and the policy recommendations for updating and improving their Air Quality Plans. In this way actions implemented by the IP will be included in the regional strategies that will be adopted by beneficiaries after the end of the IP.

The actions that have been selected to continue will be implemented at the end of the IP by the beneficiaries with their own sources or other funds that will be identified from public or private sources.

At the end of action F3 an agreement will be signed among the Regions and the Province of the Po Basin about the commitment to the management of the Data Sharing Infrastructure and the AQ model after the end of the IP as well as the adoption of coordinated measures at the Basin scale.

During Phase 2 and 3 of the project beneficiaries will strengthen and stabilize their partnership. At the end of the project in phase 3 partners will lay down an Agreement aimed at extending this positive cooperation and the project results to the new horizon represented by the European programming period 2021 – 2028, with the involvement and the support of the complementary funds regional authorities.

This will be done with reference to the contents and the audience of the already existing agreements on the air quality in the Po basin (Agreement for the improvement of air quality in the Po basin of December 19th, 2013 and the new Memorandum of Understanding for improving air quality of December 30th, 2015) and also through a dialog with the stakeholders involved in the program for the cross-border cooperation Italy-Slovenia.

The involvement of political representatives and their commitment and continuous support to the project activities will be ensured during the project and afterwards.

Will the staff recruited/trained during the project continue to work on the implementation of the plan?

Permanent staff of the involved associated beneficiary will be involved in action F3 and in the other actions that will continue at the end of the project.

Permanent staff is involved in all the actions by all the beneficiaries. When necessary, additional staff have been foreseen to ensure the effective implementation of the actions, but it will be always supervised by permanent staff.

People involved in the project will be selected among the managers and experts of the beneficiary's staff. These are people usually working on the themes addressed by the IP, so the lessons' learnt and expertise they acquire will increase the know how and capacity building of beneficiaries. In particular technicians and experts involved in capacity building activities will ensure the continuity of project's actions also after its conclusion.

When possible, additional staff will be chosen within the people already selected through public procedures, although not yet employed in the beneficiary' staff, so as to ensure the continuity of people working on the issues addressed by the project.

 How, where and by whom will the equipment acquired be used after the end of the project? (if relevant)

The material collected by the Municipality of Bologna for parking the bikes will be used also after the end of the project by citizens and will boost them to use public transport means (train, bus, etc.) so as to promote intermodality.

In action C11 innovative solutions for trucks constructions and for loading/unloading of goods will be investigated in order to indentify an onboard equipment (space-saver-

technology) that can handle goods characterized by diversified weights, shape, volume and loads. Through the subscription of an Agreement with the Region, the operators involved in the project will be committed to apply the model of distribution of goods and the equipment for a specific amount of years after the end of the project.

During Action C1 Arpae will upgrade and increase the hardware equipment of the computing centre hosting the data sharing infrastructure. The computing center, managed by Arpae, will continue its operation after the end of the project to produce and disseminate air quality information. This will include monitoring, assessment and forecast of pollutants concentrations in the Po Valley. The maintenance of the data sharing infrastructure will be ensured by the permanent governance infrastructure set up by action F3. The automatic gas analyzers and PM samplers (70 000 €) acquired by Arpae during action D6 will be integrated in the network of fixed stations measuring Air Quality in the Emilia-Romagna region and will be included in the Regional air Quality Assessment plan (art. 2 D.Lvo 155/2010).

In Veneto, equipment will consist in software useful for managing electric vehicles charging points which will be used also after the end of the IP.

The laboratory created by the Province of Trento for training of operators in the correct use and maintenance of biomass plants will be maintained after the end of the project in order to replicate the action in the following years.

The equipment acquired by Region Emilia-Romagna in order to set up the info point for supporting local bodies in acceding to the funds available for increase energy efficiency will be used by the regional staff working on air quality also after the end of the project.

• To what extent will the results and lessons of the project be actively disseminated after the end of the project to those persons and/or organisations that could best make use of them (please identify these persons/organisations)?

At the end of the IP each beneficiary will ensure with its own sources the maximum dissemination of the project contents and results through their institutional websites, conferences and so on. The website of PREPAIR will be maintained for 5 years after the end of the project.

Many of the actions implemented by the IP and many complementary actions directly involve people and organizations who have to implement the AQPs; these people/organizations will therefore be an active subject in the implementation of the IP and complementary actions.

This should ensure the continuity of IP actions on the long term, especially capacity building actions, getting a network of subjects, public and private, responsible for the effective implementation, monitoring and evaluation of the AQPs.

The action F3 includes the creation of a stakeholder board for each region/province where the project contents and results will be presented and discussed. The stakeholder boards will continue after the end of the IP and will lead to at least one Report for each Region about the involvement of stakeholders in the implementation of Air Quality Plans eventually containing proposals for a better involvement.



Project number: LIFE15 IPE/IT/000013 – LIFE-IP PREPAIR

Annex II_ter

Description of the project



LIFE Integrated Projects 2015

Stage 2 – Full proposal

TECHNICAL APPLICATION FORMS

Part C – detailed technical description of the proposed actions

DETAILS OF PROPOSED ACTIONS

A. <u>PREPARATORY ACTIONS (ELABORATION OF MANAGEMENT/ACTION PLANS, OBTAINING LICENCES AND PERMITS, TRAININGS, ETC.)</u>

ACTION A.1 EMISSIONS DATA SET

Beneficiary responsible for implementation: ARPA Lombardy

Description (what, how, where and when):

The action aims at the preparation of a common data set of emissions for the project target area (Po Valley and Slovenia), based on the existing emissions inventories. By this data set the preliminary assessment of the AQ plans on air quality will be realized (action A.3).

Due to the classification of the emissions sources it will be possible to identify areal and point emission sources such as airports, ports, large plants.

The action will start with a preliminary analysis of the available emission data, that will be used to realize a common emission dataset. The data set will be analyzed in order to investigate the largest discontinuities among regions and support the identification of possible ways to reduce them as input for action D.2. That results will be used to define the technical specifications for action C.2 aimed at realizing a tool for improving emission inventory on Po basin. This tool will produce emission model estimation and data warehouse, will be interfaced with the IAM (RIAT+, action C.3) and applied for the implementation of emission scenarios.

This action will process and merge the dataset currently used by ARPA Lombardy, Arpae Emilia-Romagna, ARPA Piedmont, ARPA Veneto, ARPA Friuli Venezia Giulia, ARPA Valle d'Aosta, Trento Province, Slovenia. APPA of Bolzano will participate as stakeholder sharing their dataset.

The action will be realized within the phase 1 of the project (start February 2017 and December 2018).

Reasons why this action is necessary:

In recent years, many efforts have been done aiming to the development of regional emission inventories on common basin. The development of an emission dataset from the existing inventories can be affected by several discontinuities due to, e.g.:

- the time shift in the framework of the activities and the statistical data release;
- new developments in atmospheric emission sources understanding:
- potential differences in the application of algorithms of different levels, as reported by EMEP Guidebook;
- the possible range of choice of the emission factors.

In this action a first common emission dataset will be built by combining the existing emission inventories: this will provide information on the largest discontinuities among regions and support the identification of possible ways to reduce them as input for action D2.

This action is necessary during the phase 1 of the project since it will provide an essential input for action A.3 (action A3 will assess the expected levels of pollution in the target areas (Po Valley and Slovenia) after the full implementation of the approved AQ plans and of the concrete actions of the PREPAIR project.

Constraints and assumptions

The data set will be compliant with the EMEP Guidebook and IPCC Best Practice. Data about diffuse, line and local emission sources, such as airports, ports and large plants will be provided by regions to allow data analysis. Due to the above indicated link, this action will be realized in strong interaction and cooperation with actions A.2 and A.3.

Expected results (quantitative information when possible):

- 1. Data flow procedure for building common database and emission data analysis to be carried on in depth in Action D.2. The main activity results will define the estimates improvement procedures embedded into the tool as for action C.2.
- 2. Combination of the existing emission inventories in a common database selecting the main sources showing higher spatial discontinuities among regions.
- 3. Procedure definition for the development of emission scenarios according to future trend analysis provided by external sources and in collaboration with action A.2.

Cost estimation:

The following costs have been estimated:

- Personnel (permanent and additional staff)
- Travel and subsistence costs: for meetings within partners involved for action development and Participation to national and/or European meetings about Emission Inventories (EMEP-TFEIP) meeting and related topics (FairMode, other meetings).

Deliverables:

- N.1 data set of emissions for the Po Valley and Slovenia in the reference year (31/01/2018);
- N.1 Report on data flow definition, quantification of the main divergences and procedures for their reduction (31/10/2018).

- Start up meeting within responsible of actions A.1, A.2 and A.3 for coordinate the actions (30/04/2017);
- Identification of local sources (31/08/2017);
- Delivery of the data set for the reference year with the existing emission inventories in the Po Valley and Slovenia (input for action A3) (30/01/2018);
- joint meeting within coordinators of actions A.1, A.2 and A.3 for checking the data and define evaluation method (31/01/2018);
- Quantification of the main divergences of diffuse emission sources among existing emission inventories (30/04/2018);
- Definition procedure for the preparation of emission scenarios according to future trend analysis provided by external sources and in collaboration with action A.2 (31/10/2018);
- Delivery of final report (31/10/2018).

<u>ACTION A.2</u>: System for the environmental accountability of the measures of AQ PLANS

Beneficiary responsible for implementation: ART-ER

Description (what, how, where and when):

The action aims at the preparation of a common data set of actions/measures and of a common system for the periodic upgrading of the actions/measures.

The data set will contain a list and quantitative data about all actions/measures planned by the regional/local AQ plans and by the PREPAIR project itself.

The construction of the dataset will start from the experiences developed by partners. In particular, tools (Clexi software: http://clexi.ervet.it) and experiences of environmental accountability in Emilia Romagna.

The database will be produced together with the people in charge of the valuation of the quality of air and of the local and regional planning. It should allow an easy access to the quality of air measures that might be useful in specific situations for satisfying the requirements and the objectives of the quality of air. Also, it should provide guidance to the people at all administrative levels of the member states and the European Union on the cost effectiveness of pollution abatement strategies and actions.

A tool for collecting the data necessary to document the state and progresses in the realization of pollutants reduction measures foreseen in the AQ Plans will be designed and developed. The tasks are:

- Review and organization of the reduction measures in a common database
- Identification of indicators for each action (efficient reduction of emissions, application rate, associated costs, etc.) and definition of the common database with the identified indicators
- Development of a web based platform for the periodic collection of realization indicators (e.g. the updated application rate) from those bodies which apply the measures. The platform will also distribute the output indicators to the subjects in charge of environmental effects assessment.

This action will take into account all actions developed within the project thus it will be implemented in all the project's territories: Emilia-Romagna, Lombardy, Piedmont, Friuli Venezia Giulia, Veneto Regions and province of Trento. Province of Bolzano might participate as stakeholder.

The action will last 20 months, starting in February 2017 until September 2018.

Reasons why this action is necessary:

This action is necessary during phase 1 of the project to prepare the input data to actions A1, A3 in order to realize an assessment of the expected levels of pollution in the target areas (Po Valley and Slovenia) after the full implementation of the approved AQ plans and of the concrete actions of the PREPAIR project.

The tool is necessary during phase 2 for monitoring the state and progresses in the realization of pollutants reduction measures foreseen in the AQ Plans (action D.1) in the Po Valley regions and for the implementation of the IAM (RIAT+) in the Po valley.

This action is necessary during the phase 1 of the project to prepare the input data to actions A.1, A.3 in order to realize an assessment of the expected levels of pollution in the target areas (Po Valley) after the full implementation of the approved AQ plans and of the concrete actions of the PREPAIR project.

Constraints and assumptions

The creation of a single dataset for the whole basin will allow the benchmarking assessments of the cost effectiveness of the single actions.

 The tool shall be compliant with the Commission Implementing Decision laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air (Decision 2011/850/EU);

 The data collected will ensure the compatibility with the RIAT+ and AQ model standards for input data. The RIAT+ has been developed by the Life-OPERA project.

Due to the above indicated link, this action and actions A1 and A3 will be realized in strong interaction and cooperation.

Expected results (quantitative information when possible):

Design and implementation of a common system for the monitoring and reporting the situation about the realization of the Air Quality Plans.

Cost estimation:

For the design and implementation of the dataset, the average cost/day x n° days of internal personnel has been considered.

External assistance has been considered for the development of the web based tool.

Travel costs for meeting within partners have been also taken into account.

Deliverables:

- 1 dataset of actions and measures for the Po Valley Region with indicators planned by the regional/local AQPs and by the IP itself and a Monitoring Protocol to evaluate the impact of the measures (31/10/2017);
- a web based platform for collecting the data for the accountability of measures (to be implemented in action D.1) (31/07/ 2018);
- technical handbook (31/07/2018).

- creation of a working group for the monitoring of actions for the quality of air (28/02/2017);
- start up meeting within responsible of actions A.1, A.2 and A.3 for coordinating the actions (30/04/2017);
- joint meeting within coordinators of actions A.1, A.2 and A.3 for checking the data and define evaluation method (31/01/2018);
- sharing of the dataset of measures, actions and indicators for each topic (28/02/2017-30/06/2017);
- transferring of the dataset on the management tool (31/10/2017 31/07/2018).

ACTION A.3: PRELIMINARY ASSESSMENT OF THE AIR QUALITY PLANS

Beneficiary responsible for implementation: ARPAE Emilia-Romagna

Description (what, how, where and when):

The action aims at realizing a preliminary assessment of the expected pollutant levels in the Po Valley target area after the full implementation of the approved AQ plans and of the concrete actions of the PREPAIR project. Moreover the transboundary effects of the Po valley air quality plans on the Slovenia target area will be preliminary evaluated.

The assessment will be based on existing local emissions inventories and on the preliminary estimate of emission reductions due to concrete actions that will be realized by the PREPAIR project. Such data will be collected by actions A1 and A2.

The pollutants considered are PM10, PM2.5, NO_2 and O_3 . The assessment method will be defined during the A.2/A.3 actions joint meetings, in accordance with partners and considering the data availability and the information provided by the air quality plans approved by partners. Modelling techniques and/or objective – estimation techniques will be considered. For that purposes an inter-comparison exercise between several air quality models (at least one model for the Po valley and one model for the Slovenia) running on the target domain, will be realized. This action involves ARPA Lombardy, ARPA Piedmont, ARPA Veneto, ARPA Friuli Venezia Giulia, ARPA Valle d'Aosta, Trento Province and Slovenia.

The preliminary action A.3 will be realized during the phase 1 of the project (start February 2017 end January 2019).

Reasons why this action is necessary:

The action is needed as a first guess for a quantitative answer to the question "if and how the approved local AQ plans and the concrete actions will reduce air pollution in Po Valley and Slovenia and help reach compliance with limit and target values as covered by Directive 2008/50/EC." This preliminary evaluation will be the base for designing and implementing the air quality plans monitoring infrastructure (e.g. the data sharing infrastructure and the air quality models).

Constraints and assumptions

It is assumed that at least a first guess dataset about Po Valley and Slovenia emissions inventory and emission reduction due to concrete actions will be available. To limit the impact of this constraint, this action and actions A.1 and A.2 will be realized in strong interaction and cooperation.

Expected results (quantitative information when possible):

It is expected to realize an assessment of the expected levels of PM10, PM2.5, NO₂ and O₃ in the target areas (Po Valley and Slovenia) after the full implementation of the approved AQ plans and of the concrete actions of the PREPAIR project.

Cost estimation:

The cost of personnel have been estimated considering an average daily rate per partner and the number of working days.

Deliverables:

- n.1 Report on the expected levels for specific pollutants (31/01/2019);
- n.1 Report on the assessment methodology (31/01/2019).

- Start up meeting within responsible of actions A.1, A.2 and A.3 aimed at coordinating the actions (30/04/2017);
- input data available from actions A.1 and A.2 (31/01/2018);

- joint meeting within responsible of actions A.1 A.2 and A.3 aimed at checking the data and defining the evaluation method (31/01/2018);
- preliminary evaluation of the impact of air quality local plans in Po valley (31/01/2019);
- preliminary evaluation of the impact of the trans-boundary effects of Po Valley air quality plans in Slovenia (31/01/2019).

<u>ACTION A.4</u>: NETWORK OF SPECIAL STATIONS FOR THE MONITORING OF THE PLAN'S ENVIRONMENTAL EFFECTS: DEFINITION OF THE NETWORK AND OF THE PROTOCOLS FOR MEASURING

Beneficiary responsible for implementation: ARPA Lombardy

Description (what, how, where and when):

The sub action will define the features of the network of special stations (location of the stations and pollutants to be measured) for the monitoring of the plan's environmental effects. The network will be defined on the basis of existing stations managed by each partner. The action will identify gap; and the common standards for collecting the samples; the protocols of measures; the criteria for organizing the data. The network aims at monitoring the time patterns of some tracers of atmospheric processes not monitored by standard fixed stations, useful to verify the effectiveness of the plans.

Moreover an experimental protocol for defining possible deeper experimental campaigns during the Monitoring and evaluation of the AQ plan (Action D.1) will be defined.

The stations will be located in the territory of Lombardy, Emilia-Romagna, Piedmont, Veneto, Valle d'Aosta, Friuli Venezia Giulia and Slovenia regions.

The action will be realized during the phase 1 of the project (start February 2016 - end October 2018).

Reasons why this action is necessary:

To monitor adequately the results of air quality plans it is important to monitor not only the concentrations of conventional pollutants but also the tracers of the different sources. To do it properly it is necessary to define the stations, the species, the protocols of measures, for collecting the samples; , the criteria for organizing the data.

The network of special stations and the related monitoring protocol will be applied by the Monitoring and evaluation of the AQ plan during the phase 2 of the project (Action D.4).

Constraints and assumptions

Expected results (quantitative information when possible):

Definition of all the information needed to active the monitoring in special stations.

Cost estimation:

For the realization of the action it is necessary to deepen the state of scientific research; to discuss the different opportunities; to identify monitoring points through site inspections. Costs arise from man-hours and travel expenses.

Deliverables:

- 1 document defining the stations, the species and the frequency of measure and the protocols of the measures to be done continuously (30/09/2018);
- 1 document describing the standards for collecting and organizing the data by the existing special stations (30/09/2018);
- 1 document describing the experimental protocol for realizing possible intensive experimental campaigns during the Monitoring and evaluation of the AQ plan (30/09/2018).

- Start up meeting within participants for coordinate the action (30/04/2017);
- Draft document defining the stations, the species and the frequency of measure and the protocols of the measures to be done continuously (15/10/2017);
- Delivery of documents defining the stations, the species and the frequency of measure and the protocols of the measures to be done continuously, the standards for collecting and organizing the data by the existing special stations and the experimental protocol for

realizing possible intensive experimental campaigns during the Monitoring and evaluation of the AQ plan (31/07/2018).

C. <u>CONCRETE</u> (CONSERVATION/IMPLEMENTATION) <u>ACTIONS</u>

ACTION C.1: Implementing the data sharing infrastructure and the AQ model

Beneficiary responsible for implementation: ARPAE

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 12.1 p. 184 "Gli strumenti di gestione del piano"
Lombardy	ch. 5 p. 238 "Il sistema di monitoraggio
Piedmont	Regional Law. 7 April 2000, n. 43, art. 7 (B.U. 12 April 2000, 2° supplement
	to n. 15, p. 5,6)
Veneto	Par. 6.2.11 " Misure a carattere scientifico, conoscitivo, informativo,
	educativo", Action B2.1 [a,b,c], p. 323
Trento	AC2, p.66, Predisposizione di un sistema di simulazione numerica per la
	qualità dell'aria.

Description (what, how, where and when):

The objective of this action is to implement the infrastructure to produce and disseminate air quality information. This will include monitoring, assessment and forecast of pollutant concentrations in Po Valley and Slovenia; products will be addressed to PREPAIR partners, stakeholders and citizens.

In Prepair project, Po Valley and Slovenia are treated as a single aerological basin, so it is crucial that all required input data are gathered and treated homogeneously. In this area, air quality is regularly monitored by the different regional and local authorities. Monitoring networks are dense, well maintained and reliable, but they have always been managed largely independently. Several quality control procedures are implemented, in real time, near real time and delayed time, so that data can be invalidated and modified also after a long time. It has therefore been decided not to build a single, centralized database, but to leave to each local authority the task to check, update and disseminate to Perpair partners its own data.

The products of this action will be based on "snapshot" databases, that will be populated with the best data available at the time of production of each product; these databases will also be accessible to Prepair partners. This approach of "exposure and gathering" will also be used for the complementary data, such as meteorological observation special air quality measurements, that are required to generate specific products, as well as for the dissemination of intermediate products between Prepair partners.

Action C.1 will consist of:

- Definition of the formats for data exchange; data exchange will follow the European and Italian standards for "open data" (www.europeandataportal.eu; http://open-data.europa.eu; http://dati.gov.it);
- Software development for gathering data from the different local authorities;
- Software development for building and managing "snapshot" databases at ARPAE. These databases will be based on Arkimet open-source data management platform (https://github.com/ARPA-SIMC/arkimet), enhanced by new implementations to fulfill the requirements of the project. Prepair partners will access data by means of a set of Web Services (machine-to-machine data exchange) and a web based interface, that will allow a guided and user-friendly remote retrieval of data stored. The computer infrastructure will be designed and maintained in order to guarantee business continuity to data access servers. The design of the databases and web interfaces will be fully modular: it will be possible to add new type of data, to change data structure and format;
- One or more air quality models will be implemented in Po Valley area. At least one model will be run daily, to provide air quality forecast and input data for NRT air quality

- assessment; other models will be run on a regular basis, to provide ensemble input data for periodic air quality assessment. These models will take advantage of the emission inventories produced and refined by actions A1 and C2;
- Data fusion software will be tested and implemented, to merge gridded model analysis with monitoring data, taking into account proxy variables (such as altitude and high-resolution emission inventories). The analysis will be targeted at urban and rural background concentrations, with a horizontal resolution of 1 km on the whole Po Valley. Assessment will be focused on PM 10 and 2.5, but it will also include all the pollutants whose values exceed EU requirements in Po Valley (namely nitrogen dioxide and ozone);
- Assessment of population exposure will be produced on a periodic (monthly, seasonal and annual) basis, based on data fusion products and geographical information on built-up areas and population distribution;
- Added to the periodic air quality assessments, this action will also produce a number of real time and near real time air quality data, based on gathering of observations, air quality models and data fusion, that will cover the whole Po Valley and Slovenia area. Local authorities taking part in Prepair will have real-time access to these data, and will have the opportunity to use them to inform population on pollution levels (according to current EU legislation), and to enhance their actions of education and awareness-rising.

All software developed in this action will be open source.

During phase 1 of PREPAIR, the architecture of data exchange, snapshot databases and dissemination procedures will be designed and implemented; in the same time, the technical details for gathering of air quality observations will be decided, and air quality models will be tested on a domain covering the whole Po Valley and Slovenia.

Phase 2 will focus on verification, tuning and real time implementation of all products (particularly data fusion and population exposure), as well as on gathering and use of complementary data.

The action will take place during phase 1, phase 2 and phase 3 of the project (from July 2017 toJune 2021).

This action involves: ARPAE Emilia Romagna, ARPA Lombardy, ARPA Piedmont, ARPA Veneto, ARPA Valle D'Aosta, ARPA Friuli Venezia Giulia, APPA Trento, Slovenia, ART-ER.

Reasons why this action is necessary:

The outputs of this action will provide key inputs for two of the main objectives of the project:

- The regular assessment of air quality in Po Valley (action D5) will be largely based on data fusion and population exposure products;
- Communication and public awareness-rising (action E1) will strongly benefit on near-real time tools for air quality monitoring and assessment, as well as on daily air quality forecasts.

Constraints and assumptions

This action relies on outputs from actions A.1 and C.2 (emission inventories), which will
provide an essential input for air quality models. To limit the impact of this constraints, this
action and actions A.1 and C.2 will be realized in strong interaction and cooperation.

Expected results (quantitative information when possible):

- Air quality observations from at least 100 stations will be accessible in near real time to project partners; these data will provide a homogeneous coverage of cities and rural areas of Po Valley and Slovenia:
- daily updated air quality analysis and forecast, based on one or more air quality models, as well as observations and data fusion, will be made available to project partners and local authorities; these products will cover Po Valley and Slovenia with a resolution of 5 km;
- complementary data (i.e. non-standard air quality observations) will be gathered and used to improve and validate the products.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff): estimated considering an average daily rate per partner and the number of working days
- External assistance costs for Software development and/or scientific and technical support for models implementation
- Travel and subsistence costs: for meetings within partners involved for action development and participation to national and/or European meetings about AQ assessment and related topics (i.e. Copernicus, FairMode, other meetings)
- Equipment: HW for computing centre c/o ARPAE and computers and software for ARPA Veneto and Slovenia.

Deliverables:

- Report: definition of format specifications and transmission protocols for data exchange; precise definition of which data and metadata will be exchanged (31/01/2018);
- Report on the air quality modeling systems implemented in this action; these systems produce daily forecasts and near real time analysis (data fusion) (31/01/2021);
- Report on the software tools implemented to produce regularly monthly and annual gridded analysis of air quality in Po Valley and Slovenia; this includes software to estimate population exposure (30/04/2021);
- Report on the use of complementary data for air quality assessment; data that are identified as "significant" are gathered on a regular basis (30/04/2021).

- Data from air quality monitoring networks are made available in near real time by all partners, according to standards defined in deliverable 1 (31/07/2018);
- Joint meeting with action C.2 for coordinate the actions: (31/10/2018);
- Two air quality modeling systems are run operationally by ARPAE Emilia Romagna and Slovenia; they provide daily air quality analysis and forecast over a domain covering Po Valley and Slovenia (31/01/2019);
- Air quality analysis based on data fusion are produced in near real time, and are accessible through the "snapshot databases" (30/06/2021);
- near real time products for communication and monthly air quality assessment start to be produced regularly in their final version; the selected complementary data are available in near real time (31/01/2021).

<u>ACTION C.2:</u> Tool for improved emission inventory on the Po basin and emission data warehouse

Beneficiary responsible for implementation: ARPA Lombardy

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 12.1 p. 184 "Gli strumenti di gestione del piano"
Piedmont	Regional Law. 7 April 2000, n. 43, art. 7 (B.U. 12 April 2000, 2° supplement to
	n. 15, p. 5,6)
Veneto	Par. 6.2.11 " Misure a carattere scientifico, conoscitivo, informativo,
	educativo", Action B2.1 [a,b,c], p. 323

Description (what, how, where and when):

Action A.1 will deliver a data flow analysis and the definition of procedures for estimate an improved emission inventory on Po basin. These evaluations will be the base for the definition of a specific informative tool able to collect existing emission inventories and their update, analysing the data and reducing discontinuities among regions for the main pollution sources. A tool for collecting the data necessary to build up a common emission data and their improvement on Po basin to be used both as input for emission scenarios development and in monitoring emission reduction on the base of indicators provided by the System for the environmental accountability of the measures of AQ plans (action A.3) will be designed and implemented. The main tasks are:

- organize, archive and distribute data files
- offer a software interface to regional compilers and system users for the periodic update of data
- definition of a common database for the organization of the collected emissions (based on the data set delivered by A1 sub action)
- analysis of the existing emission data and improvement of the estimates
- algorithms for common run for emissions from road traffic and biomass burning on Pobasin
- distribution of periodic releases of emission output on Po basin to the subjects in charge of environmental effects assessment (according to action D.2)
- interface of emission results with scenario development (implementing the Integrated Assessment Model) and monitoring the emissive effects of the actions.

The action will start during the phase 1 and end during phase 3: start April 2018 end January 2022).

Participants: ARPA Lombardy, Arpae Emilia-Romagna, ARPA Piedmont, ARPA Veneto, Trento Province, ARPA Friuli Venezia Giulia, ARPA Valle d'Aosta.

Reasons why this action is necessary:

The bottom-up approach of emission estimates by regional compilers ensure high quality data especially for local pollutant sources as: large plants, airports, landfills, and others. As discussed in point A1 other sources as biomass burning and road traffic require a Po basin analysis in order to overcome possible divergences. The detailed knowledge of regional compilers and a continuous representation of some sources on Po basin will both embedded into this tool.

Constraints and assumptions

The tool should be designed taking into account parallel activities on the other tool and data sharing developed in the frame of PREPAIR.

Expected results (quantitative information when possible): Informative tool for producing and distributing improved emission dataset as in action D2.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff): estimated considering the daily rate and the number of working days,
- External assistance costs for tool development.

Deliverables:

- Report: definition of format specifications for data exchange: precise definition of which data and metadata will be exchanged (31/07/2018);
- Informative platform for collecting emission data (31/01/2022).

- Availability of data relative to existing emission inventories by all partners according to standards defined in deliverable 1 (31/10/2018);
- Delivery of the informative platform (31/01/2022).

ACTION C.3: Implementing the Integrated Assessment Model (RIAT+)

Beneficiary responsible for implementation: The action will be coordinated by Arpae Emilia-Romagna through direct consultation with ARPA Piedmont

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 12.1 p. 184 "Gli strumenti di gestione del piano"
Piedmont	Regional Law. 7 April 2000, n. 43, art. 7 (B.U. 12 April 2000, 2° supplement to n. 15, p. 5,6)
Veneto	Par. 6.2.11 "Misure a carattere scientifico, conoscitivo, informativo, educativo", B3.1 Monitoraggio dell'efficacia di risanamento mediante modelli di valutazione integrata, p. 323

Description (what, how, where and when):

The objective of this action is to implement the Decision Support System RIAT+ in the Po Valley. Moreover a feasibility application study, based on the results obtained in the actions A1, A2, will be realized for Slovenia

RIAT+ is an integrated modelling environment using tabular and geographic data, simulation and optimization models, graphical and geographical user interface, focused on the local and regional scales. It incorporates explicitly the specific features of the area, i.e. the local meteorology, the detailed pattern of the emission precursor sources and the prevailing chemical regimes. RIAT+, developed and delivered by the Life-OPERA project, supports the policy makers in the selection of optimal emission reduction technologies.

Peculiar components of RIAT+ core system are:

- a multi-objective optimization problem solver, i.e. one or more air quality indicators (e.g. yearly PM10 average) are reduced in the policy application domain, minimizing the emission reduction measures costs to obtain this concentration decrease; the solver is able to select and present to the RIAT+ user the entire set of efficient abatement measures, in terms of application rates (i.e. market penetration levels to be reached).
- a source-receptor model (i.e. a relationships between emission sources and air quality indicators at given receptor sites, based on Artificial Neural Network or other techniques).
 To full implement the RIAT+ in Po Valley the following tasks will be realized:
- C.3.1 Input data collection
- C.3.2 CTM simulations: A series of long-term (i.e. yearly) simulations of a CTM model
 with severals emissions scenarios will be performed The number of simulations should
 be selected in order to ensure the identification of source/receptor models.
- C.3.3 building the source/receptor models: The results of the CTM simulations will be used to build the source/receptor (S/R) models using ANN. This procedure requires two steps: the definition of the specific structure of the artificial neural network and the calibration of ANN parameters. Finally the identified S/R models will be validated using the CTM simulations results.
- C.3.4 RIAT+ model set-up.

A feasibility study and a RIAT+ application test case in Slovenia will be realized by ARSO, following step by step the tasks C3.1 - C3.4 for the Po valley application domain. During each phase of the work ARSO will check the availability of the input data to implement the RIAT+ tool. A first run of RIAT+ will be a "first guess data" (emissions, S/R, abatement measure database) provided by SHERPA (Screening for High Emission Reduction Potential on Air) a tool developed by JRC. The final report delivered by action C3 will define the feasibility and the implementation strategy of the tool during the next phases of the project.

The action, coordinated by Arpae Emilia-Romagna through direct consultation with ARPA Piedmont, will be fulfilled according to other regional environmental agencies (ARPA Lombardy, ARPA Piedmont ARPA Veneto, ARPA Friuli, ARPA Valle d'Aosta and Slovenia) and will start 15 months after the beginning of the project. ARPA Piedmont is responsible for the tasks C.3.2 and C.3.3.

After the implementation of RIAT+ by action C3, the tool, will be used by action D5 to monitorate the impact on air quality of the application of emission reduction foreseen in regional air quality plans and help to identify the most effective emissions reduction actions at basin scale. If the planned actions turn out to be insufficient to fulfil air quality legislation requirements, a new strategy will have to be adopted in the phase 2 of the project. In this case, updated emission inventories (from action D2) and assessments of the application of concrete actions (from actions D1 and D6) will be used to precisely define the causes of the problem. RIAT+ will then be used to design the most cost-efficient strategy in Po Valley. The action will be performed during the phase 2 and 3 of the project.

At the same time the allocation of resources to the concrete actions, deriving from Operational Programmes and Rural Development Programmes, could be changed towards more efficient measures identified by RIAT+. The cross-sector working groups, within each Region, will be involved in order to check the feasibility (social and economic sustainability) of the proposed actions and in order to report to the complementary founds regional authorities. The evaluation process will be shared with the PO Basin Board, who's in charge of ensuring the long term sustainability of project results. Recommendations about more efficient actions will be detailed in the Project After Life Plan.

The action will start in April 2018 and will end in March 2020.

Participants: ARPA Lombardy, ARPA Veneto., ARPA Friuli Venezia Giulia, ARPA Valle d'Aosta and Slovenia

Reasons why this action is necessary:

Use of RIAT+ allows an analysis of the measures adopted by the several Air Quality action plans and help to evaluate the synergy among the measures and to coordinate the priority ones to be implemented. This integration play a fundamental role since many processes of production and accumulation of pollutants are large scale processes. The application of RIAT+ will help to identify actions at basin scale (priority interregional) as well as measures to be implemented in each regional air quality plan.

Constraints and assumptions

It is assumed that action A.1 (Emission data set) and A.2 (The action and measure data set) are completed before this action starts. To limit the impact of this constraints, a good interaction between the beneficiaries responsible is planned. Moreover the data collected in action D1 (Periodical collection of the measures already planned for the environmental reporting of measures' implementation through the environmental accountability system) will be evaluated with RIAT+ tool.

Expected results (quantitative information when possible):

The Integrated Assessment Model RIAT+ implemented and operational in Po Valley for the evaluation of air quality actions plans.

A feasibility study and a RIAT+ application test case in Slovenia.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff) estimated considering an average daily rate per partner and the number of working days;
- External assistance costs to implement the RIAT+ software in the Po basin and addressed to high performance computing resources required to perform CTM simulations during the C.3.2 task;
- Travel and subsistence costs for meetings within partners involved in activities and meetings with the developers of RIAT+ (EU-JRC and OPERA partners).

Deliverables:

Interim report on the implementation of the RIAT+ in Po Valley (30/04/2019);

- Technical report on the feasibility study and RIAT+ application test case in Slovenia (30/04/2019);
- Final report on the implementation of the RIAT+ in Po Valley and Slovenia (31/01/2021).

- C.3.1 Input data collection and feasibility study of RIAT+ application in Slovenia (30/09/2018);
- C.3.2 CTM simulations (31/07/2019);
- C3.3 Source-receptor model development (31/01/2020);
- C.3.4 Riat+ model set up (31/03/2020).

<u>ACTION C.4</u>: Promoting an ammonia low-emission application of fertilizers based on urea in agriculture

Beneficiary responsible for implementation: Region Emilia Romagna

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.5.4 p. 157 "Misure inerenti l'utilizzo dei fertilizzanti in campo agronomico"
Lombardy	Ch. 2.4.2.4 p. 91 "Settore agricolo"; Ch. 3.5.3 page135 "Attività agricole e
	forestali"; Attach. 3 p. 5 and 9
Piedmont	Regional Law. 7 April 2000, n. 43, art. 7 (B.U. 12 April 2000, 2° supplement to
	n. 15, p. 5,6)
Veneto	Par. 6.2.9, p. 309-318 "Interventi su agricoltura ed ammoniaca"
Trento	Ch. 6, measure AGR1, p. 207, "Promozione e supporto di buone pratiche
	gestionali nel settore dell'allevamento su ricoveri del bestiame, su metodi di
	stoccaggio e spandimento delle deiezioni"

Description (what, how, where and when):

The project aims at identifying the best application techniques of urea-based fertilizers, which often cause ammonia emissions deriving from urea degradation before absorption by crops, and at verifying (also through field-based analysis) the opportunity of replacing urea with other nitrogen fertilizers or with organic substances, with assessment of the environmental costs and benefits associated.

The project includes studies aimed at:

- individuation of the techniques currently used for fertilizers application, of quantities used, of the farmers involved and of the possible case studies;
- the estimation of the generated impact in terms of emissions reduction, through tests if necessary;
- specific analyses for the identification of the best application techniques with respect to the adopted cropping system or the possibility to identify technological applications to reduce chemical fertilizers to advantage of natural fertilizers (livestock manure) or to other nitrogen fertilizers with a lower nitrogen release into air and water;
- evaluation of the costs and of the replicability of the techniques in the area of the Po Basin (with involvement also of producers of fertilizers and farmers' representatives).

On the bases of the study results, operator trainings and expert meetings will be organized. The project involves fertilizers' producers (who have an assisting role to farmers in the application methods) and farmers representatives.

A conference will also be organized with the aim of presenting the action's results (foreseen and realized within Action E2).

A site visit will be arranged with the aim of developing the action's capacity building (foreseen and realized within Action E2).

The action will be implemented in the Regions Emilia-Romagna, Piedmont, Lombardy, Veneto through case studies.

Trento Province and Friuli-Venezia Giulia Region participate in terms of data sharing and project/expert meetings.

The action will have a maximum duration of about four years and a half: from July 2017 to December 2021.

Reasons why this action is necessary:

Ammonia emissions come mostly from the activities of the agricultural sector and contribute significantly to the formation of secondary particles. The application of fertilizers containing urea may cause emissions of ammonia from urea degradation prior to absorption by crops; it is therefore important to identify the best techniques to limit these emissions.

It is considered strategic in order to promote the application of the best techniques to involve main stakeholders in a synergistic way.

The outputs of this action, reported in the position paper, will be used as guidelines to direct the allocation of the complementary funds of Rural Development Programmes, during next European programming period.

Constraints and assumptions

Possible difficulties could include the effective participation of all necessary parties and the feasibility of the actions that will be identified as the most effective.

The participation of all parties involved should ensure the search for the best solutions as it includes the different points of view.

It might be difficult to find techniques that ensure at the same time high effectiveness of emission reduction and good applicability and economic sustainability.

It will be important to promote and ensure as much as possible the practical application of the techniques identified.

Expected results (quantitative information when possible):

Once the effective techniques to reduce emissions are identified and concretely applicable, we expect potentially high results in reducing emissions of ammonia from the activities of application / replacement of fertilizers. By using BAT technique of urea-based fertilizers we expect to achieve at least a reduction of 18% of ammonia emissions.

Cost estimation:

The following costs have been considered:

- For the coordination of the action the average cost/day x n° days of internal personnel.
- External assistance for the studies described above.
- Travel costs for the necessary expert meetings and project meetings and conference.
- Organizational costs for expert meetings.

Deliverables:

Position paper/report on an agrarian system perspective with identification of the good practices to reduce ammonia emissions from the use of chemical fertilizers that includes economically sustainable low emission fertilizer applications, evaluation of the amount of ammonia emissions avoidable and description of case studies (31/12/2021).

Milestones:

Public tenders for the studies (30/04/2018):

Study phases definition and implementation (30/06/2020).

<u>ACTION C.5</u>: Implementation of a common model for evaluation of gaseous emissions and odour resulting from the intensive rearing of cattle, pigs and poultry

Beneficiary responsible for implementation: Region Emilia-Romagna

Region/Province	References in Air Quality Plan
Emilia-	Ch. 9.5.3 p. 157
Romagna	"Misure nel settore degli allevamenti zootecnici"
Lombardy	Ch. 2.4.2.4 p. 91 "Settore agricolo"; Ch. 3.5.3 p.135 "Attivita agricole e forestali"; Attach. 3 p. 5 and 9
Piedmont	Regional Law. 7 April 2000, n. 43, art. 7 (B.U. 12 April 2000, 2° supplement to n. 15, p. 5,6)
Veneto	Par. 6.2.9, p. 309-318 "Interventi su agricoltura ed ammoniaca"

Description (what, how, where and when):

The action consists in the elaboration of a common model for the evaluation of gaseous emissions (ammonia, nitrous oxide, methane and carbon dioxide), odour emissions, and potential release of nitrogen compounds in water deriving from cattle, pigs and poultry intensive farming activities with "whole farm approach", after a wide examination of the existing models applied for the same purpose.

The model should be applicable to the single farms, and will be developed through the implementation of a dataset to be shared among the Regions of the Po Basin, it can be tailored on different farm typologies, on different animal categories and on local characteristics. The model can be transferred also to other areas, e.g. extensive mountain livestock systems or applied to a wider scale.

In order to evaluate the impacts of breeding activities on air quality it is commonly recognized the importance of the following principles:

- "whole farm" approach to estimate the overall gaseous and odour emissions of the livestock farm and in general of the whole agricultural farm, which are produced during the various stages of production and management (nutrition, housing, storage, manure treatment and spreading, crop management), taking into consideration the interaction between the benefits obtained in a given phase of the breeding cycle and the impacts of the subsequent phases. The optimization of cattle feeding, manure management and spreading, and crop management practices should result in a reduction of the environmental impact without structural interventions.
- Consider all the environmental components and the interactions between water-soil-air matrices (best practices aimed at reducing nitrogen percolation into groundwater might not be so positive with regard to atmospheric emissions and *vice versa*). As a consequence, the action foresees the implementation of a model which is composed of two interrelated modules:
 - the first module is qualitative, with the aim of evaluating the environmental sustainability of the livestock farm, following the "whole farm" approach by verifying the application of the best available techniques (BAT) in the different production and management phases of breeding. The quality evaluation consist of awarding each farm a score (basing on a ranking elaborated after a first survey, taking into consideration production and management parameters of livestock farm), that shall estimate the environmental impact of the farm from a qualitative point of view and give indications on the improvement possibilities.
 - the second module is quantitative and allows to:
 - estimate the gaseous and odour emissions coming from the different phases of production and management of the farm, also in consequence of the BAT application, including those concerning agrometeorology and crops management, and so to evaluate their impacts on air, water and soil.

- consider all the existing researches and management models in the Po Valley, with the aim to support firstly the evaluation of the environmental "quality" criteria of the farm and secondly the estimation of the farm's emissions starting from collected data concerning applied BATs and relevant farm characteristics.
- produce guidelines about best practices for manure spreading and fertilization. The
 action will set up a system for providing assistance to farmers for choosing the best
 application techniques with respect to the meteorological and soil conditions, in order
 to minimize ammonia emissions in the atmosphere.

The necessity to reduce gaseous emissions will highly depend on economic perspectives linked to this reduction, thus, it will be important to integrate the measurement and evaluation of these emissions at a larger scale in order to develop "quality production brand" criteria for low emission farms taking into account the production systems realities in the Po Basin.

This model should be developed on the basis of a shared dataset suitable to each farm typology, to different categories of reared animals and to local characteristics. It is indeed better to reach a reduction through the application of BATs rather than acting on each single production phase. This reduction should be evaluated through an assessment model of the impacts of all the production and management phases.

Training activities (at least 1 workshop per partner) are foreseen for farmers and operators of the sector.

A conference will be organized with the aim of presenting the action's results (foreseen and realized within Action E2).

A site visit will be arranged with the aim of developing the action's capacity building (foreseen and realized within Action E2).

The action will be implemented in the Regions Emilia-Romagna, Lombardy, Piedmont, Veneto. Veneto Region is the coordinator for the implementation of the simplified module.

Trento Province and Friuli-Venezia Giulia Region participate in data sharing and project meetings.

ARPAE Emilia Romagna and ARPA Piedmont will participate at the action defining the part of "best practices guidelines" regarding the meteorological conditions and the present and foreseen soil conditions, by setting up a system to provide assistance to farmers for the choice of the best application techniques.

The action will have a maximum duration of about four years and a half: from July 2017 to December 2021.

Reasons why this action is necessary:

It is estimated a contribution of over 95% from the agriculture sector to ammonia emissions in the Po Valley. As a matter of fact ammonia is one of the PM10 precursor emissions, and NEC Directive establishes a limit for national emissions of such pollutant.

The first application of the IPPC Directive to poultry and pig intensive farming allowed to obtain improvements thanks to the adoption of BATs, that are applied to one or several farming phase, basing on the evaluation of the particular situation of every farm, to achieve over time a reduction of gaseous and odour emissions. Such approach has often been supported by local impacts calculation models. These models, however, do not have a uniform application in the Po basin.

It can be estimated that through the BAT application it is possible to fulfill a relevant reduction of the emissions, that can vary basing on the animal category and on specific conditions, e.g. up to 40% of emissions reduction for pig farms.

As regards to cattle farms, currently there is a lack of a uniform model for all the Po basin regions for estimating gaseous and odour emissions produced by the farms and a defined scheme of BAT implementation for reducing the environmental impact to be applicable to farm management and production phases.

Hence, in order to provide a unique evaluation model applicable to all farms, it is necessary to:

- provide a uniform and common evaluation criteria within the Po basin;
- enhance and strengthen the improvement pathway also following the new IED Directive:

- facilitate the application of the new BREF (IRPP), concerning pigs and poultry intensive rearing, that will be issued soon;
- facilitate the application of the sectorial regulations concerning atmospheric emissions and
 of the guidelines for the reduction of emissions in agriculture that are being elaborated
 within the Po basin agreement for air quality improvement;
- facilitate the application of a similar approach to cattle breeding, considering the relevance of the related gas emissions.

Constraints and assumptions

Possible critical issues:

- in order to consider all the elaborations and evaluations carried out at local level, it is necessary to involve all the subjects that are currently developing or have participated in the development of local models in the different regions, such as research institutions, universities or territorial development agencies.
- it is necessary to elaborate the model in a format that can be easily applicable and adaptable to all the different types of breeding, in order to facilitate its use for studies and preliminary estimations that could be useful in farm's emissions authorization processes and for the planning and programming tools elaboration.
- the possibility to consider the provisions of forthcoming regulations (BREF for intensive livestock breeding, Po basin agreement guidelines, etc.) depends on the timing of those regulating tools.

Expected results (quantitative information when possible):

By model application we expect to achieve relevant reductions of ammonia emissions from farms (from all the phases of housing, manure storage, treatment and spreading) and a simultaneous reduction of greenhouse gasses emissions. Through BAT application it is possible a relevant reduction of the emissions, that can vary basing on the animal category and on specific conditions, e.g. up to 40% reduction of emissions from pigs breeding.

Cost estimation:

The following costs have been considered:

- for the coordination of the action the average cost/day x n° days of internal personnel;
- external assistance for the development of the model, laboratory analysis and "quality production brand" criteria for low emission farms;
- travel costs for the necessary project meetings, conference and site visits;
- organizational costs for training activities.

Deliverables:

- a common model to evaluate emissions (ammonia, nitrous oxide and methane) from pig and poultry farms to support the revision of IED Permits (Directive 2010/75/EU) and to support studies and assessments aimed at granting contributes and the preparation of regulations about environment protection. (31/03/2020)
- a final common model for the evaluation of gaseous and odour emissions applicable to the intensive rearing of cattle, pigs and poultry able to support studies and preliminary estimations and be useful in farm's emissions authorization processes and for the elaboration of planning and programming tools (31/12/2021);
- model's manuals user (31/12/2021);
- technical framework for the definition of criteria for low emission farms (31/12/2021).

Milestones:

- establishment of a Working Group of experts and definitions of the methodology to implement the action including interchange with project partners (28/02/2018)

<u>ACTION C.6</u>: Technical and specialist training for installers and designers of domestic biomass systems

Beneficiary responsible for implementation: Autonomous Province of Trento

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.3.4.1 p. 128 "Misure per la riqualificazione energetica"
Lombardy	Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili"; Attach. 3 p. 51
Piedmont	d.g.r. 4 agosto 2009, n. 46-11968, par. 1.4 "Prescrizioni specifiche sugli impianti termici negli edifici", par. 1.5 "Generatori di calore" (B.U 7 agosto 2009, 4° supplemento al numero 31, p. 102)
Trento	Ch. 6, measure CIV2, p.150, "Rinnovo dei generatori di calore domestici a legna"
Veneto	Par. 6.2.2, pagg. 254-265 "Utilizzazione delle Biomasse in piccoli impianti civili e combustioni incontrollate", Azione A2.3
Friluli Venezia Giulia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore dell'energia", p. 428-431

Description (what, how, where and when):

The aim of the action is the qualification of the competences of installers, maintenance engineers and designers of civil and residential biomass systems, offering specific trainings aimed at developing:

- awareness of the impact of biomass plants on air quality;
- technical and professional competences related to criteria and tools to choose, design, install and maintain systems and components, conducting tests and preparing the documentation required;
- recognize the importance of their role as promoters of a culture of environmental sustainability towards the end user and develop communication and interpersonal skills to interact effectively and provide adequate information.

In the Province of Trento, the trade associations have committed, since 2007, in an intensive design and implementation of training programs on energy and environmental sustainability of facilities and buildings. In recent years, 40 training courses have been realized, involving more than 500 participants to about 2,500 hours of training, developing tools, models and methodologies. The scope was to offer technical and specialist training, but also to encourage integration between different actors who are involved in the implementation of building operations and therefore to develop awareness of their important role as promoters of a culture of sustainability. Regarding the specific issue domestic biomass systems, several training sessions have already been organized for installers and maintenance technicians on the themes of aeration and ventilation and control and cleaning of chimneys. In 2014 were also carried out two training courses specifically dedicated to biomass plants, of which this proposal represents a continuation.

The Province of Trento will coordinate this action with the aim of spreading this successful experience at the Po Basin level, in order to increase the number of professionals aware and skilled on these important topics.

At the beginning of this action, the Province of Trento will be in charge of making available to the project partners the experiences and the best practices already developed and to realize a specific training format. The planning of the training format will be entrusted to a subcontractor with proven experience in the field, who will be in charge of discussing and sharing ideas with all the partners.

Once the training format will be accepted by all the partners involved in this action, the course will be organized in each territory. Each Administration will entrust to a sub-contractor with

proven experience in the field the tasks of contracting the teachers, implementing the various steps of the training.

The training format will consist in a mandatory introductory module of 4 hours, dedicated to air quality issues (legislation, pollutants, health impact, main local emission sources, etc.), and 4 thematic modules of 16 hours each.

Each thematic module will focus on specific topics, as follows:

- module 1: characteristics of the biomass fuel, with particular reference to the quality of biomass, certification, supply chain, traceability, etc.; different types of process (combustion, gassification, pyrolysis); heating technologies (traditional technologies like fireplace and stoves and innovative ones);
- module 2: integrated planning and system design;
- module 3: systems' installation, testing and maintenance, with particular reference to ventilation, chimneys, legislation, etc.;
- module 4: negotiation and effective communication (communicating the technical offer, preparing estimates, etc.) and proper information and awareness to users

For each edition of the training, it is expected the participation of about 15-20 technicians.

The participants will receive a certificate of attendance, if at least the 75% of the lessons are attended.

The action will take place in: Province of Trento, Emilia-Romagna Region, Veneto Region, Friuli Venezia Giulia Region. Lombardy Region and Piedmont Region will participate mainly with personnel involved in project meetings and sharing of information.

The Autonomous Province of Trento will be in charge of the overall coordination, organizing moments of common planning of the activities and on going evaluation.

FLA will support Trento in the dissemination of the main results of the action and in the involvement of relevant stakeholders during the technical meetings.

The action will last from July 2017 to March 2022.

The Phase 1 will be dedicated to an initial coordination, to plan the trainings, discussing the training format with all the region partners involved; therefore the first experimental edition of the training will be implemented in the Province of Trento territory.

During the Phase 2 and Phase 3, the remaining training editions will be implemented also in the territories of the other regions. It is expected to propose an edition a year for four years; the training sessions will be concentrated during the periods that will be more compatible with the professional obligations of the parties involved in the training.

The final months will be dedicated to the final evaluation of the results with the involvement of all partners.

Reasons why this action is necessary:

Thanks to the policies of promoting renewable energies and competitive prices, biomass systems are spreading more and more, not only in the mountain areas where traditionally are already widely present, but also in urban areas.

While the use of the woody biomass as renewable source offers important advantages, from the other side biomass system incorrectly designed, maintained or supplied can have a significant impact on air quality and safety.

The use of a poor quality biomass and the spreading of inefficient combustion appliances do not allow an optimal combustion in household systems causing significant emissions into the atmosphere of harmful compounds to human health, such as fine particles and PAHs (Polycyclic Aromatic Hydrocarbons).

The use of inadequate solid fuel and poor cleaning and maintenance of chimneys increase the risk of fire. Furthermore, the current construction methods of mansard roofs, which favour the use of thick layers of woody insulating material and plastic flammable sheaths, pose buildings at risk of fire due to overheating of the flues.

It is therefore essential to raise awareness of the entire supply chain, from the designer until the private end user, and to offer information to maximize the advantages and minimize the disadvantages and risks associated with the use of biomass.

Designers and installers have a relevant role both in the proper construction and maintenance of biomass systems and in raising private end-users awareness to the issues of sustainability and to proper maintenance of the systems. It is therefore essential to provide specific training to enable the experts to act in a professional and integrated way.

Constraints and assumptions

- delays or administrative problems in entrusting the assignment of planning the training format;
- delays or administrative problems in entrusting the assignment of training;
- lack of participation of some partners in the preparatory meetings, necessary in order to define a common and shared training format;
- lack of participation of the professionals expected to be involved in the trainings.

Expected results (quantitative information when possible):

- Training of about 80 qualified professionals in each partner region;
- Dissemination of the relevance of biomass combustion in terms of air quality;
- Dissemination of a culture of proper design, construction and maintenance of domestic biomass systems;
- Awareness of end-users about proper use and maintenance of the facilities, in particular with respect to measures to guarantee lower emissions of pollutants

With this action it's supposed that a replacement of 10% of the less efficient plants with high energy efficiency ones will take place. So it's estimated a reduction of about 5% of emissions from domestic biomass combustion.

Cost estimation:

Different methodologies have been used to estimate the costs.

The action has been divided into smaller activities in order to quantify more precisely the amount of work to be done and the number of working-days necessary. The budget for the personnel has been quantified as [number of days*average cost/day], divided into permanent staff and temporary staff.

The external assistance refers to the initial organization (in the Coordinator's budget) and to the implementation of the training courses (in each Region's budget). The effort of planning the training

have been quantified as [number of days*average cost/day] and the lectures as [number of training hours*average cost/hour].

Travel and subsistence costs have been estimated for meetings into the project area within partners involved for action development.

The coordinator will assume the costs regarding the definition of a common training format (external assistance) and the overall coordination, monitoring and evaluation (temporary staff). Each partner will assume at least the costs of personnel, in order to contribute sharing ideas and experiences in this field. According to each territory's needs, each partner will implement a different number of course editions.

Deliverables:

- assessment questionnaire regarding each edition of the trainings, completed by the participants. (31/10/2018 - 31/10/2019 -31/05/2021 -31/12/2021);
- final report about assessment of training and evaluation of the training experience (31/03/2022).

Milestones:

- organization of the course and definition of training format (Phase 1, 30/04/2018);

- meetings with project partners and stakeholders (trade associations, etc.) for the initial coordination of the action (Phase 1, 30/04/2018);
- monitoring and/or evaluation meetings, involving all the stakeholders, held once a year during the implementation of the trainings and/or shortly after their conclusion (Phase1, Phase 2 and Phase 3 30/11/2018 - 30/11/2019 - 31/07/2021- 31/01/2022);
- conclusion of each edition of the training courses (Phase 1, Phase 2 and Phase 3, 31/10/2018 - 31/10/2019 - 31/05/2021 -31/12/2021);
- final evaluation of the training done through meetings with stakeholders (Phase 3, 31/03/2022).

<u>ACTION C.7</u>: Enhancement of the role of "qualified chimney sweep" for the control and maintenance of biomass domestic systems

Beneficiary responsible for implementation: Autonomous Province of Trento

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.3.4.2 p. 130 "Regolamentazione degli impianti di combustione a biomassa per riscaldamento civile"
Lombardy	Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili"; Attach. 3 p. 51
Piedmont	d.g.r. 4 agosto 2009, n. 46-11968, par. 1.4 "Prescrizioni specifiche sugli impianti termici negli edifici", par. 1.5 "Generatori di calore" (B.U 7 agosto 2009, 4° supplemento al numero 31, p. 102)
Veneto	Par. 6.2.2, p. 254-265 "Utilizzazione delle Biomasse in piccoli impianti civili e combustioni incontrollate", Action A2.3bis
Friuli Venezia Giulia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore dell'energia", p. 428-431
Trento	Ch. 6, measure CIV4, p. 152, "Rafforzamento del ruolo professionale di fumisti e spazzacamini e dei meccanismi di controllo sull'adozione di pratiche corrette"

Description (what, how, where and when):

The figure of the chimney sweep takes on a role of great significance in ensuring the proper use and the safety of domestic plants fuelled by wood/pellet, of chimneys and flues. Its role is also very relevant in creating the conditions for emissions reduction through proper maintenance of the facilities and, above all, raising awareness among end users, who must be educated on the correct choice of fuels and on the importance of periodic maintenance. The chimney sweep also assumes an important role with regard to fire prevention and the economy management system (3 mm of soot determine a decrease of 15% of the system performance). These conditions and chimney sweeps' role are well highlighted by the majority of European countries, where there are laws and regulations governing the sector. Relevant example is the percentage of carbon monoxide poisoning: Italy has one of the higher rates in Europe.

The figure of the chimney sweep is responsible for "the maintenance and periodic monitoring of the combustion plants. He cleans the chimneys of fireplaces in the kitchen and independent and centralized heating systems, he checks for flaws that could favour the outbreak of a fire. If necessary, he performs the function of a consultant providing information on more rational heating solutions and on the proper maintenance of the facilities. His responsibilities have been enhanced by the new safety regulations and include, among other things, assessing the suitability of chimneys, flue gas and tanks and the cleaning of the air ducts."

Considering this framework, the objectives of the action are as follows:

- defining, for each territory taking part in this action, an overall and comprehensive regulatory framework in regards to management, maintenance and security of the heating systems and the current supply and demand of chimney sweeps;
- defining the qualification requirements of a chimney sweep and ensuring appropriate training programs to bring new people to the profession and to update those who already work in the field;
- enhancing the chimney sweep as a professional figure and supporting, through dissemination and communication, the public visibility of its work.

The planned activities are as follows:

- 1. for each region involved, a survey to quantify the offer (existing chimney sweeps) and the potential demand, an evaluation of their current methods of intervention, as well as the number of new professionals to be involved in the training;
- 2. a survey amongst each administration involved on the current regulatory framework for

the management, maintenance and control of heating systems;

- analysis of the good practices already in place, especially in the Autonomous Province
 of Bolzano which has a long standing tradition of training and recognition of the figure
 of the chimney sweep; evaluation of the qualification requirements compared to
 existing territorial peculiarities and definition of a qualification profile agreed by all the
 regions involved;
- 4. establishment of a public registry of recognized professionals in each region involved;
- 5. implementation of training courses to upgrade the skills of those who already work as chimney sweeps and/or to prepare them for the certification exam. The trainings will also be proposed to individuals interested in becoming a chimney sweep. Certification of the trained chimney sweeps in order to validate their knowledge and skills;
- 6. promotion of the figure of qualified chimney sweep through activities meant to raise public awareness;
- 7. proposition of a legislation that would formally recognize the chimney sweep as a qualified professional figure.

The project staff of the Coordinator will be in charge of organizing the first activities, in close collaboration to each project partners, and to entrust to a sub-contractor with proven experience the realization of a comprehensive study including: surveys, analysis of the best practices, drafting of the qualified chimney sweep professional profile and feasibility study for the establishment of the public registry. The partners will collaborate with the sub-contractor and the Coordinator by providing all necessary information and data. The planning of the training format will be entrusted by the Coordinator to a sub-contractor with proven experience in the field, who will also handle the monitoring and the assessment of the training courses and certification exams.

Each region partner involved in this action will entrust assignments to sub-contractors with proved experience in technical education in order to carry out the various steps of the training: lectures and certification exams.

Each region partner will be also in charge of arranging the legislative background necessary to formally recognize the role of chimney sweeps and of promoting its figure towards the general public and the local authorities, especially the municipalities.

The Coordinator will collaborate with the Province of Bolzano, stakeholder of this project, recognized to have a long tradition in this field: the chimney sweeps have already been formally recognized as qualified professional figures, there are local legislations that define how each municipality has to organize and support their work. Experts from Bolzano will be invited to participate to some technical meetings, together with all the partners involved, in order to share experiences and lessons learnt.

Regarding the activity n.5, the Coordinator will be in charge of arranging and proposing a common training format. Each training edition should be divided into 2 modules: 160 hours of the training course for new professionals and 32 hours of updating.

Each edition aims to involve around 30 participants.

Each edition, divided in 2 modules, will cover the following topics:

- CHIMNEY SWEEP TRAINING COURSE (160 training hours):
- 1. fundamentals of chimney sweeps' profession;
- 2. sector regulations;
- 3. role of maintenance to ensure safety, health and good air quality;
- 4. technical elements that make up the chimney;
- 5. tools and equipment required on the job;
- 6. maintenance and control methods of the chimney, measurement and assessment;
- 7. trails and practical tests;
- 8. drafting of the technical report;
- 9. how to get the information to the consumers: effective communication techniques;
- 10. knowledge tests during and at the end of the course: theoretical and practical mock tests to prepare for the certification exam.

- CHIMNEY SWEEP UPDATING COURSE (32 training hours):
- 11. knowledge assessment at the beginning of the course;
- 12. information on qualification requirements and certification procedures;
- 13. update on technical and regulatory developments;
- 14. theoretical and practical mock tests in preparation for the certification exam.

The action will take place in: Province of Trento, Emilia-Romagna Region, Veneto Region, Piedmont Region, Friuli Venezia Giulia Region.

Lombardy Region will participate mainly with personnel involved in project meetings and sharing of information.

The Autonomous Province of Trento will assume a coordinating role.

FLA will support Trento in the dissemination of the main results of the action and in the involvement of relevant stakeholders during the technical meetings.

The action will last from July 2017 to September 2022.

The Phase 1 will be dedicated to the context analysis, the surveys, the definition of the qualification profile and the feasibility study for the establishment of a public registry.

The Phases 2 and 3 will be dedicated to the planning of the training format, the implementation of the training courses, the certification exams and the establishment of the public registry. The promotion of the professional figure of the chimney sweep will be held since the Phase 1 for the whole action. During the Phase 3 the partners will work together to propose a legislation that would formally recognize the chimney sweep.

The final months will be dedicated to the evaluation of the results and will see the involvement of all the partners.

Reasons why this action is necessary:

The spread of domestic biomass systems due to the fuel cheapness and the simultaneous increase of fossil fuel prices has led to an overall increase in polluting compounds emissions linked to poor combustion and an increased number of fire due to overheating of the barrel flue.

Chimney construction methods are substantially unchanged from those of the past and the rules for their design and construction have not had sufficient impact on professionals and craftsmen, who are often not properly trained and do not know how to apply them. Building renovations according to the energy standards required by law are almost never followed by a check and regulation of the flues.

The main reasons this project is deemed necessary are the following:

- the increase of domestic plants fuelled by woody biomass that do not guarantee good combustion (bad fuel, poor management, lack of cleanliness) has a significant impact on air quality;
- importance of the enhancement of the figure of the chimney sweep, a technician in direct contact with the end user and therefore, if properly trained, able to sensitise him;
- elevated number of fires caused by the overheating of the flue (> 200 cases per year just in the Province of Trento) and carbon monoxide poisoning (10 cases per year just in the Province of Trento);
- lack of documentation indicating compliance with the standards set for chimneys;
- the need for better legislation to regulate cleaning and construction of chimneys in order to increase both safety and air quality;
- spread in recent years of solid fuel systems that are installed independently without the intervention of the professional figure;
- dissemination of good practices in the construction of chimneys;
- encouraging the training of qualified personnel for the construction and cleaning of chimneys - many studies show that plants expertly constructed contribute to greater

combustion efficiency, resulting in the reduction of pollutants emitted into the atmosphere.

Constraints and assumptions

- delays or administrative problems in entrusting the assignment of planning the training format;
- delays or administrative problems in entrusting the assignment of training;
- lack of participation of some project partners in the initial meetings, necessary to carry out the surveys, to define a qualification profile, to establish the chimney sweeps' registry, etc;
- lack of participations of the professionals expected to be involved in the trainings;
- political obstacles to the development of a legislative proposal to formally recognize the chimney sweep as a qualified professional figure.

Expected results (quantitative information when possible):

- Public recognition of the figure of the chimney sweep through the definition of a qualification profile recognized by all regions taking part in the action;
- definition of the regulatory framework and certification procedures in a professional registry established ad hoc;
- training and certification of an adequate number of new chimney sweeps consistently with the results of the quantitative analysis on the needs of professionals per territory;
- training of the chimney sweeps already operating in the different territories;
- proposition of a specific legislation that aims to formally recognize the chimney sweep as a professional figure;
- spreading of a culture of safety and quality that leads to a correct use of fuels and to greater attention to the maintenance and inspection of chimneys and flues carried out by certified professionals.

A proper maintenance of the all the existing plants could lead to increase energy efficiency and reduce emissions of pollutants into the atmosphere of about 7%.

Cost estimation:

Different methodologies have been used to estimate the costs.

The action has been divided into smaller activities in order to quantify more precisely the amount of work to be done and the number of working-days necessary. The budget for the personnel has been quantified as [number of days*average cost/day], divided into permanent staff and temporary staff.

The external assistance refers to the involvement of sub-contractors of proved experience in the survey and context analysis activities, the definition of a qualification profile, the definition of a common training format and the realization of the trainings. This amount has been quantified estimating the number of working-days necessary, as [number of days*average cost/day].

The coordinator will assume the costs regarding the first activities, like the surveys, the context analysis, the drafting of the qualified professional profile and the establishment of the registry (external assistance, permanent and temporary staff), the definition of a common training format and the training to the lecturers (external assistance) and the overall coordination, monitoring and evaluation (temporary staff).

Each partner will assume at least the costs of personnel, in order to contribute to the first common activities (surveys, definition of a qualification profile and registry's establishment). According to each territory's needs, each partner will implement a different number of course editions.

Travel and subsistence costs have been estimated for meetings into the project area within partners involved for action development and for meeting with the most relevant stakeholders.

Deliverables:

 Final report of the survey about the quantification of demand-offer of chimney sweeps (31/12/2018);

- final report of the survey about the current regulatory framework of heating systems (31/12/2018);
- report about the qualification profile of chimney sweeps (31/12/2018);
- report containing the training format (31/03/2019);
- assessment questionnaire regarding each edition of the trainings, completed by the participants (Phase 2 – Phase 3) (31/07/2022);
- final report of the training experience (30/09/2022);
- legislative proposal to formally recognize the chimney sweep as a qualified professional figure (30/09/2022).

Milestones:

- Establishment of a public registry of recognized professionals (Phase 1, 31/12/2021).

ACTION C.8: Analysis of the logistics of consumption and supply of woody biomass

Beneficiary responsible for implementation: FLA

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.3.4.2 p. 130 "Regolamentazione degli impianti di combustione a
	biomassa per riscaldamento civile"
Lombardy	Ch. 2.4.2.2 p. 88 "Settore del riscaldamento civile/residenziale"; Ch. 3.5.2.1 p.127-128 "Fonti energetiche rinnovabili"
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, pag. 5,6)
Veneto	Par. 6.2.11 " Misure a carattere scientifico, conoscitivo, informativo, educativo", Action B1.1 "Promozione di studi scientifici volti alla definizione e quantificazione delle sorgenti del particolato atmosferico" (p. 322)
Friuli Venezia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore
Giulia	dell'energia", p. 428-431
Trento	Ch. 6, measure CIV5, pag. 156, "Garantire la Sostenibilità ambientale degli impianti di produzione di energia, inclusi teleriscaldamenti, alimentati con fonti rinnovabili"

Description (what, how, where and when):

The goal of the action is to optimize the local supply chain management and production of biomass for energy use through the implementation of suitable management plans, the application of traceability protocol, the stakeholder engagement and the comparison of good practices. The action is divided into five different sub actions.

Sub-action C.8.1: Study of supply flows of biomass

The flows of biomass, from abroad and from domestic markets to the Po valley, will be evaluated and quantified, along the stages of the supply chain (production, upstream processing, transportation, storage, downstream processing, commercial distribution, disposal of ashes) depending also on the type of the final fuel (firewood, chips, pellets).

The different sources of supply will be analysed and the final consumption on a regional level will be evaluated, in relation with the different types of use also considering the climatic and morphological characteristics of the territory.

The study will be conducted on the basis of an approach coherent with existing methodologies (emissions inventory INEMAR, ISTAT data sets etc.) and coordinated between the project partners. The available data, thanks to the collaboration of the project partners, will be collected from different regional sources, a new and shared protocol of detection will be defined to ensure the sharing and the comparability of the data collected at the level of Po basin. This action will be in a good synergy with the action D3 that will investigate the residential wood consumption estimation in the Po Valley. The two actions will complement and provide a good picture of consumption and supply of biomass in the Po basin.

To increase the knowledge of the systems of supply at local level, some visits in selected pilot area will be organized to investigate the mode of procurement and management of biomass for thermal use.

At the end of the action, during the project's Final Conference will be presented the study's results and a comparison between the different regions/provinces involved. The action's results will be also disseminated through publications and especially by the project website.

The main stakeholders are represented by economic actors operating throughout the wood supply chain, associations and local administrators.

Sub-action C.8.2 Definition of biomass management plans to optimize the production and use of biomass

The main objective of this action is to promote the sustainable use of biomass through the definition of effective biomass management plans able to improve the local supply chain and the local use of biomass, this action will be possible also thanks to the support of an innovative software able to optimize the biomass management plans creation.

The definition and implementation of biomass management plans for the agro-forestry residues is the fundamental starting point for achieving the objectives of sustainable management and production of biomass for energy use.

The main objective of this task is the evaluation of the advantages and effectiveness of the short and well organized production chains, able to minimize the environmental impacts during the collection, transport and storage of biomass and also aimed at encouraging the creation of transparent local markets.

All the elements necessary for an accurate planning of the production and management of the biomass will be evaluated as well as and the guarantee of a production of a biofuel with specific technical and quality parameters, suitable for domestic installations and capable of ensuring lower emissions of air pollutants.

In a selected pilot area, PREPAIR will test an innovative software created by the European MED project "ProForBioMed" (PFBM) designed to optimize and facilitate the drafting of biomass management plans. The software allows fast processing of the data collected to facilitate and optimize the preparation of a forestry management plan. There will be events organized for the training of technicians and employees in the formulation of the plans (thanks to a cooperation with the Spanish Murcia Region).

The main stakeholders are: actors operating throughout the supply chain of wood, local governments, Murcia Region.

Sub-action C.8.3: Application of a traceability system to ensure and improve the management and quality of biomass produced

The chance of reduction and control of atmospheric emissions related to biomass combustion in thermal plants is strongly linked to the quality of fuel used. The production of biomass with the appropriate features to be used for energy production must necessarily include the application of a traceability system capable to guarantee the source, the good management and the legality of the origin (fulfillment of EU Regulation 995/2010).

At the same time it appears to be increasingly important to raise consumer awareness towards the importance of buying a biomass of good quality, of which origin is unknown and produced locally in a sustainable way.

An innovative protocol of traceability defined during the implementation of PFBM project will be made known and available to the technicians (see: http://proforbiomed.eu/sites/default/files/1.5%20-%20Traceability%20system.pdf).

This new protocol is an operational tool useful to the technicians and operators in the biomass sector, able to provide guidelines and technical requirements to ensure traceability biomass along the entire production chain, from the supply of raw materials to the final delivery point.

A specific training sessions will be organized to explain to the technicians how to apply and use the traceability protocol.

At the same time, thanks to the specific action E3-Communication on the use of biomass at the Po basin level, coordinated by Lombardy Region, it will be possible to raise with target actions awareness among the final consumers about the importance of buying a biomass guaranteed by a traceability system. To make the action effective and amplify the message the strategic associations as AIEL, ARIBL and other strategic stakeholders will be involved.

To reach this important objective FLA will cooperate with Province of Trento to valorize and capitalize the tools and results implemented in the EU project BIO EN AREA (http://www.bioenarea.eu)

The main stakeholders are: technicians and operators involved in the supply chain, local governments, SMEs.

Sub-action C.8.4: Stakeholder engagement and activation of clusters that can ensure the promotion of sustainable and efficient short chains

The direct involvement and cooperation of local actors operating in the management processes and production of biomass for energy use is crucial to achieving the goal of creating efficient and sustainable supply chains. The subscription of *ad hoc* collaborative agreements and the possible activation of clusters are strategic actions in preparation for the optimal realization of bioenergy sector.

In synergy with the action E.3-Communication on the use of biomass at the Po basin level and in close collaboration with Lombardy Region, specific agreements will be prepared aimed at encouraging collaborative activities between the different local stakeholders acting in the pilot area, promoting the creation of public/private partnership aimed at the birth of a bioenergy cluster with the following objectives:

- Encourage the creation of local supply chains for the production and management of sustainable biomass production chain
- Promote the management of biomass according to a "cascade approach" that takes into account the different possible uses of the raw material
- Promotion and dissemination of good practice.

Based on the results and actions carried out by the project, is expected to start a Working "Biomass Group (under the agreement for Energy Pact" see: http://proforbiomed.eu/sites/default/files/Biomass%20for%20Energy%20Pact nosignatures. pdf) with the objective of producing a document ("Position Paper") to submit to the national and EU institutions. The document will contain a series of concrete proposals to apply locally, with the direct support of the institutions, designed to overcome the most critical and strong barriers that hinder the achievement of the targets for the reduction of air pollution from the burning of biomass.

The main stakeholders are: actors of the supply chain of biomass, local governments, trade associations, universities and research institutions. The bodies subscribers of the agreement "Biomass for Energy Pact" at local, national and European level.

Sub-action C.8.5: Collection and dissemination of good practices related to the use of biomass

The project PREPAIR will disseminate at local/regional level some of the most important experiences developed in Europe (in the context of previous projects) as the evaluation and study of emissions from residential combustion of different types of pellets, the application of innovative software for the definition of management plans for biomass, the activation of participatory processes for the formation of local clusters and the signing of cooperation agreements for the production of energy from renewable sources, new ways of communication and public awareness on the issue of energy production from biomass.

The main stakeholders are: economic and social subjects operating throughout the supply chain of wood, local administrations.

Possible valorization of: the European project FOROPA that involved the Province of Bolzano (through TIS) and Styria (A), as lead partner (HCS - Holzcluster Styria GmbH); capitalization of the project PROFORBIOMED (http://proforbiomed.eu/) involving the Lombardy Foundation for the Environment as the National coordinator and the Murcia Region as lead partner; capitalization of the project BIO EN AREA (http://www.bioenarea.eu), involving the Province of Trento.

The action will involve the following Regions/Provinces: Emilia-Romagna, Lombardy, Piedmont, Veneto, Friuli Venezia Giulia, Trento.

The action will last from July 2017 to December 2020.

Reasons why this action is necessary:

Biomass is a clean energy as it contributes to the reduction of the carbon footprint, promotes the development of local economies in the most deprived regions, increases rural employment, helps the conservation of forests, t improves the pasture rents and the habitats of wildlife and hunting species etc.

A key point to ensure that this resource will be actually beneficial is to promote the sustainable use of biomass as a RE source, recovering in particular the forest biomass potential, developing technical and legal aspects and promoting the use of residual forestry biomass for energy. For this reason is essential to know in depth the biomass production chain and the flows of biomass on the territory. On the basis of this information, it will be possible to optimize supply chains through the use of strategic tools as biomass management plans and traceability protocol (this tool could be capitalized from PFBM project). To ensure long-term results, the strategy relies on the involvement of key stakeholders involved in biomass production chain that takes into account sustainability and compatibility with other uses and provides new economic opportunities.

This action operates in a multi-sectorial dimension, working with public and private stakeholders related to biomass chains at all levels (from European to local).

The action will involve all the partners and will include an analysis of supply flow of biomass throughout the Po basin. In one selected pilot area, an innovative software for the production of the management plans will be tested (produced by the EU PFBM project) as useful tool to optimize the biomass production chain. At the same time, actions to involve strategic and local stakeholders will be carried out with the main objective to promote the birth of new clusters or to stimulate the existing ones. The methodology used and the results obtained by the pilot action will be spread at EU level.

Constraints and assumptions

The technical risk related to the difficulty to recover of data is effectively mitigated by the participation, as project partners, of key institutional actors as the Regional administrations belonging to the Po basin that are in possession of the data and information relevant to the analysis and that are in contact with local authorities directly involved in land management.

The good implementation of technical action as well as the implementation of management plans and traceability protocol will be assured by the involvement of the external experts that support the partnership in the implementation of these concrete actions. The risk of failing to involve local actors will be mitigated thanks to the implementation of targeted communication actions to raise awareness of local stakeholders with respect to the activities and objectives of the project (see actions E). In particular, the task 5 provides a specific action of dissemination of best practices related to management and production of biomass. Moreover, the institutional partnership has a very strong potential for involvement of both local actors and national/international subjects.

Expected results (quantitative information when possible):

- 1 study related to the biomass flows relative to the entire Po basin. It will analyze the sources of supply and will evaluate the final consumption at a regional and, municipal scale also considering different types of households and taking into account the climatic and morphological characteristics of the territory. This study will be supplemented by the data obtained in the action D3 that will investigate the residential wood consumption estimation in the Po Valley.
- 1 protocol of detection useful to ensure the sharing and the comparability of the data collected at the level of Po basin
- At least 1 training sessions with the involvement at least of 60 technicians on how to apply the PFBM Biomass Management Plan software
- At least 1 Biomass Management Plan (even more, depending on the number of interested partners) produced in specific pilot areas.

- At least 1 training session with the involvement of more than 60 technicians on how to apply the PFBM Traceability protocol,
- At least 1 clusters (or dynamization of existing clusters) produced
- 1 best practice book containing the selected good practices by partners.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff)
- External assistance costs for the implementation of the study on biomass flows to the entire Po basin, the project management plan definition, the traceability training courses organization, the cluster development and the definition, translation in German language and dissemination of the best practices book
- Travel and subsistence cost for the visits in the selected pilot area by partners involved and for the know-how transferring with Murcia Region
- Consumable for training courses
- Other costs.

Different methodologies have been used to estimate the costs, considering the different kind of outputs of this action. A major fraction of the budget will be dedicated to staff cost, the personnel of the project partners involved have a good experience in the coordination and implementation of the technical activities related to biomass issue; while a consistent part of budget will be dedicated to external experts, that will support project partners in the implementation of the more technical parts. A part of the budget will be also devoted to the involvement of technical expert from Murcia region who developed the PFBM software for transferring the know-how. A part of the budget will be dedicated to travel cost for the visits in the selected pilot area to investigate the mode of procurement and management of biomass for thermal use.

Deliverables:

- 1 study related to the biomass flows relative to the entire Po basin (31/10/2019);
- 1 protocol of detection useful to ensure the sharing and the comparability of the data collected at the level of Po basin (31/10/2019);
- 1 best practice book (30/04/2020);
- Information Material on training sessions (30/04/2020);
- 1 Biomass Management Plan (31/12/2020).

Milestones:

- Data recovery by partners (31/10/2018);
- Stakeholders involvement (31/07/2019).

ACTION C.9: ACTIONS PROMOTING CYCLING MOBILITY

Beneficiary responsible for implementation: Piedmont Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.1.3.2 p. 96 "Misure per la riduzione dei flussi veicolari nei centri abitati"
	cap. 9.2.3.4 p. 110 "Interventi per l'interscambio modale"
Lombardy	Ch. 2.4.2.1 p. 84 "Trasporto stradale"; Ch. 3.5.1.1 p.116-121
	"Trasporto privato" and "Trasporto pubblico locale"; Attach. 3 p. 106,
	107
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al
	numero 15, p. 5,6)
Veneto	Par. 6.2.7 "Interventi sul trasporto passeggeri", Actions A.7.14 and
	A7.14bis, p. 297
Trento	Ch. 6, measure MOB4, p. 186, "Promozione di modalità di
	spostamento a minor impatto ambientale"
Friuli Venezia	Ch. 7 "Le azioni del Piano" - Par. 7.1.2 "Misure riguardanti il settore dei
Giulia	trasporti", p. 425-428

Description (what, how, where and when):

Cycling mobility is one of the major elements recalled in Air Quality Plans because it responds to the multiple aim of reducing, at the same time, vehicles congestion and air pollution in urban areas.

There are many aspects of cycling mobility that need to be dealt with in order to promote and improve this kind of transport. This action wants to ensure that each partner involved will be able to realize in its territory measures that will respond to the different territorial and planning peculiarities and that are complementary to the ones already included in other funding schemes.

Conditions for improving cycling in urban areas can be enhanced by several type of infrastructural and promotional measures, like increasing road safety for bikers, preventing bikes thefts, supporting local administrators involved in urban planning and transportation issues in their task of upgrading and improving existing cycling networks and bike-parking facilities, training young students on the benefits of travelling using sustainable modes and teaching them how to ride bicycles in a safe way.

The different tasks will be developed within the Po basin. Each partner will apply the ones that better fit with local necessities to integrate the existing infrastructures and services in conformity with Mobility and Air Quality Plans. Experience exchanges between Po valley Regions on measures promoting cycling in daily life, will allow to capitalize the best practices and give a wider effect to local initiatives.

Sub-action C.9.1 – Training of public officers and advisors

This task aims at raising the awareness and provide technical information through training for policy makers or advisors and police officers from local government with courses in classroom and on field. The training action also aims at urging the local authorities to ensure that their planning initiatives take into account, in an integrated way, of all the modes of transport existing or planned in a given territory.

The main contents of training modules are going to be co-planned and shared by all participating partners.

Some of the main topics developed will be:

 information on the national and regional framework legislation that regulate bike infrastructures and amenities, so that municipal authorities appropriately integrate their local cycle track networks and services into the regional scale identified by the Regional Plans;

- planning and design of cycling networks and facilities (dissemination at regional level of the GIS-based database of the Bicycle Network): bike plans, cycle track networks, sign systems, good practices;
- developing the theme of safety and sustainability of bike routes especially for homeschool mobility;
- the e-bike: electric bikes and pedal-assisted bike "Pedelec" (Pedal Electric Cycle): types, mechanical and electric power features, operation, maintenance, driving styles, battery re-charging modes and systems, economic costs, safety and security rules, advantages and problems;
- bicycle logistics for sustainable delivery of goods in cities: the organization of the goods delivery, the cargo bike, spaces for loading/unloading, the accessibility to the city; transport and mobility in the city centres;
- information and recommendations on the planning of intermodal transport facilities and policies (bike + local public transport, with particular reference to the railway stations).

This action will contribute to consolidate the collaboration with the national Working Group on "Cycling Mobility" and to the implementation of and will be complementary with the actions provided by the ROP-ERDF 2014-2020 and by PON Metropolitan City.

The task will take place in: Region Piedmont, Emilia Romagna Region, Lombardy Region and Friuli Venezia Giulia Region.

FLA is in charge of coordinating and developing the tasks and of its application in Lombardy Region.

Sub-action C.9.2 - Training in schools and for citizens

Young people and citizens are strategic target groups for changing travel modes, as mobility attitudes are deeply influenced by experiences from an early age. Therefore, it's important to:

- raise awareness on transport / health / safety issues among children and their parents;
- encourage the use of bike.

In this action a programme focused on behavioural changes will be delivered in order to increase the number of school pupils cycling to and from school safely. The aim is to promote safe routes to primary schools and to develop a network of Bike Ambassadors which encourage secondary school pupils to increase pro-bike attitudes amongst their peers.

This task will be realized involving 50 primary and secondary schools (students aged 6-11), low secondary (students aged 11-14) and high secondary (students aged 14-19) schools. The training will regard how to reach schools safely and how to plan, develop and deliver surveys and campaign supporting biking. The training will be hosted by specifically hired paediatricians, in coordination with schools' champions (one or more teachers for every school). The champion(s) will choose the students that will be part of the Bike Ambassadors network, and the paediatrician will work with them, gathering and stimulating their ideas to reach the above mentioned goals of the training. We will also hire psychologists to talk with parents, because, in the Italian culture, they are usually scared of allowing their children to cycle in big cities full of motorized vehicles, like Milan.

The increase of capacity building in the scholar environment will be fulfilled by developing a toolkit of competences "Curriculum for teaching bike safety in the schools" and supplying technical skills and scientific approaches into surveying travel behaviour and issues at schools. Another aspect that this activity will cover is the important issue of "road safety", organising educational projects to spread the main issues regarding road safety and respect for cyclers and pedestrians. Moreover, a "Safe Routes to school" manual will be produced to help students who ride their bikes on the public roads and have to interact with traffic. These projects will be held in collaboration with the Municipal Police.

At the end of every school year, the schools will be spilt in 3 tiers, bronze, silver and gold, depending on their results in terms of number and diversity of activities made. Every school that will take part to the program will be given a certification for the participation with the tier they reached.

In order to enhance the use of bike among children and young people, this task will involve also students to take part in a video competition on the health benefits of cycling.

In Bologna high-skilled personnel will be training school pupils (i.e. Municipal police) who is highly experienced for topics related to road safety. The action is mainly targeted on primary and middle schools because of the major proximity between school and home, a distance which would be easily covered by bike.

To improve the student safe cycling also through the awareness of the citizens, it is intended to promote sustainable forms of mobility through public events aimed at the entire city and all citizens.

Some remote meetings with school classes will be organized by the Municipalities. Video spots for kindergarten and primary school will be made to continue guiding children to use the bike and respect the rules on cycle paths.

The Municipality of Milan, will start the activities in schools at the beginning of the school year 2021/2022 (sept. 2021),.

As far as communication and dissemination actions are concerned, special initiatives for the promotion of the cycle mobility will be realized within national and European major events, such as the European Mobility Week, the National Bike Day, Bike Pride, etc. In particular, the Municipality of Bologna will be committed in the communication and dissemination actions during the European Mobility Week, involving citizens and associations. Moreover, it is intended to involve a significant number of people through the organization of the "Ecological Sundays" events. In these events other different ways of experiencing the city will be tested in order to guarantee accessibility and livability, introducing restrictions on the circulation of the most polluting vehicles and measures to encourage the use of public transport. This is a way to ensure that the actions implemented under the Regional Air Quality Plan of Emilia Romagna Region and in the Bologna SUMP are accepted. On this point, during the winter seasons 2021, the single ticket for urban public transport is expected to be valid for one day on "ecological Sundays" to facilitate and promote access to the central area (called "T") open only to pedestrians and bicycles from 8 to 22.

The task will take place in: Municipality of Milan, Municipality of Bologna

Sub-action C.9.3 – Survey on bike infrastructures availability in railway stations

Survey on the necessity of bike infrastructures (parking, ramp, lift, access system to the rail line, road sign, electric recharging point, etc.) in the main railways stations of the participating Regions and in the urban area of the Municipality of Bologna, in order to direct funding opportunities to improve intermodal mobility systems (bike + train + local public transport) and bikes parking infrastructures.

Analysis of the data obtained from the survey (Piedmont Region) in order to identify the needs of new infrastructures; the results will be integrated in Regional Mobility Plan.

The task will take place in: Emilia-Romagna Region, Piedmont Region, Municipality of Bologna

Sub-action C.9.4 – Bike –station and improvement of bike infrastructures

This task regards the feasibility study of "Bike Station" as a closed and controlled area where it is possible to park bikes for long time (example automatic underground bike parking system). The task includes also the realization of a bike service covering 24/24 hours, with the maximum level of safety control for bike & bikers.

The aim is to develop an innovative structural and managerial model for save and comfortable bike parking with accessory services, such as bicycle racks, helmets and clothing repository and repairing facilities, in order to encourage a greater intermodality between bicycle and public transport. The development of the project should follow SUMP's rules and will necessary involve cyclists' local associations, commuters, and associations of the Mobility Managers in the area.

The management of the bike station could be operated with the involvement of the third sector and associations and integrated with the interoperable existing mobility charging systems. Interventions are foreseen also on:

- signage for bicycles, in order to improve road signs for better addressing the cycle mobility and to renewal the already existing ones;
- bicycle racks (in public spaces and private buildings), cycle path marking, signposting, parking facilities, service infrastructure on cycle paths;
- projects for recovery and reuse of abandoned bicycles.

As far as communication and dissemination actions are concerned, special initiatives for the promotion of the cycle mobility will be realized within national and European major events, such as the European Mobility Week, the National Bike Day, Bike Pride, etc. In particular, the Municipality of Bologna will be committed in the communication and dissemination actions during the European Mobility Week, involving citizens and associations.

The task will take place in: Municipality of Bologna, Region Piedmont, Municipality of Turin.

Sub-action C.9.5 – Geo-tracking of bike lines and bike navigator

This task aims at assessing the quality of regional bike lines and routes and their geo-tracking so to realize a regional geo-roadmap by which it could be possible to find any type of information to choose the best route (destination, type of line, road surface, road signs, safety awareness, traffic flows, dangerous intersections, availability, etc.).

Realization of a bike-navigator, a mobile information system dedicated to cyclists. The tool should provide information on the quality of the bike path and on available services such as parking and bike repair. Information will be made available like open-data.

The geo-referenced data that will be collected with regard to classification and typology of cycle paths, parking sites, repairing facilities sites, etc.

This action involves the Municipality of Turin, Friuli Venezia Giulia Region and Piedmont Region.

Sub-action C.9.6 - Modal split analysis

The main goal is to increase the modal shift from motorized mobility to cycling mobility in urban

A survey is then necessary, on a representative sample of urban population, to determine the travel behaviour and identify the modal split among cars/bicycles/motorbikes/busses and pedestrians.

The analysis will be run through a traffic sources and destinations enquiry, a study of the land use and territorial planning, in order to determine where daily life cycling mobility has the major increasing potential.

The task will take place in: Municipality of Bologna.

The overall action will last from July 2017 to October 2023.

Reasons why this action is necessary:

This action is necessary to support a *low-impact mobility* (non-motorised modes of transport) and sustainable mobility (transport using less fossil fuels, cleaner urban air).

Cycling mobility is playing an important role as an emission-free means of transport by itself but also as feeder of public transport facilities. It is an important goal to strengthen its share in modal split, increasingly replacing motorized mobility especially over short distances (<5 km). Infrastructures and services offer is fundamental to develop cycling mobility, but, in order to really shift from motorized to cycling mobility, a change in people behaviour is necessary.

The proposal of training courses addressed to schools (children, parents and teachers), to the local governments officers and technicians and to citizens in general, aims to help develop a real culture of cycling in the Po Valley's cities.

The operators and officials of the Public Administrations do hardly have specific expertise on the subject of the cycling mobility; therefore a specific training on an efficient planning and design of cycling networks is particularly important to the aims of the diffusion of a *low-impact mobility*.

To create conditions to facilitate and promote the use of bicycles for school-home or work-home commuting and for leisure is becoming a necessity for the abatement of green-house gases emission and air pollution, the reduction of congestion and noise in urban areas, and also to make more accessible and efficient the local public transport, often hampered by a lack of sufficient economic resources.

It is therefore essential that the decision-makers involved in the mobility policies are incited to promote this strategic mode of transport to make it capable to cover most of the daily commuting at least in the range of the "first and last mile".

Constraints and assumptions

The review of actions promoting cycling mobility in several towns or central districts shows that the long-term success of innovative mobility concepts depends on the fact that they are capable to respond to the local challenges and are supported by local teams or interest groups. The implementation of the measures that have been devised depends often on the decision taken by local municipalities plans. Therefore, local co-funding of the planned activities as expression of the local commitment is a prerequisite for all their implementations.

Expected results (quantitative information when possible):

- A development and improvement of specific skills on cycling mobility planning and promotion in public administrations;
- Citizens and stakeholder involvement in training projects and measures for urban cycling promotion;
- Increase of the number of citizens willing to use the bike in the urban areas also within an intermodal approach helping to reach the targets of bike fraction of the total urban mobility set in Air Quality Plans;
- Improvement of bike infrastructures availability in urban areas.

It is expected a further 4% reduction, compared to that estimated by Regional Air Quality Plans, in the use of private cars in urban and suburban area.

Cost estimation:

Different methodologies have been used to estimate the costs, considering the different kind of outputs of this action.

The following type of costs have been considered:

- Personnel (permanent and additional staff)
- External assistance costs for the feasibility study of "Bike Station", the surveys and data recovery, for training courses, for stakeholders to promote regular and safe cycling, for the realization of the open data on geo-referenced bike paths and services platform and bike navigators;
- Equipment costs for bike infrastructures, teaching materials;
- Travel and subsistence cost for the project meetings (co-planning, participation to foreseen events and activities):
- Consumables for training courses, teaching materials, foreseen initiatives, bicycle toolkits and bike accessories.

Deliverables:

 teaching materials (slides, video, cartographic info related to the visiting sites) (31/01/2019);

- report on information and recommendations on the planning of intermodal transport facilities and policies (bike + local public transport, with particular reference to the railway stations) 31/12/2021;
- modal split analysis report (30/04/2020);
- toolkit of competences "Curriculum for teaching bike safety in the schools" 31/10/2022;
- brochure about local services and facilities for bicycles (30/04/2021);
- survey on bike infrastructures availability in the main regional railway stations and in urban area (30/06/2021)
- video through competition in at least 40 schools on the issue "biking to school" 31/10/2022;
- open data on geo-referenced bike paths and services (31/10/2021);
- feasibility study and management of at least 1 bike-station (31/08/2022);
- bike-navigator (30/09/2022).

Milestones:

- Institution of working groups for co-planning of training modules and teaching materials (30/04/2018);
- Co-planning of main contents of training modules (31/07/2018);
- Data collection and involvement of associations (31/12/2019):
- Organization of public educational /training activities (at least 30 during project) on road safety and respect for cycle and pedestrian and production of a "Safe Routes to school" manual 31/10/2023
- Creation of low-speed zones (31/12/2020);
- Public tenders for external assistance and surveys (where necessary) (30/04/2021);
- Projects development for recovery and reuse of abandoned bicycles (31/08/2022).

<u>ACTION C.10</u>: DEMONSTRATIVE ACTION ON CONVERSION PROPULSION SYSTEM FROM DIESEL TO ELECTRIC

Beneficiary responsible for implementation: Piedmont Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	ch. 9.2.4.1 p. 114 "Promozione dell'utilizzo di veicoli elettrici"
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al
	numero 15, p. 5,6)
Veneto	Par. 6.2.7 "Interventi sul trasporto passeggeri", action A7.7, p. 295

Description (what, how, where and when):

Diesel-powered vehicles are responsible for a large part of nitrogen oxides (NOx) and particulate matter (PM) emissions from transportation sources. Particulate matter is created during the incomplete combustion of diesel fuel. Diesel engines release particulate matter directly into the air and emit nitrogen oxides and sulphur oxides, which transform into "secondary" particulates in the atmosphere.

A substantial number of buses, used in local public transport (LPT), in the PO Valley, are diesel; the oldest (Euro 2 and Euro 3) buses have an average age up to 20 years and represent up to 60% of the entire fleet.

According to the European AFI directive (Dir. 94/2014), the regional policies foresee a shift from diesel LPT buses to a balanced mix of Electric drive and LNG (liquified natural gas)/CNG (compressed natural gas) engine.

In fact, one of the promising energy carriers capable of replacing diesel fuel and improving air quality is electricity, besides the other quoted alternative fuels.

The goal of this action is to tackle pollution derived from diesel buses emissions by studying a system to convert an old bus with diesel engine, available from the public transport enterprises, into a vehicle with full electric powertrain. and test its environmental performances.

It's important to underline that the effectiveness of this action is proportional to the repeatability of the retrofit on the Po Basin public transport fleet. The repeatability is possible only with a sustainable cost. If during the implementation of the action there is the evidence that the repeatability is not possible for economical or technical reasons, the action will be addressed to other buses conversion types, involving the alternative fuels foreseen in AFI directive or to other activities according to the development of the mobility policies that will be decided at the level of the Po Basin .

The action is conceived in three distinct activities:

Feasibility study

This study is developed in two sub-phases:

1) **Pre - analysis:** the PPs will define the minimal technical characteristics of the vehicle target with the support of local Public Transport Companies of the Po Basin.

The type of the second-hand bus shall be identified on the base of the presence in the Po Basin fleet.

In this sub-phase the vehicle mission profile will be investigated and the vehicle performances will be defined.

As an example the vehicle mission profile could include the next items: Vehicle segment, Competitors, Target price, Markets, Volumes, Investments, Vehicle duty cycle, Duration of cycle, Daily distance, Average speed, Max speed, Number of stop and go, Energy consumption, Max slope to be passed at full load, Max torque, Recharge time at grid, Recharge time at terminal bus, Max perceived noise, Endurance time, Safety device. Based on the vehicle mission profile, the PPs and the LPT companies will define the kilometric autonomy required for the conversion.

The PPs carried out an initial study on the availability and number of diesel bus models used in the Po Valley for local public transport.

This analysis, identified the minimum characteristics that the buses to be renewed must have.

The minimum requirements identified will be included in the tender specifications of which the "Feasibility study" phase will be one of the activities planned in order to identify the most widespread models in the Po valley that could constitute the test buses for conversion.

It is expected to start the tender procedures in the first half of 2021, the "Feasibility study" phase will be completed by April 2022 at the latest.

2) Engineering development: development will be done for one specific Diesel bus, twelve metres long. During this phase the kit technical features and the vehicle transformation (physical integration) will be defined.

Diesel bus conversion

Three specific diesel twelve metres long buses will be transformed into electric. The diesel buses for the conversion are assumed to be provided by LPT companies free of charge, while all components and subcomponents necessary for the conversion are supposed to be on charge of the project.

Tender procedures are planned in the first half of 2021 and the "Feasibility study" phase will be completed by 30/04/2022, the "Diesel bus conversion" phase will be completed by spring 2023 at the latest.

Validation phase

The validation phase starts collecting data from different buses (new and revamped) on real public transport routes. The results deriving from the comparison of these data should provide an analysis useful to plan the transition phase, according to EU DIR 94/2014 (AFID) and to choose the best technologies in each type of alternative drive/fuel. For example, in the electric drive it's possible to choose from different type of vehicles and different type of recharging stations (superconductor charging, storehouse charging, etc.).

The Validation phase, according to the schedule as described heretofore, will be completed by December 2023.

The action will take place in Piedmont Region. Emilia-Romagna Region, Veneto Region, Friuli Venezia Giulia Region and City of Torino will participate with personnel for sharing results. The action will last from March 2017 to December 2023.

Reasons why this action is necessary:

This study is necessary to determine the cost benefit analysis related diesel buses revamping and to draw up an estimated cost involved in that plan in order to decrease the emission (PM, CO, HC, NOx) and reduce the carbon footprint of the diesel vehicles.

Constraints and assumptions:

If no offers are submitted on the call for tender, the following options are to be considered:

- 1) entrusting the activity in accordance with the procedures provided for by law in the event of failure to award the contract
- 2) publication of a new call for tender for the conversion of buses to other alternative fuel engines as required by the action
- 3) request for substantial action modification according to the development of mobility policies to be decided at Po Basin level

Expected results (quantitative information when possible):

- 1. Detailed Costs for conversion of a diesel bus to electric
- 2. Three converted public transport buses to electric
- 3. Data on the converted bus service on a real public transport route.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff)
- External assistance costs for Feasibility study and prototype realization.

Deliverables:

- Feasibility study on the specific bus identified by the Public Transport Services (30/04/2022);
- Testing of environmental and technical performances of the converted buses also compared to other new buses (31/12/2023).

Milestones:

- Provisional award of public tender (31/12/2021);
- Identification of minimal characteristics of test bus (31/10/2018);
- Business partnership agreement contract between LPT enterprise and tenderer, (31/12/2022).

<u>ACTION C.11</u>: RATIONALIZATION OF SHORT-RANGE FREIGHT LOGISTICS IN URBAN AND EXTRA/PERI-URBAN AREAS

Beneficiary responsible for implementation: Emilia-Romagna Region (coordinator)

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.2.5 p. 117 "Le azioni per una gestione sostenibile delle merci"
Piedmont	L.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al
	numero 15, p. 5,6)
Veneto	Par. 6.2.8 "Interventi sul trasporto merci e multi modalità", Actions
	A8.1, A8.2, A8.4, A8.5 p. 306
Friuli Venezia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore
Giulia	dei trasporti", p. 425-428

Description (what, how, where and when):

The action aims to develop two different targets:

- A) Rationalization of short-range freight logistics in urban areas (city centre);
- B) Rationalization of extra-urban and peri-urban short-range freight logistics, therefore has been divided in two sub-actions.

Sub-action C.11.1 - Rationalization of freight distribution in the city centre

The management and regulation of freight transport in urban areas is an important issue that needs to be addressed by Sustainable Urban Mobility Plan.

The aim of the action is to inquire freight supply, distribution and logistics in the city centre in order to identify actual inefficiencies in urban logistics, optimise freight movements to and from the city and assess the real need of loading bays.

The project will run a set of surveys to collect more information and details on the issue, in order to implement a new freight delivery plan and regulation.

The surveys are also useful for enquiring the actual fleet accessing to city centres. In fact Urban Mobility Plans and Air quality plans usually regulate the access to Limited Traffic Zones (LTZ) setting the time slots and the type of duty vehicles. Usually they also foreseen a gradual tightening of limitations in the years that presumably could lead to a renewal of the fleet.

The project will be based on consumers and operators surveys, LTZ access data mining and data analysis.

- Survey on transport and delivery of goods in the city centre of Bologna and Turin in order to build an organic information framework of freight transport.
 - The study should determine:
 - area under study;
 - type of goods and/or supply chain to be surveyed;
 - information on the types and amount of businesses in the area, including large distribution, and classification of existing structures;
 - the incidence of goods type and the supply chain of belonging (dispatcher, trucker and receiver);
 - identification of the type of logistics operators, such as own account "OA" and thirdparty logistics "3PL" and the incidence of own account;
 - detection of the composition of the fleet by type of vehicle and emission class;
 - investigation of the regulations on access and on loading and unloading areas, or any other regulatory constraints.
- Definition of most critical aspects and of the consequent actions/regulations aimed at reducing the impact of logistics and freight delivery optimization through synergies between operators and development of a joint participation logistic model for urban areas.
- Eventually application of the model in a pilot study.

A video will be made with the aim of spreading the action's results (foreseen and realized within Action E2).

Communication on the action results will be held during the public conferences of the project, as reported in action E1.

The action will take place in: Bologna Municipality, Turin Municipality, Veneto Region.

The action will last from April 2017 to December 2021.

Sub-action C.11.2 - Rationalization of extra-urban short-range freight logistics

In the case of extra-urban and peri-urban short-range freight the transport flows are generated by business-to-business (B2B) relations that feed different production cycles. On the other hand the case of urban freight distribution addresses the services sector and the retail chains. These two worlds are completely different but both are served by two types of logistics operators: "OA" – own account transport and "3PL" – 3rd party logistics providers. The fact that the 3PL is mainly focused on the "parcel" segment makes it not functional to serve different B2B industrial cycles, which are characterized by different shapes and handling needs than those that a "3PL" can serve. Consequently, the "OA" is the only logistic service that is capable of serving the extra-urban and peri-urban short-range freight.

Based on the mapping of industrial areas and of the mix of products to be handled a study is going to be made, with the aim of designing the supply model and identify innovative technologies (loading/unloading & space saver technologies) which are functional to manage mix of products exchanged among industrial areas. At the same time, the study intends to identify public policies suitable to stimulate private investments on this market segment.

The action will be developed in the following steps:

- Mapping the industrial and craft areas affected by extra-urban short-range freight;
- · Mapping the interested products mix and supply chains;
- Design of handling units and on-board space saver technologies for different products and fleets;
- Design of loading/unloading technologies;
- Definition of the new logistic service model and of the business model that will support the implementation;
- Definition of public policies functional to stimulate private investment on a rich and extensive potential market where, at the present time, there are not any specialized existing supply models.

Communication on the action results will be held during the public conferences of the project, as reported in action E1.

The action will take place in: Emilia-Romagna Region, Piedmont Region. Friuli Venezia Giulia Region will participate to meetings and sharing of results.

The action will last from July 2017 to December 2021.

Reasons why this action is necessary:

Air emissions from freight transport is a criticality all over the Po Valley, especially in most larger cities, and significantly contribute to the overall emissions from transports in urban and peri-urban areas. Sustainable Urban Mobility Plans need therefore to cope with the improvement of efficiency and cost-effectiveness of the transportations of goods, as well as of people, in urban and peri-urban areas. In urban areas the project aims at optimizing short range goods delivery, reducing mileage and applying good practices to achieve an environmental friendly approach to freight management.

Northern Italy shows a significant dispersion of industrial and productive areas that are characterized by the presence of industrial and manufacturing enterprises belonging to an interrelated and wide variety of products and supply chains (automotive, fashion, agro-food processing, etc..). A large number of manufacturing zones are located in hilly areas that are generally interconnected to industrial areas located nearby large and middle towns of Northern Italy. Short-range freight transport presents a strong environmental impact, deriving from the intensity of the transport flows, their dis-optimization and consequent pollution and congestion.

Unlike the case of city logistic, intervention policies on extra-urban and peri-urban short-range freight cannot be of normative nature (as access restrictions and regulation), therefore it is necessary to define accompanying policies.

So, on one hand, it is necessary to define a new supply model for industrial areas (concerning transport and logistics, as well as extended enterprises organizational models) and, on the other, to create an appropriate system of public policies that could stimulate private investments on a rich and extensive potential market in which, under the present conditions, there is not any specialized existing supply model.

Constraints and assumptions

Operators might show reluctance to collaborate since they could see the project as a threat to their activities.

Willingness of associations/operators to subscribe agreements with Public bodies for a shared commitment to a sustainable management of freight distribution.

Expected results (quantitative information when possible):

Sub-action C.11.1

- 1 Survey on city centre freight logistic for each partner;
- Development of one or more innovative logistic models for urban areas and for companies and operators that can handle fragmented deliveries on short range distances and with restrained load weight trucks, in order to reduce freight transport mileage;
- At least 1 pilot study of the model;
- Agreement among Municipality of Bologna and local trade and transport associations for a shared commitment to implement the best measures for an optimized goods delivery system.

Sub-action C.11.2

- 1 Survey on extra-urban freight logistic for each partner area;
- Identification of innovative solutions for trucks constructions and for loading/unloading of goods: definition of onboard equipment (space-saver-technology) and for loading and unloading, that can handle goods characterized by diversified weights, shape, volume and loads;
- Agreement among Region and operators involved in the project that commits operators to apply the model of distribution of goods for at least some years.

Given that nearly half of freight trips are with empty loads, the reduction of these distances through optimisation of loadings and paths could lead to a decrease of driven vehicle kilometres with duty vehicles of about 15%.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and additional staff);
- External assistance costs for surveys and management model development;
- Equipment costs for sensors, On Board Units (OBU) and onboard equipment for spacesaving-technology;
- Travel and subsistence costs for the project meetings;
- Consumables for events and conferences.

Deliverables:

For each participant:

 1 report on the survey in urban area and on the management/regulation model (30/06/2021); 1 report on the survey in extra-urban area and on the management model application (31/12/2021).

Milestones:

- Public tender for the surveys (30/04/2018);
- Public tender for the management model (31/10/2018);
- Agreements subscriptions (31/12/2021);
- Implementation of the urban freight model as pilot study (30/06/2021).

ACTION C.12: DEVELOPMENT OF ICT TOOLS FOR PUBLIC TRANSPORT USERS

Beneficiary responsible for implementation: Emilia-Romagna Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	ch. 9.2.3.6 p. 111 "Sviluppo dell'ITS e di progetti di infomobilità"
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero
	15, p. 5,6)
Veneto	Par. 6.2.7 "Interventi sul trasporto passeggeri", action A7.10, p. 296

Description (what, how, where and when):

An important goal of the Local Governments is to have a good public transport network, but if they really want to address mobility demand they also need a good Infomobility service that allows people to know how to move and when to use collective mobility.

The easiest way to obtain this target is to have an application for a dynamic planner that shows in real time:

- all the necessary information about mobility offer (to choose/prefer collective mobility);
- the congestion level on the journey path;
- a planning tool able to show the available possibilities of collective mobility options to reach the desired destination depending on the real time traffic fluxes.

The proposed Project aims at designing and developing a new **multi-modal "open" and integrated journey planning tool** for public transport services at regional level via web and App.

The framework is entirely based on open source paradigm.

The new service is expected to be fully delivered in Emilia-Romagna Region and partially delivered in the other Regions, according to the public transport data set that will be available and compatibly with the existing local Infomobility service.

The action will take place in: Emilia-Romagna Region, Veneto Region, Piedmont Region and Friuli Venezia Giulia Region.

The action will last from February 2019 to September 2022.

Reasons why this action is necessary:

One of the main task of every Public Administrations is, nowadays, to reduce traffic and pollution especially in urban areas; the easiest way to reach this target is to reduce individual mobility and give citizens the opportunity to move and reach their desired destination by means of collective mobility services.

This action is intended to better reach the objective of mobility modal shift towards collective mobility in order to reduce congestion in large (multi-regional) areas thanks to a **mobile app** developed with these basic concepts.

Constraints and assumptions

The technical risk is related to the difficulty of collecting data on traffic fluxes, journey paths, timetables, etc. from transport agencies and to reach an agreement on the technical protocols for the data (publication in open data of Transport Agencies information on public transport) and for the software system.

Expected results (quantitative information when possible):

To foster citizens' choices at using collective mobility options with the support of an easy and reliable tool (mobile app) and therefore helping reducing traffic and pollutant emissions resulting by the individual use of private vehicles.

Benefits from ITS technology application have been evaluated through experiences in Europe and USA in a reduction of pollutants emissions about of 10%, of energy consumption of 12% and of travel time of 20% (ref. "Piano di Azione Nazionale sui Sistemi Intelligenti di Trasporto (ITS) April 2013).

Cost estimation:

The following type of costs have been considered:

- Personnel (permanent and additional staff);
- External assistance costs for designing and developing the multi-modal "open" and integrated journey planning tool;
- Travel and subsistence costs for the project meetings.

Deliverables:

Mobile and web app (30/09/2022).

Milestones:

- Data collection (30/04/2021);
- Agreement on the data protocol and on the specifications of the open-source multimodal trip planning software system (30/09/2022).

ACTION C.13: ACTIONS IN SUPPORT OF ELECTRIC MOBILITY

Beneficiary responsible for implementation: Piedmont Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.2.4.1 p. 114 "Promozione dell'utilizzo di veicoli elettrici"
Lombardy	Ch. 2.4.2.1 p. 84 "Trasporto stradale"; Ch. 3.5.1.1 p. 116-118 "Trasporto privato"; Attach. 3 p. 93
	privato, Attach. 3 p. 93
Piedmont	L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero
	15, p. 5,6)
Veneto	Par. 6.2.7 "Interventi sul trasporto passeggeri", action A7.7, p. 295
Friuli Venezia	Ch. 7 "Le azioni del Piano" - Par. 7.1.2 "Misure riguardanti il settore dei
Giulia	trasporti", p. 425-428
Trento	Ch. 6, MOB1, pag. 180, "Promozione dell'utilizzo di veicoli elettrici e di
	carburanti a basse emissioni"

Description (what, how, where and when):

The aim of this action is to collaborate with and inform public and private stakeholders in order to enhance the diffusion of electric mobility, also at policy level. It foresees courses (addressed to local administrators, professionals and mobility managers), consultations and studies. To this end three activities will be carried out:

1. Course on sustainable mobility.

Such course will address mobility managers of selected private companies, professionals of the local transport companies and local administrators of the Regions involved in the project. The aim is to inform them on the advantages that electro mobility could bring to their companies, bodies and to the environment as a whole.

The course will be divided into several modules that cover legislative, managerial, social, environmental and technical aspects of the mobility issue. Furthermore it will provide examples of best practice in Europe.

Competent institution, with proved expertise in the field of education and dissemination on electric and sustainable mobility, will carry out the course.

The course will last one full day and will be performed in 4 companies/bodies every year for 4 years. E-learning participation will be also available (webinar). Two courses per year will be provided for the three years of Phase 3.

Each partner will manage independently the courses using the same program.

A certification for participants to the training activities will be released.

2. Stakeholder consultation concerning electric mobility issues

Stakeholders' consultations help to make electric mobility policy making transparent, well targeted and coherent. Consultations will be based on evidence, experiences and views of those affected by the policies and involved in their implementation: industrial actors, academic institutions, energy providers and land planners and national bodies involved.

The results of the above mentioned consultation will be taken into consideration in policy implementation (of new policies, financial programmes, legislative proposals).

3. Study on electric mobility implementation area

Electric mobility diffusion may be applied successfully to some particular domains. This study will be committed in order to analyse and identify those domains in relation to vocation of determined territories (such as tourist destinations or routes) or particular needs (last mile freight logistics, Public Transportation services in urban areas...)

Main stakeholders to be involved in these activities are: the regional and local administrators, the managers of local public transport, industrial actors, academic institutions, energy providers and land planners and national bodies.

The action will take place in: Piedmont Region, Emilia-Romagna Region, Lombardy Region, Veneto Region, Friuli Venezia Giulia.

Piedmont Region will be in charge of the overall coordination.

The task of planning training modules will be contracting to external assistance with proven experience in the sector.

Lombardy Region will take part only in the activity 2 concerning the stakeholder consultation. FLA will support Piedmont Region to involve Lombard public and private stakeholders in the Stakeholders' consultations. FLA will give a wide dissemination of the results and activities of this action in order to enhance the diffusion of electric mobility in Lombardy Region. FLA will use its different communication tools as the website, mailing-list, newsletter etc.

The action will last from July 2017 to December 2023.

Reasons why this action is necessary:

In compliance with EU Directive 2014/94, on December 2014 the PNIre - Piano Nazionale Infrastrutturale per la ricarica dei veicoli elettrici (National Plan for EV Charging Infrastructure) has been published which provides national targets and supporting actions for the development of the market as regards alternative fuels, in close cooperation with regional and local authorities and with the industry concerned, in order to minimise dependence on oil and mitigating the environmental impact of transport.

The project will implement a campaign for electro-mobility and enhance existing policies and strategies, in order to improve air quality. Furthermore, the regional health and air quality strategy for "Po Valley" will benefit from this project. All Italian Regions and Autonomous Provinces are engaged in this policy which seeks support of Electro-mobility as one of the tools for meeting pollutant reduction targets.

Furthermore, the project will prepare for expected future transport flows, as well as enabling all modes of transport to be decarbonised through transition to innovative low carbon and energy-efficient transport technologies, while optimising safety.

Constraints and assumptions

The diffusion of electric mobility is prevented from the still high costs of vehicles and the insufficient charging stations network.

Expected results (quantitative information when possible):

The expected results are:

- 25/50 people per course will be informed and trained on sustainable and electric mobility (total n. of people involved depends on the number of courses that are going to be realized).
 At least 4 courses for each project participant, except for Lombardy.
- implementation of new policies, financial programmes, legislative proposals
- partnership building.

It's expected that the implementation of this action would favour a further increase of the target in electric mobility (vehicles, bikes and motorbikes) foreseen in the Air Quality Plans.

Cost estimation:

The following type of costs have been considered:

- Personnel (permanent and additional staff);
- External assistance for services related to courses on electric mobility;
- Consumables for materials for training courses on electric mobility and catering for conferences:
- Other costs for travel and subsistence costs for speakers.

Deliverables:

- Materials for courses (31/07/2018);
- 1 report on the survey 31/12/2023;
- Set of new policies, financial programmes, legislative proposals to enhance electric mobility (31/12/2023).

Milestones:

- Provisional award of public tender (31/12/2019);
 Definition of electro-mobility strategy at level of PO Valley (31/12/2023).

ACTION C.14: TRAINING ON ECO-DRIVING

Beneficiary responsible for implementation: Piedmont Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.2.6 p. 119 "Utilizzo ottimale dei veicoli: Eco-driving"
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al
	numero 15, p. 5,6)
Veneto	Par. 6.2.11 " Misure a carattere scientifico, conoscitivo, informativo,
	educativo", Action B5.3, p. 325

Description (what, how, where and when):

The driving style denoted as "Eco-Driving" can help reducing fuel consumption and vehicle emissions that are largely affected by drivers behaviour. This action, addressed to specific categories of citizens, is aimed at:

- raising awareness in drivers on the techniques and the practice of eco-driving issues, that enable to practice a safer, less expensive and more sustainable driving behaviour;
- ❖ achieving a significant reduction in fuel consumption (between 10 and 15 % per year) and, proportionally, a decrease of CO₂ emissions too;

This action will be implemented with the following activities:

- eco-driving study to identify the best indicators for monitoring an eco-driving style
- inclusion of this parameters within the ICT solution MOVE IN that is used in Regione Lombardia and in Regione Piemonte to raise drivers' awareness about their role in pollution and air quality
- adoption of technological, statistic solutions able to make drivers aware of their eco driving performances inside the MOVE IN project;
- eco-driving surveys to drivers who sign the MOVE IN agreement.

Eco-driving with the target of reducing pollutant emissions only partly coincides with fuel-saving driving behaviour. For instance the common fuel-saving low-rev driving in urban areas can be counterproductive and cause higher pollutant emissions. It is therefore important also to identify the relationship between driving behaviour for fuel-saving and low pollutant emissions for different vehicle classes.

The action will be carried out during the study to identify the best indicators for monitoring an eco-driving style and comprises the following implementation elements:

- Study on relationship between driving behaviour for fuel-saving and for low pollutant emissions for different vehicle classes;
- Customization of an eco-driving survey in cooperation with stakeholders.

The action will take place in: Piedmont Region, Emilia-Romagna Region, Veneto Region. Friuli Venezia Giulia Region will participate to meetings and sharing of results.

The action will last from July 2017 to September 2022.

Reasons why this action is necessary:

This action is intended to encourage Eco-driving awareness, techniques and practice in order to maximize on-road fuel economy of vehicles and decrease CO_2 and air pollutants emissions. It needs to be analysed which driving behaviour corresponds to the target of energy-efficiency as well as to the target to reducing pollutant emissions. The targeted person groups need capacity building in terms of know-how on techniques, information on the interrelation of the personal driving style, energy efficiency and emission, and last but not least by own experience. It is expected that, once convinced by the advantages of eco-driving, they become multipliers for this driving style. This action as well intends to strengthen transport services stakeholders role in sustainable mobility policies

Constraints and assumptions

The integration of the targeted eco-driving training concept in existing training schedules for the different driver groups (post-PREPAIR activity) needs to be coordinated with various stakeholders, like national drivers association, driving schools and education institutions.

Expected results (quantitative information when possible):

Educating of thousands of drivers according to eco-driving standards and the adoption of eco-driving techniques.

The study on the impact of driving behaviour on both fuel saving and pollutant emissions will allow an estimation of the effect of eco-driving trainings on the reduction of air pollutant emissions as soon as they will be integrated in compulsory driving training schedules for the different driver groups (eco-driving training is a post-PREPAIR activity).

A significant reduction in CO₂ emissions (5-10% less fuel consumption of participants of ecodriving courses) to be estimated with the technologies, surveys and data available.

Cost estimation:

The following costs have been considered:

- for the coordination of the action the average cost/day x n° days of personnel (permanent and additional staff);
- external assistance for the study and the training concept elaboration;
- external assistance for the technological devices and courses;
- travel costs for the necessary project meetings.

Deliverables:

- Study on impact of driving behaviour on fuel saving and pollutant emissions 31/12/2021;
- Final report about the training experience (30/09/2022).

Milestones:

Provisional award of public tender (30/06/2021);

<u>ACTION C.15</u>: TRAINING AND SUPPORT SERVICES TO INDUSTRIES AIMED AT IMPROVING ENERGY EFFICIENCY

Beneficiary responsible for implementation: Emilia-Romagna Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.3.4.3 "Misure di efficientamento nel settore industriale
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al
	numero 15, p. 5,6)
Veneto	Par. 6.2.6 "Interventi di riconversione del patrimonio edilizio in funzione
	del risparmio energetico", Action A6.9
Friuli Venezia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore
Giulia	dell'energia", p. 428-431

Description (what, how, where and when):

Air Quality Plans define measures in the industrial sector aimed at increasing energy efficiency in productive activities, since the total final energy consumption in the industrial sector accounts for 25% of total EU28 final energy consumption (1,103,813 kTOE) in 2013.

This theme has been developed at European level, including the Energy Efficiency Directive (EED), EU ETS directive, Ecodesign Framework Directive, and the Industrial Emissions Directive (IED). Furthermore, sector-specific policies have to be taken into account, where relevant.

With this action PREPAIR aims at improving the compliance of European directives through the implementation of available existing tools and best techniques.

One of the objectives of the action is to increase the technical knowledge of the companies' staff, included energy managers of SMEs (Small Medium Enterprises).

The project aims to carry out, through the collaboration of associations and of local enterprises in the Po Basin and with the support of specialized technical consultants (firms, research institutes), a survey of productive activities, in order to identify their main needs and specificities and the sectors mainly potentially involved in the fulfilment of energy efficiency regulations. The survey will select the techniques that are best suited to the involved areas and that are most effective in promoting both energy efficiency and emissions reduction of atmospheric pollutants. At the same time the applicability of those techniques will be assessed. A video will be made with the aim of spreading the action's results (foreseen and realized within Action E2).

The action will be developed in the following steps:

- Selection of case-studies and their detailed analysis;
- Quantitative assessment of the expected benefits in terms of reduction of air pollutant emissions (PM and its precursors, including Nox);
- Development of thematic guidelines (like "mini Brefs"), concerning methods of assessment of the level of efficiency and identifying the actions required to increase it using the available free tools on self evaluating and comparative analysis, and the criteria for applying certain techniques;
- Events related to specific aspects (i.e Introduction of energy management inside the manufacturing company, support to adoption of ISO 50.001 certification schemes by companies; innovative solution for reduction of energy consumption, energy performance contracts and third party financing scheme in the manufacturing sectors);
- Workshops with the business system to support the concrete application of measures for the implementation of the energy efficiency BRef and other measures identified, and the development of technical and managerial tools with the possibility of procedural simplification. The participants will receive a certificate of attendance to the workshop.

The stakeholders involved will be:

- Manufacturing Industries;
- Manufacturing enterprises association (food and agriculture, engineering, electromechanical, electrical, plastic, etc.);
- Consulting companies or research institutes or land development agencies;
- Associations between organizations that produce and sell components, assemblies and systems with the declared energy efficiency;
- Chambers of commerce and UNIONCAMERE.

The action will take place in: Emilia-Romagna Region, Piedmont Region, Veneto Region, Province of Trento, Friuli Venezia Giulia Region.

The action will last from March 2018 to December 2021.

Reasons why this action is necessary:

Combustion processes are one of the causes of air pollution in the target area, especially for NOx and PM emissions as well as their precursors. Therefore, energy efficiency is a target objective of the AQ plans aiming at reducing the use of fuels.

The Legislative Decree July 4, 2014, n. 102, transposition of the directive 2012/27/UE on energy efficiency, establishes the energy audit for big or energy-intensive companies; it also provides a fund for energy efficiency together with a call for proposal for co-financing the programs presented by the regions to encourage energy audits in SMEs or adoption of management systems according to ISO 50001 (15 million per year) in SMEs.

Constraints and assumptions

The issues that can affect the attainment of the objectives and / or constitute a risk can be summarized mainly in:

- Availability of organizations to adhere to the project;
- Credibility of consultants;
- Bureaucratic obstacles;
- Crisis liquidity of companies that invest only on the core business leaving out all the possible benefits to the boundary.

Expected results (quantitative information when possible):

5 workshops; identification of areas in which greater energy efficiency improvements are feasible (identifying priorities for assistance), assistance to the implementation of the actions identified in the "Energy Check Up" and consequent follow up of the firm.

The expected benfits are:

- Improved energy efficiency in industrial processes: between 15 and 20% of reduction
 of the current costs for electric consumption through interventions on electric motors
 (introductions high efficiency motors, improving efficiency compressed air systems,
 pumping, ventilation etc.);
- Improved energy efficiency in industrial buildings: between 3 and 5% of reduction of the current costs of interventions with thermal insulation, heating and air conditioning systems, lighting systems and interventions of "building automation";
- Advantages deriving from the application of cogeneration and trigeneration (quantified evaluations are not possible at the moment).

In general a reduction of 3-5% of thermal consumptions would correspond to an equal percent reduction of emissions in industrial sector.

Cost estimation:

The following costs have been considered:

- For the coordination of the action the average cost/day x n° days of personnel (permanent and additional staff);
- External assistance;
- Travel costs for the necessary project meetings;
- Consumables for workshops materials.

Deliverables:

- Report on case studies of productive activities, in order to identify their main needs and specificities and the sectors potentially involved in the fulfilment of energy efficiency regulations (30/06/2021);
- Thematic guidelines (like "mini Brefs"), concerning methods of assessment of the level of efficiency and identifying the actions required to increase it, and the criteria for applying certain techniques (31/12/2021);
- Final report about the training experience (31/12/2021).

- Realization of the survey on productive activities, in order to identify their main needs and specificities and the sectors potentially involved in the fulfilment of energy efficiency regulations (30/06/2021);
- Open call for expression of interest to workshops (30/06/2021).

ACTION C.16: NEAR ZERO ENERGY BUILDINGS

Beneficiary responsible for implementation: Autonomous Province of Trento

Region/Province	References in Air Quality Plan				
Emilia-Romagna	Ch. 9.3.4.1 p. 128 "Misure per la riqualificazione energetica"				
Lombardy	Ch. 3.5.2 p.125-131 "Sorgenti stazionarie ed uso razionale dell'energia",				
	Attach. 3 p. 28, 29				
Piedmont	I.r. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero				
	15, p. 5,6)				
Veneto	Par. 6.2.6 "Interventi di riconversione del patrimonio edilizio in funzione				
	risparmio energetico", Action A6.2				
Trento	Ch. 6, Measure CIV1, p. 149, "Promozione del risparmio energetico e de				
	riqualificazione energetica degli edifici"				
Friuli Venezia	Ch. 7 "Le azioni del Piano" – Par. 7.1.2 "Misure riguardanti il settore				
Giulia	dell'energia", p. 428-431				

Description (what, how, where and when):

According to the European Directive 2010/31/UE by the 31st of December 2020 every new building and deep renovation will have to be built following the "Near zero energy building" target.

The aim of this project is to develop professional expertises for an holistic approach to building works, specifically oriented to multi-family houses, involving all actors usually into the building chain. Case studies and a final workshop will establish a practical approach and will offer to participants tools for their working life.

The Autonomous Province of Trento, with the involvement of local associations, promoted, through european projects and FESR funds, the realisation of a number of training courses on energy efficiency, environmental sustainability, developing instruments, models and methodologies oriented not only to the formation of technical expertisse but also to the creation of an integrated approach.

The valuable results of the European Alpine Space Programme Project ENERBUILD highlight the importance of following objectives of high specialised professional integration about energy retrofit of multi-ownership buildings. PREPair intends to continue the experience of ENERBUILD through activities divided into three phases:

PHASE 1

Share, review and update of the format already experienced in ENERBUILD with project partners and co-designing the training program, to be realized in all territories involved.

PHASE 2

Editions: 4 editions (Year II, III, IV, V Project).

The course is for: architects, engineers, surveyors, craftsmen, service administrators.

Course duration: 56 hours.

Number of participants for issue: 30 participants between designers, artisans and condominium managers.

The participants will receive a certificate of attendance, if at least the 75% of the lessons are attended.

In principle, the path of the format will be based on the following modules:

- background and integration principles for building NZEB;
- knowledge and architectural typological: sanitation building wrap;
- knowledge and heating plant: rehabilitation of facilities and renewable energy;
- compliance and tax incentives for energy redevelopment projects;
- energy audit;
- organization and quotation;
- redevelopment and energy law condominium;

- workshop.

PHASE 3

The Autonomous Province of Trento coordinates an overall assessment, a comparison of the results, and appropriate dissemination.

Meetings will be organized with the partners in the synthesis, in addition to what is foreseen in Action E2.

The route will be done in all provinces and project partner regions.

The Autonomous Province of Trento and the other partners will organize operational coordination moments from all project partners to share the training model (STEP 1).

The first year will be dedicated to the development of the training format and the coordination between the stakeholders involved and the project partners, who wish to complete this action. Four issues for each regional / provincial partners. The final year will be devoted to the final evaluation of the results with the involvement of all partners.

The action will take place in: Province of Trento, Emilia-Romagna Region, Veneto Region, Piedmont Region, Friuli Venezia Giulia Region.

Lombardy Region will participate with personnel involved in project meetings and sharing information.

A conference will be organized with the aim of presenting the action's results (foreseen and realized within Action E2).

A video will be made with the aim of spreading the action's results (foreseen and realized within Action E2).

A site visit will be arranged with the aim of developing the action's capacity building (foreseen and realized within Action E2).

The action will last from July 2017 to September 2022.

Reasons why this action is necessary:

Buildings account for 40% of final energy consumption and about a quarter of the direct greenhouse gas emissions. The buildings have huge potential for their efficiency: about 75% of the EU building stock is inefficient and more than two thirds of the existing buildings will be in use in 2050. In fact, only a small portion is upgraded every year. Specifically, the condominiums are the most promising ones from a technical point of view. In this area includes the national and local policies that promote, through various regulatory and financial measures, restoration and redevelopment. Design and build a building "Near zero energy" is completely different from the current building practice, which requires a perfect knowledge of the buildings physics and a perfect mastery of the construction and installation of all construction and plant components. In recent years it has been increasingly highlighted as integrated planning is critical to ensure the achievement of the ambitious energy and environmental goals set by European policies to combat climate change. This consideration is even more important when considering interventions on existing buildings, built to design principles and plant no longer adequate to ensure high energy performance and environmental sustainability. Recovery and redevelopment in fact require to compete with numerous constraints of a regulatory nature, architectural and plant engineering. Only an integrated team of experienced professionals can identify ways to optimize the result in respect of all the imposed constraints. Therefore it is essential to provide specific training to enable those involved in the construction process to act in a qualified and integrated way, by relating to condominium administrators managing a large part of existing homes.

Constraints and assumptions:

- Delays or administrative problems in entrusting the assignment of planning the training format;
- delays or administrative problems in entrusting the assignment of training;
- lack of participation of some partners in the preparatory meetings, necessary in order to define a common and shared training format;
- lack of participations of the professionals expected to be involved in the trainings.

Expected results (quantitative information when possible):

- Sharing and testing the training format, with a view to further spread even in areas that are currently not included in the project partnership;
- Formation of 30 professionals for each course realized, for a total of at least 120 participants per partner that activates the course.

Cost estimation:

Different methodologies have been used to estimate the costs.

The action has been divided into smaller activities in order to quantify more precisely the amount of work to be done and the number of working-days necessary. The budget for the personnel has been quantified as [number of days*average cost/day], divided into permanent staff and temporary staff.

The external assistance refers to the initial organization (in the Coordinator's budget) and to the implementation of the training courses (in each Region's budget). The effort of planning the training have been quantified as [number of days*average cost/day] and the lectures as [number of training hours*average cost/hour].

Travel and subsistence costs have been estimated for meetings into the project area within partners involved for action development.

The coordinator will assume the costs regarding the definition of a common training format (external assistance) and the overall coordination, monitoring and evaluation (temporary staff). Each partner will assume at least the costs of personnel, in order to contribute sharing ideas and experiences in this field. According to each territory's needs, each partner will implement a different number of course editions.

Deliverables:

- Training format (30/04/2018);
- reports years II, III, IV, V;
- final report about the training experience (30/09/2022).

Milestones:

- Launch of the first training course (Phase 1, 31/07/2018).

<u>ACTION C.17</u>: Support to local authorities for energy saving initiatives in public buildings and for the enhancement of GPP

Beneficiary responsible for implementation: Emilia-Romagna Region

Region/Province	References in Air Quality Plan
Emilia-Romagna	Ch. 9.6 p. 162 "Acquisti verdi nelle pubbliche amministrazioni"
Piedmont	L.R. 7 aprile 2000, n. 43, art. 7 (B.U. 12 aprile 2000, 2° supplemento al numero 15, p. 5,6)

Description (what, how, where and when):

European Community policies in terms of energy efficiency define a lot of ambitious goals and supply a number of incentives and initiatives for its achievement.

The action aims to support local authorities with technical support and information on access to finance and investment opportunities. This action intends to strengthen the capacity building among public officers in local governments, increasing skills in particular on energy savings and GPP (Green Public Procurement).

Such action is divided in two parts:

- 1. Sub-action C.17.1 Support to local authorities for energy saving in public buildings
- 2. Sub-action C.17.2 Promotion of GPP and support to local authorities.

Sub-action C.17.1 - Support to local authorities for energy saving in public buildings

The task aims at the opening of a regional information point in support of the local authorities, that will be tasked to collect and disseminate information on funding opportunities for energy efficiency measures in public buildings, to support in the elaboration and deal of Energy Performance Contracts with private investors and third party financing investment schemes (ESCO's model) and in the management of the contracts along its implementation period.

The information point will assume a role of a technical and administrative support to local authorities (i.e. to office building managers or municipal building managers) for defining and implementing the best actions for public estate refurbishment and for accessing and managing structural funds and financial instruments such as public-private partnership.

The technical experts of each territory involved will periodically meet for an update on the state of the structural funds financing and valuating strengthens and weakness of the energy saving in public buildings.

Workshops and focus points will be organized in order to train municipalities' officers on these specific issues, so as to increase the capacity building on the use of technical and financial instruments for maximizing energy savings and economic benefits for local communities.

The action will be developed through the following tasks:

- Creation of a regional information point, with skilled staff and/or virtual solutions, also through the development of specific common areas in the project website.
- Workshops aimed to study and develop forms and innovative ways to design projects and their realization through the appropriate forms of financing (like concession agreements and energy performance Contracts - EPC), providing information and skills on energy contracts, on elaboration and management of related technical and financial issues in the short and long term.
- Focus groups on specific themes. The Municipal Environmental Center (Bologna Ambiente Comune BAC) and the "Showroom Energia e Ambiente", an institution which promotes mitigation activities against global warming between citizens, schools and associations (www.comune.bologna.it/showroom), with the support of external experts, will carry out also, through the focus groups, the involvement of technical and administrative personnel of local authorities and end users of public buildings (i.e. managers, teachers and students in public schools including the project topics into the activities to be carried out in schools as part of their training). A certificate of attendance to participants will be released.

The action will take place in: Emilia-Romagna Region, with the support of ARPAE, Piedmont Region, Veneto Region, Friuli Venezia Giulia Region, Trento Province, Municipality of Bologna. The action will last from July 2017 to March 2022.

Reasons why this action is necessary:

In the recent years several measures have been undertaken to test the use of Energy Performance Contract and third part financing investment schemes (ESCOs' model) in local administrations' buildings and public street lightning, according to EU directives.

EPC schemes are quite complicated to be managed, because they are based on financial and technical basis, often not so well understood by public officers, requiring competences in several fields uncommonly to be found in small municipal communities. In particular the clauses of closure of the EPC contract can contain "hidden" long term costs for public authorities shifted at the end of the contract period that sometime can vanish the saving achieved in the initial part of EPC operation. Furthermore, EPC contracts foresee that municipality adopt specific practices and procedure to achieve their energy saving targets that, if not correctly implemented, may vanish the economic benefit or create over costs in the medium long term.

Constraints and assumptions

Recruitment of staff specialized both on financial and technical issues related to energy savings constructions projects in public buildings.

Expected results (quantitative information when possible):

- 1 Regional information point (supporting structure) for each Region
- At least 2 workshop per year (3 years) in Emilia Romagna, Veneto, Province of Trento, Piedmont and Friuli Regions
- 4 focus groups in two years in Municipality of Bologna.

Cost estimation:

The following costs have been considered:

- For the coordination of the action and regional information point establishment, the average cost/day x n° days of personnel (permanent and additional staff);
- External assistance for the implementation of virtual info points, workshops and focus groups;
- Travel costs for the necessary project meetings:
- Equipment for the regional information point (such as hardware, printer, etc.);
- Consumables as educational materials and sample kits for focus groups and workshops (i.e. solar panels, electric circuits) and informative material of the regional point;
- Other costs for travel expenses of experts.

Deliverables:

Workshops/focus groups materials (contents to be defined in collaboration among participating partners) available to institution members for further dissemination (31/03/2022).

Milestones:

- Creation of a working group with the local authorities experts (28/02/2018)
- Establishment of the first information point (30/04/2018)
- Establishment of one info point for each partner (31/12/2021).

Sub-action C.17.2 - Promotion of GPP and support to local authorities.

The aim of this task is to increase the GPP approach into the local authorities and to improve the "green" quality of goods and services available in the regions involved in the project.

This action will be carried out through two different types of interventions: local workshops and eLearning training activities.

This action must include:

- a) workshops for the diffusion of the GPP approach between local bodies and enterprises at the local level, also through exchange of experiences and difficulties (how to apply the CAM contents into call text, how to increase the green enterprises at the local level in order to fulfil the GPP approach);
- b) training activities for the personnel of local bodies, also through the e-learning tools (already available from the Action Plan for the environmental sustainability of public consumption in Emilia-Romagna and its upgrading). The already existing e-learning tools are an online course on GPP (available at the following link: http://www.self-pa.net/moodle/pubblica-amministrazione/ Italian only) and the Intercent-ER Platform, which manages the contracts for services and products purchased by the public administration (available at the following link: http://intercenter.regione.emilia-romagna.it/ Italian only). The contents of the training courses will be the new minimum environmental criteria CAMs (especially those that have an impact on air quality), the procedure to make a green public call, monitoring, accountability and communication of the green public calls data. Training courses will deliver a certification of participation.

The action will take place in: Emilia-Romagna Region, Veneto Region, Piedmont Region, Friuli Venezia Giulia Region, Trento Province and the Municipality of Bologna.

The workshops will be organized at the local level in each region involved in the project.

A conference will be organized by the Province of Trento on the whole C17 action results (task 1 and task 2) and will be developed within action E2.

The action will last from July 2017 to April 2022.

Reasons why this action is necessary:

The European Union gives a very important role to GPP policy so to increase the low carbon economy strategy and the green economy. Considering that Public Procurements represent about the 17% of GDP at the European level, it's clear that if a large number of local authorities will increase the percentage of GPP in their purchase there could be a big change.

In addition, the Italian parliament has approved a National Law (L. 221/2015) that makes the GPP approach mandatory for all Public Administration.

Constraints and assumptions

A possible low participation to the workshops could reduce the effectiveness of the capacity building of the action.

Expected results (quantitative information when possible):

At least 1 workshops per year for each partner.

To involve a high number of local authorities' personnel into the training course and to develop two additional e-learning modules in addition to the three available by Emilia Romagna Region. A monitoring system implemented in all regions involved in the project.

An evaluation in terms of emissions reduction is not possible for this type of action.

Cost estimation:

- For the coordination of the action the average cost/day x n° days of personnel (permanent and additional staff);
- External assistance for the implementation of courses regarding GPP and for development of e-learning modules;
- Travel costs for project meeting, workshops and dissemination activities;
- Consumables for materials in support of GPP training.

Deliverables:

Report on the results and impact of the Workshop organized (30/04/2021);

- A report on the monitoring system implemented and quantitative results of the monitoring activities performed (30/04/2021);
- One new e-learning GPP module, on specific CAM that have effects on air quality (31/10/2019).

Milestones:

- Sharing of the training package contents with partners (30/04/2018).

D. MONITORING OF THE IMPACT OF THE PROJECT ACTIONS (OBLIGATORY)

<u>ACTION D.1</u>: Periodical collection of the measures already planned for the environmental reporting of measures' implementation through the environmental accountability system

Beneficiary responsible for implementation: ART-ER

Description (what, how, where and when):

This action represents the operative part resulting from the using of the tool created within Action A.2 (and probably integrated within action C.1). The people in charge of the monitoring of the measures foreseen in the Air Quality Plans and in PREPAIR will fill in the fields foreseen by the tool and periodically check the state of implementation of the measures and effectiveness of the actions.

In order to facilitate a correct use of the tool, ART-ERwill be in charge of training activities. ART-ER will also guarantee a help desk service.

This action is connected to action A.2 thus it will also be implemented in the whole project area.

This action will start in July 2018 and will last until March 2023.

Reasons why this action is necessary:

The continuous monitoring of the measures' and actions' implementation is strictly connected to the realization of the Air Quality Plans.

Constraints and assumptions:

It is assumed that all the administrations in charge for implementing the Air Quality action plans will compile at least every year the data set about the realization of the actions.

Expected results (quantitative information when possible):

Updating of the dataset for each partner involved containing the status of realization of the planned actions (quantitative indicators compiled).

Cost estimation:

For the periodical updating of the dataset and for training activities included the help desk, the average cost/day x n° days of internal personnel has been considered.

Expenses related to the printing of the report and the meeting have been considered consumables.

Deliverables:

 Report on accountability system of the measures' implementation and their effectiveness (30/11/2023).

- Training for the people in charge of the monitoring of the Air Quality Plans (31/08/2018 -30/04/2019);
- One meeting about the environmental accountability and functioning of the tool (31/03/2019);
- Periodical updating dataset (15 October of every year with the data updated at December of every year from 2018 until 2022).

ACTION D.2: PERIODIC UPDATE OF EMISSION DATA

Beneficiary responsible for implementation: ARPA Lombardy

Description (what, how, where and when):

An improved quality emission inventory on Po basin will be built considering local emission sources contributions as developed by local compilers, a Po basin evaluation on road traffic and biomass burning emissions. The activities finalized to provide a common traffic flow and residential wood heating consumption estimated on a coherent and homogeneous methodology, D.3 and D.4, will be the base of the estimation of road transport and wood heating emissions on Po basin. The remaining diffuse sources will undergo an extensive analysis in order to identify and quantify possible divergences between regional inventories as defined in action C.2.

The present action will provide a periodic update of emission data according data flow exchange protocol stated in A.1 and C.2 actions and input data will be provided by partners: ARPA Lombardy, Arpae Emilia-Romagna, ARPA Piedmont, ARPA Veneto, Trento Province, APPA Bolzano, ARPA Friuli Venezia Giulia, ARPA Valle d'Aosta.

These data will be merged with results from the currently used emission inventory and provided by Slovenia.

Periodic emission scenarios on Po Valley evaluation will be provided on the base of the update of data as measures indicators (action D.1), emission inventories (A.1 and update date), future trends analysis etc.) also in collaboration with other actions D.5.

Action starts in April 2018 and ends in December 2022.

Reasons why this action is necessary:

This action will use emission inventories data to monitor whether the concrete actions planned and implemented in the project are being effective in reducing the emissions, by the tool developed in C.2 and C.3.

As stated in the experience in the development of regional emission inventories the most discontinuities can affect more some sources than others. The flow of vehicles moving in defined road links is used for calculating road traffic emissions. The similarity of vehicle flows with fluid dynamic of liquids suggests an integrated approach defined on Po basin in order to overcome the possible discontinuities between different regions.

Biomass burning in small domestic appliances is a key source not only of PM in the emission inventories. The development of surveys on a sampling design defined on Po basin would overcome difficulties in synchronizing results based on different sampling schemes and period.

Constraints and assumptions:

Update and availability of emission data about diffuse, line and local emission sources as airports, ports, large plants will be provided by regions to allow data analysis.

Expected results (quantitative information when possible):

- Common run for emissions estimates on traffic flow diagram and residential wood heating on Po Valley.
- Preparation of an updated emission dataset for the target area by merging the improved emission dataset on Po Valley and results from the currently used emission inventory by Slovenia.
- Updated emission scenarios on Po valley.

Cost estimation:

The following costs have been considered:

Personnel (permanent and additional staff);

 External assistance costs for tool maintenance and/or scientific and technical support for update dataset.

Deliverables:

- report on emission dataset (31/12/2020);
- report on emission dataset (31/12/2022).

- implementation of the emission dataset on Po Valley and Slovenia (31/07/2020);
- update emission dataset on Po Valley and Slovenia (31/07/2021);
- update emission scenarios and comparison with previous estimation on Po Valley (31/07/2022);
- update emission dataset on Po Valley and Slovenia (31/07/2022).

ACTION D.3: Residential wood consumption estimation in the Po Valley

Beneficiary responsible for implementation: ARPA Veneto

Description (what, how, where and when):

Data on the consumption of woody biomass in the Po Basin (or Po Valley) were obtained between 2009 and 2013 from a set of household wood use Region-level and Province-level surveys.

Since residential wood-heating emissions resulting from the previous mentioned surveys represented one of the most relevant emission source of PM in the Po Basin's regions and provinces, a comprehensive update of wood consumption, burning appliances distribution, types of wood and wood-burning practices is needed.

These data are necessary to estimate the emissions due to residential wood combustion and consequently to update the atmospheric emission inventory at Po Basin level (Action D.2 "Periodic update of emission data"), through the tool implemented by Action C.2 ("Tool for improved emission inventory on Po basin and emission data warehouse").

In order to gain this comprehensive reference framework of household wood consumption in the Po Basin, in synergy with Action C.8 ("Analysis of the logistics of consumption and supply of woody biomass") the action intends to develop and implement one estimating methodology, reproducible over time, bringing together different approaches such as:

- realization of a survey on the use of woody biomass in the residential sector at Po Basin-level (including the territory covered by the regions Valle D'Aosta, Piedmont, Lombardy, Veneto, Friuli Venezia Giulia and Emilia-Romagna and the provinces of Trento and Bolzano), taking into account feed backs from previous national (ISPRA and ISTAT), regional and provincial surveys;
- assessment of a domestic heating consumption balance, accounting the amount and composition of energy consumption and the household's energy demand.

A conference on this action's results will be organized (see Action E.2). The action will last from July 2018 to January 2020.

Reasons why this action is necessary:

Provide a reference framework, at Po Basin level, of residential woody biomass consumption and home-heating appliances, not only to estimate atmospheric emissions from this sector, but also to promote adequate policies to improve air quality.

Constraints and assumptions:

Availability, in due time and at Po Basin level, of data on:

- structural characteristics of housing, type of heating appliances and fuels;
- existing regional/provincial home-heating appliances registers.

Expected results (quantitative information when possible):

Estimation of wood consumption of home-heating plants and of the most used domestic appliances at province level, with particular focus in the main large cities included in Po Basin. Implementation of a domestic heating consumption balance, accounting the amount and composition of energy consumption (including the results of the woody biomass consumption survey).

This energy balance will include harmonization and comparison with other available data, also mentioned in "Constraints and assumptions":

- Other national surveys on energy consumption in domestic heating (es. ISTAT, ENEA);
- Census on households and surfaces (ISTAT);
- Domestic heaters registers;
- Information on CHP (combined heat and power) and district heating;

- Municipal level of natural gas distribution and presence of other type on energy network;
- Regional energy balances and transboundary energy fluxes;
- Previous surveys on biomass.

Cost estimation:

The following costs have been considered:

- Personnel (permanent and temporary staff);
- External assistance:
- Other costs (publication).

The cost estimation of external assistance concerns the execution of the survey on the use of woody biomass for domestic heating in the Po Basin and the development of domestic heating consumption balance. Costs have been estimated considering the average cost of previous regional surveys. Personnel costs of permanent staff have been estimated considering an average daily rate per partner and the n. of working days.

Deliverables:

- n. 1 report and complete dataset (surveys data, metadata and results) on the use of woody biomass and appliances share at province level with particular focus in the main large cities for domestic heating in the Po Basin, including the territory covered by the regions Valle D'Aosta, Piedmont, Lombardy, Veneto, Friuli Venezia Giulia and Emilia-Romagna and the provinces of Bolzano and Trento (by 31/07/2019);
- n. 1 domestic heating consumption balance as in "expected results" in the household heating sector at Po Basin scale (by 31/01/2020).

- public tender for survey realization (30/09/2018);
- arrangement of the survey questionnaires (31/12/2018);
- public tender for the external assistance for the development of domestic heating consumption balance (31/01/2019);
- elaboration of filled questionnaires (31/05/2019);
- final collection of energy balance data (31/07/2019).

ACTION D.4: TRAFFIC FLOW ESTIMATION IN THE PO VALLEY

Beneficiary responsible for implementation: ARPA Piedmont

Description (what, how, where and when):

The objective of this action is to apply a traffic model over the whole Po Basin, reconstructing vehicular flows on a common road network in order to quantify traffic emissions in the context of regional inventories.

Actually flow data are estimated in different regions/provinces of the Po Basin using several methodologies (different complexity of traffic network, different levels of arc description, different systems to count vehicle passages).

In order to provide a common knowledge base as well as to have vehicular flows on road network over the whole Po Basin coming from the same methodology, the action intends to establish a common approach for assignment of vehicular flows, concerning the following activities:

- realization of a common graph of the road network reproducing the same level of complexity and characterization over the whole Po Basin, starting from commercial road network or, alternatively, merging regional graphs already used by the Regions/Provinces of the Po Basin;
- collection and organization in a common database of all available traffic flow detections (from Italian partners), included cross-border flows (from Slovenia), at hourly basis if possible and using the maximum detail in the classification of vehicles;
- creation of a new O/D¹ matrix to estimate movements of people and goods, by means of specific surveys and previous studies;
- implementation of a common traffic flow assignment methodology: the application of assignment modelling system must provide hourly flows and speed data for each road link (arc level) and for each different types of vehicle;
- focus on "transit traffic", with evaluation of vehicle fleet effectively in circulation, instead of the merge of regional fleets coming from statistic representations currently used for regional emission inventories.
- further periodic updates of traffic flows provided by traffic assignment model, if compatible with the interest periods.

The participants at the action will be: ARPA Valle d'Aosta, ARPA Lombardia, ARPAE Emilia-Romagna, Trento Province, ARPA Veneto, ARPA Friuli Venezia Giulia, Slovenia. The action will last from July 2018 to December 2022.

Reasons why this action is necessary:

Provide a reference and coherent traffic database at Po Basin level to estimate atmospheric emissions from this sector, overcoming current criticalities of local discontinuities and methodological differences.

Constraints and assumptions:

- Availability of commercial road networks or regional graphs already used by the individual Regions/Provinces;
- Availability of traffic detections or traffic flows in the area of interest.

Expected results (quantitative information when possible):

Evaluation – with a common and reproducible methodology - of traffic flows and their qualitative composition in the Po Basin in order to improve the estimated contribution of transport emissions on the whole area.

Cost estimation:

The following costs have been estimated:

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¹ O/D = Origin/Destination

- Personnel (permanent and additional staff);
- External assistance (considering the average expenditure for this kind of activity) costs
 to develop by a professional company with consolidated experience in the transport
 modelling a common graph of the road network over the whole Po Basin, collection
 and organization of all available traffic flow detections, implementation of a common
 traffic flow assignment methodology.

Deliverables:

- n. 1 dataset of collected data (graphs, traffic detections, traffic flows) (31/07/2019);
- n. 1 report about collected data and starting framework (31/01/2020);
- n. 1 dataset (metadata and results) of traffic flows assigned on common graph of road network (31/01/2021);
- n. 1 report about assignment methodology, final results and their analysis (31/01/2021);
- at least an update of traffic flows provided by traffic assignment model and the related report (31/12/2022).

- realization of the dataset of collected data (graphs, traffic detections, traffic flows) (31/07/2019);
- realization of the dataset of traffic flows assigned on common graph of road network (31/01/2021);
- at least an update of traffic flows assigned on common graph of road network (31/07/2022).

ACTION D.5: Regular Assessment (monthly/yearly) of the air quality

Beneficiary responsible for implementation: Arpae Emilia-Romagna and ARPA Piedmont

Description (what, how, where and when):

The main objective of this action is to assess the effectiveness of PREPAIR concrete actions on air quality in Po Valley. The trans-boundary effects of the Po valley air quality plans on the Slovenia target area will be also evaluated. For the Po Valley target area the assessment will take into account both pollutant concentrations and population exposure, and it will be continuously updated throughout the project. For the Slovenia Target area the assessment will take into account the pollutant concentrations. This action will examine PM10, PM2.5, nitrogen dioxide and ozone, which are the pollutants whose values more frequently exceed legislation thresholds, and for which monitoring networks and expertise are more consolidated; some of the other pollutants will be evaluated in action D6. Results shall be applicable in the whole target area, not only to specific locations where measurements are available. The assessment will take into account the confounding effect of meteorological variability. Details about methodology will be defined considering the results of the preparatory actions A. Generally speaking, two complementary approaches will be used:

- the data fusion technique implemented in action C.1, which combines air quality modelling and observations, will be implemented on a regular basis for Po Valley. Air quality and population exposure estimates will be produced monthly (mainly for communication purposes), and a more detailed report will be issued every year. For Slovenia, air quality assessment will be based mainly on models results, and the applicability of data fusion techniques will be evaluated;
- the RIAT+ integrated model, implemented in action C.3, will be used to assess the effects on air quality of concrete actions C.4-C.17 For Po Valley. Actual emission estimated during the project in actions D.1-D.4 will be used as input, and results will be compared with expected values defined in action A.3. If needed, explicit air quality model simulations will be performed to further refine the estimate of expected compliance level. For Slovenia the applicability of the integrated model approach will be evaluated.

If the planned actions turned out to be insufficient to fulfill air quality legislation requirements, a new strategy will have to be adopted in the phase 2 of the project: the allocation of resources to the concrete actions could be changed, and additional actions could be promoted. In this case, updated emission inventories (form action D.2) and assessments of the application of concrete actions (from actions D.1 and D.6) will be used to precisely define the causes of the problem, RIAT+ will then be used to design the most cost-efficient strategy in Po Valley.

The action will be performed during the phase 2 and 3 of the project.

Province of Bolzano will participate as stakeholder.

Reasons why this action is necessary:

This action is the main monitoring action of the project: it will use observed data to verify whether the concrete actions planned and implemented in the project are being effective in reducing the concentrations of the most important air pollutants. If necessary, it will also provide a fundamental tool to design the required adjustments to concrete actions.

Moreover, this action will also provide a clear and synthetic view on the state of air quality in Po Valley and Slovenia, that can be very helpful in raising awareness on the issue of air quality. Finally, this action will finalize the outputs of several PREPAIR actions, exploiting their results and making them available for communication.

Constraints and assumptions:

This action, either directly or indirectly, depends on outputs from several PREPAIR actions: it uses directly the air quality modelling systems results and data fusion methodologies developed in action C.1 and the integrated model assessment implemented in action C.3, but

it also relies on the emission inventory (action A.1) and on the assessment of emission reduction during the project (actions C.2, C.5, D.1, D.2, D.3 and D.4).

Inter-annual meteorological variability is expected to have an effect on observed concentrations: air quality models and meteorological data will be used to take into account this confounding effect, and an estimate of the related uncertainty will be produced.

It is assumed that the data sharing infrastructure, the air quality modelling systems (action C.1) and the RIAT+ integrated assessment model (action C.3) have been implemented and are ready for operational and on-demand runs. Each partner involved should ensure the data availability on the data sharing infrastructure. Appropriate documentation and technical assistance will be provided to the partners in order to facilitate the data sharing. Partners have a long experience in air quality assessment by models and monitoring data, moreover expert professionals (permanent and additional staff) assisted by external expertise will be dedicated to the activities.

The assessment reports will be realized by different tools in Po Valley and Slovenia, but will contain the same type of information. A common format will be defined and specific meetings for defining the reporting format and to share and compare results obtained for Po Valley and Slovenia will be organized.

Expected results (quantitative information when possible):

Action D.5 will deliver periodic reports during the second phase of the IP. The main outputs will be:

- Annual assessment reports and related datasets about the air quality concentration levels in the Po valley and Slovenia (regular production starting from year 2020);
- Annual assessment reports and related datasets about the population exposure in the Po valley (regular production starting from year 2020);
- Automated monthly reports about air quality in the Po Valley (regular production starting from January 2020);
- Reports about the cost-effectiveness analysis and corrective measures (if needed).

Cost estimation:

The costs have been estimated considering the maintenance cost of the data sharing infrastructure and modeling activities (external assistance), the travel for meetings and discussions with Italian partners (Slovenia). Personnel cost of permanent and additional staff are estimated considering, for each partner, an average daily rate and the number of working days.

Deliverables:

- N. 3 annual assessment reports and related datasets about the air quality levels and population exposure (30/04/2021, 30//04/2022, 30/04/2023);
- up to two reports about the cost-effectiveness analysis in the Po Valley (31/01/2022 and 31/01/2023).
- N.2 Special Reports on the effect Covid-19 Lockdown measures on Air Quality in Po Valley and Slovenia (31/01/2021)

- start up meeting for defining the reporting format (Po Valley and Slovenia) (30/11/2019);
- meeting to share and compare results obtained for Po Valley and Slovenia (30/04/2022.)

<u>ACTION D.6</u>: Monitoring the environmental effects of pollutants reduction measures implemented by air quality improvement plans

Beneficiary responsible for implementation: ARPA Lombardy

Description (what, how, where and when):

Executions of routine sampling in the special stations network defined in action A.4. Analysis of samplings. Collection and elaboration of data. Elaboration of the results with statistical and source apportionment techniques to identified the evolution of the contributions of the different sources related to the actions implemented.

The measurements will be conducted on a routinely base. The analysis of the results will be done periodically on an yearly base.

In the second phase of the project will be evaluated the possibility to conduct also specific intensive additional campaigns to measure other specific tracers not collected on a routinely base, as defined in action A.4.

This action involves ARPAE Emilia-Romagna, ARPA Piedmont ARPA Veneto, Arpa Valle d'Aosta, Arpa Friuli Venezia Giulia and Slovenian Environment Agency.

Action starts in January 2018 and ends at the end of the project.

Reasons why this action is necessary:

As described in action A.4, to monitor adequately the results of air quality plans it is important to monitor not only the concentrations of conventional pollutants but also the tracers of the different sources. The continue measurements of specific tracers in particularly related to PM composition will permit to follow the evolution in the sources not limited to estimates based on the emissions.

Constraints and assumptions:

Expected results (quantitative information when possible):

- Active Supersite network with a DB with more than 2000 samples data every year.
- Source apportionment study with biannual periodicity.

Cost estimation:

The type of costs estimated are the following ones:

- equipment for measures (analysers and sequential PM samplers)
- consumable materials for sampling and analysis for 4 years indicated for 5 hypothetical sampling sites with full temporal coverage and 3 with 2 months coverage, with on the whole 2000 analysis every year: filters, ovens for EC/OC, XRF and IC standards, laboratory glassware and accessories (pipettes, syringes..), detectors, IC columns
- samplers maintenance
- personnel costs (for collecting samples and for analysis)
- shipping (transferring) samples
- travelling costs (meeting internal to project and to participate to international meeting of experts in the field).

Deliverables:

- DB of measurements, populated on a regular base after the first year (31/03/2019; 31/03/2020; 31/03/2021; 31/03/2022; 31/03/2023);
- 1 report about the source apportionment of PM (and of other pollutants when possible) (30/04/2021)
- 1 final report about the source apportionment of PM (and of other pollutants when possible) (30/06/2023)

- Measurements starting after 1 year (15/01/2018)
 Periodical updating dataset (31/03 of every year from 2018 until 2022).

E. PUBLIC AWARENESS AND DISSEMINATION OF RESULTS (OBLIGATORY)

ACTION E.1: Information and awareness raising activities

Beneficiary responsible for implementation: ART-ER

Description (what, how, where and when):

The action aim is to promote and disseminate the results of each action at a local, national and international level. LIFE Logo shall always appear on all documents realized, on the website and on other project outcomes disseminated.

This aim will be pursued using different tools and methods, fitting different targets.

E.1.1 Website

A project website will be set up within 6 months from the start of LIFE PREPAIR. It will be made in Italian and English with the main sections translated also in Slovenian language and will be kept and updated for at least 5 years after the end of project. The website will contain a description of the project and its aim and actions. All project deliverables and results will be published on the website; it will be updated periodically throughout the progress of PREPAIR, including all information related to communication events. The hit rate on the website will be monitored in order to see how well it is used.

In the home page it will be reported that PREPAIR project is co-funded by the European Commission.

The website is the most important tool for dissemination activities and will be structured with a friendly approach towards visitors. It's a communication tool aiming at reaching a large public, so technical language will be reduced as much as possible in order to make it more understandable.

At least 1000 visits to the website per year is the target of this sub-action.

Website will be elaborated by ART-ER and will be the crossroad of official document's transmissions and communications.

E.1.2 Notice boards and communication material

Notice boards describing PREPAIR project shall be displayed in strategic places accessible to the public (for examples they'll be showed in the offices of all partners involved in the project). Notice boards will be written in English, Italian and Slovenian.

ART-ER will work with the contribution of all partners to create the project logo and information material. Key dissemination materials at this stage will be the project's logotype, banner, leaflets and the roll-ups. Leaflets will describe the partnership, the objectives of the project and its main actions.

This promotional material will be used in dissemination activities will also be produced in this task. Leaflets will be distributed at projects meetings and conferences to participants and stakeholders.

Main important communication materials will be published in English, Italian and Slovenian language.

LIFE Logo will always appear on dissemination materials.

E.1.3 Public conferences and participation to thematic fairs

During the PREPAIR project 4 conferences will be held:

- Initial Conference
- 2 middle term Conferences
- Final Conference

Initial Conference: the aim of this event is to present the project to different target groups: public authorities, companies, facilities and other organizations potentially interested in the PREPAIR issues. The event will be organized in Bologna by the Emilia-Romagna Region.

The two middle term conferences in Lombardy and Veneto to present the state of the art of project; they will be organized by Lombardy Region and Veneto Region with the support of Arpa Veneto.

The Second mid term conference will be postponed from april to october in order to match the period of the year in which the attention to Air Quality is higher.

The Final Conference in Piedmont to show the final results of the project; it will be organized by Piedmont Region. In this occasion the layman's report will be officially distributed.

In order to foster the participation of all stakeholders, it will be possible to follow the events also in streaming.

Moreover, project partners will set communication channels with Italian/Slovenian main networks potentially interested in PREPAIR issues.

The participation to at least two thematic fairs, coordinated by ART-ER, will foster the project's visibility by displaying roll-ups and notice bards with the project logo in strategic locations and distributing promotional material.

E.1.4 Layman's Report

The layman's report describing the activities and outcomes of the project will be prepared in Italian, English and Slovenian; it will be produced both on paper and electronic format at the end of the project and it will be available on the PREPAIR website. Layman's report will be distributed during final conference and at least 200 copies for each partner will be printed. After the Final Conference partners will disseminate the Layman's report. Language of the document will be non-technical and clear.

E.1.5 Project communication campaign

A project communication campaign on the Po basin will be organized in order to spread the message of PREPAIR to the whole area object of the project. The main risks connected to air pollution will be highlighted in order to catch people attention on the issue and raise awareness on what will be done to increase the air quality. The campaign will have a direct, communicative and straightforward language able to catch everybody's attention. The campaign will include the creation of a slogan, the production of an advertising spot for video/radio and other promotional materials and tools to display in urban areas (public corners) and on local media. Communication activities are necessary for the whole project's development and enhancement thus they will be applied in the whole project area.

This communication activity will last for the whole duration of the project.

Reasons why this action is necessary:

Dissemination of project results is one of the most important actions of the project and will be carried out during and after the LIFE PREPAIR project duration. EU added value could be enhanced only through a systematic and constant communication activity throughout the project.

Dissemination activities will encourage the replicability of the project and will increase the interest on the LIFE PREPAIR topics. Indeed, dissemination will inform different target groups

on the air quality condition of the Po basin and Slovenia and all the measures that will be implemented with the target of increasing it.

The website is an essential tool to make project's results available to all partners as well as any interested people in a simple and non-technical way.

Notice boards and brochures are a necessary tool for communicating the project objectives and activities for they give synthetic information with a non-technical languages and they can reach any kind of public giving key information in an easy way.

Public conferences will be the occasion to present the project to different target groups and collect useful feedback.

The communication campaign will be a very useful tool for making people aware of the importance of the project's targets considering the air quality condition of the Po basin and the risks connected to pollution.

Constraints and assumptions

Risks of the dissemination activities are related to the following issues: low access rate to the website, scarce visibility of the notice boards, unclear language in the layman's report, low participation to the conferences, difficulties in reaching national media for the communication campaign. These constraints, however, are quite low considering the partners experience in realizing information and dissemination campaigns.

To further reduce these risks, with reference to the main dissemination tools, it will be particularly paid attention to the following aspects:

The website, as it is a fundamental tool for enhancing the project visibility and for disseminating its results, will have an attractive layout and will be continuously updated. The structure will be immediate and user-friendly, considering the heterogeneity of the audience. Contents will be presented in an attractive way.

Notice boards will be synthetic, realized using a straight-forward language and placed in strategic locations. Moreover, attention will be paid to the material used for the print (waterproof, resistant etc.). Any logistical difficulties related to the installation of the panels will be avoided by "standard sizes", easily movable and easy to be placed also on pre-existing structures.

Layman's report: the difficulty to "condense" into a few pages such a complex project will be overcome by a selection of key contents, a good capacity of synthesis and the use of functional images.

The location of the conferences will be planned with geographical considerations and with the purpose of simplifying the participation to the target audience. All partners have great experiences in events organization and social networks will also be used for conferences calls. The communication campaign will be very communicative, it will be able to attract people's attention with short yet very significant messages. The video that will be realized will be translated in English and will be displayed in strategic locations.

Expected results (quantitative information when possible):

- 1 website. At least 1,000 access per year
- 2 roll-ups per partner
- 100 notice boards per partner
- 2,000 leaflets disseminated
- 1 project's logo
- 1 project's banner
- 1 kick-off meeting (number of people expected 200 and more than 20,000 persons informed by invitation per e-mail)
- 1st middle term conference (number of people expected 200 and more than 20,000 persons informed by invitation per e-mail)
- 2nd middle term conference (number of people expected 200 and more than 20,000 persons informed by invitation per e-mail)

- 1 final conference (number of people expected 200 and more than 20,000 persons informed by invitation per e-mail)
- Participation to at least 2 thematic fairs
- 200 Layman's report per partner
- 1 project communication campaign.

Cost estimation:

Different methodologies have been used to estimate the costs, considering the different kind of outputs of this action.

For the website, the cost is connected to the external assistance for its construction and maintenance.

For the production of dissemination material (roll-ups, notice boards, leaflets, logo, banner and layman's report) the cost is related to the material costs and the costs of external services (design, printing).

For the organization of conferences and participation to fairs, involved personnel organizing each conference has been considered (average cost/day x n° days of involved personnel) plus consumables (catering, translators, etc.) and other costs.

The cost of the project communication campaign has been calculated including external assistance for the development of tools, personnel involved and other costs for the rent of public corners.

The costs for the translation of dissemination material in Slovenian are personnel costs.

Deliverables:

- Website (31/07/2017)
- Notice boards (31/07/2017)
- Project leaflets (31/07/2017)
- Roll ups (31/07/2017)
- Advertising spot for the project communication campaign (30/09/2021)
- Layman's report (31/12/2023).

- Launch of the website (31/07/2017)
- Launch of the project communication campaign (31/05/2021)
- Initial conference (31/07/2017)
- 1st Middle term conference (30/04/2019)
- 2nd Middle term conference (30/10/2021)
- Final conference (31/12/2023).

ACTION E.2: Development of communication actions in support of single actions

Beneficiary responsible for implementation: ART-ER

Description (what, how, where and when):

An integrated project requires a common approach on all communication activities, i.e. a common language and common messages. The following actions will be conducted with the aim of homogenizing all communication campaigns of all actions with a unique language and giving a unique project message:

- One conference on results of some relevant thematic actions;
- Survey on the people perception on the quality of air in the Po basin through the "Action Research" methodology conducted both before and after the development of the project actions:
- One international conference organized in Brussels;
- Support to some actions dissemination for homogenizing them through the following tools: e-learning platform for all capacity building, training initiatives and streaming service for all public events;
- Organization of site visits for some actions;
- Journalistic support to the project through press releases and cooperation with media
- Realization of one storytelling video for some actions;
- One educational publication focused on the air quality issues, specifically targeted to citizens of the Po Basin's regions.

The LIFE14 GIE/DE/000490 CLEAN HEAT project will be used for building up the communication activities in support of the action on biomass burning.

The E.2 action will take place in the whole area of the project and throughout its whole duration.

Reasons why this action is necessary:

All communication initiatives must be connected to the Po basin approach and its communication strategy in order to be an integrated project. The message coming out of the project must be unique, not only the realization of actions but also the communication of their outputs and of all different initiatives organized within PREPAIR must be tied together and connected between each other so to give to the project a single voice.

Constraints and assumptions

Communication campaigns might use different languages thus they might not be homogeneous, however they need to appear very similar instead, even though they treat different topics. The support to communication campaigns and the organization of conferences will overcome the risk of non-homogeneity. The national survey will be conducted on the whole Po basin and the difficulty of coordinating such an extended work will be handled by partners thanks to their experiences. Site visits will make stakeholders and interested people aware of what has been done and will help to spread the message of PREPAIR. The streaming of conferences will also allow the spread of PREPAIR messages on a larger scale and will reach all interested people who could not participate to conferences. Capacity building and training activities will be efficiently developed through the use of the e-learning platform.

Expected results (quantitative information when possible):

- 5 conferences on some actions results. In detail:
- 1 conference on results of Actions C.4 and C.5 (Emilia Romagna Region)
- 1 conference on results of Action C.16 (Province of Trento)
- 1 conference on results of Action C.17 (Province of Trento)
- 1 conference on results of Action E.3 (Lombardy Region)
- 1 conference on results of Action D.3 (ARPA Veneto)
- 5 storytelling videos. In detail:

- 1 video on Action C.11 Rationalization of short-range freight logistics in urban and extraurban areas (Emilia-Romagna Region)
- 1 video on Action C.16 zero energy buildings (Province of Trento)
- 1 video on Action C.15 energy efficiency industries (Emilia Romagna Region)
- 1 video on Action E.3 to inform citizens on the proper use of biomass (FLA)
- 1 video on Action E.4 on electric mobility (Piedmont Region)
- 2 site visits:
- 1 site visit on Action C.16 during the conference (Province of Trento)
- 1 site visit on Action C.4 or C.5 (Emilia Romagna Region)
- 1 information campaign on results of Action C.10 (Piedmont Region)
- 2 national surveys (one before actions C and one after the end of the project)
- 1 international conference
- 1 e-learning platform
- 1 publication on air quality issues.

Cost estimation:

For the organization of conferences on results of some project's actions, involved personnel organizing each conference has been considered (average cost/day x n° days of involved personnel) plus consumables (catering, translators, etc.).

For the surveys on people perception costs refer to external assistance, costs of the personnel involved (average cost/day x n° days of involved personnel) and consumables for the printing service.

The costs for the conference in Brussels are related to personnel (average cost/day x n° days of involved personnel) plus travel, consumables and external assistance for interpreters.

The costs for the supporting tools to the conferences on actions results, such as the development of the e-learning platform, the journalistic support and the realization of storytelling videos are for the external assistance.

Costs for the educational publication are related to:

- staff (permanent and project's) dealing with the definition of technical and scientific contents and the publication's promotion strategy;
- external experts and services dealing with publication's graphic aspects and the implementation of international seminar in Brussels.

Deliverables:

- 2 reports on the results of the national surveys (31/01/2019 and 31/01/2023);
- 5 storytelling videos on results Action C11 (31/01/2021), C16 (30/09/2022), C15 (31/03/2022), E3 (31/01/2023), E4 (by 31/01/2023) 1 educational publication in digital version (31/01/2023);
- At least 11 press releases for 4 project conferences (31/07/2017, 30/04/2019, 31/10/2021, 31/12/2023) and for 5 conferences on actions results (E.3: 31/12/2023, C.16: 30/09/2022, C.4-5:31/12/2021, D.3: 31/10/2021, C.17: 30/04/2022) plus kick off meeting (30/04/2017).

Milestones:

- Launch of the 1st survey on the people perception on the quality of air in the Po basin (30/09/2018);
- International conference in Brussels (during phase 3);
- Launch of the e-learning platform (28/02/2018);
- Launch of the 2ND survey on the people perception on the quality of air in the Po basin (30/09/2022);
- tender notice for a communication agency (for the press campaign) (30/04/2017).

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ACTION E.3: Communication on the use of biomass

Beneficiary responsible for implementation: Lombardy Region

Description (what, how, where and when):

The communication action about biomass is primarily addressed to the inhabitants of the Po Valley and has as its object the theme of biomass combustion for domestic heating. These activities, aimed at improving energy efficiency and lower atmospheric emissions, intend to embrace the different profiles of the biomass issue: the features and type of biomass to be used in households; the need for a correct use of the biomass and of the plants in which it is burned; the requirement of the adequacy of domestic heating systems, properly installed, maintained by experts and recorded at the specific Registry; the possible impacts on health due to indoor pollution; aspects of home security for the risk of chimney fires.

The main tools to implement the whole activity of communication are the following:

- 1) a preliminary survey will be carried on among the territories involved in the IP about the activities already done in the past years for communication on the issue of biomass;
- 2) ad hoc publications on specific websites;
- 3) moments of broad public dissemination, characterised by "dissemination events" to be fitted and proposed on a regional scale and in the territory of Po Valley.

These cycles of meetings will be implemented in the territories of the municipalities more involved with the problem of burning wood, with meetings open for the population.

ARPA Lombardy will support the action E.3 in these specific activity of public dissemination events on the Lombardy territory.

These public moments will be organised in the winter periods, more afflicted by the use of biomass in the domestic plants.

The campaign will be developed with the support of communication activities and tools of action E.2 coordinated by ART-ER. In particular:

- 1) a specific press campaign characterised by wide visibility and impacts. One of the main elements will be the creation of a video designed to inform citizens on the proper use of biomass (see Action E.2);
- 2) a conference will be organized in parallel with the development of the specific press campaign (see Action E.2).

The campaign will be designed to inform people about how to properly use biomass for energy and in particular on the proper handling of small household wood heating devices to protect human health and environment. In particular the following key issues will be addressed:

- Use and maintenance of small domestic wood plants;
- Stoves and boilers: features and certifications, also on the basis of the new national law on this issue;
- Regulatory obligations to be met;
- What types of biomass can be burned in the house: cost, availability, environmental benefits:
- How to recognize the pellet's quality;
- Advantages and limitations of biomass in comparison with conventional fuels.

Key stakeholders are: institutions of local government and environment and health monitoring and controlling; environmental bodies; business associations; school system; citizenship; trade associations and with the producers of the combustion plants.

A second aspect which will be declined with the different means of communication proposed, is that of the dissemination of knowledge about the elements of the current regulations relating to biomass. This aspect thus provides a stakeholder engagement, such as combustion plant producers, managers of supply chains (wood, pellets..) and home users. The main aim is correctly convey the message and the cogency of sector regulations – of national and / or regional level - in order to make it effectively implemented and to highlight the best practices in the sector.

For instance, the national law about the certification of the biomass combustion plants for domestic heating is one of the theme that will be treated.

FLA (Fondazione Lombardia per l'Ambiente) will support Lombardy Region to start up and maintain an active communication strategy, an e-mail list will be created with constant information on the project, issued at the different stakeholders at local, national and international level; and with the creation of the video on biomass.

The activities will take place in Lombardy and on the territories of the other partners involved, with a particular attention to the territories of the municipalities more involved with the problem of burning wood. All partners will replicate the moments of broad public dissemination in its territory, will support the press campaign through its local media and will help to spread the deliverables.

The whole action will last 5 years and three months, starting in September 2017 and finishing in December 2022, with more activities during the winter seasons.

Reasons why this action is necessary:

The purpose of this action is at least threefold:

- 1) to promote better and wider knowledge of the problems and the opportunities related to the topic of biomass combustion for domestic heating;
- 2) to promote the correct choices regarding the use and purchase of residential heating plants as well as the proper installation and maintenance of those appliances;
- 3) to support the transition of the users towards best technology plants with benefits in terms of greater energy efficiency and of less pollutant emissions, and the transition from the use of the wood log to the pellet.

According to data from the European Environment Agency dust emissions per unit of fuel from a pellet stove are equal to 10% compared to those of a modern wood stove; to this must be added the increased energy efficiency of appliances using pellet. In this perspective, even if these appliances don't meet emission standards of other fuels such as natural gas, the replacement of the logs with pellets would allow a emission reduction from the combustion of woody biomass by more than 90%.

Constraints and assumptions

In general terms, the more critical aspect debating about the theme biomass as fuel for domestic heating is of cultural profile: a sort of social objection to accept scientific data that underline the criticality and the impact of the wood when is burned.

The need for action on increasing the level of awareness and information on the subject is born specifically from the need to tackle the cultural biases in the environmental field. Therefore, a communication action so broad and capillary goes in that direction.

A second element to face when debating about biomass combustion for domestic heating, is the need to promote coordination between policies on air quality with those against climate change, pushing on technological improvement and energy/emission efficiency of the plants. Again, initiatives of information and communication of high scientific level may help to clarify this point and to send the message also to policy-makers at all levels, from the EC to the national and local scale.

Expected results (quantitative information when possible):

By developing this action we expect to achieve greater awareness about the biomass burning and a strong shift of the choices and use of the consumers and population. This output can lead to relevant reductions of atmospheric emissions from wood burning for several pollutants, such as PM10, PM2.5, VOC and different important compound under a toxicological point of view as dioxins and polycyclic aromatic hydrocarbons. These results can contribute to the improvement of air quality in the Po basin for those specific pollutants.

Cost estimation:

The costs are referred to personnel (average cost/day x n° days of involved personnel), travel and external assistance.

In particular, it will be advertised a public tender for the assignment to a communication agency to the following activities:

- drafting a communication campaign plan;
- creation of a thematic banner on woody biomass that can be used on the websites of the Municipalities, as well as those local health companies in the project area and other subjects (research institutions, other local bodies, consortia, environmental associations, etc.), which want to disseminate on the issue of the correct combustion of biomass:
- creation of a video of 30 seconds/1 minute on the subject of biomass to be disseminated on the social project pages (facebook, youtube, etc.) as well as the partner, and which can be taken up and disseminated also by any other subject that intends to collaborate to raise awareness on the topic;
- creation of a social campaign, and relative profiling of targets, aimed at ensuring a "viral" effect;
- creation of a thematic poster;
- creation of a thematic leaflet;
- implementation of 2 roll ups for each territorial body (Regions and Autonomous Province of Trento) involved in the implementation of the communication campaign;
- realization of a brochure on the subject of biomass of about 20-24 pages that can be used as a support for further information to be made public on the project site and to be used in distribution in public dissemination events.

All the materials will be placed on the project website and used, in digital or paper format, for the realization of:

- prints;
- purchase of spaces for the promotion of the thematic content related to biomass on social pages;
- purchase of space in local newspapers and magazines for the dissemination of correct use of biomass. In any case, the partners will privilege the use of free press and distribution of informative like, for example: social and aggregation centers, municipal magazines sports associations and mountain communities' magazines.

Deliverables:

- 1 survey about the activities of communication on biomass on the territories of the Po Valley (30/04/2018);
- at least 1 publication about the theme described above, published on the Partner/s websites and the specific PREPAIR website (31/12/2022);
- "dissemination events" about biomass, structured into tangible products (e.g. PDF, ppt, papers...) that can be replied and proposed for other territories (31/12/2022);
- several deliverables will be produced by the press campaign, in the mail form of brochure/publication that will be deliver by web and printed and distributed during the public moments of the campaign (31/12/2022);
- 1 mailing list for strategic stakeholders at local, national and international level (30/04/2018);

- definition of the working group to carry on the communication activities (survey, publications, dissemination events, etc.): 28/02/2018;
- preliminary survey about the activities of communication on biomass on the territories of the Po valley: 30/04/2018;
- tender notice for a communication agency (for the press campaign): 30/04/2018;
- launch of the campaigns and start of the public moments of dissemination: from 01/05/2018 until 31/12/2022.

<u>ACTION E.4:</u> Population awareness raising on electric vehicles (regional Electric Mobility Day)

Beneficiary responsible for implementation: Piedmont Region

Description (what, how, where and when):

The aim of this action is to define and implement an awareness raising campaign with a focus on electric mobility to actively engage citizens on this matter. This campaign will focus on setup regional dissemination events.

In order to raise awareness of the population on electric mobility, every year a Regional Electric Mobility Day will be organized during European Mobility Week.

The events will be planned in highly frequented visited location (city square, park, street, etc.). In order to distribute promotional materials (suitable personalized technological gadgets and various other promotional materials) will be realized information booths and videos will be shown on the issues.

The events will showcase the latest technology from the world's leading car manufacturers and will allow test-drives the newest electric vehicles. Those events will provide the opportunity to understand technology and processes involved in developing electric vehicles and the benefits of using them.

Such a campaign can be easily replicated in other cities since its easy to organize, its innovative, its fairly cheap and it creates a synergy among schools, environmental associations enabling to reach a large public.

The main tools to implement this work of communication are:

- moments of broad public dissemination, characterised by ability to do a test drive
- ad hoc publications on specific websites;
- information through social networks (facebook and twitter) and interaction with users.

The activities will take place in Piedmont and in the territories of the partners involved,

A series of events have been programmed in Turin, Milan, Bologna, Trento and in Friuli Venezia Giulia and Veneto regions.

The events will be organized every year during European Mobility Week. The first event has been programmed for September 2017, the last for September 2022.

The action will start in April 2017 and will end in December 2022.

Reasons why this action is necessary:

Electric mobility is "system sustainability", that is the necessity to guarantee a sustainable transport development, aiming at reducing energy consumption, polluting emissions and negative mobility impacts on the territory.

Among the many advantages e-vehicles have today, it should be mentioned that the TCO (Total Cost of Ownership) is 5-6 time less than the TCO of a conventionally fueled vehicle.

The aim of this action is to inform citizens on electric mobility challenges and advantages. Furthermore it aims at raising the awareness of the population and thus contribute to the spread of electric mobility and to the improvement of the quality of life.

Constraints and assumptions

In general terms, the more critical aspect debating about the theme electric vehicles is of economic and cultural profile and; in fact many citizens believe this technology too expensive without assessing the impact on the environment.

The need for action on increasing the level of awareness and information on the subject is born specifically from the need to tackle the cultural biases in the environmental field. Therefore, a communication action so broad and capillary goes in that direction.

Expected results (quantitative information when possible):

- 50 stakeholder involved in square events;
- 5.000 people involved in square events per Region (1.000 people per event per 5 years);

100.000 people involved through website and media.

Cost estimation:

The costs are referred to personnel (average cost/day x n° days of involved personnel), travel and external assistance (square event, test drives, stands, design of dissemination products on e-mobility and other services).

Deliverables:

- Database of stakeholders and target group (31/10/2018);
- Several deliverables will be produced by the press campaign, in different forms that could be articles, posters, ads, video and radio messages etc. (31/12/2022).

- Public tender for press campaign (31/10/2017);
- Elaboration of tailored communication concepts for specific groups in the field of emobility (31/12/2019);
- Development of specific social networks page aimed to the interaction with population (31/12/2020);
- Selection of municipalities and enterprises, implementation of the concepts in the municipalities and enterprises (31/07/2022);
- Organization of some events about electrical mobility (31/12/2022).

<u>ACTION E.5</u>: Creation of school-targeted formal and non-formal educational paths on the air quality issues related to the Project objectives

Beneficiary responsible for implementation: FLA

Description (what, how, where and when):

The action aims at designing, testing and implementing different educational target-oriented paths addressed to awareness-raising and knowledge-strengthening in the school system (teachers and students) on the air quality issues dealt with by the project.

Under this action a formal and non-formal educational path will be developed and target-tailored for the whole Italian school system (primary school, secondary school, high school) with the aim of raising the social awareness and personal interest of the young on the main issue of air quality impacts, monitoring and control as dealt by the PREPAIR project.

The education paths will be designed through a close collaboration with selected teachers, and developed within the existing educational school programs with the goal of strengthening the interdisciplinary knowledge of air quality related issues. The educational tools and methods will be conceived to ensure their transferability and replication in the school system even after the project life.

The educational paths will be defined in strict cooperation with the partners involved in the action (Province of Trento, ARPA Veneto, Emilia-Romagna Region, Lombardy Region, Friuli Venezia Giulia Region, Piedmont Region and ARPA Piedmont) in such a way to make them applicable to the different local contexts. The action will be divided into three phases:

- (i) design and creation of the educational tools and paths (18 months, 2017/18);
- (ii) experimental testing in three classes (one for each school level) in all the regions/provinces involved in the action (school year 2018/2019);
- (iii) implementation of the educational activities in at least 20 classes for each of the regions/provinces involved in the action (school years 2019/2020, 2020/2021, 2021/2022).

In the first phase all the project partners will cooperate to select the contents of the training modules, as well as to adapt them to the different needs of their territories. The second and third phases will be managed directly by the partners – on the basis of their own budgets - within their respective regions with a direct support and general coordination by FLA.

Besides the preparation of teaching materials as support of the educational activities to be performed in the classroom by the teachers with the assistance of project's staff experts, the education paths will include non-formal modules based on:

- virtual blackboard and PC experiments on the topics of the emission of atmospheric pollutants by different energy sources, expected impacts on human health and ecosystems, monitoring techniques and good practices for emission reduction;
- guided on-field excursions or visits to environmental agencies facilities, monitoring stations, low-emission energy plants or systems (transport, livestock farms, biomass burning sectors).
- games and quizzes and for the younger pupils.

Between the first and second phase a trainer-addressed seminar will be held to instruct the staff experts who will join the teacher in performing the testing of the educational paths and the use of the teaching tools and to work out the best criteria for the selection of the schools to be chosen in the testing phase.

Between the second and third phase of the action another workshop will be organized to discuss thoroughly the results of the experimental phase and define guidelines and recommendations for the final implementation phase of the educational activities.

All the action activities will be disseminated within the school system and communicated to external stakeholders and the general public in strict coordination with the communication action E.2 coordinated by ART-ER.

In addition, all materials developed to support the implementation of educational paths will be available for download in a specific project website's section aimed at providing teachers with

appropriate instruments to carry out environmental education activities within their own school programs.

The action will start in April 2017 and will last until. December 2023

Reasons why this action is necessary:

The long-term success of the project's goals depends on the change in individual behaviours of the final energy users (customers, citizens at large) through awareness-raising and knowledge-spreading processes mainly fuelled by teachers and social communicators. To this purpose the teaching and training activities envisaged by this action are deemed to be absolutely crucial.

Constraints and assumptions

Present content gaps in the school curricular courses of scientific disciplines and a not sufficiently updated cultural background of the teachers may hinder a full and successful mastery by the students of the proposed educational materials and paths. For this reason, the project is built up on a direct involvement of teachers in all the development phases.

Expected results (quantitative information when possible):

Definition of three target-oriented educational paths with related teaching material (one for each school level) on air quality issues related to the project objectives. Testing and implementation the educational paths in about 20 classes in the Province of Trento, Lombardy, Veneto, Friuli Venezia Giulia, Piedmont and Emilia-Romagna Region (total about 80 classes).

Cost estimation:

Different methodologies have been used to estimate the costs, considering the different kind of outputs of this action.

For the development of the three target-oriented educational paths (for primary, secondary and high schools) the balance-sheet item is constituted by the cost of the staff to be engaged (the FLA's internal staff has a well-established experience in the development of educational projects in the environmental field). In addition, external experts will be recruited as advisers for the specific materials and tools of the educational paths (item: external expertise).

For the involvement of the schools and for the implementation of the three target-oriented educational paths in the partners' territories, the respective budget is divided between staff cost and external assistance, on the basis of expenditure needs of the different partners involved

The budget's item named "consumables" refers to the costs of producing and supplying CDs, games, paper texts, materials for experiments.

Deliverables:

- n. 3 target-oriented teaching materials (primary, secondary, high schools): (31/10/2018);
- n. 15 reports/minutes of tests of the previous educational paths in as many classes (5 primary, 5 secondary, 5 high schools in the four regions/provinces involved) (31/10/2019).

- Definition of target-oriented educational paths (31/10/2018);
- School involvement (01/01/2019).

ACTION E.6: Networking with other projects

Beneficiary responsible for implementation: Emilia-Romagna Region

Description (what, how, where and when):

This action aims at identifying previous and present projects related to project issues such as air quality, energy efficiency, biomass burning, transports and many others in order to identify methodologies and tools that can be integrated and promoted within PREPAIR activities. Networking will be important in particular for sharing and capitalizing projects results, avoiding overlapping and strengthening synergies between initiatives.

In order to develop this task, partners will work on the identification of related Life projects (or project founded by other EU Programs) from the beginning of the project.

Through EU funding programs databases, partners will identify other projects that have some connections with PREPAIR.

Projects emerged from the research of European sources will be assessed by several indicators, before to contact the beneficiary; the following are some criteria for the assessment:

- project aims;
- project topics;
- fields involved;
- stakeholders involved;
- tools and methodologies implemented;
- project results.

Projects will be selected according to the usefulness and possibility of integration with the actions of PREPAIR.

The network activities will be carried out through different tools and activities. A working table will be organized for a periodical and continuous comparison with other projects dealing with the quality of air, with the representatives of the managing authorities of the structural funds and with the representatives of the Po Valley Agreement for Air Quality. This working table will allow a continuous exchange and updating on the progress of PREPAIR activities.

The networking activity concerns the whole project area. This activity will last for the whole project's duration.

Reasons why this action is necessary:

Networking with other projects is necessary for best practices, methodologies and/or valuation models might be exchanged and they might bring an added value to PREPAIR.

Constraints and assumptions

Although different projects can have similar targets, overlapping must be carefully avoided and other projects shall be "used" as complementary and mutually reinforcing towards the same target of pollution reduction.

Expected results (quantitative information when possible):

Creation of a mailing list for each scope of action of the project (agriculture, biomass, transport and energy efficiency).

Cost estimation:

Costs refer to personnel involved (average cost/day x n° days of involved personnel), travel and other costs for the involvement of other projects' representatives and meetings.

Deliverables:

- List of projects involved in networking activities (30/04/2022);
- Mailing lists (30/04/2022).

Milestones:

Launch of the working table (31/07/2017).

F. PROJECT MANAGEMENT AND MONITORING OF PROJECT PROGRESS (OBLIGATORY)

ACTION F.1: ADMINISTRATIVE AND FINANCIAL MANAGEMENT OF THE PROJECT

Beneficiary responsible for implementation: Emilia-Romagna Region

Description (what, how, where and when):

Project management will be guaranteed by the coordinating beneficiary in charge of the overall coordination, financial management, monitoring evaluation and the implementation of the whole project on behalf of the associated beneficiaries.

The responsible of this action, in collaboration with all the associated beneficiaries involved, will be in charge of the following group of activities:

- Guarantee the most productive utilisation of the project budget;
- Search and solve any problem incurred during the project implementation;
- Manage the financial operations;
- Support the technical actions of the project;
- Monitoring the project time schedule:
- Submission of the reports foreseen by LIFE regulation (interim reports and final reports, together with all technical reports).

A specific task will aim at the compilation of information needed to complete the indicator tables to be submitted with the first Interim report and with the Final report, by the responsible of the action, in collaboration with all the associated beneficiaries.

A Steering Committee will be set up, and it will be composed by representatives of each associated beneficiary, in charge of the strategic issues and any other decision involving all the project partners.

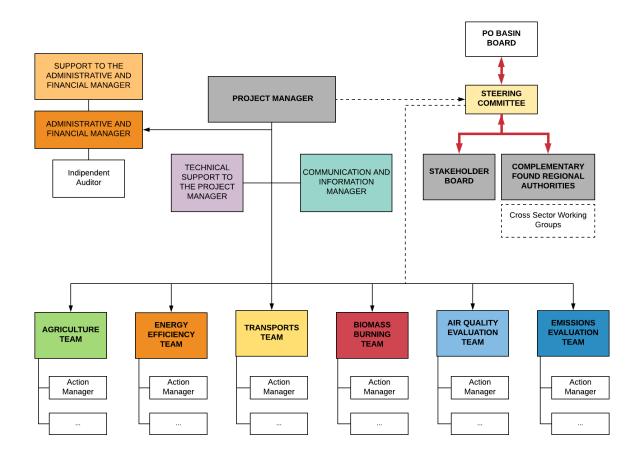
The coordinating beneficiary will guarantee the realization of this action through a full-time dedicated team of experts, in charge of both administrative and technical activities.

The project manager will be nominee by the General Director for Territorial and Environmental Care of Emilia-Romagna Region, with high level of skills in managing European Projects as well as a very long experience in the thematic of air pollution. The project manager will be chosen within the permanent staff of the Emilia-Romagna Region. The project manager will be assisted by an administrative coordinator with experiences in administrative and financial management of European projects.

Within the team of experts will be also other staff (additional and non additional) with a commitment to the project. Additional staff will be chosen through public procedure with specific requirements, while internal staff with specific qualifications in agriculture, biomass, energy efficiency, transports and air pollution will be assigned to the project activities with decision of the Director General for Territorial and Environmental Care of Emilia-Romagna Region.

Each associated beneficiary will set up a team dedicated to the project management with separate acts. Regular contacts with the other associated beneficiaries and with the project monitor and authorities will be kept.

MANAGEMENT CHART



The Steering Committee will be set up during the Kick-Off Meeting, at the beginning of the project. A Responsible for each group of actions or thematic pillar will be defined within the Steering Committee:

- Agriculture
- Biomass
- Transport
- Energy
- Air Quality Evaluation
- Management
- Communication.

The project manager will elaborate a workplan with details about the activities with their coordinators, time schedule and stakeholders involved. This workplan will be shared among the partners, and will be constantly updated (at least every three months). Moreover, within 3 months from the beginning of the project, the coordinating beneficiary will sign a partnership agreement with every associated beneficiary in which will be detailed the duties and the rights of each one.

After the signature of the Agreement, the coordinating beneficiary will claim the pre-financing of the LIFE funds, that will be distributed among the associated beneficiaries according to their own project budget. Then, according to the project phases, one or more interim payments will be requested and at the end of the project activities, the payment of the balance.

PROJECT MANAGEMENT MEETINGS

During the project duration, face to face management meetings will be organised as to discuss about the state of implementation of the project activities and, in case, talking about difficulties in the implementation of the project both for administrative and technical issues. Apart from the face-to-face meeting, Skype or video conferences will be organized by the coordinating beneficiary or according to an associated beneficiary's request.

A kick-off meeting will be held in Bologna in March 2017 after the project starting date, the Final Meeting will be held in 2023, in Turin.

The following project management meetings will be organized during the project lifetime:

Where		Hosting Beneficiary	When	
Bologna	Emilia-Romagna		I° trimester 2017	l°
Venezia	Veneto		III° trimester 2017	ll°
Trento	Prov. Trento		I° trimester 2018	lll°
Torino	Piemonte		III° trimester 2018	IV°
Milano	Lombardia		I° trimester 2019	V°
Bologna	Emilia-Romagna		III° trimester 2019	VI°
Milano	Lomba	ırdia	I° trimester 2020	VII°
Bologna	Emilia-	Romagna	III° trimester 2020	VIII°
Trieste	Friuli Venezia Giulia		I° trimester 2021	ΙΧ°
Trento	Prov. Trento		III° trimester 2021	Χ°
Ljubljana	Slovenia		I° trimester 2022	ΧΙ°
Trento	Prov. Trento		III° trimester 2022	XII°
Bologna	Emilia-Romagna		I° trimester 2023	XIII°
Torino	Piemonte		IV° trimester 2023	XIV°

Strictly related to the administrative and financial management is the monitoring of the project. This part of the action will last during the entire project, and it will allow to identify any delay and/or problems during the project implementation. Monitoring of the whole project will be also assured with the implementation of the action F.3, in which *Po Basin Board* will be involved as to guarantee the sustainability of the project results even after the end of the project. According to the workplan, the Project Manager will monitor the project monthly.

According to the Grant Agreement for integrated projects, periodical reports will be submitted to the European Commission. Any delays or other problems incurred during the project implementation will have to be detailed within the reports.

Reasons why this action is necessary:

Management and coordination of the project is necessary to guarantee the achieving of the project objectives and results, complying the Grant Agreement and the common provisions.

Constraints and assumptions

- Failure and/or delays in implementing the project activities;
- Financial risks.

As to avoid the first one of the list, the coordinating beneficiary will adopt a reliable system of management, characterised by a dedicated team full-time committed to the project. In addition, the communication among the partners will be guaranteed during the whole project.

As to avoid financial risks, administrative and financial experts of the coordinating beneficiary will adopt a day-to-day management of the project, will constantly monitor the associated beneficiaries activities and they will organize training about the project financial reporting.

Expected results (quantitative information when possible):

- 1 workplan constantly updated;
- 1 partnership agreement signed between the coordinating beneficiary and the partners;
- 1 Kick-Off meeting;
- 1 final meeting;
- N. 11 interim project management meetings;
- 1 project Steering Committee will be composed;
- N. 2 Interim reports (April 2019, April 2021);
- final report (January 2024).

Cost estimation:

The cost of the action is mainly related to the costs of personnel, permanent or additional, and of external assistance necessary to assure a continuous management of the project, technical, financial and administrative. The cost of the action includes also the travel costs necessary for each partner to attend project meetings and conferences.

Deliverables:

- 2 Interim Reports (30/04/2019, 30/04/2021);
- 1 Final Report (31/04//2024);
- 1 Workplan document (30/04/2017);
- Minutes of the meetings, within 30 days after the end of the meetings (30/04/2017, 31/10/2017, 30/04/2018, 31/10/2018, 30/04/2019, 31/10/2019, 30/04/2020, 31/10/2020, 30/04/2021, 31/10/2021, 30/04/2022, 31/10/2022, 30/04/2023; 31/10/2023):
- N. 15 partnership agreements (30/04/2017);
- 1 After Life Plan (31/01/2024).

Milestones:

- Setting up of the Steering Committee (30/04/2017);
- Nomination of the coordinating beneficiary experts team (30/04/2017);
- Nomination of the project experts teams and action leaders (30/04/2017);
- Signature of the Partnership Agreements (30/04/2017);
- Submission of the Amendment Requests for phase shift (31/10/2018, 31/10/2020)
- Submission of the interim and final reports (30/04/2019, 30/04/2021, 30/04/2024).

ACTION F.2: INDEPENDENT AUDITING

Beneficiary responsible for implementation: Emilia-Romagna Region

Description (what, how, where and when):

The financial management of the whole project will be certified by an independent auditor, either a person with the qualification provided for by law, or an audit society.

The independent financial auditor will be in charge of the verification of the financial statements, and he will issue a certification whenever an interim payment is requested, as well as for the final cost claim.

The independent auditor will be choice with a public tender as to assure the best value for money, and the project manager will agree with the auditor the best way for the future checks. The costs for the auditing activities, according to the LIFE guidelines, will be in charge of Emilia-Romagna Region.

Reasons why this action is necessary:

This action is mandatory, according to the guidelines of the LIFE IP.

Constraints and assumptions

None.

Expected results (quantitative information when possible): Certifications of the accounting.

Cost estimation:

A maximum of € 100.000,00 allocated in other costs budget line.

Deliverables:

 Certification of the auditor (for interim payments 30/04/2019 and 30/04/2021; for the final balance: 30/04/2024).

Milestones:

Grant of the contract for the auditing (31/07/2018).

ACTION F.3: Establishing the governance permanent platform

Beneficiary responsible for implementation: Emilia-Romagna Region for the implementation of the action. Lombardy Region for the link to the Po Valley Board.

Description (what, how, where and when):

The action aims to guarantee the sustainability of the project results even after the end of the project by ensuring the coordination and funding of the data sharing, modelling and monitoring infrastructures implemented and the involvement of the relevant stakeholders in so ensuring the effective implementation of the IP and more in general of the regional Air Quality Plans.

Each regional or provincial administration engaged as beneficiary of the IP will institute a "Stakeholder board" involving local authorities (municipalities or association of municipalities) as well as environmental and socio-economic associations.

Where already established by regional laws, as the case of Region Lombardy, the associated beneficiaries will use the existing boards ensuring that the themes addressed by the IP will be integrated in their agenda.

The *Stakeholder Boards* will be called at the beginning of the IP and following at the end of each project phase. The regional and provincial administrations will guarantee the maintenance of the *Stakeholder boards* also after the conclusion of the IP, so as to ensure the involvement of key stakeholders in the implementation of the regional Air Quality Plans.

The beneficiaries will also ensure the involvement of people in charge of the management of complementary actions (mainly ERDF, EARDF, ESF) through coordination procedures existing within the administration or through new and more effective processes. To this aim, each Region/Province will ensure the coordination with the sectors in charge of other relevant policies through the institution of a project "cross-sector working group", which will meet at least once a year. The activity of these groups will be considered in the "After Life Plan" so to maintain integration among PREPAIR results, Air Quality Plans and the other relevant policies. The implementation of the complementary actions will be monitored during the IP through a continuous and effective exchange of data, information and results with the Managing Authorities and with the Environmental Authorities that are involved in the monitoring of the Regional Operational Programmes. A common format for collecting the data by the beneficiaries involved will be elaborated at the beginning of the IP, and it will be shared among the beneficiaries in the Steering Committee. A document including the details of complementary activities implemented will be sent together with the foreseen project reports.

At the same time, the "Po Basin Board" will be involved within the IP, both at political and scientific level, to ensure the monitoring and facilitate the implementation of the data sharing infrastructure (Action C.1). The Board will check the state of art of action C.1 and analyse the results of the evaluating phase (Action D.5) in order to take common decisions in case of corrective actions. The Board will act in coordination with the Steering Committee (Action F1). The Board will act on the basis of the evaluations supplied by actions D.1, D.2, D.5 and D.6, as periodical reports, so as to ensure the corrective actions in case the measures adopted by the AQPs will result not fully effective. To this aim the Board will include representatives of the environmental Agencies of the involved regions so as to ensure the durability of D related actions. The same process will be adopted beyond the end of the IP.

In particular, as the monitoring activities will deliver periodic reports about the rate of implementation of concrete actions (action D.1), the emissions of pollutants (action D.2) and the state of the air quality (action D.5), that reports will be used, at the beginning of the phase 3, for checking the effectiveness of concrete actions realized by PREPAIR and AQ plans on air quality in Po Valley and Slovenia. The results of the check will be evaluated by the Steering Committee for decide about the need of further and/or corrective actions. Such actions can be assessed by the support of the Integrated assessment model RIAT+ implemented on the target area. The final check will be realized at the end of the project by the Po Basin Board that will

adopt a final report and a long term action plan in order to ensure the sustainability of the project's results after the end of PREPAIR.

Lombardy Region, that has long and recognised experience in coordinating the Po Basin regions and provinces, will be responsible for linking the IP with the Po Basin Board and with the activities foreseen in the PO Basin Agreement.

The Po Basin Board will operate also after the end of the project so as to ensure the long term sustainability of the Data Sharing Infrastructure. The Board will be called at least every year for the IP duration and will promote the participation of representatives of the Ministry for Environment in the project main meetings and conferences so as to ensure the maximum coordination between the objectives of the IP and the national targets specially referred to Directives 2008/50/CE, NEC Directive and Po Valley Agreement.

Permanent staff of the involved associated beneficiary will lead this action so as to ensure the long term sustainability of the project results.

The action includes the project phase 'evaluate lessons learnt and formulate policy recommendations': all partner regions and provinces evaluate their exchanged and transferred good practices (lessons learnt) and identify policy recommendations for updating and improving their Air Quality Plans.

The action will take place in each beneficiary's territory.

The action will start at the beginning of the IP and will last for the whole project period.

Reasons why this action is necessary:

The action is necessary to ensure the long term durability of the project and to evaluate results from Actions D in order to facilitate the implementation of the Air Quality Plans and their next updating.

Constraints and assumptions

Effective participation of relevant stakeholders in the Stakeholders Boards.

As to avoid this risk, the coordinator of the action will monitor the implementation of the Boards. The coordinator will report to the Steering Committee (F1) where corrective actions will be immediately realized in case of necessity.

Expected results (quantitative information when possible):

- Formally involvement of the Po basin Board inside the IP;
- 7 Stakeholder Boards established;
- 7 cross-sector working group established;
- At least 3 meetings of the Stakeholder Boards;
- At least 6 meetings of the Po Basin Board;
- At least 1 meeting a year of the cross sector working groups.

Cost estimation:

The costs have been estimated considering the necessary costs of personnel, permanent or additional, the travel and subsistence costs necessary for attending meetings and other costs for inviting representatives of Italian Ministry for Environment and other relevant stakeholders to the meetings.

Deliverables:

- At least one Report for each Region about the involvement of stakeholders in the implementation of Air Quality Plans containing proposals for the better involvement (30/10/2023);
- At least one Report for each Region about the lessons learnt and the policy recommendations for updating and improving their Air Quality Plans (30/10/2023);

- Report on cross sector working group meetings with the agendas, the list of participants and the minutes (31/01/2024).
- N. 1 final report and an action plan defining the long term funding of the technical tools implemented during the IP, as well as the adoption of coordinated measures at the Po Basin scale (31/01/2024).

Milestones:

- Setting up of the Stakeholder Boards (31/07/2017);
- Setting up of the cross sector working groups (31/07/2017);
- Involvement of the Po Basin Board in the IP (31/07/2017);
- Annual meetings of Po Basin Board and periodical meetings of Stakeholder Boards (30/04/2018, 30/04/2019, 30/04/2020, 30/04/2021, 30/04/2022, 30/04/2023).

DELIVERABLE, MILESTONES AND REPORTING SCHEDULE

MAIN DELIVERABLE PRODUCTS OF THE PROJECT

Name of the Deliverable	Code of the associated action	Deadline
1 data set of emissions for the Po Valley and Slovenia	A1	31/01/2018
Report on data flow definition, quantification of the main divergences and procedures for their reduction	A1	31/10/2018
1 dataset of actions and measures for the Po Valley Region with indicators planned by the regional/local AQPs and by the IP itself and a Monitoring Protocol to evaluate the impact of the measures	A2	31/10/2017
a web based platform for collecting the data for the accountability of measures (to be implemented in action D1)	A2	31/07/ 2018
1 Technical handbook	A2	31/07/2018
1 Report on the expected levels for specific pollutants	A3	31/01/2019
1 Report on the assessment methodology	A3	31/01/2019
1 document defining the stations, the species and the frequency of measure and the protocols of the measures to be done continuously;	A4	30/09/2018
1 document describing the standards for collecting and organizing the data by the existing special stations	A4	30/09/2018
1 document describing the experimental protocol for realizing possible intensive experimental campaigns during the Monitoring and evaluation of the AQ plan	A4	30/09/2018
Report on the air quality modeling systems implemented in this action; these systems produce daily forecasts and near real time analysis (data fusion)	C1	31/01/2021
Software tools to produce regularly monthly and annual gridded analysis of air quality in Po Valley and Slovenia	C1	31/01/2020
Report on the software tools implemented to produce regularly monthly and annual gridded analysis of air quality in Po Valley and Slovenia; this includes software to estimate population exposure	C1	30/04/2021
Report on the use of complementary data for air quality assessment	C1	30/04/2021
Informative platform for collecting emission data	C2	31/01/ 2022
Interim report on the implementation of the RIAT+ in Po Valley	С3	30/04/2019
Report on the feasibility study and RIAT+ application in Slovenia	C3	30/04/2019
Final report on the implementation of the RIAT+ in Po Valley and Slovenia	C3	31/01/2021
Position paper on an agrarian system perspective to reduce ammonia emissions from fertilizers	C4	31/12/2021
Common model for the evaluation of gaseous and odour emissions in intensive rearing; model's manual user;	C5	31/03/2020
a final common model for the evaluation of gaseous and odour emissions applicable to the intensive rearing of	C5	31/12/2021

sottle pige and noultry able to support studies and		1
cattle, pigs and poultry able to support studies and preliminary estimations and be useful in farm's emissions		
authorization processes and for the elaboration of		
planning and programming tools		
Model's manuals user	C5	31/12/2021
Technical framework for the definition of criteria for low		
emission farms	C5	31/12/2021
Office of Turne		. (31/10/2018 -
assessment questionnaire regarding each edition of the		31/10/2019 -
trainings, completed by the participants	C6	31/05/2021 -
30, 10 p 1000 by 10 p 10 p 10 p		31/12/2021);
Final report about assessment of trainings and evaluation	00	24/02/2022
of the training experience	C6	31/03/2022
final report of the training experience	C7	30/09/2022
Legislative proposal to formally recognize the chimney	C7	30/09/2022
sweep as a qualified professional figure	C7	30/09/2022
1 study related to the biomass flows relative to the entire	C8	31/10/2019
Po basin		31/10/2019
1 best practice book	C8	30/04/2020
1 Biomass Management Plan	C8	31/12/2020
Teaching materials (slides, video, cartographic info	C9	31/01/2019
related to the visiting sites)	00	31/01/2013
Report on information and recommendations on the	C9	31/12/2021
planning of intermodal transport facilities and policies		
modal split analysis report	C9	30/04/2020
Toolkit of competences "Curriculum for teaching bike	C9	31/10/2022
safety in the schools"	00	20/04/2024
Brochure about local services and facilities for bicycles	C9	30/04/2021
survey on bike infrastructures availability in the main regional railway stations and in urban area	C9	30/06/2021
Video through competition in at least 40 schools on the		
issue "biking to school"	C9	31/10/2022
open data on geo-referenced bike paths and services	C9	31/10/2021
feasibility study and management of at least 1 bike-station	C9	31/08/2022
Bike-navigator	C9	30/09/2022
Feasibility study on the specific bus identified by the		
Public Transport Services	C10	30/04/2022
Testing of environmental and technical performances of		
the converted buses also compared to other new buses	C10	31/12/2023
Reports on the survey in urban area	C11	30/06/2021
Reports on the survey in extra-urban area	C11	31/12/2021
Mobile and web app	C12	30/09/2022
1 report on the survey	C13	31/12/2023
Set of new policies, financial programmes, legislative	040	04/40/0000
proposals to enhance electric mobility	C13	31/12/2023
Study on impact of driving behaviour on fuel saving and	C14	24/42/2024
pollutant emissions	C14	31/12/2021
Final report about the training experience	C14	30/09/2022
Report on case studies of productive activities, in order to		
identify their main needs and specificities and the sectors	C15	30/06/2021
potentially involved in the fulfilment of energy efficiency		33,00,2021
regulations		
Thematic guidelines (like "mini Brefs")	C15	31/12/2021

	045	04/40/0004
Final report about the training experience	C15	31/12/2021
Training format	C16	30/04/2018
Final report about the training experience	C16	31/09/2022
Workshops/focus groups materials	C17	31/03/2022
One new e-learning GPP module, on specific CAM that have effects on air quality	C17	31/10/2019
Report on accountability system of the measures' implementation and their effectiveness	D1	31/112023
Reports on emission dataset	D2	31/12/2020 and 31/12/2022
n. 1 report and complete dataset on the use of woody biomass and appliances	D3	31/07/2019
n. 1 domestic heating consumption balance	D3	31/01/2020
n. 1 dataset of collected data (graphs, traffic detections, traffic flows)	D4	31/07/2019
n. 1 report about collected data and starting framework	D4	31/01/2020
n. 1 dataset (metadata and results) of traffic flows assigned on common graph of road network	D4	31/01/2021
n. 1 report about assignment methodology, final results and their analysis	D4	31/01/2021
at least an update of traffic flows provided by traffic assignment model and the related report	D4	31/12/2022
N. 3 annual assessment reports and related datasets about the air quality levels and population exposure	D5	30/04/2021 30/04/2022 30/04/2023
DB of measurements, populated on a regular base after the first year	D6	31/03/2019 31/03/2020 31/03/2021 31/03/2022
1 final report about the source apportionment of PM (and of other pollutants when possible)	D6	30/06/2023
Website	E1	31/07/2017
Advertising spot for the project communication campaign	E1	30/09/2021
Layman's report	E1	31/12/2023
•	Ε0	31/01/2019
2 reports on the results of the national surveys)	E2	31/01/2023
1 educational publication in digital version;	E2	31/01/2023
1 survey about the activities of communication on biomass on the territories of the Po Valley	E3	30/04//2018
n. 3 target-oriented teaching materials (primary, secondary, high schools)	E5	31/10/2018
List of projects involved in networking activities	E6	30/04/2022
1 Workplan document	F1	30/04/2017
1 After Life Plan	F1	31/01/2024
At least one Report for each Region about the involvement of stakeholders in the implementation of Air Quality Plans At least one Report for each Region about the lessons learnt and the policy recommendations for updating and improving their Air Quality Plans	F3	30/10/2023
Report on cross sector working group meetings with the agendas, the list of participants and the minutes	F3	31/1/2024

N. 1 final report and an action plan defining the long term funding of the technical tools implemented during the IP, as well as the adoption of coordinated measures at the Po	F3	31/01/2024
Basin scale		

MAIN MILESTONES OF THE PROJECT

Name of the Milestone	Code of the associated action	Deadline
Delivery of the dataset with the existing emission inventories in the Po Valley and Slovenia	A1	31/01/2018
Delivery of final report	A1	31/10/2018
Transferring of the dataset on the management tool	A2	31/10/2017- 31/07/2018
Preliminary evaluation of the impact of air quality local plans in Po valley	А3	31/01/2019
Preliminary evaluation of the impact of the trans-boundary effects of Po Valley air quality plans in Slovenia	А3	31/01/2019
Delivery of documents defining the stations, the species and the frequency of measure and the protocols of the measures	A4	31/07/2018
Data from air quality monitoring networks are made available in near real time by all partners, according to standards defined in deliverable	C1	31/07/2018
Joint meeting with action C.2 for coordinate the actions	C1	31/10/2018
Two air quality modeling systems are run operationally by ARPAE Emilia Romagna and Slovenia; they provide daily air quality analysis and forecast over a domain covering Po Valley and Slovenia	C1	31/01/2019
Air quality analysis based on data fusion are produced in near real time, and are accessible through the "snapshot databases"	C1	30/06/2021
Near real time products for communication and monthly air quality assessment start to be produced regularly in their final version	C1	31/01/2021
Delivery of the informative platform	C2	31/01/2022
Input data collection and feasibility study of RIAT+ application in Slovenia	C3	30/09/2018
CTM simulations	C3	31/07/2019
Source-receptor model development	C3	31/01/2020
Riat+ model set up	C3	31/03/2020
Study phases definition and implementation	C4	30/06/2020
Establishment of a Working Group of experts and definitions of the methodology to implement the action including interchange with project partners	C5	28/02/2018
Organization of the course and definition of training format	C6	30/04/2018
Meetings with project partners and stakeholders (trade associations, etc.) for the initial coordination of the action	C6	30/04/2018
Monitoring and/or evaluation meetings, involving all the stakeholders, held once a year during the implementation of the trainings and/or shortly after their conclusion	C6	30/11/2018 30/11/2019 30/11/2021 31/12/2021

		0.4/4.0/0.04.0
Conclusion of each edition of the training courses	C6	31/10/2018
		31/10/2019
		31/05/2021
		31/12/2021
Final evaluation of the training done through meetings with stakeholders	C6	31/03/2022
Establishment of a public registry of recognized professionals	C 7	31/12/2021
Data recovery by partners	C8	31/10/2018
Production of a "Safe Routes to school" manual	C9	31/10/2023
Creation of low-speed zones	C9	31/12/2020
Projects development for recovery and reuse of abandoned bicycles	C9	31/08/2022
Provisional award of public tender	C10	31/12/2021
Business partnership agreement contract	C10	31/12/2022
Agreements subscriptions	C11	31/12/2021
Implementation of the urban freight model as pilot study	C11	31/12/2021
Data Collection	C12	30/04/2022
Agreement on the data protocol and on the specifications		
of the open-source multimodal trip planning software	C12	30/09/2022
system	040	04/40/0000
Definition of electro-mobility strategy at level of PO Valley	C13	31/12/2023
Realization of the survey on productive activities	C15	30/06/2021
Open call for expression of interest to workshops	C15	30/06/2021
Establishment of the first information point	C17	30/04/2018
Training for the people in charge of the monitoring of the Air Quality Plans	D1	31/08/2018 - 30/04/2019
One meeting about the environmental accountability and functioning of the tool	D1	31/03/2019
Periodical updating dataset	D1	15/05/2018 15/05/2019 15/10/2020 15/10/2021 15/10/2022
implementation of the emission dataset on Po Valley and Slovenia	D2	31/07/2020
Final collection of energy balance data	D3	31/07/2019
Realization of the dataset of collected data (graphs, traffic detections, traffic flows)	D4	31/07/2019
Realization of the dataset of traffic flows assigned on common graph of road network	D4	31/01/2021
at least an update of traffic flows assigned on common graph of road network	D4	31/07/2022
Periodical updating dataset	D6	31/03 of every year from 2018 until 2021
Launch of the website	E1	31/07/2017
Launch of the project communication campaign	E1	31/05/2021
Initial conference	E1	31/07/2017
1st Middle term conference	E1	30/04/2019
2nd Middle term conference	E1	30/10/2021
Final conference	E1	31/12/2023
International conference in Brussels	E2	during phase 3

Launch of the e-learning platform	E2	28/02/2018
Launch of the campaigns and start of the public moments of dissemination	E3	from 01/05/2018 until 31/12/2022
Organization of some events about electrical mobility	E4	31/12/2022
School involvement	E5	01/01/2019
Setting up of the Steering Committee Nomination of the coordinating beneficiary experts team Nomination of the project experts teams and action leaders Signature of the Partnership Agreements	F1	30/04/2017
Submission of Amendment Request for Phase 2 shift	F1	31/10/2018
Submission of Amendment Request for Phase 3 shift	F1	31/10/2020
Setting up of the Stakeholder Boards Involvement of the Po Basin Board in the IP	F3	31/07/2017

ACTIVITY REPORTS FORESEEN

Type of report	Deadline
Activity report Phase 1	30/04/2019
Activity report Phase 2	30/04/2021
Final report with payment request	30/04/2024

TIMETABLE

List all actions ordered by number and using their numbers or names. Tick as appropriate.

Action		20	17			20	18			20	19			20	20			20	21			20	22			20	23		20	24
Number Name	ı	II	Ш	IV	ı	II	III	IV	ı	II	III	IV	-	II	III	IV	ı	II	Ш	IV	ı	II	Ш	IV	ı	II	III	IV	ı	II
A. Preparatory actions, elab	orati	on o	f ma	nage	emen	t pla	ns a	nd/o	r acti	on p	lans			•			•	•		•	•	•		•	•					
A1 - Emissions data set			•																											
A2 - System for the environmental accountability of the measures of AQ plans	•		-	-	-	-																								
A3 - Preliminary assessment of the Air Quality Plans					•	•		-	•																					
A4 - Network of special stations for the monitoring of the Plan's environmental effects: definition of the network and of the protocols for measuring		•	•	•	•	•		•																						
C. Concrete (conservation/i	mple	men	tatio	n) ac	tion	s	I				ı	l		I			ı	I	l	I	I		l		I					
C1 - Implementing the data sharing infrastructure and the AQ model						•		-	•			•	-	-		-	-	-												
C2 - Tool for improved emission inventory on Po basin and emission data warehouse									•							•	•													
C3 - Implementing the Integrated Assessment Model (RIAT+)						•			•				•																	

C4 - Promoting an ammonia low-emission application of fertilizers based on urea in agriculture		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•							
C5 - Implementation of a common model for evaluation of gaseous emissions and odour resulting from the intensive rearing of cattle, pigs and poultry		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•							
C6 - Technical and specialist training for installers and designers of domestic biomass systems				•						•																
C7 - Enhancement of the role of "qualified chimney sweep" for the control and maintenance of biomass domestic systems							-		-						•			•	•	•	•	•				
C8 - Analysis of the logistics of consumption and supply of woody biomass			•			•		-			•			•	-											
C9 - Actions promoting cycling mobility						•								•			•			•		•			•	
C10 - Demonstrative action on conversion propulsion system from diesel to electric			-			-		-						-	-		-		•	•	•	•		-	•	
C11 - Rationalization of short- range freight logistics in urban and extra/peri-urban areas																										
C12 - Development of ICT tools for public transport users																										
C13 - Actions in support of electric mobility																										
C14 - Training on Eco-driving																										

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	of th	of the pro	•	•		of the project actions	of the project actions	of the project actions	of the project actions				of the project actions					of the project actions	of the project actions			of the project actions	of the project actions		of the project actions	of the project actions	of the project actions	of the project actions	of the project actions

E1 - Information and awareness raising activities					•			•	•			•			-		•	•	•	•					-		
E2 - Development of communication actions in support of single actions			•		•				•			•	•	-		-	•						•				-
E3 -Communication on the use of biomass			•		•			•	•			•	•			•	•		•								
E4 - Population awareness raising on electric vehicles (regional Electric Mobility Day)			-		-				-			•	-	-	-	-	•	•	•			•					
E5 - Creation of multimedia informative and educational materials on air quality issue		-	-	-	•	-	•	•	-	-	•	•	-	-	-	•	•	•	•		•	-	-	-	-	•	
E6 - Networking with other projects																											
F. Project management and	mon	itori	ng of	f pro	ject _l	orog	ress																				
F1 - Administrative and financial management of the project					•																						•
F2 - Indipendent auditing																											
F3 - Establishing the governance permanent platform																											



Project number: LIFE15 IPE/IT/000013 – LIFE-IP PREPAIR

Annex III_ter

Estimated budget of the project



LIFE 2015 ENVIRONMENT INTEGRATED PROJECTS

Stage 2 - Full proposal

FINANCIAL APPLICATION FORMS

Proposal acronym: LIFE-IP PREPAIR

NOTES:

Please refer to guidelines for IP applicants when filling in these forms

Budg	get 2° am.		
Budget breakdown categories	Total cost in euro	Eligible Cost in euro	% of total eligible costs
1. Personnel		8.701.027	52,34%
2. Travel and subsistence		336.867	2,03%
3. External assistance		5.396.277	32,46%
4. Durable goods			
Infrastructure	200.000	200.000	1,20%
Equipment	295.728	232.728	1,78%
Prototype		0	0,00%
5. Land purchase / long-term lease		0	0,00%
6. Consumables		502.513	3,02%
8. Other Costs		197.479	1,19%
9. Overheads		1.058.548	6,37%
TOTAL	16.688.439	16.625.439	100%

Contribution breakdown	In euro	% of TOTAL	% total eligible costs
Requested European Union contribution	9.974.624	59,77%	60,00%
Coordinating Beneficiary's contribution	797.500	4,78%	
Associated Beneficiaries' contribution	5.916.315	35,45%	
Co-financers contribution	0	0,00%	
TOTAL	16.688.439	100,00%	

Action number A1	Name of action		Breakdo									
		1. Personnel	2. Travel and	3. External	for Actions in E 4.a Infrastructure	4.b Equipment	4.c Prototype	5. Purchase	6. Consumables	7. Other costs	8. Overheads	TOTAL
A2	Emissions data set System for the environmental	56.154	3.020	0	0	0			0	0		59.174
	of the AQ plans	117.689	4.222	14.450	0	0			0	667		137.028
А3	Preliminary assessment of the Air Quality Plans	53.906	1.777	35.000	0	0			0	0		90.683
A 4	Network of special stations for the monitoring of the Plan's environmental effects: definition of the network and of the protocols for measuring	81.101	3.195	0	0	0			0	0		84.296
C1	Implementing the data sharing infrastructure and the AQ model	266.476	8.489	258.417	0	56.000			0	0		589.382
C2	Tool for improved emission inventory on Po basin and emission data warehouse	39.521	0	50.000	0	0			0	0		89.521
СЗ	Implementing the Integrated Assessment Model (RIAT+)	215.860	9.060	162.634	0	3.000			0	1.821		392.375
C4	Promoting an ammonia low- emission application of fertilizers based on urea in agriculture	173.185	5.821	156.923	0	0			0	4.900		340.829
C5	Implementation of a common model for evaluation of gaseous emissions and odour resulting from the intensive rearing of cattle, pigs and poultry	158.990	4.533	173.763	0	0			0	4.900		342.186
C6	Training and specialist training for installers and designers of domestic byomass systems	153.808	5.386	200.069	0	0			3.250	5.667		368.180
С7	Enhancement of the role of "qualified chimney sweep" for the control and mantinance of biomass domestic systems	169.898	5.880	210.832	0	7.500			6.250	16.000		416.360
С8	Analysis of the logistics of consumption and supply of woody biomass		7.046	78.760	0	0			0	2.000		288.343
C9	Actions promoting cycling mobility	653.653	18.096	535.793	200.000	10.000			127.363	750		1.545.655
C10	Demonstrative action on conversion propulsion system from diesel to electric	54.709	4.600	374.337	0	0			0	0		433.646
C11	Rationalization of short-range freight logistics in urban and extra/peri-urban areas	196.812	13.200	166.700	0	17.000			10.500	0		404.212
C12	Development of ICT tools for public tranport users	119.852	8.300	151.000	0	0			0	0		279.152
C13	Actions in support of electric mobility	217.149	7.390	162.500	0	0			10.800	0		397.839
C14 C15	Training on Eco-driving Training and support services to industries aimed at improving energy efficiency	255 521	3.000	120.014 189.527	0	0			3.000 1.500	4.000		165.746 454.540
C16	Near Zero Energy Buildings Support to local authorities for	142.283	5.810	222.819	0	0			2.500	25.500		398.913
C17	energy saving initiatives in public buildings and for the enhancement of GPP	439.903	7.316	238.013	0	2.950			28.172	16.250		732.605
D1	Periodical collection of the measures already planned for the environmental reporting of the measures' implementation through the environmental accountability system	80.114	95	28.903	0	0			5.821	1.000		115.933
D2	Periodic update of emission data	126.167	572	25.000	0	0			0	0		151.739
D3	Residential wood consumption estimation in the Po Valley	84.393	0	174.000	0	0			0	0		258.393
D4	Traffic flow estimation in the Po Valley	97.318	0	258.400	0	0			0	0		355.718
D5	Regular assessment (monthly/yearly) of the air quality	684.737	9.191	431.986	0	36.600			0	1.115		1.163.629
D6	quality improvement plans	617.594	12.158	60.940	0	160.628			198.000	8.427		1.057.747
E1	Information and awarness raising activities	174.414	15.462	281.500	0	0			26.250	14.931		512.557
E2	Development of communication actions in support to single actions	189.383	15.617	132.223	0	0			22.946	25.000		385.169
E3	Communication on the use of biomass	99.123	8.281	119.351	0	0			4.603	0		231.358
E4	Population awareness raising on electric vehicles (regional Electric Mobility Day)	158.948	1.500	103.822	0	0			36.558	1.409		302.237
E5	Creation of multimedia informative and educational materials on air quality issue	164.102	3.400	62.830	0	0			8.500	7.000		245.832
E6	Networking with other projects Administrative and financial	38.436	6.333	0	0	0			0	580		45.348
F1 F2	management of the project Indipendent auditing	2.333.598	133.455 0	215.771	0	2.050			6.500	2.498 50.066		2.693.873 50.066
F3	Establishing the governance permanent platform	45.962	667	0	0	0			0	3.000		49.629
	Overheads TOTAL	8.701.027	336.867	5.396.277	200.000		0	0	502.513	0 197.479	1.058.548 1.058.548	1.058.548 16.688.439 235

FORM FC Proposal acronym: LIFE-IP PREPAIR

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	Budget 2° am										
	Coordinating Beneficiary's contribution										
Country code	Country code ficiar Beneficiary short name contribution in euro Total costs of the actions in euro Total costs of the actions in euro Country code ficiar beneficiary short name contribution in euro Amount of EC contribution requested in euro										
IT	1	RER	1.981.000		797.500	1.183.500					

Associated Ber	neficia	ries' contribution			
Country code	Bene ficiar y n°	Beneficiary short name	Total costs of the actions in euro	Associated beneficiary's own contribution in euro	Amount of EC contribution requested in euro
IT	2	VENETO REGION	1.162.031	464.812	697.219
IT	3	LOMBARDY REGION	492.698	197.079	295.619
IT	4	PIEDMONT REGION	1.746.974	698.789	1.048.185
IT	5	RAFVG	860.274	344.110	516.164
IT	6	PROVINCE OF TRENTO	1.170.618	472.747	697.871
IT	7	ARPAE	1.534.492	613.797	920.695
IT	8	ARPAV	668.072	278.899	389.173
IT	9	ARPA PIEMONTE	1.197.753	491.102	706.651
IT	10	ARPA LOMB	1.361.533	544.613	816.920
IT	11	ARPA VDA	240.845	96.338	144.507
IT	12	ARPA FVG	240.845	96.338	144.507
SI	13	ARSO	479.906	192.632	287.274
IT	14	сово	814.154	325.662	488.492
IT	15	MILAN	488.961	195.584	293.377
IT	16	CDT	546.306	223.022	323.284
IT	17	ARTER	1.007.532	403.013	604.519
IT	18	FLA	694.445	277.778	416.667
			14.707.439	5.916.315	8.791.124

Co-financers contribution	
Co-financer's name	Amount of co-financing in euro
TOTAL	0

Seneticiary short name Action number			Proposal acronym: LIFE-II Dire	ct Personnel costs			
Seneticiary short name Action number			Coloulation	-<	I A	Ь	AVD
RER	Description of the description	Action					A X B Total Direct
RER C19 NOM Anothonous Staff Junior experts 160,00 19 3.5 RER C11 Additional Staff Torthonous assistants 175,00 281 45.7 RER C11 NOW Additional Staff Junior experts 160,00 61 9.5 RER C12 Additional Staff Technical assistants 175,00 214 37.7 RER C12 Additional Staff Junior experts 1215,00 66 10.0 RER C12 ANOM Additional Staff Junior experts 215,00 66 10.0 RER C12 ANOM Additional Staff Junior experts 215,00 20 13.0 RER C15 ANOM Additional Staff Junior experts 150,00 22 13.0 RER C15 ANOM Additional Staff Junior experts 150,00 20 18. RER C15 ANOM Additional Staff Junior experts 230,00 18 3.4 RER C17 ANOM			··		•		
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RER							3.020
Coling							45.736
EER C12 Additional Staff Forthinal assistants 175,00 214 377. EER C12 N.ON Additional Staff Senior experts 150,00 63 10.5 EER C13 N.ON Additional Staff Senior experts 150,00 73 11.7 EER C14 N.ON Additional Staff Junior experts 160,00 22 3.1 EER C15 N.ON Additional Staff Total Control assistants 175,00 9 1.6 EER C15 N.ON Additional Staff Junior experts 160,00 22 3.3 EER C15 N.ON Additional Staff Junior experts 160,00 20 3.3 EER C15 N.ON Additional Staff Senior experts 120,00 18 3.3 EER C17 N.ON Additional Staff Total Control 175,00 33 14.4 EER C17 N.ON Additional Staff Senior experts 120,00 19.3 14.2 EER C4							9.800 13.514
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RER C15 NON Additional Staff Senior experts 230,00 82 18. RER C16 NON Additional Staff Fenior experts 200,00 18 3.3. RER C17 Additional Staff Technical assistants 175,00 83 14. RER C17 NON Additional Staff Junior experts 1160,00 32 5. RER C17 NON Additional Staff Junior experts 115,00 197 199 19. RER C4 Additional Staff Senior experts 175,00 190 19. 18. 19. 19. 19. 19. 19. </td <td>RER</td> <td>C15</td> <td>Additional Staff</td> <td>Technical assistants</td> <td>175,00</td> <td>9</td> <td>1.560</td>	RER	C15	Additional Staff	Technical assistants	175,00	9	1.560
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RER E2 NON Additional Staff Project manager 210,00 2 4 RER E2 NON Additional Staff Senior experts 200,00 7 1.4 RER E3 NON Additional Staff Senior experts 200,00 24 4.8 RER E5 Additional Staff Technical assistants 175,00 17 3.0 RER E5 NON Additional Staff Technical assistants 175,00 30 6.0 RER E6 NON Additional Staff Project manager 210,00 8 1.7 RER E6 NON Additional Staff Senior experts 170,00 5 8 RER F1 Additional Staff Technical assistants 175,00 278 48.6 RER F1 NON Additional Staff Project manager 210,00 870 182.6 RER F1 NON Additional Staff Project manager 210,00 870 182.6 RER F3 NON Additional Sta	RER						850
RER E2 NON Additional Staff Senior experts 200,00 7 1.4 RER E3 NON Additional Staff Senior experts 200,00 24 4.8 RER E5 Additional Staff Technical assistants 175,00 17 3.0 RER E6 NON Additional Staff Senior experts 200,00 30 6.0 RER E6 NON Additional Staff Senior experts 170,00 8 1.7 RER E6 NON Additional Staff Senior experts 170,00 5 8 RER E6 NON Additional Staff Senior experts 170,00 5 8 RER F1 NON Additional Staff Administrative assistants 175,00 278 48.6 RER F1 NON Additional Staff Project manager 210,00 997 119.5 RER F1 NON Additional Staff Head of Unit / Supervisor 505,00 6 3.0 RER F3 NON Additio				<u> </u>			720 420
RER E3 NON Additional Staff Senior experts 200,00 24 4.8			•				1.430
RER	RER						
RER E6 NON Additional Staff Project manager 210,00 8 1.7 RER E6 NON Additional Staff Senior experts 170,00 5 28 RER F1 Additional Staff Technical assistants 175,00 278 48.6 RER F1 NON Additional Staff Administrative assistants 120,00 997 119.5 RER F1 NON Additional Staff Project manager 210,00 870 182.6 RER F3 NON Additional Staff Head of Unit / Supervisor 505,00 6 33.6 RER F3 NON Additional Staff Head of Unit / Supervisor 505,00 6 3.6 VENETO REGION A2 NON Additional Staff Head of Unit / Supervisor 520,00 3 1.5 VENETO REGION C10 NON Additional Staff Technical assistants 120,00 236 28.3 VENETO REGION C11 NON Additional Staff Technical assistants 120,00 46 7.6 <td>RER</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3.000</td>	RER						3.000
RER E6 NON Additional Staff Project manager 210,00 8 1.7 RER E6 NON Additional Staff Senior experts 170,00 5 28 RER F1 Additional Staff Technical assistants 175,00 278 48.6 RER F1 NON Additional Staff Administrative assistants 120,00 997 119.5 RER F1 NON Additional Staff Project manager 210,00 870 182.6 RER F3 NON Additional Staff Head of Unit / Supervisor 505,00 6 33.6 RER F3 NON Additional Staff Head of Unit / Supervisor 505,00 6 3.6 VENETO REGION A2 NON Additional Staff Head of Unit / Supervisor 520,00 3 1.5 VENETO REGION C10 NON Additional Staff Technical assistants 120,00 236 28.3 VENETO REGION C11 NON Additional Staff Technical assistants 120,00 46 7.6 <td>RER</td> <td>E5</td> <td>NON Additional Staff</td> <td>Senior experts</td> <td>200,00</td> <td>30</td> <td>6.060</td>	RER	E5	NON Additional Staff	Senior experts	200,00	30	6.060
RER	RER						1.700
RER	RER	E6	NON Additional Staff	Senior experts	170,00	5	850
RER	RER	F1	Additional Staff	Technical assistants	175,00	278	48.600
RER F3 NON Additional Staff Head of Unit / Supervisor 505,00 6 3.0	RER						119.590
RER F3 NON Additional Staff Project manager 210,00 25 5.1	RER						182.600
VENETO REGION							3.000 5.160
VENETO REGION	VENETO REGION						1.560
VENETO REGION C10 NON Additional Staff Senior experts 170,00 24 4.0 VENETO REGION C11 Additional Staff Technical assistants 120,00 236 28.3 VENETO REGION C11 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C11 NON Additional Staff Senior experts 170,00 45 7.6 VENETO REGION C12 Additional Staff Technical assistants 120,00 178 21.3 VENETO REGION C12 NON Additional Staff Senior experts 170,00 83 14.1 VENETO REGION C13 Additional Staff Senior experts 170,00 111 13.3 VENETO REGION C13 NON Additional Staff Senior experts 170,00 113 19.1 VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.5 VENETO REGION C15 NON Additional Staff Senior experts 170,00 36 </td <td>VENETO REGION</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3.400</td>	VENETO REGION						3.400
VENETO REGION C11 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C11 NON Additional Staff Senior experts 170,00 45 7.6 VENETO REGION C12 Additional Staff Technical assistants 120,00 178 21.3 VENETO REGION C12 NON Additional Staff Senior experts 170,00 83 14.1 VENETO REGION C13 Additional Staff Technical assistants 120,00 111 13.3 VENETO REGION C13 NON Additional Staff Senior experts 170,00 113 19.1 VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.5 VENETO REGION C15 NON Additional Staff Senior experts 170,00 36 2.6 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 <th< td=""><td>VENETO REGION</td><td>C10</td><td></td><td></td><td>170,00</td><td>24</td><td>4.080</td></th<>	VENETO REGION	C10			170,00	24	4.080
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VENETO REGION C12 Additional Staff Technical assistants 120,00 178 21.3 VENETO REGION C12 NON Additional Staff Senior experts 170,00 83 14.1 VENETO REGION C13 Additional Staff Technical assistants 120,00 111 13.3 VENETO REGION C13 NON Additional Staff Senior experts 170,00 113 19.1 VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.5 VENETO REGION C15 NON Additional Staff Senior experts 170,00 5 2.6 VENETO REGION C16 Additional Staff Senior experts 170,00 262 44.5 VENETO REGION C16 Additional Staff Senior experts 170,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132	VENETO REGION						2.600
VENETO REGION C12 NON Additional Staff Senior experts 170,00 83 14.1 VENETO REGION C13 Additional Staff Technical assistants 120,00 111 13.3 VENETO REGION C13 NON Additional Staff Senior experts 170,00 113 19.1 VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.5 VENETO REGION C15 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C15 NON Additional Staff Senior experts 170,00 262 44.5 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Senior experts 170,00 90 10.6 VENETO REGION C17 NON Additional Staff Senior experts 170,00 13	VENETO REGION			<u> </u>			7.650
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VENETO REGION C13 NON Additional Staff Senior experts 170,00 113 19.1 VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.5 VENETO REGION C15 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C15 NON Additional Staff Senior experts 170,00 262 44.6 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C17 Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 NON Additional Staff Senior experts 170,00 90 10.8 VENETO REGION C4 Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 <	VENETO REGION	+		•			14.150
VENETO REGION C14 NON Additional Staff Senior experts 170,00 33 5.8 VENETO REGION C15 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C15 NON Additional Staff Senior experts 170,00 262 44.8 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Senior experts 120,00 90 10.8 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6	VENETO REGION						13.320
VENETO REGION C15 NON Additional Staff Head of Unit / Supervisor 520,00 5 2.6 VENETO REGION C15 NON Additional Staff Senior experts 170,00 262 44.5 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Technical assistants 120,00 90 10.8 VENETO REGION C4 Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6	VENETO REGION						19.190
VENETO REGION C15 NON Additional Staff Senior experts 170,00 262 44.5 VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Technical assistants 120,00 90 10.8 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							5.555 2.600
VENETO REGION C16 Additional Staff Technical assistants 120,00 84 10.0 VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Technical assistants 120,00 90 10.8 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							2.600 44.540
VENETO REGION C16 NON Additional Staff Senior experts 170,00 130 22.1 VENETO REGION C17 Additional Staff Technical assistants 120,00 90 10.8 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6		1		<u> </u>			10.080
VENETO REGION C17 Additional Staff Technical assistants 120,00 90 10.8 VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							22.135
VENETO REGION C17 NON Additional Staff Senior experts 170,00 132 22.3 VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							10.800
VENETO REGION C4 Additional Staff Technical assistants 120,00 245 29.4 VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							22.360
VENETO REGION C4 NON Additional Staff Head of Unit / Supervisor 520,00 7 3.6							22.360
,							3.640
VEREIN DEGLOT 104 UNUN AUGURURA 2000 TORROR TORROR TORROR 1 170 UNIN 1800 170	VENETO REGION VENETO REGION	C4	NON Additional Staff	Senior experts	170,00		

FORM F1		Proposal acronym: LIFE-IP Direct	ct Personnel costs			
		Onlawistian -		1 ^		AVE
	Action	Calculation =		Α	Number of	A X B Total Direct
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate		Personnel costs
VENETO REGION	C5	Additional Staff	Technical assistants	120,00	212	25.440
VENETO REGION	C5	NON Additional Staff	Head of Unit / Supervisor	520,00		2.600
VENETO REGION	C5	NON Additional Staff	Senior experts	170,00		27.200
VENETO REGION	C6	Additional Staff	Technical assistants	120,00		1.320
VENETO REGION	C6	NON Additional Staff	Senior experts	170,00		34.320
VENETO REGION	C7	Additional Staff	Technical assistants	120,00		4.440
VENETO REGION	C7	NON Additional Staff	Senior experts	170,00		33.400
VENETO REGION VENETO REGION	C8 D1	NON Additional Staff NON Additional Staff	Senior experts Senior experts	170,00 170,00		1.000 9.930
VENETO REGION	E1	NON Additional Staff	Senior experts	170,00		1.010
VENETO REGION	E3	NON Additional Staff	Senior experts	170,00		4.040
VENETO REGION	E4	Additional Staff	Technical assistants	120,00	30	3.600
VENETO REGION	E4	NON Additional Staff	Senior experts	170,00	91	15.400
VENETO REGION	E6	Additional Staff	Technical assistants	120,00	12	1.440
VENETO REGION	E6	NON Additional Staff	Technical assistants	120,00	5	550
VENETO REGION	F1	Additional Staff	Administrative assistants	112,50	763	85.810
VENETO REGION	F1	NON Additional Staff	Administrative experts	170,00	359	61.065
VENETO REGION	F1	NON Additional Staff	Head of Unit / Supervisor	520,00		2.600
VENETO REGION	F1	NON Additional Staff	Senior experts	170,00		24.990
VENETO REGION VENETO REGION	F3	NON Additional Staff NON Additional Staff	Administrative experts Head of Unit / Supervisor	170,00 520,00		7.835 2.080
Lombardy Region	A2	NON Additional Staff	Project manager	444,00		1.350
Lombardy Region	A2	NON Additional Staff	Senior experts	238,00		582
Lombardy Region	C13	NON Additional Staff	Junior experts	160,00		4.779
Lombardy Region	C13	NON Additional Staff	Senior experts	238,00		5.813
Lombardy Region Lombardy Region	C16	NON Additional Staff NON Additional Staff	Junior experts Senior experts	160,00 238,00		2.139 2.936
Lombardy Region	C4	NON Additional Staff	Head of Unit / Supervisor	449,00		4.909
Lombardy Region	C4	NON Additional Staff	Senior experts	238,00		10.700
Lombardy Region	C5	NON Additional Staff	Head of Unit / Supervisor	449,00		1.230
Lombardy Region	C5	NON Additional Staff	Senior experts	238,00		4.260
Lombardy Region	C6	NON Additional Staff	Junior experts	160,00 238,00		2.365 2.539
Lombardy Region Lombardy Region	C7	NON Additional Staff NON Additional Staff	Senior experts Junior experts	160,00		3.734
Lombardy Region	C7	NON Additional Staff	Senior experts	238,00		4.174
Lombardy Region	C8	NON Additional Staff	Junior experts	160,00		2.318
Lombardy Region	C8	NON Additional Staff	Project manager	444,00		450
Lombardy Region	C8 C9	NON Additional Staff NON Additional Staff	Senior experts	238,00		3.850
Lombardy Region Lombardy Region	C9	NON Additional Staff	Head of Unit / Supervisor Junior experts	449,00 160,00		11.071 6.919
Lombardy Region	C9	NON Additional Staff	Senior experts	238,00		8.532
Lombardy Region	D1	NON Additional Staff	Project manager	444,00		450
Lombardy Region	D1	NON Additional Staff	Senior experts	238,00		2.892
Lombardy Region	D1	NON Additional Staff	Technical assistants	140,00		2.265
Lombardy Region	E1 E1	NON Additional Staff NON Additional Staff	Administrative assistants Junior experts	137,00 160.00		392 2.925
Lombardy Region Lombardy Region	E1	NON Additional Staff	Project manager	444,00		3.726
Lombardy Region	E1	NON Additional Staff	Senior experts	238,00		3.669
Lombardy Region	E2	NON Additional Staff	Junior experts	160,00	28	4.451
Lombardy Region	E2	NON Additional Staff	Project manager	444,00		3.511
Lombardy Region Lombardy Region	E2 E3	NON Additional Staff NON Additional Staff	Senior experts Junior experts	238,00 160,00		2.363 14.107
Lombardy Region	E3	NON Additional Staff	Project manager	444,00		9.205
Lombardy Region	E3	NON Additional Staff	Senior experts	238,00	45	10.630
Lombardy Region	E5	NON Additional Staff	Junior experts	160,00		3.017
Lombardy Region	E5	NON Additional Staff	Project manager	444,00		1.860
Lombardy Region Lombardy Region	E5 E6	NON Additional Staff NON Additional Staff	Senior experts Project manager	238,00 444,00		1.036 1.164
Lombardy Region	F1	NON Additional Staff	Administrative assistants	137,00		10.579
Lombardy Region	F1	NON Additional Staff	Junior experts	160,00	67	10.772
Lombardy Region	F1	NON Additional Staff	Project manager	444,00		8.919
Lombardy Region	F1	NON Additional Staff	Senior experts	238,00		6.353
Lombardy Region PIEDMONT REGION	F3 A2	NON Additional Staff NON Additional Staff	Junior experts Administrative assistants	160,00 130,00		1.224 462
PIEDMONT REGION	A2 A2	NON Additional Staff NON Additional Staff	Junior experts	130,00		2.955
PIEDMONT REGION	A2	NON Additional Staff	Senior experts	280,00		3.163
PIEDMONT REGION	C10	Additional Staff	Technical assistants	140,45		7.023
PIEDMONT REGION	C10	NON Additional Staff	Administrative assistants	130,00		2.580
	C10	NON Additional Staff	Head of Unit / Supervisor	550,00	22	12.245
PIEDMONT REGION						
PIEDMONT REGION	C10	NON Additional Staff	Junior experts	195,00		6.222
		NON Additional Staff NON Additional Staff Additional Staff	Junior experts Senior experts Technical assistants	195,00 280,00 140,45	52	6.222 14.553 5.605

Proposal acronym: LIFE-IP PREPAIR

		Proposal acronym: LIFE- Dir	ect Personnel costs			
		Calculation	=>	l A	В	AXB
	Action				Number of	Total Direct
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate		Personnel costs
PIEDMONT REGION	C11	NON Additional Staff	Administrative assistants	130,00		1.341
PIEDMONT REGION	C11	NON Additional Staff	Head of Unit / Supervisor	550,00		16.882
PIEDMONT REGION PIEDMONT REGION	C11	NON Additional Staff NON Additional Staff	Junior experts Senior experts	195,00 280,00		6.222 14.796
PIEDMONT REGION	C12	NON Additional Staff	Administrative assistants	130,00		1.195
PIEDMONT REGION	C12	NON Additional Staff	Junior experts	195,00		778
PIEDMONT REGION	C12	NON Additional Staff	Senior experts	280,00		8.674
PIEDMONT REGION	C13	Additional Staff	Technical assistants	140,45	80	11.236
PIEDMONT REGION	C13	NON Additional Staff	Administrative assistants	130,00	17	2.242
PIEDMONT REGION	C13	NON Additional Staff	Head of Unit / Supervisor	550,00		25.177
PIEDMONT REGION	C13	NON Additional Staff	Junior experts	195,00		6.222
PIEDMONT REGION	C13	NON Additional Staff	Senior experts	280,00		26.652
PIEDMONT REGION PIEDMONT REGION	C14	NON Additional Staff NON Additional Staff	Administrative assistants	130,00 195,00		4.595 8.324
PIEDMONT REGION	C14	NON Additional Staff	Junior experts Senior experts	280,00		15.001
PIEDMONT REGION	C15	NON Additional Staff	Administrative assistants	130.00		4.844
PIEDMONT REGION	C15	NON Additional Staff	Head of Unit / Supervisor	550,00		12.624
PIEDMONT REGION	C15	NON Additional Staff	Junior experts	195,00	59	11.472
PIEDMONT REGION	C15	NON Additional Staff	Senior experts	280,00		19.382
PIEDMONT REGION	C16	NON Additional Staff	Administrative assistants	130,00		3.774
PIEDMONT REGION PIEDMONT REGION	C16 C16	NON Additional Staff NON Additional Staff	Head of Unit / Supervisor Junior experts	550,00 195,00		4.422 11.234
PIEDMONT REGION	C16	NON Additional Staff	Senior experts	280,00		23.184
PIEDMONT REGION	C17	NON Additional Staff	Administrative assistants	130,00		5.745
PIEDMONT REGION	C17	NON Additional Staff	Head of Unit / Supervisor	550,00		3.316
PIEDMONT REGION	C17	NON Additional Staff	Junior experts	195,00		19.740
PIEDMONT REGION	C17	NON Additional Staff	Senior experts	280,00		38.885
PIEDMONT REGION	C4 C4	NON Additional Staff	Administrative assistants	130,00 195,00		369 7.875
PIEDMONT REGION PIEDMONT REGION	C4	NON Additional Staff NON Additional Staff	Junior experts Senior experts	280,00		7.550
PIEDMONT REGION	C5	NON Additional Staff	Administrative assistants	130,00		923
PIEDMONT REGION	C5	NON Additional Staff	Junior experts	195,00		11.204
PIEDMONT REGION	C5	NON Additional Staff	Senior experts	280,00		13.049
PIEDMONT REGION	C6	NON Additional Staff	Administrative assistants	130,00		462
PIEDMONT REGION	C6	NON Additional Staff	Junior experts	195,00		778
PIEDMONT REGION PIEDMONT REGION	C6 C7	NON Additional Staff NON Additional Staff	Senior experts Administrative assistants	280,00 130,00		5.640 1.293
PIEDMONT REGION	C7	NON Additional Staff	Junior experts	195,00		3.284
PIEDMONT REGION	C7	NON Additional Staff	Senior experts	280,00		7.524
PIEDMONT REGION	C8	NON Additional Staff	Head of Unit / Supervisor	550,00		7.438
PIEDMONT REGION	C8	NON Additional Staff	Junior experts	195,00		778
PIEDMONT REGION	C8	NON Additional Staff	Senior experts	280,00		5.083
PIEDMONT REGION PIEDMONT REGION	C9 C9	NON Additional Staff NON Additional Staff	Administrative assistants Head of Unit / Supervisor	130,00 550,00		923 16.462
PIEDMONT REGION	C9	NON Additional Staff	Junior experts	195,00		11.666
PIEDMONT REGION	C9	NON Additional Staff	Senior experts	280,00		34.389
PIEDMONT REGION	D1	NON Additional Staff	Administrative assistants	130,00		1.048
PIEDMONT REGION	D1	NON Additional Staff	Junior experts	195,00		1.244
PIEDMONT REGION	D1	NON Additional Staff	Senior experts	280,00		8.986
PIEDMONT REGION PIEDMONT REGION	E1 E1	NON Additional Staff NON Additional Staff	Junior experts Senior experts	195,00 280,00		384 1.115
PIEDMONT REGION PIEDMONT REGION	E2	NON Additional Staff	Administrative assistants	130,00		1.115
PIEDMONT REGION	E2	NON Additional Staff	Junior experts	195,00		1.546
PIEDMONT REGION	E2	NON Additional Staff	Senior experts	280,00		3.967
PIEDMONT REGION	E3	NON Additional Staff	Administrative assistants	130,00		462
PIEDMONT REGION	E3	NON Additional Staff	Junior experts	195,00		2.698
PIEDMONT REGION	E3	NON Additional Staff	Senior experts	280,00		2.852
PIEDMONT REGION	E4	Additional Staff	Technical assistants	140,45		7.023
PIEDMONT REGION	E4	NON Additional Staff	Administrative assistants	130,00		3.335
PIEDMONT REGION PIEDMONT REGION	E4 E4	NON Additional Staff NON Additional Staff	Head of Unit / Supervisor	550,00 195,00		11.307 5.396
PIEDMONT REGION	E4	NON Additional Staff	Junior experts Senior experts	280,00		7.313
PIEDMONT REGION	E5	NON Additional Staff	Junior experts	195,00		7.719
PIEDMONT REGION	E6	NON Additional Staff	Junior experts	195,00		969
PIEDMONT REGION	E6	NON Additional Staff	Senior experts	280,00	4	1.116
PIEDMONT REGION	F1	Additional Staff	Junior experts	150,00	651	97.650
PIEDMONT REGION	F1	Additional Staff	Technical assistants	140,45	250	35.113
PIEDMONT REGION	F1	NON Additional Staff	Administrative assistants	130,00		17.680
PIEDMONT REGION	F1	NON Additional Staff	Administrative experts	229,75		8.731
PIEDMONT REGION	F1	NON Additional Staff	Head of Unit / Supervisor	550,00		22.743
PIEDMONT REGION	F1	NON Additional Staff	Junior experts	195,00		38.374
PIEDMONT REGION	F1	NON Additional Staff	Senior experts	280,00		30.289
PIEDMONT REGION	F3	NON Additional Staff	Administrative assistants	130,00		1.048
PIEDMONT REGION	F3	NON Additional Staff	Head of Unit / Supervisor	550,00	10	5.568

FORM F1		Proposal acronym: LIFE	rect Personnel costs			
	Action	Calculation	n =>	A	Number of	A X B Total Direct
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate		Personnel costs
PIEDMONT REGION	F3	NON Additional Staff	Junior experts	195,00		
PIEDMONT REGION	F3	NON Additional Staff	Senior experts	280,00		5.608
RAFVG	A2	NON Additional Staff	Head of Unit / Supervisor	515,00		1.110
RAFVG RAFVG	A2 C10	NON Additional Staff	Junior experts	155,00		
RAFVG	C10	NON Additional Staff NON Additional Staff	Project manager Project manager	290,00 290,00		2.006 5.397
RAFVG	C12	NON Additional Staff	Project manager	290,00		10.345
RAFVG	C12	NON Additional Staff	Senior experts	200,00		6.400
RAFVG	C13	Additional Staff	Administrative assistants	120,00	25	3.000
RAFVG	C13	Additional Staff	Administrative assistants	150,00	15	2.250
RAFVG	C13	Additional Staff	Technical assistants	150,00	26	3.920
RAFVG	C13	NON Additional Staff	Administrative assistants	150,00		1.930
RAFVG	C13	NON Additional Staff	Head of Unit / Supervisor	515,00		
RAFVG RAFVG	C13	NON Additional Staff NON Additional Staff	Junior experts Project manager	155,00 290,00		18.660 4.960
RAFVG	C13	NON Additional Staff	Senior experts	200,00		2.000
RAFVG	C14	NON Additional Staff	Project manager	290,00		
RAFVG	C15	Additional Staff	Administrative assistants	120,00		9.600
RAFVG	C15	NON Additional Staff	Head of Unit / Supervisor	515,00		15.030
RAFVG	C15	NON Additional Staff	Junior experts	155,00		5.400
RAFVG	C15	NON Additional Staff	Project manager	290,00		3.960
RAFVG RAFVG	C15 C16	NON Additional Staff NON Additional Staff	Senior experts Administrative assistants	200,00 150,00		11.520 2.150
RAFVG	C16	NON Additional Staff	Head of Unit / Supervisor	515,00		
RAFVG	C16	NON Additional Staff	Junior experts	155,00		
RAFVG	C16	NON Additional Staff	Project manager	290,00		2.970
RAFVG	C16	NON Additional Staff	Senior experts	200,00		2.000
RAFVG	C17	Additional Staff	Administrative assistants	120,00	130	15.600
RAFVG	C17	Additional Staff	Technical assistants	150,00	73	11.000
RAFVG	C17	NON Additional Staff	Administrative assistants	150,00	49	7.394
RAFVG	C17	NON Additional Staff	Head of Unit / Supervisor	515,00		4.550
RAFVG	C17	NON Additional Staff	Junior experts	155,00		11.407
RAFVG	C17	NON Additional Staff	Project manager	290,00		13.240
RAFVG RAFVG	C17	NON Additional Staff NON Additional Staff	Senior experts	200,00 150,00		24.137 1.120
RAFVG	C4	NON Additional Staff	Administrative assistants Junior experts	155,00		1.132
RAFVG	C4	NON Additional Staff	Project manager	290,00		
RAFVG	C5	NON Additional Staff	Junior experts	155,00		2.196
RAFVG	C5	NON Additional Staff	Project manager	290,00	2	660
RAFVG	C6	Additional Staff	Administrative assistants	120,00	8	960
RAFVG	C6	Additional Staff	Administrative assistants	150,00	7	1.050
RAFVG	C6	Additional Staff	Technical assistants	150,00	7	1.000
RAFVG	C6	NON Additional Staff	Administrative assistants	150,00	8	1.174
RAFVG	C6	NON Additional Staff	Head of Unit / Supervisor	515,00		
RAFVG	C6	NON Additional Staff	Junior experts	155,00		
RAFVG	C6	NON Additional Staff	Project manager	290,00 200,00		
RAFVG RAFVG	C7	NON Additional Staff Additional Staff	Senior experts Administrative assistants	120,00		
RAFVG	C7	Additional Staff	Administrative assistants	150,00	10	1.500
RAFVG	C7	Additional Staff	Technical assistants	150,00		
RAFVG	C7	NON Additional Staff	Administrative assistants	150.00		
RAFVG	C7	NON Additional Staff	Head of Unit / Supervisor	515,00		
RAFVG	C7	NON Additional Staff	Junior experts	155,00		
RAFVG	C7	NON Additional Staff	Project manager	290,00		
RAFVG	C7	NON Additional Staff	Senior experts	200,00		
RAFVG RAFVG	C8	NON Additional Staff NON Additional Staff	Head of Unit / Supervisor Junior experts	515,00 155,00		1.505 2.580
RAFVG	C8	NON Additional Staff	Senior experts	200,00		
RAFVG	C9	NON Additional Staff	Administrative experts	150,00		
RAFVG	C9	NON Additional Staff	Head of Unit / Supervisor	515,00	4	
RAFVG	C9	NON Additional Staff	Project manager	290,00		
RAFVG	C9	NON Additional Staff	Senior experts	200,00		
RAFVG RAFVG	D1	NON Additional Staff NON Additional Staff	Head of Unit / Supervisor	515,00 155,00		
RAFVG	D1	NON Additional Staff	Junior experts Senior experts	200,00		
RAFVG	E1	NON Additional Staff	Junior experts	155,00		
RAFVG	E1	NON Additional Staff	Project manager	290,00		400
RAFVG	E3	NON Additional Staff	Junior experts	155,00		2.800
RAFVG	E3	NON Additional Staff	Senior experts	200,00		
RAFVG	E4	NON Additional Staff	Administrative assistants	150,00	4	600

		Direct	Personnel costs			
		Calculation =>	·	l A	В	AXB
Panafiaian, about nama	Action				Number of	Total Direct
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate		Personnel costs
RAFVG	E4	NON Additional Staff	Head of Unit / Supervisor	515,00	2	1.215
RAFVG	E4	Additional Staff	Technical assistants	150,00		2.400
RAFVG	E4	NON Additional Staff	Junior experts	155,00		10.875
RAFVG RAFVG	E4 E4	NON Additional Staff NON Additional Staff	Project manager Senior experts	290,00 200,00		1.650 1.500
RAFVG	E5	NON Additional Staff	Junior experts	155.00		1.890
RAFVG	E6	NON Additional Staff	Junior experts	155,00		1.240
RAFVG	E6	NON Additional Staff	Project manager	290,00	2	700
RAFVG	F1	Additional Staff	Administrative assistants	120,00	386	46.333
RAFVG	F1	Additional Staff	Administrative assistants	150,00	50	7.500
RAFVG	F1	Additional Staff	Technical assistants	150,00	88	13.200
RAFVG	F1	NON Additional Staff	Administrative assistants	150,00	49	7.383
RAFVG	F1	NON Additional Staff	Head of Unit / Supervisor	515,00		7.260
RAFVG	F1	NON Additional Staff	Junior experts	155,00		5.118
RAFVG RAFVG	F1 F1	NON Additional Staff NON Additional Staff	Project manager	290,00		11.677 6.200
RAFVG	F3	NON Additional Staff	Senior experts Junior experts	155,00		1.600
RAFVG	F3	NON Additional Staff	Project manager	290,00	6	1.595
PROVINCE OF TRENTO	A1	NON Additional Staff	Technical assistants	200,00		5.000
PROVINCE OF TRENTO	A2	NON Additional Staff	Technical assistants	200,00		4.000
PROVINCE OF TRENTO	A3	NON Additional Staff	Technical assistants	200,00	10	2.000
PROVINCE OF TRENTO	C13	Additional Staff	Administrative assistants	180,00		6.600
PROVINCE OF TRENTO	C13	Additional Staff	Technical assistants	180,00	42	7.560
PROVINCE OF TRENTO	C13	NON Additional Staff	Technical assistants	200,00		3.500
PROVINCE OF TRENTO	C15	Additional Staff	Administrative assistants	180,00	133	23.930
PROVINCE OF TRENTO	C15	Additional Staff	Technical assistants	180,00	189	34.060
PROVINCE OF TRENTO	C15	NON Additional Staff	Technical assistants	200,00	15	3.000
PROVINCE OF TRENTO	C16	Additional Staff	Administrative assistants	180,00	92	16.483
PROVINCE OF TRENTO	C16	Additional Staff	Technical assistants	174,00	97	16.932
PROVINCE OF TRENTO	C16	NON Additional Staff	Technical assistants	200,00	16	3.100
PROVINCE OF TRENTO	C17	Additional Staff	Administrative assistants	180,00	68	12.240
PROVINCE OF TRENTO	C17	Additional Staff	Technical assistants	180,00	182	32.760
PROVINCE OF TRENTO	C17	NON Additional Staff	Project manager	200,00		380
PROVINCE OF TRENTO	C17	NON Additional Staff	Senior experts	200,00	4	820
PROVINCE OF TRENTO	C17	NON Additional Staff	Technical assistants	200,00		11.460
PROVINCE OF TRENTO	C4	NON Additional Staff	Technical assistants	200,00		800
PROVINCE OF TRENTO	C5	Additional Staff	Technical assistants	180,00		180
PROVINCE OF TRENTO	C5	NON Additional Staff	Technical assistants	200,00		1.320
PROVINCE OF TRENTO	C6	Additional Staff	Administrative assistants	180,00	91	16.390
PROVINCE OF TRENTO	C6	Additional Staff	Technical assistants	180,00		20.160
PROVINCE OF TRENTO	C6	NON Additional Staff	Junior experts	200,00		6.000
PROVINCE OF TRENTO PROVINCE OF TRENTO	C6 C6	NON Additional Staff	Project manager Technical assistants	200,00		8.700 5.730
PROVINCE OF TRENTO	C7	NON Additional Staff Additional Staff	Administrative assistants	180,00		17.460
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PROVINCE OF TRENTO	C7	Additional Staff	Technical assistants	180,00		20.700
PROVINCE OF TRENTO PROVINCE OF TRENTO	C7	NON Additional Staff	Junior experts Project manager	200,00		6.040 9.800
PROVINCE OF TRENTO	C7	NON Additional Staff NON Additional Staff	Project manager Technical assistants	200,00		9.800 8.800
PROVINCE OF TRENTO	C8	Additional Staff	Technical assistants	180,00		3.285
PROVINCE OF TRENTO	C8	NON Additional Staff	Project manager	200,00		350
PROVINCE OF TRENTO	C8	NON Additional Staff	Technical assistants	200,00		1.150
PROVINCE OF TRENTO	D1	NON Additional Staff	Senior experts	200,00	13	2.600
PROVINCE OF TRENTO	D1	NON Additional Staff	Technical assistants	200,00		4.900
PROVINCE OF TRENTO PROVINCE OF TRENTO	D2 D2	NON Additional Staff NON Additional Staff	Senior experts Technical assistants	200,00		1.800 3.200
PROVINCE OF TRENTO	D2 D4	NON Additional Staπ Additional Staff	Technical assistants Technical assistants	180,00		2.340
PROVINCE OF TRENTO	E1	Additional Staff	Administrative assistants	180,00		
PROVINCE OF TRENTO	E1	Additional Staff	Technical assistants	180,00		2.460
PROVINCE OF TRENTO	E1	NON Additional Staff	Technical assistants	200,00		3.440
PROVINCE OF TRENTO	E2	Additional Staff	Administrative assistants	180,00	94	17.000
PROVINCE OF TRENTO	E3	Additional Staff	Administrative assistants	180,00	21	3.780
PROVINCE OF TRENTO	E3	Additional Staff	Technical assistants	180,00	47	8.430
PROVINCE OF TRENTO	E3	NON Additional Staff	Junior experts	200,00		200
PROVINCE OF TRENTO	E3	NON Additional Staff	Project manager	200,00	1	260
PROVINCE OF TRENTO	E3	NON Additional Staff	Technical assistants	200,00	10	

		Direct	Personnel costs			
		Calculation =>		Ι Λ	В	AXB
Beneficiary short name	Action	Type of staff	Category/Role in the project	Daily rate	Number of	Total Direct
PROVINCE OF TRENTO	number E4	Additional Staff	Administrative assistants	180,00	person-days 88	Personnel costs 15.760
PROVINCE OF TRENTO	E4	Additional Staff	Technical assistants	180,00	41	7.380
PROVINCE OF TRENTO	E4	NON Additional Staff	Technical assistants	200,00	15	3.060
	E5	Additional Staff	Administrative assistants	180,00	10	1.800
PROVINCE OF TRENTO	E5	Additional Staff	Technical assistants	180,00	17	3.060
PROVINCE OF TRENTO	E5	NON Additional Staff	Project manager	200,00	1	120
PROVINCE OF TRENTO	E6	Additional Staff	Administrative assistants	180,00	3	620
PROVINCE OF TRENTO	E6	Additional Staff	Technical assistants	180,00	6	1.135
PROVINCE OF TRENTO	E6	NON Additional Staff	Technical assistants	200,00	3	525
PROVINCE OF TRENTO	F1	Additional Staff	Administrative assistants	180,00	660	118.850
PROVINCE OF TRENTO	F1	Additional Staff	Technical assistants	180,00	504	90.720
	F1 F1	NON Additional Staff NON Additional Staff	Junior experts Project manager	200,00	20 79	4.000 15.850
PROVINCE OF TRENTO	F1	NON Additional Staff	Technical assistants	200,00	162	32.480
PROVINCE OF TRENTO	F3	Additional Staff	Administrative assistants	180,00	19	3.420
PROVINCE OF TRENTO	F3	Additional Staff	Technical assistants	180,00	18	3.240
PROVINCE OF TRENTO	F3	NON Additional Staff	Junior experts	200,00	8	1.680
PROVINCE OF TRENTO PROVINCE OF TRENTO	F3 F3	NON Additional Staff NON Additional Staff	Project manager Technical assistants	200,00	7	240 1.420
Arpae Arpae	A1	NON Additional Staff	Junior experts	190,00		1.900
Arpae	A1	NON Additional Staff	Project manager	500,00	3	1.500
Arpae	A1	NON Additional Staff	Senior experts	220,00	5	1.100
Arpae Arpae	A2 A2	NON Additional Staff NON Additional Staff	Junior experts Project manager	190,00 500,00	7	1.330 2.000
Arpae	A2	NON Additional Staff	Senior experts	220,00	8	1.670
Arpae	A3	NON Additional Staff	Junior experts	190,00	12	2.360
Arpae Arpae	A3 A3	NON Additional Staff NON Additional Staff	Project manager Senior experts	500,00 220,00	6 12	3.000 2.640
Arpae	A4	NON Additional Staff	Junior experts	190,00	10	1.900
Arpae	A4	NON Additional Staff	Project manager	500,00	4	2.000
Arpae	A4 C1	NON Additional Staff	Senior experts	220,00 190,00	5	1.100
Arpae Arpae	C1	NON Additional Staff NON Additional Staff	Junior experts Project manager	500,00	55 83	10.415 41.450
Arpae	C1	NON Additional Staff	Senior experts	220,00	128	28.050
Arpae	C1	NON Additional Staff	Technical assistants	150,00	81	12.165
Arpae Arpae	C15 C16	NON Additional Staff NON Additional Staff	Junior experts Junior experts	190,00 190,00	1 17	160 3.160
Arpae	C17	NON Additional Staff	Junior experts	190,00	50	9.410
Arpae	C3	NON Additional Staff	Junior experts	190,00		
Arpae Arpae	C3	NON Additional Staff NON Additional Staff	Project manager Senior experts	500,00 220,00		11.700 40.200
Arpae	C5	NON Additional Staff	Project manager	500,00	9	4.678
Arpae	C5	NON Additional Staff	Senior experts	220,00		3.300
Arpae Arpae	D2 D2	NON Additional Staff NON Additional Staff	Junior experts Senior experts	190,00 220,00	11 13	2.170 2.830
Arpae	D5	NON Additional Staff	Head of Unit / Supervisor	550,00		8.250
Arpae	D5	NON Additional Staff	Project manager	500,00		27.900
Arpae Arpae	D5 D5	NON Additional Staff NON Additional Staff	Junior experts Senior experts	190,00 220,00		77.168 101.720
Arpae	D6	NON Additional Staff	Junior experts	190,00	67	12.800
Arpae	D6	NON Additional Staff	Project manager	500,00		12.250
Arpae Arpae	D6 E1	NON Additional Staff NON Additional Staff	Senior experts Senior experts	220,00 220,00	18 11	3.950 2.500
Arpae	E6	NON Additional Staff	Head of Unit / Supervisor	550,00		1.000
Arpae	E6	NON Additional Staff	Project manager	500,00	1	500
Arpae	F1 F1	NON Additional Staff NON Additional Staff	Administrative assistants Administrative experts	150,00 220,00		51.339 35.880
Arpae Arpae	F1	NON Additional Staff	Project manager	500,00		33.120
Arpae	F1	NON Additional Staff	Senior experts	220,00	45	9.900
ARPAV	A1 A2	NON Additional Staff	Senior experts	173,00		3.325
ARPAV ARPAV	A3	NON Additional Staff NON Additional Staff	Senior experts Senior experts	173,00 173,00		16.110 1.730
ARPAV	A4	NON Additional Staff	Senior experts	173,00	7	1.239
ARPAV	C1	NON Additional Staff	Senior experts	173,00		26.073
ARPAV ARPAV	C2 C3	NON Additional Staff NON Additional Staff	Senior experts Senior experts	173,00 173,00	5 38	941 6.496
ARPAV	D2	NON Additional Staff	Senior experts	173,00		5.276
ARPAV	D3	NON Additional Staff	Senior experts	173,00	223	38.500
	D3	NON Additional Staff	Head of Unit / Supervisor	535,00		45.893
ARPAV ARPAV	D5 D6	NON Additional Staff NON Additional Staff	Senior experts Senior experts	173,00 173,00		16.607 20.587

FORM F1		Proposal acronym: LIFE D	irect Personnel costs			
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D C. la	Action	Calculatio		A	Number of	A X B Total Direct
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate	person-days	Personnel costs
ARPAV	E1	NON Additional Staff	Senior experts	173,00	16	2.768
ARPAV ARPAV	E5 E6	NON Additional Staff	Senior experts	173,00 173,00	45 8	7.794 1.384
ARPAV	F1	NON Additional Staff Additional Staff	Senior experts	535,00	37	19.990
ARPAV	F1		Project manager	· ·	93	16.165
ARPAV	F1	NON Additional Staff NON Additional Staff	Administrative experts Head of Unit / Supervisor	173,00 535,00	14	7.504
ARPAV	F1	NON Additional Staff	Project manager	535,00	35	18.938
ARPAV	F1	NON Additional Staff	Senior experts	173,00	207	35.811
ARPA PIEMONTE	A1	Additional Staff	Junior experts	135,00	4	548
ARPA PIEMONTE	A1	NON Additional Staff	Senior experts	184,00	24	4.475
ARPA PIEMONTE	A2	Additional Staff	Junior experts	135,00	370	49.891
ARPA PIEMONTE	A3	NON Additional Staff	Senior experts	184,00	11	1.969
ARPA PIEMONTE	A4	NON Additional Staff	Head of Unit / Supervisor	357,00	19	6.614
ARPA PIEMONTE	A4	NON Additional Staff	Junior experts	156,00	6	888
ARPA PIEMONTE ARPA PIEMONTE	C1	NON Additional Staff	Junior experts	156,00	56 71	8.783
ARPA PIEMONTE	C1	NON Additional Staff NON Additional Staff	Senior experts Technical assistants	184,00 140.00	36	13.121 5.108
ARPA PIEMONTE	C3	Additional Staff	Junior experts	135,00	157	21.151
ARPA PIEMONTE	C3	NON Additional Staff	Head of Unit / Supervisor	357,00	9	3.296
ARPA PIEMONTE	C3	NON Additional Staff	Junior experts	156,00	216	33.691
ARPA PIEMONTE	C3	NON Additional Staff	Senior experts	184,00	161	29.659
ARPA PIEMONTE	C3	NON Additional Staff	Technical assistants	140,00	28	3.925
ARPA PIEMONTE	C5	NON Additional Staff	Senior experts	184,00	11	2.000
ARPA PIEMONTE	D2	NON Additional Staff	Junior experts	156,00	26	4.000
ARPA PIEMONTE	D2	NON Additional Staff	Senior experts	184,00	6	1.074
ARPA PIEMONTE	D4	Additional Staff	Junior experts	135,00	314	42.439
ARPA PIEMONTE	D4	Additional Staff	Technical assistants	114,43	167	19.110
ARPA PIEMONTE	D4	NON Additional Staff	Junior experts	156,00	136	21.258
ARPA PIEMONTE	D4	NON Additional Staff	Senior experts	184,00	60	11.022
ARPA PIEMONTE	D5	Additional Staff	Technical assistants	114,43	696	79.686
ARPA PIEMONTE	D5	NON Additional Staff	Junior experts	156,00	267	41.609
ARPA PIEMONTE ARPA PIEMONTE	D5	NON Additional Staff NON Additional Staff	Senior experts	184,00 140,00	246 25	45.238 3.466
	D6		Technical assistants			
ARPA PIEMONTE ARPA PIEMONTE	D6	Additional Staff	Technical assistants Head of Unit / Supervisor	114,43 357,00	213 11	24.383 3.990
ARPA PIEMONTE	D6	NON Additional Staff NON Additional Staff	Junior experts	156,00	204	31.801
ARPA PIEMONTE	D6	NON Additional Staff	Head of Unit / Supervisor	357,00	6	2.316
ARPA PIEMONTE	E1	NON Additional Staff	Head of Unit / Supervisor	357,00	2	718
ARPA PIEMONTE	E1	NON Additional Staff	Junior experts	156,00	4	627
ARPA PIEMONTE	E1	NON Additional Staff	Technical assistants	140,00		
ARPA PIEMONTE ARPA PIEMONTE	E5	NON Additional Staff NON Additional Staff	Junior experts	156,00 184,00		50.877
ARPA PIEMONTE	E6	NON Additional Staff	Senior experts Senior experts	184,00	50 4	9.123 716
ARPA PIEMONTE	E6	NON Additional Staff	Technical assistants	140,00		1.300
ARPA PIEMONTE	F1	NON Additional Staff	Administrative assistants	142,34		46.727
ARPA PIEMONTE	F1	NON Additional Staff	Head of Unit / Supervisor	357,00		45.658
ARPA PIEMONTE	F1	NON Additional Staff	Senior experts	184,00		48.106
ARPA LOMB ARPA LOMB	A1 A1	NON Additional Staff NON Additional Staff	Project manager Senior experts	400,00 170,00		4.800 10.700
ARPA LOMB	A2	NON Additional Staff	Senior experts Senior experts	170,00		70.700
ARPA LOMB	A3	NON Additional Staff	Senior experts	170,00	12	2.000
ARPA LOMB	A4	Additional Staff	Technical assistants	160,00	69	11.015
ARPA LOMB	A4	NON Additional Staff	Project manager	400,00		18.000
ARPA LOMB	A4	NON Additional Staff	Senior experts	170,00		3.000
ARPA LOMB	C1	Additional Staff	Technical assistants	160,00	31	4.968
ARPA LOMB	C1	NON Additional Staff	Project manager	400,00	5	2.000
ARPA LOMB	C1	NON Additional Staff	Senior experts	170,00		3.000
ARPA LOMB	C2	Additional Staff	Technical assistants	160,00		24.840
ARPA LOMB	C2	NON Additional Staff	Project manager	400,00		4.800
ARPA LOMB	C2	NON Additional Staff	Senior experts	170,00		8.940
ARPA LOMB ARPA LOMB	C3	NON Additional Staff NON Additional Staff	Project manager Senior experts	400,00 170,00		800 1.760
ARPA LOMB	D2	Additional Staff	Technical assistants	160,00	409	65.416
ARPA LOMB	D2	NON Additional Staff		400,00		8.000
ARPA LOMB	D2	NON Additional Staff	Project manager Senior experts	170,00		9.800
ARPA LOMB	D5	Additional Staff	Technical assistants	160,00		84.660
ARPA LOMB	D5	NON Additional Staff	Project manager	400,00		7.200
ARPA LOMB	D5	NON Additional Staff	Senior experts	170,00		9.523
ARPA LOMB	D6	Additional Staff	Technical assistants	160,00		240.609
ARPA LOMB	D6	NON Additional Staff	Project manager	400,00		89.983
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		Proposal acronym: LIFE	rect Personnel costs			
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	Action	Calculation		A	Number of	A X E
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate	person-days	
ARPA LOMB	D6	NON Additional Staff	Senior experts	170,00	671	114.016
ARPA LOMB	E1	NON Additional Staff	Project manager	400,00		
ARPA LOMB ARPA LOMB	E3	NON Additional Staff	Project manager	400,00		13.000
ARPA LOMB	F1	NON Additional Staff NON Additional Staff	Project manager Project manager	400,00		103.400
ARPA LOMB	F1	NON Additional Staff	Senior experts	170,00		58.600
ARPA VDA	A1	Additional Staff	Technical expert	200,00	26	5.130
ARPA VDA	A1	NON Additional Staff	Technical expert	171,00		3.420
ARPA VDA	A3	Additional Staff	Technical expert	200,00	21	4.27
ARPA VDA	A3	NON Additional Staff	Technical expert	171,00	15	2.56
ARPA VDA	A4	Additional Staff	Technical expert	200,00	68	13.680
ARPA VDA	A4	NON Additional Staff	Technical expert	171,00	20	3.420
ARPA VDA	C1	NON Additional Staff	Technical expert	171,00		17.100
ARPA VDA	C3	NON Additional Staff	Technical expert	171,00		17.100
ARPA VDA	C6	Additional Staff	Technical expert	200,00		5.600
ARPA VDA	D2	NON Additional Staff	Technical expert	171,00		9.40
ARPA VDA	D5	NON Additional Staff	Technical expert	171,00		10.260
ARPA VDA	D6	Additional Staff	Technical expert	200,00		32.953
ARPA VDA	D6	NON Additional Staff	Technical expert	171,00		5.197
ARPA VDA	E1	Additional Staff	Technical expert	200,00		2.47
ARPA VDA	E1	NON Additional Staff	Technical expert	171,00		684
ARPA VDA	E6	Additional Staff	Technical expert	200,00		2.300
ARPA VDA	E6	NON Additional Staff	Technical expert	171,00		
ARPA VDA	F1	Additional Staff	Technical expert	200,00		14.310
ARPA VDA	F1	NON Additional Staff	Project manager	360,00		13.505
ARPA FVG	A1	Additional Staff	Junior experts	170,00		7.948
ARPA FVG ARPA FVG	A1 A3	NON Additional Staff NON Additional Staff	Senior experts Senior experts	150,00 150,00		1.200 6.000
ARPA FVG	A4	Additional Staff	Junior experts	170,00		7.948
ARPA FVG	A4	NON Additional Staff	Senior experts	150,00		5.250
ARPA FVG	C1	NON Additional Staff	Senior experts	150,00		9.000
ARPA FVG	C3	NON Additional Staff	Senior experts	150,00		1.950
ARPA FVG	D2	NON Additional Staff	Senior experts	162,77	39	6.300
ARPA FVG	D5	NON Additional Staff	Senior experts	169,16		
ARPA FVG ARPA FVG	D6 E1	NON Additional Staff NON Additional Staff	Senior experts Senior experts	162,77 162,77		13.800 3.750
ARPA FVG	E6	NON Additional Staff	Senior experts	162,77	18	3.000
ARPA FVG	F1	NON Additional Staff	Project manager	354,32		21.539
ARSO	A1	Additional Staff	Senior experts	127,70	40	5.108
ARSO	A3	Additional Staff	Junior experts	112,00	146	16.346
ARSO	A3	Additional Staff	Senior experts	127,70		9.02
	A4					
ARSO		Additional Staff	Senior experts	127,70		
ARSO	C1	Additional Staff	Junior experts	112,00		71.227
ARSO	C1	Additional Staff	Senior experts	130,00	92	12.016
ARSO	C3	Additional Staff	Junior experts	112,00	129	14.502
ARSO	C8	Additional Staff	Junior experts	112,00	41	4.597
ARSO	D2	Additional Staff	Junior experts	112,00		2.299
ARSO	D2	Additional Staff	·	132,00		
			Senior experts			
ARSO	D4	Additional Staff	Junior experts	112,00		
ARSO	D5	Additional Staff	Junior experts	112,00		104.901
ARSO	D5	Additional Staff	Senior experts	132,00	478	63.148
ARSO	D6	Additional Staff	Senior experts	132,00	68	8.959
ARSO	E1	Additional Staff	Junior experts	148,00	1	148
ARSO	E1	Additional Staff	Senior experts	131,00		8.429
			·			
ARSO	E6	Additional Staff	Senior experts	130,00		
ARSO	F1	Additional Staff	Senior experts	131,00		
COBO	C11	NON Additional Staff	Project manager	322,32		
COBO	C11	NON Additional Staff	Senior experts	395,75		
COBO COBO	C17	NON Additional Staff	Technical assistants	152,95		
	C17	Additional Staff	Technical assistants	152,95		
COBO COBO	C17	NON Additional Staff NON Additional Staff	Administrative experts Project manager	325,35 322,32		9.733
COBO	C17	NON Additional Staff	Technical assistants	152,95		
COBO	C9	NON Additional Staff	Project manager	322,32		

Direct Personnel costs								
		Calculation =>		l A	В	AXB		
Beneficiary short name	Action	Type of staff	Category/Role in the project	Daily rate	Number of	Total Direct		
СОВО	number C9	NON Additional Staff	Senior experts	395,75		Personnel costs 32.353		
COBO	C9	NON Additional Staff	Technical assistants	152,95		64.938		
СОВО	E1	NON Additional Staff	Administrative assistants	147,55		1.778		
СОВО	E1	NON Additional Staff	Project manager	322,32	4	1.216		
COBO	E1	NON Additional Staff	Senior experts	395,75		1.070		
COBO COBO	E1 E4	NON Additional Staff NON Additional Staff	Technical assistants Project manager	152,95 322,32	2 19	313 6.153		
СОВО	E4	NON Additional Staff	Senior experts	395,75		3.519		
СОВО	E4	NON Additional Staff	Technical assistants	152,95		19.072		
СОВО	F1	Additional Staff	Project manager	322,32	17	5.416		
СОВО	F1	NON Additional Staff	Administrative experts	325,35	83	27.060		
СОВО	F1	NON Additional Staff	Head of Unit / Supervisor	524,30	8	4.194		
СОВО	F1	NON Additional Staff	Project manager	322,32	106	34.112		
COBO	F1 F1	NON Additional Staff	Senior experts	395,75		7.563		
COBO	+	NON Additional Staff	Technical assistants	152,95		35.099		
Milan	C9	Additional Staff	Senior experts	290,00		110.200		
Milan Milan	C9	NON Additional Staff NON Additional Staff	Junior experts Head of Unit / Supervisor	187,00 500,00		25.440 9.000		
Milan	C9	NON Additional Staff	Junior experts	125,00		11.250		
Milan	C9	NON Additional Staff	Senior experts	235,00		23.000		
Milan	C9	NON Additional Staff	Junior experts	170,00		40.140		
Milan	E1	NON Additional Staff	Junior experts	118,00	15	1.770		
Milan	E1	NON Additional Staff	Senior experts	200,00		800		
Milan	E1	NON Additional Staff	Junior experts	120,00	30	3.600		
Milan Milan	E1 E2	NON Additional Staff NON Additional Staff	Senior experts Junior experts	240,00 118,00		2.400 2.950		
Milan	E2	NON Additional Staff	Junior experts	120,00		4.800		
Milan	E4	NON Additional Staff	Junior experts	175,00		9.750		
Milan	E4	NON Additional Staff	Senior experts	233,33	50	11.640		
Milan	E6	NON Additional Staff	Junior experts	118,00		2.470		
Milan	E6	NON Additional Staff	Senior experts	240,00		960		
Milan	E6 F1	NON Additional Staff	Senior experts	220,00	10 57	2.280		
Milan Milan	F1	NON Additional Staff NON Additional Staff	Junior experts Senior experts	159,00 240,00		9.060 1.920		
Milan	F1	NON Additional Staff	Head of Unit / Supervisor	350,00		2.450		
Milan	F1	NON Additional Staff	Junior experts	120,00		6.000		
CDT	C10	NON Additional Staff	Project manager	180,00		1.440		
CDT	C10	NON Additional Staff	Senior experts	140,00		1.540		
CDT	C11	NON Additional Staff	Head of Unit / Supervisor	430,00		1.720		
CDT	C11	NON Additional Staff NON Additional Staff	Project manager Senior experts	250,00 178,00		1.000 27.280		
CDT	C9	NON Additional Staff	Head of Unit / Supervisor	430,00		9.030		
CDT	C9	NON Additional Staff	Project manager	222,00		30.390		
CDT	C9	NON Additional Staff	Senior experts	150,00		57.600		
CDT	E1	NON Additional Staff	Project manager	180,00		540		
CDT	E1	NON Additional Staff	Senior experts	153,33		1.460		
CDT	E4 E4	NON Additional Staff	Head of Unit / Supervisor	430,00 250.00		860 500		
CDT	E4	NON Additional Staff NON Additional Staff	Project manager Senior experts	160,00		9.640		
CDT	E6	NON Additional Staff	Project manager	160,00		860		
CDT	E6	NON Additional Staff	Senior experts	166,67	7	1.140		
CDT	F1	Additional Staff	Administrative assistants	170,00	434	73.780		
CDT	F1	Additional Staff	Project manager	170,00		51.000		
CDT	F1	NON Additional Staff	Administrative assistants	187,50		2.210		
CDT	F1	NON Additional Staff	Head of Unit / Supervisor	430,00	4	1.720		
CDT	F1	NON Additional Staff	Project manager	250,00	3	750		
CDT	F1	NON Additional Staff	Senior experts	180,00		540		
ARTER	A2	Additional Staff	Junior experts	160,00		9.920		
ARTER	A2	Additional Staff	Senior experts	256,00		6.656		
ARTER	A2	NON Additional Staff	Project manager	389,00		3.501		
ARTER	C1	Additional Staff	Technical assistants	182,00		2.000		
ARTER	C17	Additional Staff	Junior experts	155,91	96	14.989		
ARTER	C17	Additional Staff	Senior experts	318,59		23.553		
ARTER	C17	Additional Staff	Technical assistants	182,00		4.633		
ARTER	C17	NON Additional Staff	Project manager	340,54		25.768		
ARTER	C17	NON Additional Staff	Senior experts	404,56		10.115		
ARTER	C17	NON Additional Staff	Technical assistants	219,43		11.749 1.328		
ARTER	D1	Additional Staff	Junior experts	160,00				
ARTER	D1	Additional Staff	Senior experts	219,00		4.121		
ARTER	D1	Additional Staff	Technical assistants	182,00	24	4.324		

FORM F1		Proposal acronym: LIFE Di	rect Personnel costs			
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	Action	Calculation		A	Number of	A X B
Beneficiary short name	number	Type of staff	Category/Role in the project	Daily rate	person-days	
ARTER	D1	NON Additional Staff	Project manager	342,79		
ARTER ARTER	D1	NON Additional Staff NON Additional Staff	Senior experts Technical assistants	266,56 232,40		7.197 2.846
ARTER	E1	Additional Staff	Junior experts	153,86		
			·	<u> </u>		
ARTER	E1	Additional Staff	Senior experts	256,00	38	
ARTER	E1	Additional Staff	Technical assistants	160,00		
ARTER	E1	NON Additional Staff	Project manager	325,89		34.945
ARTER ARTER	E1	NON Additional Staff NON Additional Staff	Senior experts Technical assistants	404,56 223,49		6.473 18.008
ARTER	E2	Additional Staff	Junior experts	155,91	378	
	E2		·	<u> </u>		
ARTER		Additional Staff	Senior experts	256,00		
ARTER ARTER	E2 E2	NON Additional Staff NON Additional Staff	Project manager Senior experts	325,89 266,56		
ARTER	E6	Additional Staff	Junior experts	151,07	9	
			· ·	· ·		
ARTER	E6	Additional Staff	Senior experts	256,00	1	256
ARTER	E6	NON Additional Staff	Project manager	342,79		412
ARTER	F1	Additional Staff	Junior experts	160,00		
ARTER	F1	Additional Staff	Senior experts	256,00		
ARTER	F1	NON Additional Staff	Administrative assistants	231,23	96	
ARTER ARTER	F1	NON Additional Staff NON Additional Staff	Administrative experts Head of Unit / Supervisor	395,77 454,30	46 80	
ARTER	F1	NON Additional Staff	Project manager	294,33		
ARTER	F1	NON Additional Staff	Senior experts	266,56		
ARTER	F1	NON Additional Staff	Technical assistants	389,00	50	19.450
FLA	C13	Additional Staff	Junior experts	252,00	22	5.544
FLA	C13	Additional Staff	Senior experts	400,00	20	8.000
FLA	C13	NON Additional Staff	Administrative assistants	140,00		
FLA	C13	NON Additional Staff	Administrative experts	262,00		
FLA	C13	NON Additional Staff	Head of Unit / Supervisor	680,00		
FLA	C13	NON Additional Staff	Project manager	395,00		
FLA FLA	C6	NON Additional Staff	Technical assistants	136,00		408 2.770
		Additional Staff	Junior experts	252,00		
FLA	C6	Additional Staff	Senior experts	400,00		
FLA	C6	NON Additional Staff	Administrative assistants	140,00 262,00		
FLA FLA	C6	NON Additional Staff NON Additional Staff	Administrative experts Head of Unit / Supervisor	680,00		
FLA	C6	NON Additional Staff	Project manager	395,00		
FLA	C6	NON Additional Staff	Technical assistants	136,00		
FLA	C7	Additional Staff	Junior experts	252,00	11	2.770
FLA	C7	Additional Staff	Senior experts	400,00	2	800
FLA	C7	NON Additional Staff	Administrative assistants	140,00		
FLA	C7	NON Additional Staff	Administrative experts	262,00		
FLA	C7	NON Additional Staff	Head of Unit / Supervisor	680,00		
FLA	C7	NON Additional Staff	Project manager	395,00		
FLA FLA	C7	NON Additional Staff Additional Staff	Technical assistants	136,00		
			Junior experts	252,00		
FLA	C8	Additional Staff	Senior experts	400,00		
FLA FLA	C8	NON Additional Staff	Administrative assistants Administrative experts	140,00 262,00		
FLA	C8	NON Additional Staff NON Additional Staff	Head of Unit / Supervisor	680,00		
FLA	C8	NON Additional Staff	Project manager	395,00		
FLA	C8	NON Additional Staff	Technical assistants	136,00		
FLA	C9	Additional Staff	Junior experts	252,00	26	6.512
FLA	C9	Additional Staff	Senior experts	400,00	26	10.563
FLA	C9	NON Additional Staff	Administrative assistants	140,00		
FLA	C9	NON Additional Staff	Administrative experts	262,00	13	3.528
FLA	C9	NON Additional Staff	Head of Unit / Supervisor	680,00		
FLA	C9	NON Additional Staff	Project manager	395,00		
FLA		NON Additional Staff	Technical assistants	136,00		
FLA	E1	Additional Staff	Junior experts	252,00		
FLA	E1	Additional Staff	Senior experts	400,00		400
FLA	E1	NON Additional Staff	Technical assistants	136,00		
FLA	E2	Additional Staff	Junior experts	252,00		
FLA	E2	Additional Staff	Senior experts	400,00		
FLA	E2	NON Additional Staff	Administrative assistants	140,00		
FLA	E2	NON Additional Staff	Administrative experts	262,00	31	7.992

LIFE 2015 Integrated Projects - Financial Forms

FORM F1

		Direct	Personnel costs			
		Calculation =>		l A	В	AXB
Beneficiary short name	Action number	Type of staff	Category/Role in the project	Daily rate	Number of	Total Direct Personnel costs
FLA	E2	NON Additional Staff	Head of Unit / Supervisor	680,00	4	2.692
FLA	E2	NON Additional Staff	Project manager	395,00	9	3.752
FLA	E2	NON Additional Staff	Technical assistants	136,00	9	1.233
FLA	E3	Additional Staff	Junior experts	252,00	16	4.032
FLA	E3	Additional Staff	Senior experts	400,00	8	3.200
FLA	E3	NON Additional Staff	Administrative assistants	140,00	4	552
FLA	E3	NON Additional Staff	Administrative experts	262,00	15	3.868
FLA	E3	NON Additional Staff	Head of Unit / Supervisor	680,00	3	2.024
FLA	E3	NON Additional Staff	Project manager	395,00	11	4.418
FLA	E3	NON Additional Staff	Technical assistants	136,00	2	274
FLA	E5	Additional Staff	Junior experts	252,00	36	9.192
FLA	E5	Additional Staff	Senior experts	400,00	20	8.000
FLA	E5	NON Additional Staff	Administrative assistants	140,00	53	7.362
FLA	E5	NON Additional Staff	Administrative experts	262,00	61	15.868
FLA	E5	NON Additional Staff	Head of Unit / Supervisor	680,00	12	8.161
FLA	E5	NON Additional Staff	Project manager	395,00	40	15.844
FLA	E5	NON Additional Staff	Technical assistants	136,00	17	2.318
FLA	E6	NON Additional Staff	Administrative assistants	140,00	1	142
FLA	E6	NON Additional Staff	Project manager	395,00	1	405
FLA	E6	NON Additional Staff	Technical assistants	136,00	15	2.036
FLA	F1	Additional Staff	Junior experts	252,00	22	5.544
FLA	F1	Additional Staff	Senior experts	400,00	3	1.200
FLA	F1	NON Additional Staff	Administrative assistants	140,00	16	2.285
FLA	F1	NON Additional Staff	Administrative experts	262,00	59	15.466
FLA	F1	NON Additional Staff	Head of Unit / Supervisor	680,00	28	19.029
FLA	F1	NON Additional Staff	Project manager	395,00	33	13.122
FLA	F1	NON Additional Staff	Technical assistants	136,00	14	1.883
TOTAL =>						8.701.027

FORM F2		Ter	Proposal acronym: LIFE-IP PREPAIR			
		Ira	evel and subsistence costs			
	Г		Calculation =>	A	В	A + B Total travel
Beneficiary short name	Action number	Destination (From / To)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	and subsistence costs
RER	A2	BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO-BOLOGNA	PARTNERS MEETING FOR THE IMPLEMENTATION OF THE ACTION AND MEASURE DATASET/2 TRAVELS/2 PERSONS/1 DAY	600	400	1.000
RER	C10	BOLOGNA/TORINO-TORINO/BOLOGNA	PAERTICIPATION TO THE STAKEHOLDER CONSULTATION	1.000	500	1.500
RER	C10	Venezia / Trento / Lubjana / Trento / Torino	project meeting PARTNERS MEETING FOR THE IMPLEMENTATION OF	1.000		1.000
RER	C11	BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO- BOLOGNA	THE ACTION AND MEASURE DATASET/4 TRAVELS/3 PERSONS/1 DAY	3.500	1.500	5.000
RER	C12	BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO- BOLOGNA	PARTNERS MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	1.400	600	2.000
RER RER	C12 C13	Venezia / Trento / Lubjana / Trento / Torino BOLOGNA/TORINO-TORINO/BOLOGNA	project meeting PAERTICIPATION TO THE STAKEHOLDER CONSULTATION AND PLANNING OF TRAINING	2.000 750	750	2.000 1.500
RER	C13	Venezia / Trento / Lubjana / Trento / Torino	SESSIONS project meeting	1.000		1.000
RER	C14	BOLOGNA/TORINO-TORINO/BOLOGNA	PLANNING OF TRAINING SESSIONS	250	250	500
RER RER	C14 C15	Venezia / Trento / Lubjana / Trento / Torino BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO-BOLOGNA	project meeting PARTNERS MEETING FOR THE IMPLEMENTATION OF THE ACTION AND MEASURE DATASET/4 TRAVELS/3 PERSONS/1 DAY	1.400	600	500 2.000
RER	C16	BOLOGNA/TRENTO – TRENTO/BOLOGNA	PRELIMINARY MEETINGS FOR ORGANIZATION OF	350	140	490
RER	C16	BOLOGNA-MILANO-TRENTO-TORINO	TRAINING COURSES MEETINGS FOR MONITORING TRAINING COURSES	210	0	210
RER	C16	Venezia / Trento / Lubjana / Trento / Torino	project meeting PARTNERS MEETING FOR THE IMPLEMENTATION OF	210		210
RER	C17	BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO- BOLOGNA BOLOGNA-MILANO-TORINO-VENEZIA-TRENTO-	THE ACTION AND MEASURE DATASET/4 TRAVELS/3 PERSONS/1 DAY MEETINGS FOR THE IMPLMENTATION AND	800	200	1.000
RER	C17	BOLOGNA	MONITORING OF THE ACTION	800	200	1.000
RER	C4	BOLOGNA-REGGIO EMILIA/PARMA/MODENA/PIACENZA-BOLOGNA	STUDY VISITS/4 TRAVELS/4 PERSONS/1 DAY	1.800	200	2.000
RER	C5	BOLOGNA-REGGIO EMILIA/PARMA/MODENA/PIACENZA-BOLOGNA	STUDY VISITS/4 TRAVELS/4 PERSONS/1 DAY	1.800	200	2.000
RER	C6	BOLOGNA/TRENTO – TRENTO/BOLOGNA	PRELIMINARY MEETINGS FOR ORGANIZATION OF TRAINING COURSES	100	40	140
RER	C6	Venezia / Trento / Lubjana / Trento / Torino	project meeting	70		70
RER	C7	BOLOGNA/TRENTO – TRENTO/BOLOGNA	PRELIMINARY MEETINGS FOR ORGANIZATION OF TRAINING COURSES	270	80	350
RER	C7	Venezia / Trento / Lubjana / Trento / Torino BOLOGNA/MILAN	project meeting	70		70
RER	C8	MILAN/BOLOGNA BOLOGNA/MILAN	MEETINGS TO REALIZE ACTIVITIES	320	80	400
RER	C8	MILAN/BOLOGNA	PRELIMINARY MEETINGS TO DEFINE ACTIVITIES	480	120	600
RER	C8	Venezia / Trento / Lubjana / Trento / Torino BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO-	project meeting PARTNERS MEETING FOR THE IMPLEMENTATION OF	400		400
RER RER	C9 C9	BOLOGNA Venezia / Trento / Lubiana / Trento / Torino	THE ACTION AND MEASURE DATASET/4 TRAVELS/3 PERSONS/1 DAY project meeting	2.000	2.000	4.000 2.000
RER	E2	Bologna - Bruxelles	final conference	5.000		5.000
RER	E3	BOLOGNA - MILAN MILAN/BOLOGNA	MEETING FOR THE DEFINITION OF THE CONTENTS OF TRAINING PACKAGE	400	100	500
RER	E3	BOLOGNA-MILANO-TRENTO-TORINO	MEETINGS FOR THE DEFINITION OF THE CONTENTS OF THE CAMPAIGN	200	0	200
RER	E3	Venezia / Trento / Lubjana / Trento / Torino	project meeting MEETINGS FOR EDUCATIONAL PATHS AND TOOLS	200		200
RER	E5	BOLOGNA/MILAN-MILAN/BOLOGNA	DEVELOPMENT MEETINGS FOR EDUCATIONAL PATHS AND TOOLS	320	80	400
RER	E5	BOLOGNA-MILANO-TRENTO-TORINO	DEVELOPMENT	400	200	600
RER RER	E5 F1	Venezia / Trento / Lubjana / Trento / Torino BOLOGNA-BRUXELLES	project meeting MEETING WITH CERTIFYING CONTRACTING	1.000	500	600 1.500
RER	F1	BRUXELLES-BOLOGNA BOLOGNA-MILANO/TORINO/VENEZIA/TRENTO-	AUTHORITY/1 TRAVEL/4 PERSONS/1 DAY PROJECT MANAGEMENT MEETINGS/2 TRAVELS/4	600	400	1.000
		BOLOGNA BOLOGNA-MILANO-TORINO-VENEZIA-TRENTO-	PERSONS/1 DAY			
RER RER	F1 F1	BOLOGNA Venezia / Trento / Lubjana / Trento / Torino	PROJECT MANAGEMENT MEETINGS project meeting	2.000	600	1.500 2.000
VENETO REGION	A2	PROJECT AREA:Venezia- Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS	2.000	300	900
VENETO REGION	C10	PROJECT AREA: Venezia- Torino	TRAVEL FOR THE DEMONSTRATIVE ACTIONS/3 TRIPS/2 PERSONS/1 DAY	200	300	500
VENETO REGION	C11	PROJECT AREA: VENEZIA - BOLOGNA/MILANO/TORINO/TRENTO	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS/1 DAY	600	400	1.000
VENETO REGION	C12	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	1.000	0	1.000
VENETO REGION	C13	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	400	0	400
VENETO REGION	C13	PROJECT AREA: Venezia- Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS/1 DAY	150	150	300
VENETO REGION	C15	PROJECT AREA: VENEZIA - BOLOGNA/MILANO/TORINO/TRENTO	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/4 TRIPS/4 PERSONS/1 DAY	250	250	500
VENETO REGION	C16	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	700	0	700
VENETO REGION	C16	PROJECT AREA: Venezia - Trento	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/4 TRIPS/4 PERSONS/1 DAY	250	250	500
VENETO REGION	C17	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE	300	0	300
	C17	PROJECT AREA: VENEZIA -	ACTION MEETINGS FOR THE IMPLEMENTATION OF THE	200		400
LILIONEGION	3	BOLOGNA/MILANO/TORINO/TRENTO	ACTION/2 TRIPS/2 PERSONS/1 DAY	200	200	400

FORM F2		Teo	Proposal acronym: LIFE-IP PREPAIR rvel and subsistence costs			
		IIa				A + D
Beneficiary short name	Action number	Destination (From / To)	Calculation => Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	A + B Total travel and subsistence
VENETO REGION	C4	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	300	0	costs 300
VENETO REGION	C4	PROJECT AREA:Venezia- Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS	600	400	1.000
VENETO REGION	C5	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	300	0	300
VENETO REGION	C5	PROJECT AREA:Venezia- Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS	600	400	1.000
VENETO REGION	C6	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	300	0	300
VENETO REGION	C7	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	1.000	0	1.000
VENETO REGION	E3	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE	700	0	700
VENETO REGION	E3	PROJECT AREA Venezia-	ACTION MEETINGS FOR THE IMPLEMENTATION OF THE	100	200	300
VENETO REGION	E4	Padova/Treviso/Verona/Vicenza/Belluno/Rovigo PROJECT AREA	ACTION/2 TRIPS/2 PERSONS/1 DAY MEETINGS FOR THE IMPLEMENTATION OF THE	700	0	700
VENETO REGION	E4	PROJECT AREA: Venezia - Padova/Verona	ACTION MEETINGS FOR THE IMPLEMENTATION OF THE	100	200	300
VENETO REGION		PROJECT AREA	ACTION/2 TRIPS/2 PERSONS/1 DAY MANAGEMENT MEETINGS/3 TRIPS/2 PERSONS/2	800	400	1.200
VENETO REGION	F1	PROJECT AREA	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION	3.100	0	3.100
VENETO REGION	F1	PROJECT AREA: Venice- Bologna/trento Torino	MANAGEMENT MEETINGS/3 TRIPS/2 PERSONS/2 MEETING WITH CERTIFYING CONTRACTING	800	400	1.200
VENETO REGION	F1	VENEZIA-BRUXELLES	AUTHORITY/1 TRIP/1 PERSONS/1 DAY Coordinating the misures of the action A2/3 trips/2	600	400	1.000
Lombardy Region	A2	FROM MILAN TO BOLOGNA/VENEZIA/TORINO FROM MILAN TO	persons/1 day for each travel	180	0	180
, ,	C4	BRESCIA/CREMONA/MANTOVA	Visiting farms where "best practices" developed in the action C4 are implemented.	1.063	160	1.223
Lombardy Region Lombardy Region	C5 C6	FROM MILAN TO BOLOGNA FROM MILAN TO TRENTO	Meeting to discuss bat- tool C5 trip to Trento for supporting action's coordinator in	128 200	10 300	138 500
, ,	C7	FROM MILAN TO TRENTO	implementation's activities trip to Trento for supporting action's coordinator in	200	300	500
Lombardy Region		FROM MILAN TO	implementation's activities going to the cities where training is proposed/4 trips/4	433	109	542
, ,		BERGAMO/BRESCIA/CREMONA/COMO FROM MILAN TO	persons travelling, one days for each travel trip to the 7 Cities where training is proposed/7 trips/3	433	109	542
Lombardy Region	C9	MONZA/LECCO/COMO/SONDRIO/LODI/CREMON A/BERGAMO	people travelling, one days for each travel	202	122	324
Lombardy Region Lombardy Region		FROM MILAN TO BOLOGNA FROM MILAN TO BOLOGNA	project Conference/1 person/1 day project Conference/2 persons/1 day	134 532	146 110	279 642
Lombardy Region		FROM MILAN TO TORINO/BOLOGNA	Trip from Milan to Bologna and Torino for participation to Project Public Conferences.	800	362	1.162
Lombardy Region	E2	FROM MILAN TO BOLOGNA/TRENTO/VENEZIA	Trip from Milan to Bologna, Trento and Venezia, for organization and participation at thematic conferences for results dissemitaion related some single actions (C4,C5, C16, C17, D3).	490	750	1.240
Lombardy Region	E3	FROM MILAN TO COMO/LECCO/VARESE	meeting to three cities (Varese, Como, Lecco) with ARPA Lombardia in order to to inform people about how to properly use biomass for energy/one person for one day for each trip.	46	97	143
Lombardy Region	E3	FROM MILAN TO LECCO/PAVIA	meeting to three cities (Milano, Lecco and Pavia) with ARPA Lombardia in order to to inform people about how to properly use biomass for energy/one person for one day for each trip.	176	45	221
Lombardy Region	F1	FROM MILAN TO BOLOGNA/BOLOGNA/	project meeting (6 trips and 2 people travelling for each trip/2 day for each trip)	590	639	1.229
Lombardy Region	F1	FROM MILAN TO BOLOGNA/TRIESTE/LUBIANA	Trip from Milan to Bologna, Trieste and Lubiana, in order to participate Project meetings.	1.698	2.000	3.698
Lombardy Region	F1	FROM MILAN TO BOLOGNA/VENEZIA/TRENTO	project meeting (3 trips and 2 persons travelling for each trip/1 day for each trip)	2.207	175	2.382
Lombardy Region	F3	FROM MILAN TO BOLOGNA	Meeting between the beneficiaries in order to manage the governance infrastructure.	400	267	667
PIEDMONT REGION	A2	Turin/Bologna	Action meeting/4 trips and 2 persons, duration: 1 day each	141	219	360
PIEDMONT REGION	C10	different cities in Piedmont	Action implementation/2 trip and 2 person, duration: 1 day	400	200	600
PIEDMONT REGION	C11	Bologna/1 city in Piedmont	Action meeting/2 trip and 2 persons, duration: 2 day + action implementation/1 trip, 2 persons, duration: 1 day	700	500	1.200
PIEDMONT	C12	Bologna	Action meeting/4 trip and 3 persons, duration: 1 day duration: 2 day	1.200	600	1.800
PIEDMONT	C13	Trento/Trieste/Venezia/different cities in Piedmont	Action implementation/3 trip and 3 persons, duration: 2 day + action implementation/4-5 trips, 3 persons, duration:	2.000	1.400	3.400
REGION PIEDMONT	C14	different cities in Piedmont	1 day Action implementation/4 trip and 2 person, duration: 1 day,	650	350	1.000
REGION PIEDMONT	C15	different cities in Piedmont and project area	duration: 1 day Action meeting and action implementation – 2 trips and 2	400	200	600
REGION PIEDMONT	C16	different cities in Piedmont	persons, duration: 1 day Action implementation – training course/6 trip and 1	400	200	600
REGION PIEDMONT			persons, duration: 1 day Action meeting and action implementation – 2 trips and 2			
REGION PIEDMONT	C16	different cities in Piedmont	persons, duration: 1 day	400	200	600
REGION PIEDMONT	C17	Turin/Bologna	Action meeting/4 trips and 2 persons, duration: 1 day each	400	170	570
REGION PIEDMONT	C6	2x Bologna	Action meeting/ 2 trips and 2 persons, duration 1 day Action implementation / 1 trip and 2 persons, duration 1	400	200	600
REGION	C7	2xRoma	day; 1 trip and 2 persons, duration 2 day	600	360	960

FORM F2		Total	Proposal acronym: LIFE-IP PREPAIR avel and subsistence costs			
		112	Calculation =>	Α	В	A + B
Beneficiary short name	Action number	Destination (From / To)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	Total travel and subsistence costs
PIEDMONT REGION	C9	Turin/Bologna	Action meeting/6 trips and 3 persons, duration: 1 day each	1200	0	1.200
PIEDMONT REGION	D1	Bologna	Action meeting - 1 trip and 1 person, duration: 1 day	95	0	95
PIEDMONT	E1	different cities in project area	Middle term conference/other disseminations events - 1	452	0	452
REGION PIEDMONT	E1	different cities in the project area	trip x 5 persons, duration: 1 day Dissemination events/1 trip for 6 persons, duration: 1 day	650	350	1.000
REGION PIEDMONT	E1	Turin/Bologna	Project Conference/1 trip and 2 persons, duration: 1 or 2	640	300	940
REGION PIEDMONT	E2	differente cities in project area	days Action implementation (story telling video) /1 trip 2 person,	1.700	1.780	3.480
REGION PIEDMONT	E5	different cities in Piedmont	duration: 1 day + 2 trip 2 person, duration: 2 days Action implementation - 5/6 trips for 1/2 persons,	150	100	250
REGION PIEDMONT REGION	E5	different cities in Piedmont	Duration: 1 day Action implementation - test in schools and implementation in schools of educational paths - 10/15 trips for 1/2	270	238	508
PIEDMONT	E5	Turin/Milano	persons. Duration: 1 day Action meeting/2 trip and 1 person, duration: 1 day	250	50	300
REGION PIEDMONT	E6	Verona	Networking Meetings during "Progetto Fuoco" Exhibition -	450	1.750	2.200
REGION PIEDMONT			1 trip/3 person, duration 3/4 days Networking Meetings Networking Meetings during			
REGION	E6	Verona	"Progetto Fuoco" Exhibition - 1 trip/3 person, duration 3/4 days	335	1.340	1.675
PIEDMONT REGION	F1	2xMilan/2xBologna	Project Meetings-Monitoring visits/4 trips and 4/5 persons, duration: 3 days	1.372	912	2.284
PIEDMONT REGION	F1	Ljubljana and other italian cities of the project area	Project Meetings-Monitoring visits/6trips and 5/6 persons, duration: 2-3 days	6.000	4.674	10.674
PIEDMONT REGION	F1	Turin/Bologna/Venezia/Milano	Project Meeting-Project Conference-Thematic Conference/4 trips and 2 persons, duration: 1 or 2 days	3.200	3.255	6.455
RAFVG	A2	PROJECT AREA/Trieste-Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS	135	0	135
RAFVG	C10	PROJECT AREA/Trieste-Torino	TRAVEL FOR THE DEMONSTRATIVE ACTIONS/2 TRIPS/2 PERSONS/1 DAY	600	400	1.000
RAFVG	C11	PROJECT AREA/Trieste- Bologna/Torino/Trento, Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	300	200	500
RAFVG	C11	PROJECT AREA/Trieste-Torino	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/1 PERSONS	300	200	500
RAFVG	C12	PROJECT AREA/Trieste- Bologna/Torino/Trento, Venezia, Lubijana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	300	200	500
RAFVG	C12	(vuoto) PROJECT AREA/Trieste-	(vuoto) MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	1.000		1.000
RAFVG	C13	Bologna/Torino/Trento,Venezia , Lubjiana PROJECT AREA/Trieste-	DAYS MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	390	200	590
RAFVG	C14	Bologna/Torino/Trento,Venezia , Lubjiana	DAYS MEETINGS FOR THE IMPLEMENTATION OF THE	300	200	500
RAFVG	C14	PROJECT AREA/Trieste-Torino	ACTION/2 TRIPS/1 PERSONS MEETINGS FOR THE IMPLEMENTATION OF THE	300	200	500
RAFVG	C15	PROJECT AREA/Trieste-Trento PROJECT AREA/Trieste-	ACTION/2 TRIPS/2 PERSONS MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	600	292	892
RAFVG	C16	Bologna/Torino/Trento, Venezia , Lubjiana	DAYS MEETINGS/0 TRIFS/2 PERSONS/2 DAYS MEETINGS FOR THE IMPLEMENTATION OF THE	300	200	500
RAFVG	C16	PROJECT AREA/Trieste	ACTION/2 TRIPS/1 PERSONS MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	300	200	500
RAFVG	C17	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	DAYS	950	400	1.350
RAFVG	C17	PROJECT AREA/Trieste-Trento	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS	256	0	256
RAFVG	C4	PROJECT AREA/Trieste-Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/1 PERSONS	300	133	433
RAFVG	C6	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	360	150	510
RAFVG	C6	PROJECT AREA/Trieste-Milano	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/1 PERSONS	266	0	266
RAFVG	C7	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	350	150	500
RAFVG	C8	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	350	150	500
RAFVG	C9	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	300	200	500
RAFVG	C9	PROJECT AREA/Trieste- Bologna/Torino/Trento/Venezia/Ljubljana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	1.050	200	1.250
RAFVG	C9	PROJECT AREA/Trieste-Torino	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/1 PERSONS	700	300	1.000
RAFVG	E3	PROJECT AREA/Trieste-Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/2 PERSONS/1 DAY	17	0	17
RAFVG	E3	PROJECT AREA/Trieste- Bologna/Torino/Trento,Venezia , Lubjiana	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 DAYS	200	200	400
RAFVG	E4	PROJECT AREA/Trieste-Bologna	MEETINGS FOR THE IMPLEMENTATION OF THE ACTION/2 TRIPS/1 PERSONS	350	150	500
RAFVG	F1	PROJECT AREA/Trieste-Bologna/Torino/Trento PROJECT AREA/Trieste-	MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2 MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	1.800	703	2.503
RAFVG	F1	Bologna/Torino/Trento/Bruxelles PROJECT AREA/Trieste-	DAYS MANAGEMENT MEETINGS/6 TRIPS/2 PERSONS/2	1.800	1.200	3.000
RAFVG	F1	Bologna/Torino/Trento/Venezia / Lubjiana/ Bruxelles		1.650	0	1.650
RAFVG PROVINCE OF	F1	TRIESTE-BRUXELLES	AUTHORITY/1 TRIP/1 PERSONS/1 DAY TECHNICAL COORDINATION MEETINGS WITH	600	400	1.000
TRENTO PROVINCE OF	A1	TRENTO-PROJECT AREA	ACTION'S COORDINATOR AND PROJECT PARTNERS. TECHNICAL COORDINATION MEETINGS WITH	350	150	500
TRENTO	A2	TRENTO-PROJECT AREA	ACTION'S COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	150	50 250	200

FORM F2		Tr	Proposal acronym: LIFE-IP PREPAIR avel and subsistence costs			
		•	Calculation =>	Α	В	A + B
•	Action number	Destination (From / To)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	Total travel and subsistence costs
PROVINCE OF TRENTO	C13	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	200	0	200
PROVINCE OF TRENTO	C16	TRENTO-EUROPE	PILLAR ACTIVITIES PRESENTATION AT INTERNATIONAL CONFERENCES	67	183	250
PROVINCE OF TRENTO	C16	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	500	750	1.250
PROVINCE OF TRENTO	C17	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	1.100	900	2.000
PROVINCE OF TRENTO	C4	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	500	300	800
PROVINCE OF TRENTO	C5	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	560	440	1.000
PROVINCE OF TRENTO	C6	TRENTO-PROJECT AREA	MEETINGS FOR ORGANIZATION AND MONITORING OF TRAINING COURSES, MEETINGS WITH STAKEHOLDERS	800	1.766	2.566
PROVINCE OF TRENTO	C6	TRENTO-PROJECT AREA	PRELIMINARY MEETINGS FOR ORGANIZATION OF TRAINING COURSES.	78	356	434
PROVINCE OF TRENTO	C7	TRENTO-PROJECT AREA	MEETINGS FOR ORGANIZATION AND MONITORING OF TRAINING COURSES, MEETINGS WITH STAKEHOLDERS, VISITS TO EXCHANGE GOOD PRACTICE	600	1.900	2.500
PROVINCE OF TRENTO	E1	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	1.620	2.180	3.800
PROVINCE OF TRENTO	E3	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	400	100	500
PROVINCE OF TRENTO	E3	TRENTO-PROJECT AREA	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS AND LOCAL DISSEMINATION EVENTS	1.700	400	2.100
PROVINCE OF TRENTO	E6	TRENTO-EUROPE	NETWORKING WITH OTHER EUROPEAN PROJECTS	450	250	700
PROVINCE OF TRENTO	F1	TRENTO-BOLOGNA	KICK-OFF MEETING AND OTHER PROJECT MANAGEMENT MEETINGS	2.700	1.800	4.500
PROVINCE OF TRENTO	F1	TRENTO-BOLOGNA	PROJECT MANAGEMENT MEETINGS	2.100	2.600	4.700
Arpae	A2	Project Area - From Bologna to other partners premises (to be defined)	Meetings within partners involved for action development/5 trips/2 persons travelling/5 days	38	0	38
Arpae	A3	Europe (country to be defined) - from Bologna IT to destination to be defined.	Participation to national and/or European meetings about AQ assessment and related topics (i.e. Copernicus, FairMode, other meetings / 1 trip / 2 persons)travelling/2	1.400	377	1.777
Arpae	A4	Project Area From Bologna to other partners premises (to be defined)	days Meetings within partners involved for action development/3 trips/2 persons travelling/4 days	333	0	333
Arpae	C1	Europe (country to be defined) - From Bologna to destination to be defined.	Participation to national and/or European meetings about AQ assessment and related topics (i.e. Copernicus, FairMode, other meetings / 1 trip / 2 persons)travelling/2	693	0	693
Arpae	C1	Europe (country to be defined) - From Bologna to destination to be defined.	days Participation to national and/or European meetings about AQ assessment and related topics (i.e. Copernicus, FairMode, other meetings /2 trip / 2 persons)travelling/2	800	200	1.000
Arpae	C1	Project Area - From Bologna to other partners	days Meetings within partners involved for action development/3	520	537	1.057
Arpae	C17	premises (to be defined) Project Area - from Bologna to other cities in Italy (Trieste, Venezia, Milano, Torino + other cities in	trips/3 persons travelling/2 or 3 days Meetings within partners involved for action development/5 trips/1 person travelling/6 days	140	0	140
Arpae	C3	Northern Italy) Italy (place to be defined) - From Bologna to Ispra	meetings with the EU-JRC and OPERA partners owner of	1.300	323	1.623
Arpae	C3	(Va), Milan, Turin Project Area - From Bologna to other partners	RIAT+ (travel to Ispra (Va), Milan, Turin, Bologna) Meetings within partners involved for action development/2	352	0	352
Arpae	C5	Project Area - From Bologna to other partners	trip /3 persons travelling/2 days Meeting with partners involved for action development/1	87	9	95
Arpae	D5	premises (Torino) Europe (country to be defined) - From Bologna to destination to be defined.	trip /1 persons travelling/1 days Participation to national and/or European meetings about AQ assessment and related topics (i.e. Copernicus, FairMode, other meetings /4 trip / 2 persons)travelling/2 days	4.000	2.500	6.500
Arpae	D5	Project Area - from Bologna to other cities in Italy (Trieste, Venezia, Milano, Torino + other cities in Northern Italy)	Meetings within partners involved for action development/5 trips/2 person travelling/5 days	1.000	574	1.574
Arpae	D6	Project Area - from Bologna to other cities in Italy (Venezia, Milano, Torino + other cities in Northern Italy)	Meetings within partners involved for action development/2 trip/1 person travelling/1 day	241	475	716
Arpae	F1	Project Area - from Bologna to other cities in Italy (Trieste, Venezia, Milano, Torino + other cities in Northern Italy)	Meetings within partners involved for action development/5 trips/3 persons travelling/6 days	3.842	2.320	6.162
ARPAV	A1	Venice/Milan	Action meeting: coordination meetings in order to homogenized emission inventories/2 trips and 2 persons, duration: 1 day each	440	80	520
ARPAV	A4	Venice/Milan	Action meeting coordination meetings in order to set up special monitoring station/3 trips and 2 persons, duration: 1 day each	660	120	780
ARPAV	C1	Venice to Bologna or other cities in the project area	project meetings , 2 trips, 4 persons, 1 day Action meeting coordinatin meetings in order to set and	200	60	260
ARPAV	C1	Venice/Bologna	homogeneized dispersion modelling/2 trips and 3 persons, duration: 1 day each	240	120	360
ARPAV ARPAV	D6 D6	Venice to Bologna or other cities in the project area Venice to Bologna/Trento/MILAN	Action meeting, 1 trip, 2 persons, 1 day Project meeting and montor visits, 3 trips, 4 persons, 1 or	100 350	30 150	130 500
ARPAV	D6	Venice/Milan	2 days Action meeting in order to verify actions impact/1 trip and	110	20	130
ARPAV	E1	Venice to Bologna or other cities in the project area	1 person, duration: 1 day Actins meeting, 2 trips, 2 persons, 1 day	250	25100	350

FORM F2		Teo	Proposal acronym: LIFE-IP PREPAIR vel and subsistence costs			
		110	Calculation =>	Α	В	A+B
Beneficiary short name	Action number	Destination (From / To)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	Total travel and subsistence
ARPAV	E1	Venice to Bologna/Trento/MILAN	Project meeting and montor visits, 3 trips, 4 persons, 1 or 2 days	350	150	costs 500
	E1	Venice/Bologna	Project Conference/1 trip and 3 persons, duration: 1 day	120	60	180
ARPAV	E2	Venice to Bologna or other cities in the project area	Action meetings, 1 trips, 1 person, 1 day	150	50	200
ARPAV	E2	Venice to Bologna/Trento/MILAN	Project meeting and montor visits, 3 trips, 4 persons, 1 or 2 days Dissemination Conference on the project topics/3 trips and	350	150	500
ARPAV	E2	Venice to Milan/Trento/Turin	2 persons, duration: 1 or 2 days depending on the destination	520	290	810
ARPAV	E6	Venice to Bologna or other cities in the project area	project meetings, 3 trips, 4 persons, 1 or 2 days	300	125	425
ARPAV	F1	Venice to Bologna or other cities in the project area	Project meeting and montor visits, 3 trips, 4 persons, 1 or 2 days	200	50	250
ARPAV	F1	Venice to Bologna/Trento/MILAN	Project meeting and montor visits, 3 trips, 4 persons, 1 or 2 days	350	150	500
ARPAV	F1	Venice to Bologna/Trento/Turin	Project Meetings: Kick off meeting and management meetings/4 trips and 2 persons, duration: 1 or 2 days depending on the destination	600	370	970
ARPA PIEMONTE		Turin/Milan	Action meeting/1 trips and 2 persons, duration: 1 day	109	0	109
ARPA PIEMONTE		Turin/Milan	Action meeting/4 trips and 3 persons, duration: 1 day each	250	0	250
ARPA PIEMONTE ARPA PIEMONTE		Turin/Bologna PROJECT AREA	Action meeting/2 trips and 3 persons, duration: 1 day each	300 1.252	200 400	500 1.652
ARPA PIEMONTE		Turin/Milan	Action meeting/6 trips and 5 persons, duration: 1 day each Action meeting/1 trip and 2 persons, duration: 1 day	50	16	1.652
ARPA PIEMONTE	D2	PROJECT AREA	Action meeting/1 trip and 1 person	62	11	72
ARPA PIEMONTE		Turin/Milan	Action meeting/3 trips and 2 persons, duration: 1 day each	500	0	500
ARPA PIEMONTE ARPA PIEMONTE		Turin/Milan PROJECT AREA	Action meeting/2 trips and 2 persons, duration: 1 day each	320	180	500
AKPA PIEMONTE	E5	PROJECT AREA	Action meeting/2 trips and 2 persons, duration: 1 day each Project Meeting-Project Conference-Thematic	193	169	362
ARPA PIEMONTE	F1	PROJECT AREA	Conference/2 trips and 2 persons, duration: 1 or 2 days depending on the destination	800	445	1.245
ARPA PIEMONTE	F1	PROJECT AREA	Project Meeting-Project Conference-Thematic Conference/2 trips and 4 persons, duration: 1 or 2 days depending on the destination	1.600	1.094	2.694
ARPA PIEMONTE	F1	PROJECT AREA	Project Meeting-Project Conference-Thematic Conference/4 trips and 2 persons, duration: 1 or 2 days depending on the destination	3.200	600	3.800
ARPA LOMB	A1	MILANO- Europe (country to be defined)	Participation to national and/or European meetings about emission inventory (i.e. EMEP TFEIP meeting, FAIRMODE meeting / 1 trip / 2 persons)travelling/2 days)	1.000	500	1.500
ARPA LOMB	A1	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development/5 trips/1 persons travelling/2 days	350	150	500
ARPA LOMB	A2	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development/5 trips/2 persons travelling/2 days	1.000	300	1.300
ARPA LOMB	A4	MILANO - LONDRA	Participation to ICAPC (International Conference on Air Pollution and Control) May 2017 to compare and discuss methods and results with the international community / 1 trip / 4 persons travelling/ 3 days	300	0	300
ARPA LOMB	A4	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development/6 trips/2 persons travelling/2 days	600	0	600
ARPA LOMB	C1	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development	390	300	690
ARPA LOMB	C1	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development/2 trips/1 persons travelling/2 days	160	150	310
ARPA LOMB	C1	to be defined	Partecipation to conference related to PREPAIR issues	700	300	1.000
ARPA LOMB	D6	MILANO-	Meetings within partners involved for action development	2.800	1.200	4.000
ARPA LOMB	D6	BOLOGNA/TORINO/VENEZIA/TRENTO/project to be defined	Partecipation to conference related to PREPAIR issues	4.600	800	5.400
	E3	to be defined (cities of the Po Valley)	Dissemniation events	1.950	1.050	3.000
ARPA LOMB	E6	to be defined	Meetings with parters of other project related to PREPAIR	700	300	1.000
	F1	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	issues Meetings within partners involved for action development	3.600	1.475	5.075
ARPA LOMB	F1	MILANO- BOLOGNA/TORINO/VENEZIA/TRENTO/project	Meetings within partners involved for action development/5 trips/3 persons travelling/6 days	1.425	900	2.325
	A4	Aosta/Milan	Action meeting/4 trips and 2 persons, duration: 1 day each	240	400	640
	C1	Aosta/Bologna	Action meeting/2 trips and 2 persons, duration: 1 day each	180	800	980 3.898
	C3 D6	PROJECT AREA Aosta/Milan	Action meeting/6 trips and 2 persons, duration: 1 day each Action meeting/1 trips and 2 persons, duration: 1 day each	942 160	2.956	3.898
ARPA VDA	D6	Aosta/Milan	Action meeting/2 trips and 2 persons, duration: 1 day each	120	200	320
	F1	PROJECT AREA	Project Meeting-Project Conference-Thematic Conference/4 trips and 3 persons, duration: 1 or 2 days depending on the destination	1.236	3.836	
ARPA VDA	F1	PROJECT AREA	Project Meeting-Project Conference-Thematic Conference/5 trips and 3 persons, duration: 1 or 2 days depending on the destination	3.550	0	3.550
ARPA FVG	A4	Palmanova/Milan	Action meeting/4 trips and 2 persons, duration: 1 day each	292	0	292
ARPA FVG	C1	Palmanova/Bologna	Action meeting/2 trips and 2 persons, duration: 1 day each	180	138	318
ARPA FVG	C1	PROJECT AREA	Action meeting/2 trips and 4 persons, duration: 1 day each	303	1.018	1.321
ARPA FVG	C3	PROJECT AREA	Action meeting/6 trips and 4 persons, duration: 1 day each. Joint work sessions with others partners. Action meeting/6 trips and 4 persons, duration: 1 day	80	292	372
-	D5 D6	PROJECT AREA PROJECT AREA	each. Joint work sessions with others partners. Action meeting/2 trips and 2 persons, duration: 1 day	241	876 258	1.117
	F1	PROJECT AREA	each. Joint work sessions with others partners. Project Meeting-Project Conference-Thematic Conference/4 trips and 3 persons, duration: 1 or 2 days	912	6.635	
ARSO	C3	PROJECT AREA	depending on the destination FAIRMODE meeting & project meeting (technical part)	991	171	1.162
	E1	Ljubljana – project area	TECHNICAL COORDINATION MEETINGS WITH ACTION'S COORDINATOR AND PROJECT PARTNERS.	270	0	270
ARSO	E1	PROJECT AREA	Thematic conference/1 person/2 days	1.451	252 252	1.82

ORM F2 Proposal acronym: LIFE-IP PREPAIR Travel and subsistence costs								
		Ira						
			Calculation =>	Α	В	A + B Total travel		
Beneficiary short name	Action number	Destination (From / To)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	and subsistence costs		
ARSO	F1	Ljubljana – project area	KICK-OFF MEETING AND OTHER PROJECT MANAGEMENT MEETINGS	2.500	960	3.460		
ARSO	F1	PROJECT AREA	Project Meetings/8 events/3 persons/2 days	4.296	1.234	5.530		
сово	E1	Bologna-Milano	Project Meeting- Milano+Thematic conference(1 trip for 2	150	60	210		
		-	persons, 1 day) Project Meeting Torino+Thematic Conference (1 trip for 2					
СОВО	E1	Bologna-Torino	persons, 1 day)	200	60	260		
СОВО	E1	PROJECT AREA	Meetings for the implementation of the action	200	65	265		
сово	F1	Bologna-Milano	Project Meeting- Milano+Thematic conference(1 trip for 2 persons, 1 day)	150	60	210		
сово	F1	Bologna-Torino	Project Meeting Torino+Thematic Conference (1 trip for 2 persons, 1 day)	200	60	260		
СОВО	F1	Bologna-Venezia	Project Meeting Venezia (1 trip for 2 persons, 1 day) MEETINGS FOR THE IMPLEMENTATION OF THE	680	120	800		
СОВО	F1	PROJECT AREA	ACTION	4.029	480	4.509		
Milan	E1	Milan-various destinations	Consortium meetings, monitoring visits, conferences participation	100	150	250		
Milan	E2	Milan-various destinations	Consortium meetings and monitoring visits	300	200	500		
	F1	Milano-Bologna	Kick-off meeting/1 trip/2 persons/1 day	430	50	480		
Milan Milan	F1 F1	Milano-Bologna Milano-Torino	Project meeting/1 trip/2 persons/1 day Communication Conference/1 trip/2 persons/1 day	230 420	280 50	510 470		
Milan	F1	Milan-various destinations	Consortium meetings and monitoring visits	3.500	3.020	6.520		
CDT	C11	Turin/Austria	Action meeting/2 trips and 2 persons, duration: 13day	2.000	500	2.500		
CDT	C11	Turin/Bologna	each Action meeting/1 trips and 2 persons, duration: 1 day each	1.200	300	1.500		
CDT	C11	Turin/Bologna	Action meeting/3 trips and 2 persons, duration: 1 day each	400	100	500		
CDT	C11	Turin/Milano	Action meeting/1 trips and 2 persons, duration: 1 day each	400 800	100	500		
CDT CDT	C9 C9	Turin/Austria Turin/Bologna	Action meeting/21trips and 2 persons, duration: 3day each Action meeting/1 trips and 2 persons, duration: 1 day each	1.800	200 200	1.000 2.000		
CDT	C9	Turin/Bologna	Action meeting/3 trips and 2 persons, duration: 3 day each	400	100	500		
CDT	C9	Turin/Milan	Action meeting/1 trips and 2 persons, duration: 1 day each	900	100	1.000		
CDT CDT	C9 C9	Turin/Milan Turin/Milano	Action meeting/3 trips and 2 persons, duration: 1 day each Action meeting/1 trips and 2 persons, duration: 1 day each	400 500	100	500 500		
CDT	C9	Turin/Milano	Action meeting/1 trips and 2 persons, duration: 1 day each Action meeting/1 trips and 2 persons, duration: 2 day each	800	200	1.000		
CDT	F1	Turin to Milan/Bologna/Venice	Project Meeting-Project Conference-Thematic Conference/1 trips and 2 persons, duration: 1 or 2 days depending on the destination	1.000	0	1.000		
CDT	F1	Turin to Milan/Bologna/Venice	Project Meeting-Project Conference-Thematic Conference/2 trips and 2 persons, duration: 1 or 2 days depending on the destination	900	600	1.500		
CDT	F1	Turin to Milan/Bologna/Venice	Project Meeting-Project Conference-Thematic Conference/4 trips and 2 persons, duration: 1 or 2 days depending on the destination	1.600	400	2.000		
ARTER	C17	involved	Meetings within partners involved for action development/2 trips/1 person traveling/2 days	200	100	300		
ARTER	E1	From BOLOGNA to the different cities of the Region involved	Meetings within partners involved for action development/8	1.613	866	2.479		
ARTER	E2	From BOLOGNA to the different cities of the Region	trips/2 persons traveling/8 days Meetings within partners involved for action development/8	1.900	1.297	3.197		
ARTER	E6		trips/2 persons traveling/8 days Meetings within partners involved for action development/2	200	133	333		
ARTER	F1	involved From BOLOGNA to the different cities of the Region		1.600	1.700	3.300		
ARTER	F1	involved From BOLOGNA to the different cities of the Region	development/16 trips/4 persons traveling/16days Meetings within partners involved in the project/24 trips/2	2.500	800	3.300		
ARTER	F1	involved From BOLOGNA to the different cities of the Region	person travelling/48 days Meetings within partners involved in the project/6 trips/4	1.428	0	1.428		
ARTER	F1	involved	person travelling/ days To study the systems of biomass supply at local level,	1.420	0	1.420		
FLA	C8	From Milan to different site in other Regions in Italy and Europe	some visits in selected pilot area will be organized to investigate the mode of procurement and management of biomass for thermal use.	166	0	166		
FLA	C8	From Milano to different site in the Po Basin	To study the systems of biomass supply at local level, some visits in selected pilot area will be organized to investigate the mode of procurement and management of biomass for thermal use.	600	360	960		
FLA	C8	From Murcia Region to Lombardy Region	Trip of the technicians from Murcia Region to Milano to transfer the know how of the biomass management plans softaware (1 trip for 2 persons A/R, 1 night in hotel and lunch)	1.700	300	2.000		
FLA	C8	Lombardy Region to different sites in the Po Basin	To study the systems of biomass supply at local level, some visits in selected pilot area will be organized to investigate the mode of procurement and management of biomass for thermal use.	1.500	520	2.020		
FLA	C9	From Milano to the 12 different Province of Lombardy Region	The FLA staff will coordinate and organize the Cycling mobility training course, the staff will participate to the 12 training modules (one for every provincial capital of the Lombardy Region). In this phase, at least 4 training courses will be implemented.	400	300	700		
FLA	С9	From Milano to the 8 different Province of Lombardy Region	The FLA staff will coordinate and organize the Cycling mobility training course, the staff will participate to the 8 training modules (one for every provincial capital of the Lombardy Region).	80	0	80		
FLA	E1	From Milano to Bologna	Participation to the project conferences (Kick-off) 2	100	100	200		
FLA	E1	Lombardy Region to other Region in the Po Basin	persons Costs to attend the Final Conference	400	. 30	400		
FLA	E2		Coordination of the activities on the Air quality publication	200	180	380		
FLA	E2	Lombardy Region to other Region in the Po Basin	Cooperation with other PPs for the implementation of communication actions	200	110	310		
ELA	E5	From Milano to echacle in Lamphraty Pagina	Involvement of the schools to test the ediucational	200	400	200		
FLA	E5	From Milano to schools in Lomabrdy Region	modules	200	180 253	380		

LIFE 2015 Integrated Projects - Financial Forms

FORM F2	ORM F2 Proposal acronym: LIFE-IP PREPAIR Travel and subsistence costs									
	Calculation => A B A+B									
Beneficiary short name	Action number	Destination	(From / Lo)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs	Subsistence costs	Total travel and subsistence costs			
FLA	F1	Lombardy Regi	on to other Region in the Po Basin	Project Meetings	1.913	500	2.413			
				TOTAL =>	222.107	114.760	336.867			

Proposal acronym: LIFE-IP PREPAIR External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs
RER	C11	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE SURVEY ON EXTRA URBAN AREAS	79.200
RER	C12	PUBLIC TENDER	TECHNICAL SUPPORT FOR THE DEVELOPMENT OF ICT	80.000
RER	C13	PUBLIC TENDER	TRAINERS FOR COURSES ON ELECTRIC MOBILITY	35.000
RER	C14	PUBLIC TENDER	SERVICES RELATED TO TRAINING ON ECO-DRIVING	35.500
RER	C15	PUBLIC TENDER	TECHNICAL SUPPORT FOR THE IMPLEMENTATION OF THE ACTION C.15	83.317
RER	C16	PUBLIC TENDER	ORGANIZATION OF TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS ON ENERGY EFFICIENCY TECHNICAL SUPPORT FOR THE IMPLEMENTATION OF THE	37.600
RER	C17	PUBLIC TENDER	INFO POINT	35.000
RER	C4	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR ANALYSIS FOR THE IDENTIFICATION OF BATS	57.442
RER	C5	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION AND MANTAINANCE OF A COMMON MODEL OF EVALUATION	55.000
RER	C5	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF A COMMON MODEL OF EVALUATION.	26.163
RER	C6	PUBLIC TENDER	TRAINING ACTIVITIES FOR THE IMPLEMENTATION OF THE ACTION	45.000
RER	C7	PUBLIC TENDER	TRAINING ACTIVITIES FOR THE IMPLEMENTATION OF THE ACTION	50.000
RER	C8	PUBLIC TENDER	TECHNICAL SUPPORT FOR THE IMPLEMENTATION OF THE ACTION	3.000
RER	C9	PUBLIC TENDER	TECHNICAL SUPPORTO FOR THE SURVEY ON BIKE INFRASTRUCTURES	30.000
RER RER	C9 E1	PUBLIC TENDER PUBLIC TENDER	TRAINING ON CYCLING MOBILITY (20000) TRANSLATION SERVICE FOR THE LAUNCH CONFERENCE	20.000 30.378
RER	E1	PUBLIC TENDER PUBLIC TENDER	REALIZATION OF COMMUNICATION ACTIVES	30.378 17.000
RER	E3	PUBLIC TENDER	REALIZATION OF COMMUNICATION PRODUCTS	7.200
RER	E5	PUBLIC TENDER	EXPERIMENTAL TESTING IN 3 CLASSES AND SUPPORT TO THE EDUCATIONAL PATHS DEVELOPMENT	2.000
RER	E5	PUBLIC TENDER	SUPPORT FOR EDUCATIONAL ACTIVITIES IN THE SCHOOLS	12.000
RER	F1	PUBLIC TENDER	EXTERNAL SUPPORT TO THE MANAGEMENT OF THE	30.195
RER	F1	PUBLIC TENDER	EXTERNAL SUPPORT TO THE MANAGEMENT OF THE PROJECT OF PHASE 1	10.065
RER	F1	PUBLIC TENDER	EXTERNAL SUPPORT TO THE MANAGEMENT OF THE PROJECT OF PHASE 2	55.000
VENETO REGION	C11	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE SURVEY ON URBAN	20.000
VENETO REGION	C12	PUBLIC TENDER	DEVELOPMENT OF ICT TOOLS FOR PUBLIC TRANSPORT USERS EXTERNAL ASSISTANCE FOR THE DEAL PATION OF	20.000
VENETO REGION	C13	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF COURSES REGARDING ELECTRIC MOBILITY	40.500
VENETO REGION	C14	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF COURSES REGARDING ECO-DRIVING	10.000
VENETO REGION	C15	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF COURSES FOR COMPANIES CONCERNING THE OBJECT OF	35.200
VENETO REGION	C16	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF TRAINING CONCERNING THE OBJECT OF THE ACTION EXTERNAL ASSISTANCE FOR THE IMPLEMENTATION OF	66.800
VENETO REGION	C17	PUBLIC TENDER	WORKSHOPS ON ENERGY SAVING EXTERNAL ASSISTANCE FOR THE IMPLEMENTATION OF	938
VENETO REGION	C17	PUBLIC TENDER	WORKSHOPS ON ENERGY SAVING (PART 17.1) and COURSES REGARDING GPP (part 17.2)	59.862
VENETO REGION	C4	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR ANALYSIS FOR THE IDENTIFICATION OF BATS	22.600
VENETO REGION	C5	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF A COMMON MODEL OF EVALUATION.	27.600
VENETO REGION	C6	PUBLIC TENDER	ORGANISATION OF TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS	41.400
VENETO REGION	C7	PUBLIC TENDER	IMPLEMENTATION OF THE STUDY ON BIOMASS FLOWS AND ORGANISATION OF TRAINING ACTIVITIES	37.000
VENETO REGION	C8	PUBLIC TENDER	ORGANISATION OF TRAINING ACTIVITIES	3.000
VENETO REGION VENETO REGION	E1	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR COMMUNICATION ACTIVITIES	40.000
VENETO REGION VENETO REGION	E4 F1	PUBLIC TENDER PUBLIC TENDER	EXTERNAL ASSISTANCE FOR COMMUNICATION ACTIVITIES EXTERNAL ASSISTANCE FOR COMMUNICATION ACTIVITIES	12.000 900
Lombardy Region	C4	PUBLIC TENDER	External assitance for identifying and testing technologies and best practices for the use of slurries in order to achieve high N efficiency reducing environmental impacts.	76.881
Lombardy Region	C5	PUBLIC TENDER	Objective of the public tender is to identify a subject for the development of studies for models for the prediction of the odorous impacts from emissions of farms.	65.000
Lombardy Region	E3	PUBLIC TENDER	External assistance for the selection of an agency for the implementation f all the communication activities defined in E3 action	102.151
PIEDMONT REGION	C10	PUBLIC TENDER	Services for engineering studies and other services for prototype feasibility study	374.337
PIEDMONT REGION	C11	PUBLIC TENDER	Services for engineering studies and other services for surveys and management model development	25.000
PIEDMONT REGION	C12	PUBLIC TENDER	Make the architecture of Piedmont Automatic Fare Collection System (AFCS), called BIP (Biglietto Integrato Piemonte) interoperable with PO Basin public transport system in order to foster solutions of sustainable mobility in the Po Valley 25	25.000

Proposal acronym: LIFE-IP PREPAIR External assistance costs

Beneficiary short name	Action	Procedure	Description	Costs
PIEDMONT REGION	number C13	PUBLIC TENDER	Services related course on e-mobility	40.000
			Study and monitoring on eco-driving effects on air pollution	
PIEDMONT REGION	C14	PUBLIC TENDER	emissions	74.514
PIEDMONT REGION	C16	PUBLIC TENDER	n. 4 training course addressed to technicians of energy efficiency Service of grafic design of the volume on CAM (Minimum	43.940
PIEDMONT REGION	C17	direct award	Environmental Criterias) on Public Green C9.1 Training course: theoric and field trip	1.500
PIEDMONT REGION	С9	PUBLIC TENDER	C9.3 Analysis on infrastructure needs for regional planning on mobility	46.549
PIEDMONT REGION	E1	PUBLIC TENDER	Organization of final conference in Turin	20.000
PIEDMONT REGION	E4	direct award	Electric mobility days planning and implementation	29.688
PIEDMONT REGION PIEDMONT REGION	E4 E5	direct award	Design of dissemination products on e-mobility and other services	9.760
PIEDMONT REGION PIEDMONT REGION	F1	direct award PUBLIC TENDER	Educational paths Support to technical and financial management of the project	16.830 32.960
RAFVG	C12	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR ICT TOOLS SYSTEMS	26.000
RAFVG	C13	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF COURSES REGARDING ELECTRIC MOBILITY	31.000
RAFVG	C15	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF COURSES FOR COMPANIES CONCERNING THE OBJECT OF	46.000
RAFVG	C16	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE REALIZATION OF TRAINING CONCERNING THE OBJECT OF THE ACTION	35.800
RAFVG	C17	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE IMPLEMENTATION OF WORKSHOPS ON ENERGY SAVING (PART 17.1) and COURSES REGARDING GPP (part 17.2)	47.960
RAFVG	C6	PUBLIC TENDER	ORGANISATION OF TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS	33.240
RAFVG	C7	PUBLIC TENDER	ORGANISATION OF TRAINING ACTIVITIES ADDRESSED TO CHIMNEY SWEEPS	30.000
RAFVG	С9	PUBLIC TENDER	ORGANISATION OF TRAINING ACTIVITIES ADDRESSED TO PROMOTING CICLING MOBILITY	34.000
RAFVG	E4	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR POPULATION AWARNESS RAISING ON ELECTRIC VEHICLES ACTIVITIES	16.800
PROVINCE OF TRENTO	C15	PUBLIC TENDER	DATA COLLECTION, DRAFTING OF CASE STUDIES AND GUIDELINES AND ORGANIZATION OF WORKSHOPS DEFINITION OF A TRAINING FORMAT AND ORGANIZATION OF	25.010
PROVINCE OF TRENTO	C16	PUBLIC TENDER	TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS OF ENERGY EFFICIENCY	10.479
PROVINCE OF TRENTO	C16	PUBLIC TENDER	ORGANIZATION OF TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS OF ENERGY EFFICIENCY	28.200
PROVINCE OF TRENTO	C17	PUBLIC TENDER	EXPERT FOR THE ORGANIZATION OF THE INFORMATION POINT AND IMPLEMENTATION OF WORKSHOP (2017-2018)	20.854
PROVINCE OF TRENTO	C17	PUBLIC TENDER	EXPERT FOR THE ORGANIZATION OF THE INFORMATION POINT AND WORKSHOP (2019-2020) DEFINITION OF A TRAINING FORMAT AND ORGANISATION OF	23.400
PROVINCE OF TRENTO	C6	PUBLIC TENDER	TRAINING ACTIVITIES ADDRESSED TO TECHNICIANS ORGANIZATION OF TRAINING ACTIVITIES ADDRESSED TO	18.715
PROVINCE OF TRENTO	C6	PUBLIC TENDER	TECHNICIANS	42.555
PROVINCE OF TRENTO	C7	PUBLIC TENDER	DEFINITION OF A TRAINING FORMAT AND ORGANISATION OF TRAINING ACTIVITIES ADDRESSED TO CHIMNEY SWEEPS	78.832
PROVINCE OF TRENTO	C7	PUBLIC TENDER	SURVEY ON DEMAND/SUPPLY OF CHIMNEY SWEEPS AND REGULATIONS, DEFINITION OF QUALIFIED CHIMNEY SWEEP PROFILE AND REGISTER FEASIBILITY STUDY	15.000
PROVINCE OF TRENTO	C8	PUBLIC TENDER	SURVEY ON WOOD BIOMASS FLOWS IN TRENTINO FOR ENERGY PURPOSES	9.760
PROVINCE OF TRENTO	E2	PUBLIC TENDER	REALIZATION OF VIDEO AND ORGANIZATION OF THE CONFERENCES FORSEEN	16.000
PROVINCE OF TRENTO	E3	PUBLIC TENDER	COMMUNICATION CAMPAIGN AND PUBLIC DISSEMINATION EVENTS	10.000
PROVINCE OF TRENTO	E5	PUBLIC TENDER	IMPLEMENTATION OF EDUCATIONAL ACTIVITIES IN	12.000
Arpae	C1	PUBLIC TENDER	external job provider to perform part of the work foreseen in 2019- 20	70.000
Arpae	C1	PUBLIC TENDER	Software development and/or scientific and technical support for models implementation	137.417
Arpae	C3	Direct treaty	RIAT+ SW implementation on the Po basin	39.040
Arpae Arpae	C3	PUBLIC TENDER PUBLIC TENDER	RIAT+ Model set up and applications Riat+ upgrading	48.678 7.686
			Computing and data storage resources service for the	
Arpae Arpae	D5 D5	PUBLIC TENDER PUBLIC TENDER	implementation of the action Temporary agency work to perform part of the action in 2017-18	46.888 81.254
Arpae	D5	PUBLIC TENDER	Collaboration agreement with an Italian University or external consultant, in both cases expert in air quality assessment	80.000
Arpae	D5	PUBLIC TENDER	External support for improving the application of the Riat plus model for the air quality assessment in the Po Valley	30.949
Arpae	D5	PUBLIC TENDER	Software development and/or scientific and technical support for models maintenance and development to satisfy users requests	88.846
Arpae	D6	PUBLIC TENDER	AQ monitoring instrument maintenance (2019-2020)	19.840
Arpae Arpae	D6 D6	PUBLIC TENDER PUBLIC TENDER	AQ monitoring instrument maintenance (2021-2022-2023) Temporary agency work to perform part of the action in 2019-20	8.600 32.500
ARPAV	C1	PUBLIC TENDER PUBLIC TENDER	Consultancy on Veneto air quality modelling system optimization	51.000
ARPAV	D3	PUBLIC TENDER	Domestic heating consumption balance	70.000
ARPAV	D3	PUBLIC TENDER	Realisation of a statistical survey on wood biomass consuption in domestic heating in the Po Valley 25	104 000

FORM F3

Proposal acronym: LIFE-IP PREPAIR External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs
ARPAV	E1	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR COMMUNICATION ACTIVITIES	10.000
ARPA PIEMONTE	C3	PUBLIC TENDER	High performance computing resources	25.230
ARPA PIEMONTE	D4	PUBLIC TENDER	Realization of a common graph of the road network with traffic flows on Po Basin	258.400
ARPA PIEMONTE	D5	PUBLIC TENDER	High performance computing resources	45.743
ARPA LOMB	C2	Public tender	development and maintenance informative tool for improved	50.000
			emission dataset	
ARPA LOMB	D2	PUBLIC TENDER	development informative tool for improved emission dataset implementation model system for air quality assessment and	25.000
ARPA LOMB	D5	PUBLIC TENDER	maintenance of the data sharing infrastructure and modeling activities	33.306
ARPA LOMB	D5	PUBLIC TENDER	maintenance and development of emission tool and modelling	25.000
ARPA VDA ARPA VDA	C6 F1	Indagine di mercato Indagine di mercato	technical Traning	19.160
ARPA FVG	A3	Market survey	Project managing support Project managing support	27.500 35.000
ARPA FVG	C3	Market survey	Project managing support	35.000
ARPA FVG	F1	Market survey	Project managing support	51.651
ARSO	C3	PUBLIC TENDER	Input data collection and feasibility study of RIAT+	7.000
ARSO ARSO	E1 F1	PUBLIC TENDER PUBLIC TENDER	Dissemination of material	5.000 7.500
COBO	C17	Direct award-best value for money	External assistance to organise the project meeting in Ljubljana 4 Focus Group C17.1 + 4 technical seminars C 17.2	20.570
СОВО	C17	PUBLIC TENDER	4 Focus Group C17.1 + 4 technical seminars C 17.2	7.930
СОВО	C9	Direct award-best value for money	European Mobility Week Organization 2021-2022.	29.322
сово	C9	PUBLIC TENDER	Actions in order to promote regular and safe cycling in the city– Stakeholder (car drivers, pedestrians).	41.480
			External assistance for managing and periodical servicing of bike station. This service will cover 24/24 hours and will assure the	
СОВО	C9	PUBLIC TENDER	correct running of the bike station to offer bikers a safer and	11.456
			controlled bikes parking.	
			"Ecological Sundays": single ticket for urban public transport valid	
СОВО	C9	PUBLIC TENDER	for all the day to facilitate and promote access to the central area open only to pedestrians and bicycles.	94.686
СОВО	E4 C9	Direct award-best value for money	Population awareness raising on electric vehicles (regional Electric Mobility Day)	10.574
Milan Milan	C9	Direct treaty Direct treaty	Organisation of cycle labs in the schools with educators Organisation of cycle labs in the schools with technical operators	40.000 40.000
Milan	C9	Direct treaty Direct treaty	Psicologist and pediatrician for adults meeting	8.000
CDT	C11	PUBLIC TENDER	External expert to implementation of model system and to involve the national logistics stakholder	42.500
CDT	C9	PUBLIC TENDER	Supporto per coinvolgimento delle Associazioni per la progettazione partecipata	15.000
CDT CDT	C9	PUBLIC TENDER PUBLIC TENDER	Supporto per recupero dati e restituzione su piattaforma open data Supporto tecnico-scientifico per progettazione bici stazione	50.000 34.500
CDT	E4	PUBLIC TENDER	EXTERNAL ASSISTANCE FOR THE ORGANIZATION OF THE ELECTRIC MOBILITY DAY	25.000
ARTER	A2	PUBLIC TENDER	Development of software	14.450
ARTER	C17	Market survey	e_learning and development workshop GPP	8.974
ARTER	C17	Market survey	new e_learning module on GPP	11.026
ARTER ARTER	D1 D1	Market survey Market survey	software maintenance software maintenance and improvement	5.780 23.123
ARTER	E1	PUBLIC TENDER	Development logo and website	25.897
ARTER	E1	PUBLIC TENDER	project communication campaign	26.036
ARTER	E1	PUBLIC TENDER	project communication campaign and Layman's report	156.889
ARTER ARTER	E2 E2	Market survey Market survey	Journalistic support realization of a research on Air Quality perception by Po Basin Citizens and Journalistic support	17.320 30.000
ARTER	E2	PUBLIC TENDER	Journalistic support, development of e-learning platform and survey on the people's perception of the quality of air	35.203
FLA	C13	direct treaty-best value for money	Dissemination of action's results	8.000
FLA	C13	direct treaty-best value for money	Support on technical study on electric mobility	8.000
FLA FLA	C8 C8	direct treaty-best value for money direct treaty-best value for money	Best practice selection and dissemination Techinical support to the implementation of Task 2, 3 and 4	3.000 30.000
FLA	C8	direct treaty-best value for money	Technical support to the implementation of Task 2, 3 and 4 Technical support to the implementation of Task 1: Study of supply flows of biomass	30.000
FLA	C9	direct treaty-best value for money	Coach service to take the trainee groups to the towns chosen for the visit (field trip)	6.000
FLA	C9	direct treaty-best value for money	Cost of renting the bike for the field trip	2.400
FLA FLA	C9 C9	direct treaty-best value for money direct treaty-best value for money	cost of renting the rooms where the courses will be organized Implementation of Cycling Mobility Courses in Lombardy Region	2.000 20.400
FLA	C9	direct treaty-best value for money	Support to the organization and implementation of Cycling mobility: training course addressed to the officials and operators of the local	10.000
FLA	E1	direct treaty-best value for money	administrations Organization of the first mid-term conference	7.300
FLA	E2	direct treaty-best value for money	Organization of the Final Conference on the use of biomass	16.700
FLA	E5	direct treaty-best value for money	Support on technical implementation of educational paths	4.000
FLA	E5	direct treaty-best value for money	Techinical support on definition of educational paths, testing and implementation	16.000
			TOTAL =>	5.396.277

FORM F4 a Proposal acronym: LIFE-IP PREPAIR

I OINNI I T	a								
Durable goods: Infrastructure costs									
Beneficiary short name	Action number	Procedure	Description	ACTUAL COST	Depreciation (eligible cost)				
СОВО	С9	Public Tender	Realization of bike stations fully equipped with bicycle racks and a special bike storage with restricted access.	200.000	200.000				
			TOTAL =>	200.000	200.000				

FORM F4 b Proposal acronym: LIFE-IP PREPAIR

FURM F4 D			Proposal actoriyili. Life-iF PREPAIR		
			Durable goods: Equipment costs		
Beneficiary short name	Action number	Procedure	Description	Actual cost	Depreciation (eligible cost)
RER	C11	Public tender	Equipment to razionalize freights on veichols	12.000	6.000
RER	C17	Public tender	HW and equipments for the Regioanl Information	2.950	1.475
RER	F1	Public tender	Hardware equipment for the management of the project (two PCs)	2.050	1.025
PROVINCE OF TRENTO	С7	Public tender	demonstration material for the training courses: construction materials of the chimneys and measuring instruments of physical quantities (temperature, flow and pressure meter)	7.500	0
Arpae	C1	Public tender	HW and SW for computing centre c/o Arpae	50.000	50.000
Arpae	D6	Public tender	Purchase of authomatic gas analyzer and PM	70.000	70.000
ARPAV	C1	Public tender	Five laptop computers and one software	6.000	3.000
ARPAV	C3	Public tender	One software	3.000	1.500
ARPAV	D5	Public tender	Veneto air quality modelling system optimization CLOUD SYSTEM	36.600	36.600
ARPAV	D6	Public tender	Measurement equipment	30.000	15.000
ARPA PIEMONTE	D6	Public tender	Measurement equipment	40.000	20.000
ARPA PIEMONTE	D6	Public tender	Portable Measurement equipment	20.628	20.628
CDT	C11	Public tender	sensori, OBU	5.000	2.500
CDT	C9	Public tender	Telecamere, computer, tablet, telefoni	10.000	5.000
			TOTAL =>	295.728	232.728

FORM F4 c

Proposal acronym: LIFE-IP PREPAIR

		D	urable goods: Prototype costs					
Beneficiary	Action							
short name	number	Procedure	Description	Actual Costs				
PHASE 1								
PHASE 2	1							
PHASE 3								
THASE 3				I				
			TOTAL (sum above) =>					

FORM F5 Proposal acronym: LIFE-IP PREPAIR

Land purchase or long-term lease of land / use rights								
		-						
		Calculation =>	Α	В	С	(A x B) + C		
Beneficiary	Action		Estimated cost per hectare (rounded to the nearest	Area	Associated charges	Expected		
short name		Description of land purchase / long-term lease / one-off compensation	euro)	(hectares)	(euro)	cost (euro)		
PHASE 1		The state of the s		, , , , , , , , , , , , , , , , , , , ,	(,			
						0		
						0		
						0		
						0		
						0		
						0		
						0		
PHASE 2								
PHASE 3								
				TOTAL =>	·	0		

FORM F6 Proposal acronym: LIFE-IP PREPAIR

FORM F6		6	Proposal acronym: LIFE-IP PREPAIR consumables	
			Olisuillables	
Danieliania dan dan ana	Action	Day and day	D	Ot-
Beneficiary short name	number	Procedure	Description	Costs
RER	C11	PUBLIC TENDER	MATERIALS FOR COMMUNICATION	3.000
RER	C13	PUBLIC TENDER	MATERIALS FOR TRAINING COURSES ON ELECTRIC	10.800
RER	C14	PUBLIC TENDER	MOBILITY+CATERING FOR THEMATIC WORKSHOPS MATERIALS FOR TRAINING ON ECO-DRIVING	3.000
RER	C15	PUBLIC TENDER	CATERING FOR TECHNICAL WORKSHOPS	1.500
			MATERIALS FOR THE REGIONAL INFO POINT + CATERING	
RER	C17	PUBLIC TENDER	FOR THE WORKSHOPS	5.000
RER	C7	PUBLIC TENDER	MATERIALS FOR TRAINING COURSES ON CHIMNY	1.000
RER	C9	PUBLIC TENDER	MATERIALS FOR TRAINING COURSES ON BIKE MOBILITY+	5,000
KEK	00	TOBEIG TENBER	CATERING FOR TECHNICAL WORKSHOPS	0.000
RER	E2	PUBLIC TENDER	MATERIALS AND CATERING FOR CONFERENCES ON	8.000
RER	E3	PUBLIC TENDER	ACTIONS C4, C5, C11, C15 MATERIALS FOR COMMUNICATION ON BIOMASSES	1.000
RER	F1	PUBLIC TENDER	CATERING FOR MONITORING VISIT	3.000
VENETO REGION	E1	PUBLIC TENDER	Catering and translation for project meeting	2.000
VENETO REGION	F1	PUBLIC TENDER	Catering and translation for project meeting	3.500
Lombardy Region	E1	PUBLIC TENDER	CATERING/COFFEES AND RELATED COSTS FOR	3.117
Lombardy Region	E1	FOBLIC TENDER	PROJECT CONFERENCE	3.117
Lombardy Region	E2	PUBLIC TENDER	CATERING/COFFEES AND RELATED COSTS FOR	6.946
,			PROJECT CONFERENCE	
Lombardy Region	E3	Framework contract	Purchase of communication materials (roll-up posters,leaflets, brochures)	2.003
			Catering (welcome coffee/coffee break) for workshops C17.1	
PIEDMONT REGION	C17	Direct Treaty	and C17.2	1.922
DIEDMONT DECICY	C17	DUBLIC TENDED	Catering (welcome coffee/coffee break) for workshops C17.1-	4 000
PIEDMONT REGION	C17	PUBLIC TENDER	C17.2	1.000
RAFVG	C16	PUBLIC TENDER	DIDACTIC MATERIAL DURING TRAINING COURSES	500
RAFVG	C17	PUBLIC TENDER	PRINTING MATERIALS	1.250
RAFVG	C9	PUBLIC TENDER	MATERIALS FOR TRAINING COURSES ON BIKE MOBILITY+	500
RAFVG	E5	PUBLIC TENDER	CATERING FOR TECHNICAL WORKSHOPS PRINTING MATERIALS	2.500
PROVINCE OF TRENTO	C16	PUBLIC TENDER	DIDACTIC MATERIAL DURING TRAINING COURSES	2.000
PROVINCE OF TRENTO	C17	PUBLIC TENDER	GPP WORKSHOP - CATERING	4.500
PROVINCE OF TRENTO	C17	PUBLIC TENDER	WORKSHOP - CATERING	1.500
PROVINCE OF TRENTO	C6	PUBLIC TENDER	DIDACTIC MATERIAL DURING TRAINING COURSES	3.000
PROVINCE OF TRENTO	C7	PUBLIC TENDER	DIDACTIC MATERIAL DURING TRAINING COURSES	5.000
PROVINCE OF TRENTO	E3	PUBLIC TENDER	DISSEMINATION MATERIALS AND OTHERS	1.600
PROVINCE OF TRENTO	E4	PUBLIC TENDER	CATERING AND GADGETS FOR THE FIRST ELECTRIC	7.258
			MOBILITY DAY CATERING AND GADGETS FOR THE SECOND ELECTRIC	
PROVINCE OF TRENTO	E4	PUBLIC TENDER	MOBILITY DAY	10.800
ARPAV	E2	PUBLIC TENDER	Catering and gadgets for Venice Mid Term Conference	3.000
ARPA LOMB	D6	PUBLIC TENDER	Filters	65.154
ARPA LOMB	D6	PUBLIC TENDER	IC colomn apparatus (detectors)	14.000
ARPA LOMB	D6	PUBLIC TENDER	IC materials	57.353
ARPA LOMB	D6	PUBLIC TENDER	laboratory glassware and accessories (pipettes, syringes)	18.070
ARPA LOMB ARPA LOMB	D6 D6	PUBLIC TENDER PUBLIC TENDER	OC/EC analyzer (oven ecc) OC/EC materials	4.000 8.500
ARPA LOMB	D6	PUBLIC TENDER	Ovens for OC/EC analyzer	3.000
ARPA LOMB	D6	PUBLIC TENDER	Standards IC	3.000
ARPA LOMB	D6	PUBLIC TENDER	Standards IC e XRF	17.000
ARPA LOMB	D6	PUBLIC TENDER	Standards XRF	4.000
ARPA LOMB	D6	PUBLIC TENDER	IC reagents	3.923
CORO	C47	Direct award-best value for	Educational materials for focus groups and workshops. Sample	
СОВО	C17	money	kits for energy saving for workshops (i.e. solar panels, electric circuits)	4.279
			Educational materials for focus groups and workshops. Sample	
сово	C17	Direct Treaty	kits for energy saving for workshops (i.e. solar panels, electric	3.721
		,	circuits)	
сово	C9	Direct award-best value for	Bicycle toolkits and bike accessories	12.000
		money	·	
СОВО	C9	Direct Treaty	Bicycle toolkits and bike accessories	15.926
Milan	C9	direct traty	Final Event for video challenge	3.000
Milan Milan	C9	direct traty direct traty	Gadgets for cycle challenge Gadgets for dissemination in the schools	14.000 44.900
Milan	C9	direct traty	material for activities in the schools	6.000
Milan	C9	direct traty	Materials for dissemination in the schools	6.500
Milan	E4	direct traty	Materials for dissemination in the schools	3.500
Milan	E4	direct traty	Materials fot the event	1.000
CDT	C11	PUBLIC TENDER	eventi/conferenze (catering)	7.500
CDT	C9	PUBLIC TENDER	eventi/conferenze (catering)	17.500
CDT	E4	PUBLIC TENDER	eventi/conferenze (catering)	10.000
ARTER	E4 C17	PUBLIC TENDER Market survey	gadget Development and printed materials in support of GPP training	4.000 4.000
ARTER	C17	PUBLIC TENDER	Material in support of GPP training	1.000
ARTER	D1	Market survey	report on measurement accounting system	5.821
			Development and printed material to support comunication	
ARTER	E1	Market survey	campaign	6.663
ARTER	E1	Market survey	print Layman's report	12.258
ARTER	E1	PUBLIC TENDER	Printing of communication material of the project	2.211
ARTER	E2	Market survey	printed research on Air Quality perception by Po Basin Citizens	2.500

FORM F6 Proposal acronym: LIFE-IP PREPAIR

Consumables						
Beneficiary short name	Action	Procedure	Description	Costs		
Beneficially short manie	number		'	1111		
ARTER	E2	PUBLIC TENDER	Printing of the survey on the people's perception of the quality of	2.500		
ARTER	LZ	FOBLIC TENDER	air	2.500		
FLA	C6	direct treaty-best value for money	Materials to disseminate the main results of the action	250		
FLA	C7	direct treaty-best value for money	Materials to disseminate the main results of the action	250		
			Publishing materials to promote the participation to the Cycling			
FLA	C9	direct treaty-best value for money	mobility: training course addressed to the officials and operators	2.037		
			of the local administrations			
FLA	E5	direct treaty-best value for money	cost related to the license of an online platform for e-learning	6,000		
FLA	E9	direct freaty-best value for moriey	activities	6.000		
			TOTAL =>	502.513		

FORM F7

Proposal acronym: LIFE-IP PREPAIR Other costs

Other costs Control of the Costs Control of the Costs Control of the Costs Costs Costs Costs Costs Costs Costs								
Beneficiary short name	Action number	Procedure	Description	Costs				
RER	A2	PUBLIC TENDER	PARTECIPATION OF EXPERT IN THE PROJECT MEETINGS	667				
RER	C16	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	4.000				
RER	C6	PUBLIC TENDER	PARTECIPATION OF EXPERT IN THE PROJECT MEETINGS	667				
RER	D1	PUBLIC TENDER	PARTECIPATION OF EXPERT IN THE PROJECT MEETINGS	1.000				
RER	F2	PUBLIC TENDER	INDEPENDENT AUDITING	50.066				
RER	F3	PUBLIC TENDER	PARTECIPATION OF EXPERT IN THE PROJECT MEETINGS	1.500				
RER	F3	PUBLIC TENDER	TRAVEL COSTS FOR EXTERNAL SPEAKERS FOR THE IMPLEMENTATION OF ACTION F.3	1.500				
VENETO REGION	C15	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT: EXPERT EXPENSES'	2.000				
VENETO REGION	C16	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	4.000				
VENETO REGION	C17	PUBLIC TENDER	Travel and accomodation for external speakers at workshop	5.000				
VENETO REGION	C4	PUBLIC TENDER	Travel and accomodation for external speakers at project meetings and	2.400				
VENETO REGION	C5	PUBLIC TENDER	Travel and accomodation for external speakers at project meetings and	2.400				
VENETO REGION	C6	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT: EXPERT EXPENSES'	1.000				
VENETO REGION	C7	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT: EXPERT EXPENSES'	2.000				
VENETO REGION	E1	PUBLIC TENDER	Travel and accomodation for the mid-term conference for external speakers	2.000				
PIEDMONT REGION	C17	Direct treaty	Travel and subsistence costs for external speakers	1.500				
PIEDMONT REGION	E2	PUBLIC TENDER	Story telling video on E4	15.000				
RAFVG	C15	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT: EXPERT EXPENSES'	2.000				
RAFVG	C16	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	7.500				
RAFVG	C17	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	3.750				
RAFVG	C6	PUBLIC TENDER	Definition of the training format: expert travel cost reimbursement	1.000				
RAFVG	C7	PUBLIC TENDER	Definition of the training format: expert travel cost reimbursement	1.000				
RAFVG	C9	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT: EXPERT EXPENSES'	750				
RAFVG	E1	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	2.000				
PROVINCE OF TRENTO	C16	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	10.000				
PROVINCE OF TRENTO	C17	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	4.500				
PROVINCE OF TRENTO	C17	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT AND CATERING DURING WORKSHOPS	1.500				
PROVINCE OF TRENTO	C4	PUBLIC TENDER	STAKEHOLDERS AND TECHNICAL EXPERTS' EXPENSES, AS TRAVEL REIMBURSEMENT, ETC	2.500				
PROVINCE OF TRENTO	C5	PUBLIC TENDER	STAKEHOLDERS AND TECHNICAL EXPERTS' EXPENSES, AS TRAVEL REIMBURSEMENT, ETC	2.500				
PROVINCE OF TRENTO	C6	PUBLIC TENDER	EXPERTS' EXPENSES	3.000				
PROVINCE OF TRENTO	C7	PUBLIC TENDER	CERTIFICATION OF QUALIFIED CHIMNEY SWEEPS	12.000				
PROVINCE OF TRENTO	C7	PUBLIC TENDER	DEFINITION OF THE TRAINING FORMAT AN TRAINING COURSES: EXPERT EXPENSES' REIMBURSEMENT	1.000				

LIFE 2015 Integrated Projects - Financial Forms

PROVINCE OF TRENTO	C8	PUBLIC TENDER	STAKEHOLDERS' EXPENSES REIMBURSEMENT	2.000
PROVINCE OF TRENTO	E4	PUBLIC TENDER	CATERING AND GADGETS FOR THE FIRST ELECTRIC MOBILITY DAY	1.409
PROVINCE OF TRENTO	E5	PUBLIC TENDER	EXPERTS' AND TEACHERS' EXPENSES REIMBURSEMENT	4.000
Arpae	С3	Direct treaty	Fees for the participation to conferences/training courses on AQ as foreseen in approved AF	1.821
Arpae	D5	Direct treaty	Fees for the participation to conferences/training courses on AQ as foreseen in approved AF or publication of technical articles	1.115
ARPAV	E2	PUBLIC TENDER	MID TERM CONFERENCE in Veneto	10.000
ARPAV	E5	PUBLIC TENDER	Rimborso spese di trasporto classi, fase 2	3.000
ARPA LOMB	D6	PUBLIC TENDER	samples transports	8.000
ARPA FVG	D6	PUBLIC TENDER	subsistence and travel costs - national day Atmospheric particulate chemical characterization SICILY, expert expenses reimbursement	427
ARPA FVG	E6	PUBLIC TENDER	Conference fee, EMS Copenhagen, GRASPA Pescara	580
ARPA FVG	F1	PUBLIC TENDER	Travel costs for participation in meetings related to Arpa FVG staff not included in the working group but carrying out administrative activities in the project	498
ARSO	E1	Direct treaty	Travel and subsistence costs for experts in the projects meetings	931
ARTER	E1	MARKET SURVEY	Participation in Ecomondo 2019 fair and rental of public spaces	8.816
ARTER	E1	MARKET SURVEY	Participation in fairs from 2021 to 2024 and rental of public spaces	1.184
ARTER	F1	MARKET SURVEY	Catering of kick off meeting	2.001
			TOTAL =>	197.479

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
LIFE PROJECT:				
<u>EII E I ROCEO I.</u>				
EU contribution	NA	9.974.624	NA	NA
Contribution by beneficiaries	NA	6.713.815	NA	NA
Contribution by cofinancers	NA	0	NA	NA
TOTAL LIFE IP		16.688.439		
EU funds:	4 - 4 - 50			
	4.2.1 Efficienza energetica e progetti dimostrativi nelle PMI (068), promozione sdell'efficienza enegetica nelle grandi imprese (070)	40.479.203		
ERDF Emilia Romagna	4.1.1 Rinnovo di infrastrutture pubbliche sul piano dell'efficienza energetica (013) Rinnovo della dotazione di alloggi sul piano dell'efficienza energetica (014)	24.171.866	Granted in 12/02/2015	Emilia Romagna Region – Direzione Economia della conoscenza, del lavoro e dell'impresa
	4.1.2 Energie rinnovabili: biomasse (011)	3.000.000		
	4.6.2 Infrastrutturee promozione di trasporti urbani puliti (043)	13.000.000		
	4.6.3 Sistemi di trasporto intelligente (044)	6.000.000		
	4.6.4 Piste ciclabili e percorsi pedonali (090)	8.275.812		
	4.1 Reduction of energy consumption in public facilities or residential and non residential buildings of public use and integration of renewable sources (<i>submeasure 4.1.1</i>)	45.000.000		
ERDF Veneto	4.2 Reduction of energy consumption and emissions in companies and integration of renewable sources (<i>sub-measure</i> 4.2.1)	24.000.000	Granted in 17/08/2015 Decision (CE) C(2015) 5903	Veneto Region, International Policies and Cooperation Department
	4.6 Smart mobility in urban areas (<i>submeasure 4.6.3</i>)	20.000.000		
	4.6 Increase of sustainable mobility in urban areas renewing the transportation fleet (submeasure 4.6.2)	13.000.000		266

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/ not yet requested	
ERDF Lombardy	cycling mobility infrustrucures oriented to the whole connection of the regional cycling mobility, identified by the Regional Plan, linked to the local cycling mobility and to the local public transport	15.000.000	To be granted. Expression of Interest started on 05/06/2015 (D.G.R. n° X/3669 + Decreto n°6549 31/07/2015)	Lombardy Region - General Direction- University, Research and Open Innovation
	4.2 Reduction of energy consumption and GHG emissions in companies and productive areas	67.487.700		Piemonte Region – Direction for Competitiveness
ERDF Piedmont	4.1 Reduction of energy consumption in public facilities or residential and non residential buildings of public use and integration of renewable sources (submeasure 4.1.1 and 4.1.2)	134.975.400	Granted in 12/02/2015 34.975.400	
ERDF Friuli Venezia Giulia	4.1.1. Promozione dell'eco- efficienza e riduzione di consumi di energia primaria negli edifici e strutture pubbliche: interventi di ristrutturazione di singoli edifici o complessi di edifici, installazione di sistemi intelligenti di telecontrollo, regolazione, gestione, monitoraggio e ottimizzazione dei consumi energetici (smartbuildings) e delle emissioni inquinanti anche attraverso l'utilizzo di mix tecnologici	56.945.513	Granted in 14/07/2015 Decision CE(2015) 4814	Regione autonoma Friuli Venezia Giulia Direzione centrale attività produttive, commercio,
	4.6.2/4.6.4. Interventi di mobilità sostenibile urbana anche incentivando l'utilizzo di sistemi di trasporto a basso impatto ambientale, il completamento, l'attrezzaggio del sistema e il rinnovamento delle flotte / Sviluppo delle infrastrutture necessarie all'utilizzo del mezzo a basso impatto ambientale anche attraverso iniziative di charginghub	11.588.911	_ 4814	cooperazione, risorse agricole e forestali

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
ERDF Provincia	Asse 3 Azione 3.1.1 Incentivi finalizzati alla riduzione dei consumi energetici delle imprese	10.000.000		Servizio Europa, Provincia
autonoma di Trento	Asse 3 Azione 3.2.1 Promozione della ecoefficienza e riduzione dei consumi di energia primaria negli edifici e strutture pubbliche	8.000.000	Granted in 12/02/2015	Autonoma di Trento
ERDF OP Metropolitan cities - Municipality of Bologna. (OT 4 "Sustainable Energy and quality of life")	Urban mobility and sustainable services. Action 2.1.2 - Energy saving in public buildings. Action 2.2.3 - Slow Mobility	11.500.000	Granted in July 2015	Italian National Agency for territorial cohesion
ERDF OP Metropolitan cities - Municipality of Turin	Realizzazione di opere per la mobilità ciclabile e pedonale, per aumentare le dotazioni ITS sulla città e per realizzare progetto sulla razionalizzazione della distribuzione delle merci in ZTL.	8.000.000	Granted in July 2015	Italian National Agency for territorial cohesion
ERDF OP Metropolitan cities - Municipality of Milan	The actions supported by the Programme Pon Metro (ERDF Fund) and carried out by Milan City Council within the priority 4 are focused on the following issues: - strengthening cycle paths in the city and in the Metropolitan Area (Cinisello Balsamo); - adding new stations for bike share (BikeMi); - buying new bikes and e-bikes	6.600.000	Granted in July 2015	Italian National Agency for territorial cohesion
	04. Supporting the shift towards a low-carbon economy in all sectors (less developed region)	10.014.152	granted by EC: 15/12/2014	Republic of Slovenia, Government Office for Development and European Cohesion Policy
OP ESI 2014-2020	04. Supporting the shift towards a low-carbon economy in all sectors (more developed region)	11.010.053	granted by EC: 15/12/2014	Republic of Slovenia, Government Office for Development and European Cohesion Policy
Slovenia	06. Preserving and protecting the environment and promoting resource efficiency (less developed regions)	82.125.360	granted by EC: 15/12/2014	Republic of Slovenia, Government Office for Development and European Cohesion Policy

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
	06. Preserving and protecting the environment and promoting resource efficiency (more developed regions)	48.999.997	granted by EC: 15/12/2014	Republic of Slovenia, Government Office for Development and European Cohesion Policy
TOTAL (ERDF)	,	679.173.967,00		
	2A "Improving the economic performance of all farms and facilitating farm restructuring and modernisation"	1.632.000	Granted in 26/05/2015 Decision CE n. 3530)	
EARDF Emilia	3A "Improving competitiveness of primary producers by better integrating them into the agri-food chain"	5.730.000		Emilia Romagna Region - Directorate General for Agriculture, Fishery and Wildlife Activities
Romagna Region	5D "Reduction of GHG and ammonia emissions from agriculture"	19.446.059		
	4C "Preventing soil erosion and improving soil management"	7.277.116		
	4B " Improving water management, including fertilixer and pesticide management"	19.512.505		
EARDF Lombardy Region	Operation: 8.6.02 "Support to investments in forest technology and transformation, movement an commercialization of forest products" Investments in machinery systems addressed to the first manufacturing in collection and storage areas. Thus contribute to increase the performance of the whole forest-wood-energy supply chain, production of wood biomass included, obtaining a reduction on fossil fuel use.	400.000	Not yet requested	Lombardy Region - DG Agricoltura – U.O. Programmazione Sviluppo Rurale e Semplificazione Amministrativa
	Operation 10.1.10 "Livestock manure spreading techniques". The operation support the reduction of the atmospheric emissions (ammonia and methane) through the manure direct injection.	5.400.000	Not yet requested. The deadline application only for 2016 is half of May 2016 (D.d.s. 16 dicembre 2015 - n. 11389).	

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
EARDF Veneto Region	Sub measures 6.4 - 8.6 – 16.2, regarding EARDF focus area "5C facilitating the supply and use of renewable sources of energy, of by-products, wastes and residues and of other non food raw material ()"	8.225.000	Granted in 26/05/2015. Decisione della Commissione europea n. 3482	Veneto Region, Agriculture and Rural Development Department
	Sub measure 16.2 regarding EARDF focus area "5D reducing green house gas and ammonia emissions from agriculture;	325.000		
	Sub measures 10.1.1 - 10.1.2 - 10.1.5 programmed for EARDF's Priority 4, with indirect effects under EARDF's focus areas 5D and "5E fostering carbon conservation and sequestration in agriculture and forestry"	22.200.000		
EARDF Piedmont Region	5D "Reduction of GHG and ammonia emissions from agriculture" (Sub-measures 4.1.3; 10.1.5 and partially 1.x; 2.x and 16.x)	34.549.323	Granted in 28/10/2015	Piemonte Region – Direction for Agricolture
	5C Int. 6.4.1 - Investimenti nelle energie rinnovabili	2.000.000		
EARDF Friuli Venezia Giulia Region	5C Int. 8.6 - tecnologie forestali per la trasformazione, mobilitazione e commercializzazione dei prodotti delle foreste	5.000.000		Regione autonoma Friuli Venezia Giulia Direzione centrale attività produttive, commercio, cooperazione, risorse agricole e forestali
	5E Int. 8.1 - sostegno alla forestazione/all'imboschime nto	16.000.000	Granted at 24/09/2015	
	5E Int. 10.1.1 - Gestione conservativa dei seminativi: dotazione finanziaria 2.000.000	2.000.000		
TOTAL (EARDF)		149.697.003,00		
Subtotal EU:		828.870.970,00		
Othor for do				
Other funds			ļ	

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
Emilia-Romagna Regional Funds	Action 2.1 Actions for increasing and improving cycling-pedestrian pathways and green infrastructures in urban areas	1.873.149	Not yet requested	Emilia Romagna Region - Directorate General for Environment and for Soil and Coast Protection
(Environmental Action Plan –PAA 2014-2015)	Action 2.2 Communication on sustainable mobility and life styles during the ecologic sundays (specific traffic restrictions)	81.468		
	Action A2.2 Granting of subsidies to encourage the scrapping of traditional stoves with high-efficiency energy ones	2.000.000		
Veneto regional funds (PRTRA - Regional Air Quality Plan)	Action A7.8 Granting of aid for the scrapping of polluting vehicles and replacement with low environmental impact ones newly registered	2.000.000	Granted (March 2015)	Veneto Region, Environment Department
	Action A7.15 Granting of aid to the Municipalities for bike sharing projects	1.131.351		
	5.1.2.1. Replacement of old domestic heating appliences - Murska Sobota	924.000		Republic of Slovenia,
	5.1.3.2. Promoting reduction of heat loss from buildings - Murska Sobota	2.557.820		
	5.2.2 Upgrade of public transport - Murska Sobota	320.000		
	7.1.2.1. Replacement of old domestic heating appliences - Maribor	1.400.000		
Slovenian Climate Change Fund - 2015/2016	7.1.3.3. Promoting reduction of heat loss from buildings - Maribor	2.000.000	granted by GOV:	
	7.2.5 Upgrade of public transport - Maribor	1.280.000	05/02/2015	Ministry for Enviroment and Spatial Planning
	4.1.2.1. Replacement of old domestic heating appliences - Celje	450.000		and Opadian Flamming
	4.1.3.2. Promoting reduction of heat loss from buildings - Celje	3.500.000		
	4.2.3 Promoting the use of electric and CNG veichles - Celje	200.000		
	4.2.7 Upgrade of public transport - Celje	480.000		

		Amount of funding	Status/date of Funding	Authority/
Sources of financing	Actions/measures to be financed	EUR	granted/	entity managing the fund
			to be granted/	
			not yet requested	
	5.1.2.1. Replacement of old domestic heating appliences - Zasavje	1.900.000		
	5.1.3.2. Promoting reduction of heat loss from buildings - Zasavje	2.900.000		
	5.1.2.1. Replacement of old domestic heating appliences - Novo mesto	700.000	granted by GOV:	
	5.1.3.2. Promoting reduction of heat loss from buildings - Novo mesto	4.300.000	05/02/2015	
	5.2.3 Promoting the use of electric and CNG veichles - Novo mesto	297.500		
Slovenian Climate Change Fund - 2015/2016	4.1.2.1. Replacement of old domestic heating appliences - Kranj	450.000		Republic of Slovenia, Ministry for Enviroment
	4.1.3.2. Promoting reduction of heat loss from buildings - Kranj	1.400.000	granted by GOV: 02/04/2015	and Spatial Planning
	4.2.3 Promoting the use of electric and CNG veichles - Kranj	640.000		
	5.1.2.1. Replacement of old domestic heating appliences - Ljubljana	1.520.000		
	4.1.3.2. Promoting reduction of heat loss from buildings - Kranj	4.691.999	granted by GOV: 04/08/2015	
	5.2.3.1 Promoting the use of electric and CNG veichles - Ljubljana	2.053.000		
Subtotal public:		41.050.287		
Debata				
Private X				
Private Y Subtotal private:		0		
Subtotal private:		, <i>U</i>		
International funds:				
Total complementary:		869.921.257		