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Italy - Regional - Emilia Romagna

Final Report

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relation to the requirements set in EU law

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PART A. SUMMARY OF KEY INFORMATION

General information on WMP

General information on	WMP				
Member State/ Region/ Municipality	Italy – Region: Emilia-Romagna				
Name of WMP	Piano Regionale di gestione dei Rifiuti e per la Bonifica delle aree inquinate 2022-2027 (PRRB) Regional Waste Management and Polluted Area Remediation Plan 2022-2027 (PRRB)				
Legal status of WMP	With Legislative Assembly Resolution No. 87 of 12 July 2022, the Regional Waste Management and Polluted Area Remediation Plan 2022-2027 (PRRB) was approved. The PRRB is in force from the publication of the approval notice in the telematic Bollettino Ufficiale della Regione Emilia-Romagna No. 244 of August 5, 2022				
Type of document	Revision of Regional Waste Management Plan 2020				
Types of waste covered*	Organic waste ("Wet" (kitchen and garden waste), "Green" (large pruning and garden waste), Paper and cardboard, Plastic, Glass, Metals, Wood, textiles, Waste electrical and electronic equipment, waste oils, bulky waste, street sweeping waste, hazardous waste produced by household, disposable diapers.				
	Further, declared as 'special' waste, the following waste streams are covered: construction and demolition waste, sewage sludge, end-of-life vehicles, end-of-life tires, medical waste, waste oils, waste electrical and electronic equipment (WEEE), fly ash and combustion slag, waste polyethylene goods, waste containing asbestos, batteries and accumulators, waste from ships and discharge residues, packaging waste				
Link	https://ambiente.regione.emilia- romagna.it/it/rifiuti/temi/rifiuti/piano-rifiuti/nuovo-piano- rifiuti-2022-2027				

^{*} **Nota bene:** Article 28(2) and (3)(a) WFD and the 1st element of the CPR enabling condition require that the waste management plan shall set out and include "An analysis of the current waste management situation in the geographical entity concerned..." and contain/include "the type, quantity and source of waste generated...". These provisions mean that all types of waste generated within the territory shall be covered by the waste management plan.

Municipal waste amounts and waste treatment installations

Waste generation (include information from detailed assessment)

Total municip		Ref	ference year	2019				
amount: bas (most recer	-		nount in ines	2,986,223	23			
Total municipal waste amount: forecast***			ference ar(s)	2027				
		-	pected amount connes	3,314,148 ((with WMP)	(without WMP)	/ 3,148,441		
Separate w	aste collection	(inc	clude informatio	n from detail	led assessmen	t)		
•	ste collection:	Ref	ference year	2019				
baseline ye recent data	-		nount in nes	2,117,352				
		%		70.9				
•	ste collection:	Ref	ference year	2027				
forecast***	forecast***		ount in ines	2,419,328 (without WMP) / 2,518,753 (with WMP)				
			73 (without		t WMP) / 80 (with WMP)			
Waste treat	tment (include i	nfor	mation from de	tailed assess	ment)			
Baseline ye recent data)	•	20:	2019 / 2022 (projection)					
Forecast**	*	202	2027					
Waste treat	tment installat	ions	(include inforn	nation from o	detailed assess	sment)		
Treatment options / type of installation	Name/Location	1	Existing capacity [t/y]		No. of planned installations	Planned capacity [t/y]		
Waste-to- Energy (WtE)			120.000					
WtE	WtE Parma		166.000					
WtE	WtE Modena		210.000					
WtE	WtE Granarolo dell'Emilia		220.000					
WtE	WtE Ferrara		142.000					
WtE	Forlì		120.000					

WtE	Coriano	150.000		
WtE	Ravenna	50.000		
WtE	Being EcoEridania	32.000		
Mechanical Biological Treatment (MBT)	Parma	180,000 (mechanical)		
МВТ	Borgo Val di Taro	58,000 (mechanical), 25,000 (biological)		
МВТ	Carpi	30,000 (biological)		
МВТ	Gaggio Montano	61,293 (mechanical) (information provided by the CA)		
		The MTB plant serves the landfill site		
МВТ	Imola	150,000 (mechanical) 70,000 (biological)		
Landfill	Finale Emilia*	-	1	150,000 (25,000 for municipal waste, 125,000 for special waste)
Landfill	Gaggio Montano	20,000 - 30,000 (closure in 2023)		
Landfill	Imola**(informa tion provided by the CA)		1	
Landfill	Sogliano al Rubicone	160,000 (closure in 2027)		
Landfill	Mirandola	40,000 (closure in 2033)		
Landfill	Medolla	50,000 (closure in 2026)		
Landfill	Castel Maggiore	130,000 (closure in 2024)		
Landfill	Jolanda di Savoia	13,000 (closure in 2023)		

^{*}authorized, but not operational due to appeals pending at the court [p.150]

- ** in authorization process [p.150]
- *** Nota bene: To ensure the fulfilment of the enabling condition, for the 2021-2027 programming period during which time the enabling condition has to be fulfilled, there may be a need for an update of data until the end of the programming period.

Mandatory requirements of Article 28 WFD

Art. of the		YES:	NO:	Number of	Name of the criterion in Part D
WFD	Element, Information is included in WMP	YE5: ✓	₩ *	criterion in Part D	
28 (2)	The waste management plans shall set out an analysis of the current waste management situation in the geographical entity concerned, as well as the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste and an evaluation of how the plan will support the implementation of the objectives and provisions of this Directive.	√		2.20	Evaluation of WMP
28 (3)	The waste management plans shall contain, as appropriate and talleast the following:	king into	account	the geographica	l level and coverage of the planning area, at
28 (3)(a)				2.1	Definition, type, source of municipal waste generated
28 (3)(a)	the type, quantity and source of waste generated within the	✓		2.2	Waste amounts
28 (3)(a)	territory, the waste likely to be shipped from or to the national territory, and an evaluation of the development of waste streams in the future			2.3	Future waste arisings, including an evaluation of the development of waste streams in the future
28 (3)(a)		✓		2.6	Waste shipments
28 (3)(b)	existing major disposal and recovery installations, including any	✓		2.5	Major disposal and recovery installations
28 (3)(b)	special arrangements for waste oils, hazardous waste, waste containing significant amounts of critical raw materials, or waste streams addressed by specific Union legislation;			2.7	Special arrangements
28 (3)(c)	an assessment of the need for closure of existing waste installations, and for additional waste installation infrastructure in accordance with Article 16. Member States shall ensure that an assessment of the investments and other financial means, including for local	√		2.11	An assessment of the need for additional waste installation infrastructure, including an assessment of the investments and other financial means, including for local authorities, required to meet those needs

Art. of the				Number of	Name of the criterion in Part D
WFD	Element, Information is included in WMP	YES: ✓	NO:	criterion in Part D	Name of the Criterion in Part D
28 (3)(c)	authorities, required to meet those needs is carried out. This assessment shall be included in the relevant waste management plans or in other strategic documents covering the entire territory of the Member State concerned;	√		2.14	An assessment of the need for closure of existing waste installations, including an assessment of the investments and other financial means, including for local authorities, required to meet those needs
28 (3)(ca)	Information on the measures to attain the objective laid down in Article 5(3a) of Directive 1999/31/EC or in other strategic documents covering the entire territory of the Member State concerned;	√		2.8	Measures to prevent landfilling of all waste suitable for recycling or other recovery
28 (3)(cb)	an assessment of existing waste collection schemes, including the material and territorial coverage of separate collection and measures to improve its operation, of any derogations granted in accordance with Article 10(3), and of the need for new collection schemes;			2.4	Existing waste collection schemes, including the material and territorial coverage of separate collection
28 (3)(cb)				2.9	Assessment of the need for new collection schemes
28 (3)(cb)				2.10	Measures to improve separate waste collection
28 (3)(d)	sufficient information on the location criteria for site identification and on the capacity of future disposal or major recovery	✓		2.12	Capacity of future disposal and major recovery installations
28 (3)(d)	installations, if necessary;	✓		2.13	Location criteria for site identification
28 (3)(e)		✓		2.15	Description of waste policies
28 (3)(e)	management technologies and methods, or policies for waste			2.16	Planned waste management technologies/ methods
28 (3)(e)				2.17	Policies for waste posing specific management problems
28 (3)(f)	measures to combat and prevent all forms of littering and to clean up all types of litter;	✓		2.18	Measures to combat littering

Art. of the WFD	Element, Information is included in WMP	YES:	NO:	Number of criterion in	Name of the criterion in Part D
	,	√	*	Part D	
28 (3) (g)	appropriate qualitative or quantitative indicators and targets, including on the quantity of generated waste and its treatment and on municipal waste that is disposed of or subject to energy recovery.	✓		2.19	Qualitative and/or quantitative waste indicators and targets
28 (5)		✓		2.21	Preparing for reuse and recycling of municipal waste, targets in Art. 11(2) and (3)
28 (5)	Waste management plans shall conform to the waste planning requirements laid down in Article 14 of Directive 94/62/EC, to the targets laid down in Article 11(2) and (3) of this Directive			2.22	Waste and treatment not acceptable in landfills, Art. 5 of Directive 1999/31
28 (5)				2.23	Marine litter prevention and programme of measures, Directive 2008/56
28 (5)	and to the requirements laid down in Article 5 of Directive 1999/31/EC, and for the purposes of litter prevention, to the requirements laid down in Article 13 of Directive 2008/56/EC of the European Parliament and of the Council and Article 11 of	✓		2.24	River basin district litter prevention, marine strategies, programme of measures, Art. 11 of Directive 2000/60
28 (5)	Directive 2000/60/EC of the European Parliament and of the Council.	✓		2.25	Packaging waste, waste planning requirements
28 (5)		✓		2.26	Construction and demolition waste, targets in Art. 11(2) and (3)
28 (5)		√		2.27	Biodegradable municipal waste

Conclusion: WMP is compliant with all required elements under the WFD.

Explanation on the overall rating and summary of key information / conclusions

The WMP includes sufficient information for all of the **mandatory requirements** of Article 28 of the WFD. In this context, a more detailed assessment for the closure of existing installations, O&M costs and financial planning could be provided, however after the provision of additional information and references by the CA, the WMP can be rated as compliant.

PART B. ASSESSMENT RESULTS

Overview of WMP and administrative structure in the MS or region

Section 1	YES: ✓	NO: ×
All general information on WMP is included	✓	
The assessment of one national, regional, or local WMP is sufficient to give an overview of the waste management situation in the geographical entity concerned (i.e., there are no waste management planning issues to be covered at another administrative level)	~	

If the assessment of one national, regional, or local WMP is **not sufficient** to give an overview of the waste management situation in the geographical entity concerned, please shortly explain which other plans are relevant to get a full picture on compliance with WFD (otherwise delete this row): # Example: Waste management planning in the Czech Republic is carried out at different administrative levels. Information on additional waste management infrastructure and capacity planning is to be included in regional plans and not in the national plan under assessment. Therefore, it is necessary to evaluate regional WMPs with a view to these two criteria. There are 14 regions / 14 regional WMPs in the Czech Republic.

Overall assessment of mandatory requirements

The overall assessment **combines all assessment steps** into **one rating**. The interpretation of the overall rating should always have a connection to the singular ratings of each assessment steps.

The waste management plan is rated as			
NOT COMPLIANT → the WMP does not cover all mandatory requirements of Article 28 of the WFD as assessed under section 2			
COMPLIANT → the WMP covers all mandatory requirements of Article 28 of the WFD as assessed under section 2	x		

Overall assessment of coverage of enabling conditions in the WMP

Overview of required elements under CPR regulation: compliance check (include information from section 4 of the detailed assessment) NO: × Element, Information is included in WMP1 YES: ✓ Waste management plan(s) as referred to in Article 28 of Directive 2008/98/EC as amended by Directive EU 2018/851/EU are in place and covering the entire territory of the Member State and include: An analysis of the current waste management situation in the 1 a) geographical entity concerned, including the type, quantity and source of waste generated 1 b) and an evaluation of their future development taking into account the expected impacts of measures set out in the $(1 c)^2$ Waste Prevention Programme(s) developed in accordance with Article 29 of Directive 2008/98/EC as amended by Directive 2018/851/EU. 2 An assessment of existing waste collection schemes, including 2 a) the material and territorial coverage of separate collection ✓ 2 b) and measures to improve its operation 2 c) as well as the need for new collection schemes. 3 An investment gap assessment 3 a) justifying the need for the closure of existing waste installations 3 b) and additional or upgraded waste infrastructure, with an information of the sources of revenues available to meet 3 c) operation and maintenance costs. 4 Information on the location criteria for how future site locations identification will be a)³ determined 4 b) and on the capacity of future waste treatment installations.

-

¹ Where information is partially included, the element is rated as "non compliant". Details on the missing information is included in Section 4 of Part D.

² Element 1c) is NOT FULFILLED if the "evaluation" does not describe how it has taken into account the expected impacts of measures set out in the Waste Prevention Programme(s) developed in accordance with Article 29.

³ The assessment includes the location criteria for the site identification but does not specifically ask for the approach or methodology used in order to determine the future site locations.

PART C. RECOMMENDATIONS

In general, consider consulting:

- 1. [EC BiPRO part of Ramboll 2018] Detailed assessment of Waste Management Plans second batch, Final report. Available at:
 - https://ec.europa.eu/environment/pdf/waste/studies/WMP%20assessment_final%20report.pdf
- 2. [EC BiPRO 2016] Detailed assessment of Waste Management Plans first batch, Final report. Available at:
 - https://ec.europa.eu/environment/pdf/waste/studies/Assessment of WMP final report.pdf
- 3. [ETAGIW Consortium 2012] Preparing a waste management plan. A methodological guidance note. Available at:

1) Proposals for modification of content, indicating in particular missing issues:

- Include information on waste containing significant amounts of critical raw materials (criterion 2.7)
- For the future WMPs it is recommended to state more explicitly the situation regarding the assessment of financing needs, even though as in this case, no additional capacities are planned. Even though the financial planning is attributed to ATERSIR, the territorial agency for water and waste services, that according to the information provided by the CA is responsible for the financial planning, the maintenance costs of installations and related aspects could have been covered in more detail (attribution of revenues to operation and maintenance costs (criterion 2.11, 2.14, 3.1).
- The closure of existing plants is to be observed from the planned operational capacities of the facilities for each year, however, the operational lifetime of some facilities could be specified in more detail, as it is done for landfills (criterion 2.14)
- For the future WMPs, financial responsibilities could be described in more detail, especially concerning the responsibilities of other stakeholders and agencies. For the closure and decommissioning of waste treatment installations and landfills could be specified in more detail (criterion 2.14)
- Include information of waste shipments, including other waste types than WEEE

2) Proposals for better structuring:

- Provide overview information on planned waste treatment installations infrastructure and planned upgrades, even if no new installations are required in the present planning period, this could be stated more explicitly.
- Include information on treatment capacity grouped by waste treatment technology and number of installations, for all available waste treatment technologies (e.g., as it is done for landfills)

3) Suggestions how to improve data and information quality and logic and comparability of data:

Provide more overviews of information grouped by specific waste categories or grouped by
waste treatment technologies, stating the responsibilities of other stakeholders more
explicitly, as in the case of e.g. ATERSIR, the territorial agency for water and waste services,

that according to the additional information provided by the CA is responsible for the financial planning.

PART D. DETAILED ASSESSMENT

1. Overview of WMP and administrative structure in the MS

This section includes **basic information on the WMP**. It further investigates the national **administrative structure of waste management policies**. Article 28 of WFD does not prescribe the administrative level at which Member States should establish WMPs, but only requires that "...plans shall, alone or in combination, cover the entire geographical territory of the Member State concerned." If WMPs exist at different levels, the coherence of the allocation/ share of responsibilities is described.

Gener	General information on WMP						
1.1	Application period and legal adoption	Application period: 2022-2027 With Legislative Assembly Resolution No. 87 of 12 July 2022, the Regional Waste Management and Polluted Area Remediation Plan 2022-2027 (PRRB/WMP) was approved					
1.2	Review period	2022-2027; The Plan's time span extends to the year 2027, at the end of which the Council will assess whether it needs to be updated, also in the light of the Plan monitoring carried out in 2025 [p.2, Norme tecniche di attuazione]; annual review					
1.3	Competent authority for drafting WMP	Emilia-Romagna Region (Environment, Waste, Contaminated Sites Remediation and Public Services Legal Service) ATERSIR (territorial agency for water and waste services) ARPAE (territorial agency for environmental prevention and energy)					

Information on waste management planning structure within Member State

Information on administrative structure

According to the provisions of Legislative Decree No. 152 of 2006 (Article 199 'Regional Plans'), the Regions have the competence to prepare and adopt Waste Management Plans in compliance with the principles and purposes indicated by the EU legislator.

The Regional Plan for Waste Management and Remediation of Polluted Areas (PRRB) defines the guidelines and prescriptions to be implemented in the regional territory in accordance with the requirements of the National Waste Management Program 2022-2028 (PNGR) adopted by Decree of the Ministry of Ecological Transition No. 257 of June 24, 2022

Coverage of the territory

The WMP under assessment covers the entire territory of Emilia-Romagna

Authorities							
1.4 Authorities involved in waste management planning	The WMP is drawn up on the regional level by the Regional Council/Government: [p.36] It has the responsibility of preparing, adopting and updating the Regional Waste Management Plan [p.20] it is authorised to amend by resolution and certain provisions (contained in Chapter 8) regarding flows in the event of deviations from						
	the Plan's forecasts regarding production, separate collection and recovery targets for municipal waste. It can amend and supplement the provisions						

of the plan in order to bring it in line with the prescriptive contents of the state waste legislation.

[p.15] Competent agency, ATERSIR (territorial agency for water and waste services) is responsible for annual monitoring for the purpose of drawing up the Economic and Financial Plans of the municipal waste management service for the following years. Is assigns a deadline, to the operators concerned to bring their service organization into line with the Plan's forecasts

ARPAE (territorial agency for environmental prevention and energy)

[p.5] Further, the process of preparation of the WMP involves different stakeholders such as local authorities, trade associations, thematic focus groups and the signatories of the Emilia-Romagna Regional Labour and Climate Impact Pact

1.5 Authorities involved in **implementing** the WMP

The responsibilities and role of authorities are described in the WMP as follows:

- the Region (council) and ARPAEmonitor and provide annual reports on the implementation of the WMP,
- [p.17, Norme tecniche di attuazione] the region accompanies the measures under this Plan through the financial instruments made available by the European Union or the state;
- [p.7, Norme tecniche di attuazione] Permanent Coordination Committee and ARPAE is responsible for the termination of waste status
- [p.7, Norme tecniche di attuazione] Regional Council, Plastic FreER steering committee, Permanent By-product Coordination Board examines implementation of the Strategy on plastic waste: e.g., the Regional Council, after informing the competent assembly committee, may envisage further measures in line with the Plan's strategy following the Plastic FreER steering committee. [...] In implementation of the plastic waste reduction targets, the Permanent by-product Coordination Board examines, as a priority, the production chains related to plastic products
- [p.9, Norme tecniche di attuazione] Municipalities (and municipal waste management service) implement separate waste collection, as well as collection and transport municipal waste, street sweeping and other urban cleaning services, or are conducted by the companies to which Atersir has entrusted the municipal waste management service.

Only in case waste management planning is carried out at different administrative levels

The following issues are managed by following levels:		Plea	se tick (X	()	Additional
		national	regional	local	information / remarks:
1.6	General waste management policies / strategy	×	×		
1.7	Type, quantity and source of waste / Estimation of waste amounts / Developments and forecasts	х	х		
1.8	Existing waste collection schemes and assessment of new collection schemes		х		

Only in case waste management planning is carried out at different administrative levels

The f	ollowing issues are	Plea	ase tick (X	()	Additional
	aged by following levels:	national	regional	local	information / remarks:
1.9	Major disposal and recovery installations		x		
1.10	Planning for additional waste infrastructure (including capacity planning)		x		
1.11	Closure of existing installations		x		
1.12	Location criteria for site identification		х		
1.13	Shipments of waste	×	x		
1.14	Special arrangements (at least for waste oils and hazardous waste)	х	х		
1.15	Municipal waste	×	×		
1.16	Packaging waste	×	×		
1.17	Biodegradable waste	Х	Х	_	
1.18	Other waste streams	×	×		

Conclusion on waste manageme	ent planni	ing struc	ture
	YES: ✓	NO: ×	Remark
Is the assessment of one national, regional, or local WMP is sufficient to give an overview of the waste management situation in the geographical entity concerned (i.e., there are no waste management planning issues to be covered by another administrative level)?	✓		In Italy, there is a National Waste Management Programme that has a framework function. It does not indicate specific interventions or projects, which are instead the responsibility of the Regional Plans. Italian regions are responsible for the elaboration of regional plans. The assessment of the regional WMP of Emilia-Romagna is sufficient to give an overview of the waste management situation in the regional territory since all waste management issues are to be covered at the regional level.

2. Mandatory requirements of Article 28 WFD ("compliance check")

The purpose of this section is to confirm, whether all information **required under the Waste Framework Directive**, in particular of Article 28 (1) to (3) and (5) of WFD (but not of Article 28 (4)) are included in the WMP. Quality aspects are not considered at this stage; the check concentrates on the simple existence of information contained within the WMP.

Does the WMP include information on		YES:	NO:	Please summarize information as
	ed elements	√	^	included in WMP for each element:
under				
Analys	sis of current was	te man	ageme	ent situation (Art. 28 (2) WFD)
2.1	Definition, type, source of municipal waste generated (Art. 28 (3) (a) WFD)	✓		 [p. 122] Legislative Decree 152/06 Art. 181 of the national legislation recognizes separate collection as an essential tool and defines that waste is to be collected separately: [p.138-147]: Waste types organic fraction (distinguished into wet, green (solid)) dry fraction: paper and cardboard, plastic waste, glass, metals (ferrous and nonferrous), wood Other categories: Textiles WEEE Waste oils Bulky waste Street sweeping waste Hazardous waste produced by households Disposable diapers
2.2	Waste amounts (Art. 28 (3) (a) WFD)	✓		Waste amounts are provided in detail for each year, including projections for the future. [p.80] - total production of municipal waste: 2,986,223 tonnes (2019) - 2,875,122 tonnes (2020) (reduction includes corona effect) [p.74] - Municipal solid waste: 667 kg/capita (2019) - Residual waste: 194 kg/capita (2019)
2.3	Future waste arisings, including an evaluation of the development of waste streams in the future (Art. 28 (3) (a) WFD)	√		[p.80] Total municipal solid waste: trend forecast is based on demographic and economic evolutions with two scenarios where one includes the WMP measures and one that does not consider the WMP measures: [p.84] Projection: 2027: (scenario: without WMP): 3.314.148 tonnes

inforn requir	the WMP include nation on red elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:						
				2027: (scenario: with WMP): 3.148.441 tonnes The WMP aims to reduce the generation of waste by 165,707 tonnes. The increase in total production to 2027 in the WMP scenario is a consequence of the projected GDP increase of +11% to 2027 compared to 2019						
2.4	Existing waste collection schemes, including the material and territorial coverage of separate collection (Art. 28 (3) (cb) WFD)	✓		[p.87] Detailed information on collection performances are provided for each department in Emilia-Romagna. Departments classified as mountain areas have lower targets (67% of waste to be separately collected in 2027), while the targets for low-land areas are 84% and for 'provincial-capital' and coastal areas are set to 79%, leading to an average value of 80%. [p.103] percentage of separately collected waste is aggregated into the three main categories of 'provincial capital'-coastal areas, mountain areas, low-land areas; [p.107] existing collection systems include: - door-to-door collection - street containers - collection centers - other collection systems (e.g. on-demand collection, collections carried out at non-household premises) [p.109] Collection by waste type of region and collection method:						



inform requir	the WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:
				[p.116] Local conditions, and costs are taken into account, when determining the method of collection. The responsible agency is Emilia-Romagna Territorial Agency for Water Services and Waste (Atersir) that in agreement with the Municipalities defines the operational modalities.
2.5	Major disposal and recovery installations (Art. 28 (3) (b) WFD)	✓		Installations of waste treatment and disposal installations are provided for mechanical and biological treatment (MBT), waste-to-energy (WtE) and landfills that change in capacity and availability over time. For the year 2022 the following capacities were planned/available: MBT: Parma: 180,000 tonnes/a Borgo Val di Taro: 58,000 tonnes/a (biological) Carpi (biological): 30,000 tonnes/a Gaggio Montano: 61,293 (mechanical) this plant serves the landfill site (information provided by the CA) Imola: 150,000 tonnes/a (mechanical), 70,000 tonnes/a (biological) Waste-to-energy (WtE) for municipal waste: Piacenza: 120,000 tonnes/a Parma:166,000 tonnes/a Granarolo dell'Emilia: 220,000 tonnes/a Ferrara: 142,000 tonnes/a Forli: 120,000 tonnes/a Coriano: 150,000 tonnes/a [p. 172] Waste-to-Energy capacity (municipal and special waste): 1,200,000 tonnes Waste-to-energy/incinerators useful for calculating regional plant capacity Plant Authorised capacity (It/year) Plant (PR) Plant (PR) Placenza (PC) Plant
				Modena (MO) 210.000 (*) Granarolo dell'Emilia (BO) 220.000 (*) Ferrara (FE) 142.000 Forlì (FC) 120.000 Coriano (RN) 150.000 (*) Ravenna (RA) 50.000

inform requir	he WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:						
				Plant Authorised capacity [t/year] Being EcoEridania (FC) 32.000 Total authorised 1.210.000 (*) Indicative value referring to the authorised nominal heat load						
				Finale Er	for munici nilia: (auth nal due to a	orized, b	out not	at the		
				its autho	Montano: 1 rized capa lanned, bu	city in 20	023)			
				waste) a	ng capacity nd time ho	rizon for	exploita			
				Company name	Municipality	Remaining capacity as at 31/12/21 [t]	Estimated annual contributions [t]	Termination of contributions		
				Herambiente Spa Gaggio Montano (BO) 90.000 20.000 - 30.000 year 2						
				Sogliano Sogliano al Rubicone 1.430.000 160.000 year						
				R.I.ECO s.r.l.	Mirandola (MO)	480.000	40.000	year 2033		
				AIMAG S.p.A.	Medolla (MO)	245.000	50.000	year 2026		
				A.S.A. S.c.p.A.	Castel Maggiore (BO)	419.000	130.000	year 2024		
				Area Impianti SpA	Jolanda di Savoia (FE)	27.000	13.000	year 2023		
				Feronia s.r.l.	Finale Emilia (MO)					
				Herambiente Spa	Imola (BO)					
2.6	Waste shipments (Art. 28 (3) (a) WFD)	✓		detail for and mate asbestos (C&D, W [p.175] For MSW available - Coria from the fire Emili - Gran 2024 - Gagg from	nd import in special waterial flows and import in special wateries, batteries, indication and incinerate Republicant (BO), will receivate Montant some municular are insofaisings are insofaisings are insofaiture, but	of MSW plants: ator rece lic of Sar of the Aga Region incinerative wasted landfill, icipalitie ar include modelled	idetailed for C&D ving, ashe imports ives som Marino, greement from Tuster receives in Tusced as futil and project in the control of the cont	maps waste, s, etc. is e MSW within with the ing from scany waste any ure jected		

inform	the WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:
				existing plants within the region and of the neighboring regions are considered. Note: amounts, proportion of waste exported, country of destination, projections and of waste shipments as done fore special waste could be provided also in regards to MSW waste types. Additional information provided by the CA:
				Already during the previous planning season, full self-sufficiency for undifferentiated municipal waste disposal was achieved at the regional level; this goal is confirmed in PRRB 2022-2027.
2.7	Special arrangements (Art. 28 (3) (b) WFD)	✓		Reference to hazardous waste legislation is included and different chapters describe current management of hazardous and special waste that is defined in the document such as C&D waste. For each of the waste categories it is referred to the regulatory framework, the state of play, the management system is described and actions and strategies on the regional level are described Reference to waste oils AND/OR reference to legislation or sectoral plan is included: [p.271 - 277] Quantities, production, treatment, movement of the waste oils in reference to regional plan and related actions and strategies are included Reference to waste containing significant amounts of critical raw materials is included only in regards to WEEE: [p.285] only reference to CRM is related to the treatment of WEEE and the need to increase treatment capacities as most of WEEE is exported
2.8	Measures to prevent landfilling of all waste suitable for recycling or other recovery (Art. 28 (3) (ca) WFD)	4		Objectives of the WMP raise targets for the preparation for re-use and recycling of municipal and packaging waste in accordance with EU's legislation [p.74] In 2019 the region, with only 1.66% of MSW being sent to landfills belongs to one of the best performing in the EU and is already below the 10% target for 2035

inforn requir	the WMP include nation on red elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:						
				Measures to prevent landfilling of waste that is suitable for recycling cover the entire region and include: - [p.70] a ban landfilling of untreated MSW - [p. 218] reduction of landfilling of special waste (e.g. C&D waste) by - 10% until 2027 - [p.373] dedicated programme for the reduction of biodegradable municipal waste going to landfill - [p.384] separation at source, an increase of separate collection, as well as through increasing the capacity of treatment facilities - [p.388] reduction of waste volumes through Waste Prevention Programme - [p.178] introduction of pricing mechanism for residual waste and its collection based on amount of waste - reduction of organic waste going to landfilling and reduction of food waste by 38%, with other alternative measures included in: Table 14-4 > Main treatment alternatives for RUB in order to reduce their landfilling Waste Reuse Recycling Recovery Composting Anaerobic Incineration and waste-to-energy plants RUB present in Russe RUB present in Russe RUB present in Russe RUB present in Russe X X						
2.9	Assessment of the need for new collection schemes (Art. 28 (3) (cb) WFD)	✓								

inforn requir	the WMP include nation on red elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:					
				cardboard, pother sorted					
				RER	2017	2019	2027		
				Wet	52	68	80		
				Green	87	91	98		
				Paper and cardboard	65	69	78		
				Plastic	47	53	73		
				Glass	84 55	91 65	95 84		
				Wood	91	94	97		
				other RD	52	55	60		
				Total	64	71	80		
				The waste fr particularly (+20% com and wet was - [p.97] furt of 120 kg/in not sent for	increased by pared to 20 ste (12%) [sher the WM habitant perecycling p	y 2027 are 019), meta p. 106]. 1P identifie er capita ur er year	e plastics ls (+19%) s a target ban waste		
2.10	Measures to improve separate waste collection (Art. 28 (3) (cb) WFD	*		home an be maint extended collection Textile we to be derived for the collection be derived for the collection be derived for the collection levels as system, speriment of the collection levels as system.	in in detail [21]. It is carons such as ructure, nare hy and relaised on that re derived, fraction: (sid/or command in territor is lower waste: collect or seand Accurate on the trypologies, and sustain a cial attentic apital and generation wels, as well increasing	in a separategorized as population tural conditural conditural conditural complete conditurate constant contexts of the following partial contexts of the way of the constant are and low sell as 'moundand constant and constant	ate chapter according to a density, tions such of collection ing llection, posting) will reloped and swhere it is ly present E and be /2030 guished considers the e tariff pe paid to eas with parate tain' areas.		

inform	he WMP include ation on ed elements WFD?	YES: ✓	NO:		summarize information as n WMP for each element:				
				- applica through prepara are to be [p.117] im accompani aimed at coobjectives	proved systems of the by information of the different of	of smart bins we waste collection for financing s should be on and education types of waste, lefined and actions			
				GENERAL OBJECTIVES	RD target to 2027: 84%. Increasing the percentage of DR: by 7% to 2027	HOMOGENEOUS PLAIN AREA			
				Product fractions	Specific Objectives	Action s			
				Wet Paper and plastic	- Increase in interception yield to 2027 - Increase in paper interception yield by 9 per cent to 2027; - Increase in plastic interception yield by 17% at 9 per cent to 2027; - Increase in plastic interception yield by 17% at 900.	increase of the main separate collection systems for the organic fraction; dissemination and enhancement of self- composting and community composting practices; as a substitute for separate collection systems. Increasing separate collection systems for the paper and plastic fractions in order to improve the quality of collection and in relation to the specificity of the territorial context.			
				Glass and metals	Increase in glass interception yield by 4 per cent to 2027; Increase in metal interception yield by 15 per cent to 2027.	 Increased use of separate collection systems for glass and increased use of separate collection systems for metals in order to improve the quality of collection and in relation to the specificity of the territorial context; for metals: increased interception at collection centree, through collections dedicated or other collection systems. 			
				Green	4% increase in interception yield to 2027	 more widespread use of green collection systems in order to improve the quality of collection and in relation to the specificity of the territorial context; dissemination and enhancement of self- composting and community composting practices, as a substitute for separate collection systems. 			
				Wood	Increased interception yield by 1% to 2027	deployment of interception systems a t collection centres or through dedicated collections.			
				GENERAL OBJECTIVES	RD target to 2027: 84%. Increasing the percentage of DR: by 7 % to 2027	HOMOGENEOUS PLAIN AREA			
				Product fractions	Specific Objectives	Action s			
				Other RD Other RD - increase in interception yield to 2027 - increased interception at collection systems in relation to the specificity of the territoral context. - Textile waste: dissemination of textile waste collection systems in relation to the specificity of the territoral context. - Hazardous municipal waste: increase of collection systems for hazardous municipal waste cocording to regulatory targets (where present) and in relation to the specificity of the territoral context.					
				Undifferentiated		 extension of the main undifferentiated waste collection systems equipped with user recognition and quantification devices of the waste delivered. 			
				Competent subjects	Atersir, Local Authorities and Waste Se	-			
				Tools	Area Plan and other planning instrume	nts			

inform	the WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:					
				GENERAL OBJECTIVES Product	DR target to 2027: 67% Increasing the percentage of DR: by 8% to 2027*	HOMOGENEOUS MOUNTAIN AREA			
				fractions	Specific Objectives Increase in interception yield by 20 per cent to 2027	Action s - increase of the main separate collection systems for the organic fraction; - dissemination and enhancement of self-composting and community composting			
				Paper and plastic	Increase in paper interception yield by 9 per cent to 2027 19% increase in plastic interception yield at 2027	practices, as a substitute for separate collection systems. Increasing separate collection systems for the paper and plastic fractions in order to improve the quality of collection and in relation to the specificity of the territorial context.			
				Glass and metals	Increase in glass interception yield by 3 per cent to 2027 Increase in metal interception yield by 13% to 2027	 Increased use of separate collection systems for glass and increased use of separate collection systems for metals in order to improve the quality of collection and in relation to the specificity of the territorial context; For metals: increased interception at collection centree, through collections dedicated or other collection systems. 			
				Green	Increased interception yield by 10% to 2027	more widespread use of green collection systems in order to improve the quality of collection and in relation to the specificity of the territorial context: dissemination and enhancement of self-composting and community composting practices, as a substitute for separate collection systems.			
				GENERAL OBJECTIVES	DR target to 2027: 79% Increasing the percentage of DR: by 11% to 2027	HOMOGENEOUS AREA COASTAL CAPITALS			
				Product fractions	Specific Objectives	Action s			
				Wet	Increase in interception yield by 12% to 2027 - Increase in paper interception yield by	Increase of the main separate collection systems for the organic fraction; dissemination and enhancement of self-composting and community composting practices, as a substitute for separate collection systems. Increasing separate collection systems for the			
				Paper and plastic	Increase in paper interception yield by 9 per cent to 2027 23% increase in plastic interception yield to 2027	- increasing separate collection systems for the paper and plastic fractions in order to improve the quality of collection and in relation to the specificity of the territorial context.			
				Glass and metals	Increase in glass interception yield by 5 per cent to 2027 Increase in metal interception yield by 25 per cent to 2027	Increased use of separate collection systems for glass and increased use of separate collection systems for metals in order to improve the quality of collection and in relation to the specificity of the territorial context; for metals: increased interception at collection centres, through dedicated collections or other collection systems.			
				GENERAL OBJECTIVES	DR target to 2027: 79% Increasing the percentage of DR: by 11% to 2027	HOMOGENEOUS AREA COASTAL CAPITALS			
				Product fractions	Specific Objectives 10% increase in interception yield to 2027	Action s			
				Green	4% increase in interception yield to 2027	 more widespread use of green collection systems in order to improve the quality of collection and in relation to the specificity of the territorial context; dissemination and enhancement of self- composting and community composting practices, as a substitute for separate collection systems. deployment of interception systems at collection 			
				Other RD	Increase in interception yield by 6 per cent to 2027	centres or through dedicated collections. Increased interception at Increased interception at Textile waste: dissemination of textile waste collection or systems in relation to the specificity of the territorial context; Hazardous municipal waste: increasing the collection systems for hazardous municipal waste according to regulatory targets (where present) and in			
				Undifferentiated		relation to the specificity of the territorial context. extension of the main undifferentiated waste collection systems equipped with user recognition and quantification devices of the waste delivered.			
				Competent subjects	Atersir, Local Authorities and Waste S				
				Tools	Area Plan and planning tools				
			Responsible stakeholders are ider Region, Atersir, Local Authorities Management Companies) and sta involved are stated (e.g. Citizens, Chain Consortia)						
2.11	An assessment of the need for additional waste installation infrastructure,	~		developed self-sufficie therefore,	ency of the enti	anning, allows for re region and, ot envisage, []			

Does the WMP include information on required elements under WFD?	YES: ✓	NO:	Please sincluded in	umma WMP				ntion ent:	as		
including an			[p.150]								
assessment of the investments and other financial means, including for		The need for additional plants is shown projections of the plant system for each until 2027, in separate tables, including tables of arising waste for that year:									
local authorities,			Table 8-1 > The plant syste		WASTE-TO		lanned to 2	DISCHAR	GES		
required to meet			WESTAWICAE BIOLOGICAE	- INCATIVICATI	Piacenza (PC			DISCHAR	GES		
those needs⁴			Parma (PR)								
(Art. 28 (3) (c)			Borgo Val di Taro (PR)	[TMB]							
WFD)			Carpi (MO)	[TB]	Modena (Mo			e Emilia (MC))*		
WID)			Imola (BO)	[TMB]	Granarolo d	ell'Emilia (B	· -	(BO)**	(0.0)		
			Gaggio Montano (BO)	[TM]	Ferrara (FE)		Gagg	io Montano	(DU)		
					TCTTGTG (FE)						
			MECHANICAL BIOLOGICA	L TREATMENT	WASTE-T	O-ENERGY		DISCHA	RGES		
					Forlì (FC)						
					Coriano (RN						
			TM: Mechanical Treatment; TB: Biostable (*) authorised plant currently not in op		-						
			Table 8-2 > Total quar	ntification of	flows at re	ogional le	vel 2022				
				ntification of			VCI, 2022				
			Total quan	itilication of	Mechanical		t	169.3			
					Biostabilisat			32.43			
			Total flows to		Waste-to-e	nergy		667.437			
					Landfill			19.63	35		
			Material recovery					1.24			
			Incineration products		Powders Slag			21.43 125.2			
			[p. 176] Add assessed baspecial wast capacity unt but addition waste that is (especially a an additional 2027.	sed on e (RS) il 2027 al capa s outsions sbesto	capace. For Model is considerable the capace. The capace capace capace capace. The capace capace capace capace. The capace capace capace capace capace. The capace	ity of ISW rside requ scop es, e	f MSV the a red s lired e of l tc.) r	V (RL vailal ufficie for sp MSW equir	J) and ble ent, becial		
			Table 8-14 > Comparison b	etween RS tre	atment needs	and overal	l availabilit	y			
				2022	2023	2024	2025	2026 [+]	2027		
	1		Requirement RU+RS fo		[t]	[t]	[t]	[t]	[t]		
	1		disposal/recovery energy	1.774.17	8 1.747.323	1.738.471	1.696.039	1.692.941	1.693.317		
			Waste-to- energy/incinerator capacity	1.210.00	1.210.000	1.210.000	1.210.000	1.210.000	1.210.000		
					2022	200	2007	2000	2027		
			T	2022 [t]	2023 [t]	2024 [t]	2025 [t]	2026 [t]	2027 [t]		
	1		Landfill requirements	564.17	537.323	528.471	486.039	482.941	483.317		
			Landfill availability	440.53	435.319	380.000	250.000	250.000	200.000		
	1		RS disposal requirements 123.643 102.003 148.471 236.039 232.941 283.317								
			The financia available are Decree of th Transition (N	e ment ie Minis	ioned stry fo	[p.23 r Eco	3]: logica	al			

⁴ As stated in Art. 28 (3) (c) WFD, the assessment of the investments and other financial means "shall be included in the relevant waste management plans **or** in other strategic documents covering the entire territory of the Member State concerned". In case the assessment is not included in the WMP, the Plan shall indicate in which external document this assessment is provided.

Does the WMP include information on required elements	YES: ✓	NO:	Please summarize information as included in WMP for each element:
under WFD?			'Construction of new waste management plants and modernisation of existing plants' provides financial resources of EUR 1.5 billion for the realisation: - A: improvement and mechanisation of the municipal waste collection network - B: modernization and extension of existing plants - C: Modernisation (also with expansion of existing plants) and construction of new innovative treatment/recycling plants [p.23] recipients of this financing are the Enti di Governo d'Ambito Territoriale Ottimale (EGATO) or, where they have not been established, the Municipalities. With MiTE Decree No. 397 of 28/09/2021 'Flagship Projects for the Circular Economy', which provides financial resources of EUR 600 million, that are directed towards modernization, construction and/or expansion of existing facilities) and construction of new facilities for improvement of collection, logistics and recycling of: - WEEE including wind turbine blades and photovoltaic panels; - paper and cardboard waste - Textiles - Construction of new facilities for recycling plastic waste (through mechanical recycling, chemical recycling, 'Plastic Hubs'), including plastic waste at sea (marine litter); [p.287] In the context of CRM and exports of WEEE, mainly to Pakistan and China, a shortage of treatment capacities is identified through the analysis of the 2018 data, and in anticipation of an increase in the production of WEEE in the coming years, the Plan therefore identifies the need to increase the regional endowment of plants dedicated to the treatment of this waste.
			Note: Since budgets are identified that would enable the upgrades in existing waste treatment facilities, the criterion is rated as compliant, but it is suggested to provide a more detailed disaggregation of financing demands and more details on the planned upgrades.
			Additional information provided by the CA:

inforn requir	Does the WMP include information on required elements under WFD?		NO:	Please summarize information as included in WMP for each element:
				Since the requirements refer to the disposal of special waste, the plant needed to cover these needs will not be able to be financed by PNRR funds nor by other public funds
2.12	Capacity of future disposal and major recovery installations (Art. 28 (3) (d) WFD)	✓		Available waste treatment capacity is higher than required capacity for MSW and indication that no additional treatment capacities are required: WtE [p.99, Quadro Conoscitivo] (municipal and/or special waste): 1,175,795 tonnes, compared to a maximum authorised capacity of 1,259,500 tonnes Composting plants [p. 110, Quadro Conoscitivo]: maximum authorised capacity (2019) was 802,100 tonnes, while treated a total of approximately 709,145 tonnes MBT plants [p. 107, Quadro Conoscitivo]: total of 493,370 tonnes of waste were treated while maximum permitted capacity was 974,293 tonnes More details are provided in the separate document "Quadro Conoscitivo" of the WMP existing and projected utilization of recovery and disposal installations is provided in detail -> see point 2.5, 2.11 For disposal through landfills, it is indicated that no new capacities are planned as "the plan sets as an objective the prohibition of disposal in landfills, subject to the saturation of the capacities already planned and authorised in implementation of the previous 2014-2021 Plan." [p.148] For other waste streams such as packaging it is indicated that different consortia are supported to manage specific waste fractions. All operated facilities by private companies are also included in a separate
				document "Quadro Conoscitivo" which is part of the WMP
2.13	Location criteria for site identification (Art. 28 (3) (d) WFD)	✓		Article 22 describes criteria for identifying suitable locations for waste disposal facilities [p.12, Norme tecniche di attuazione] proximity principle demonstration of treatment needs principle of fair distribution of environmental loads principle of self-sufficiency in waste disposal

inform	he WMP include lation on ed elements WFD?	YES: ✓	NO:	Please included	summai in WMP	_	nformat n elemer	
				identifica	12 describe ition of loca osal installa	ations fo		
An assessment of the need for closure of existing waste installations, including an assessment of the investments and other financial means,			decommine from the manager plants, it operations. Between Landfill) Landfill) Between (MBT) store further applanned of the manager planned of the manager plants and the manager plants are plants.	tioned that issioning of tables that nent system can be seen in a special 2023 - 20 and Gaggiostop operate table with closure is possible to table to table to table with closure is possible to table	f the MB t show the s	Ts is fore he waste he respect plants so la (MBT and for landfor landf	etive top and Taro	
	✓		Company name	Municipality	Remaining capacity as at 31/12/21	Estimated annual contributions [t]	Termination of contributions	
			Herambiente Spa	Gaggio Montano (BO)	90.000	20.000 - 30.000	year 2023	
	including for local authorities,			Sogliano Ambiente s.p.a.	Sogliano al Rubicone (FC)	1.430.000	160.000	year 2027
	required to meet			R.I.ECO s.r.l.	Mirandola (MO)	480.000	40.000	year 2033
	those needs 5 (Art. 28 (3) (c)			AIMAG S.p.A.	Medolla (MO)	245.000	50.000	year 2026
	WFD)			A.S.A. S.c.p.A.	Castel Maggiore (BO)	419.000	130.000	year 2024
	,,			Area Impianti SpA	Jolanda di Savoia (FE)	27.000	13.000	year 2023
				Feronia s.r.l.	Finale Emilia (MO)			
				Herambiente Spa	Imola (BO)			
				can be st adequate all the ye	With regar tated that to meet to meet to ears consid	the exist he estim ered"	ing syste lated den	m is nand in
			can be st adequate all the ye	cated that to to meet t	the exist he estim ered"	ing syste lated den	m na	

⁵ As stated in Art. 28 (3) (c) WFD, the assessment of the investments and other financial means "shall be included in the relevant waste management plans **or** in other strategic documents covering the entire territory of the Member State concerned". In case the assessment is not included in the WMP, the Plan shall indicate in which external document this assessment is provided.

Does the WMP include information on required elements under WFD?		YES: ✓	NO:	Please summarize included in WMP for ea	information as ach element:
				The plan establishes to treatments to some plane decommissioning of them are related to the stop Municipal Waste to the idea As required in the Italian it's provided at the end the plant begin a post-op costs are covered by the by the MSW tariff. The result of the public service are not and remain in the owner's	lants and not the . Therefore, no costs of the treatment of entified plants. In landfill regulation, of waste treatment, peration and related appropriate fund or sidual costs are paid no longer used by decommissioned
2.15	Description of waste policies (Art. 28 (3) (e) WFD)	✓		- Waste policies are descrinational level, followed coordination instrument legislations [p.27-70], targets that are defined e.g. targets for the prepand recycling of municipus waste including prepararecycling: 55% by 2025 65% by 2035 [p.67], or the separate collection organic waste, textile waste produced by house The plan sets the followin period 2022 - 2027: Basic indicators	by a section on ts and related including the lon the EU-level, paration for re-use pal and packaging ation for re-use and 5, 60% by 2030, representation of obligations for restending to the extension of obligations for restending to the land to t
2.16	Planned waste management technologies/ methods (Art. 28 (3) (e) WFD)	✓		[p.171-177] The main ap increase separate waste of and quality, gradually december their main function in the the pre-treatment of was: "With regard to municipal stated that the existing sy to meet the estimated de years considered" Additional information pro-	collection quantity commission MBTs as present system is te prior to landfills. I waste, it can be ystem is adequate mand in all the

inform requir	Does the WMP include information on required elements under WFD?		NO:	Please summarize information as included in WMP for each element:
				The existing Granarolo WTE plant from 2024 will receive municipal waste belonging to the whole Provincia di Bologna (since the Gaggio Montano MBT, Gaggio Montano landfill, and Imola MBT will be decommissioned) without changing its capacity. This is not a new plant
2.17	Policies for waste posing specific management problems (Art. 28 (3) (e) WFD)	✓		 [p.115] Clearly described throughout the WMP, e.g. increase the level of collection for material recovery of household and similar waste, develop source separation of bio-waste for organic recovery, improve material recovery of occasional waste streams and waste from economic activities. Policies/Decrees are mentioned for each waste stream: → biodegradable waste → plastic → hazardous waste from households → textile waste → different types of special waste (not in the scope of MSW) [p.136] Based on the performance (2019) in relation to the targets (2027) for major types of MSW, key improvements are to be made for plastics, paper and cardboard and metals
2.18	Measures to combat littering (Art. 28 (3) (f) WFD)	√		- identification of the main products and sources of littering (packaging (food and non-food) in various materials, waste related to smoking (e.g. cigarette butts, empty cigarette packets, lighters, food-related waste such as disposable cutlery, bulky waste, disposable masks (during covid pandemic), including fishing related items that represent 27% of plastic waste found on beaches "Regional Strategy for Reducing the Impact of Plastics on the Environment (#Plastic-FreER)" aims to reduce and, where possible, eliminate the use of disposable plastics throughout the region. The strategy is based on 5 pillars (the so-called 5 Rs): Reconvert, Reduce, Clean up, Waste to Resource. It includes a gradual replacement of all single-use plastic products, including beverage bottles, on beaches, bathing establishments and in protected areas, including support for the design of new products, which meet the needs of re-use, repair and recycling in the

inform	the WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information included in WMP for each element:	as	
				agricultural, agri-food and mussel-farming sectors, involving further groups of stakeholders for further developing further actions		
				[p.493] Chapter 17 → Monitoring of plan actions via Indicators with detailed tables with objectives, indicators, target values MSW (=RU)) but also special waste Table 17-1 > Monitoring Planned Plan Actions for Municipal Waste and Special Waste	for	
				Measurement method Data taken from the annual		
				Municipal waste production tonnes reports of the municipalities Induded in ORSo ORSo	values	
				Municipal waste production per capita Per capita RU = RU production/inhabitants resident Per capita RU = RU production/inhabitants Per capita RU = RU Per capita		
				Municipal waste production by area to homogeneous (OR mountain, OR lowland, OR coastal) Municipal waste production by area to homogeneous (OR mountain, OR tonnes annual municipalities included homogeneous the Plan scen	in	
	Qualitative and/or	✓		b homogeneous (OR mountain, OR lonnes annual municipalities included homogeneous (OR mountain, OR lonnes) in ORSo longer	values	
2.19	quantitative			waste included in ORSo Regional per capita production of waste not sent for recycling (R-NIR kg/inhabitant) Per capita R-NIR= (RI+RD production not recycled)/inhabitants resident	values	
and targets			[p.497]			
	(Art. 28 (3) (g)			Objective RU indicator Units of Measur method method	alue	
						Zero Waste to Waste disposed of in landfills Waste Municipal Waste Sent to Landfill Waste Waste Municipal Waste
				Zeroing the quantities of waste in landfills waste disposed of in landfills tonnes and landfill bandfills and landfill bandfill b		
				Verifying and quantifying waste incinerated waste D10/R1 tonnes bata taken from ORSo and MUD facilities cenarios	1	
				Self-sufficiency in landfill plants % plant treatment/supply		
2.20	Evaluation of WMP ⁶ (Art. 28 (2) WFD)	✓		Monitoring Results are presented for the period 2014-2020 including an evaluation strengths and weaknesses [p. 217] The evaluation of the WMP plan is include the estimation of how the plan will achieve the targets with the existing capacities are generated waste, based on two scenarioses Flows in the waste management systems calculated for each year of the plan, e.g. chapter 8.2 shows the flows between the installations. Also, costs and revenues of system are considered, shown in chapter	ed in ye nd are	
2.21	Preparing for re- use and recycling	✓		Information on conformity with the respective targets (Art. 11 (2) (a) WFD:		

⁶ The "analysis of the current waste management situation in the geographic entity concerned, as well as the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste and an evaluation of how the plan will support the implementation of the objectives and provisions of this Directive" (Art. 28 (2) WFD) is covered by the following criteria: 2.1, 2.2., 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 2.12, 2.13, 2.14, 2.16, 2.21, 2.22.

inform	the WMP include nation on ed elements	YES: ✓	NO:	Please summarize information as included in WMP for each element:
under	of municipal waste, targets in Art. 11(2) and (3) (Art. 28 (5))			Preparing for re-use / recycling (at least paper, metal, plastic and glass from households and possibly from other origins: 50% by weight by 2020)) is included [p.89] The new WMP follows the enactment of Directive 2018/851/EU, considering new targets and methodologies for preparing for re-use and recycling, to be achieved by 2025 (55%), 2030 (60%) and 2035 (65%). → for the year 2020, the preparation for re-use and recycling calculated by applying the new methodology stands at 58% [p.94] [p.136] Summary of present performance in terms of distance-to-target (2019-2027) is shown in a table for each type of waste (RU, "rifiuto urbano" stands for MSW) Table 7-8 > Summary of expected data in relation to Plan scenarios Table 7-8 > Summary of expected data in relation to Plan scenarios Plan s
2.22	Waste and treatment not acceptable in landfills, Art. 5 of Directive 1999/31 (Art 28 (5) WFD)	√		Information on conformity with the requirements as laid down in Article 5 of the Landfill Directive 1999/31/EC include contents of the Regional Waste Management Plan under Article 199, holding information on measures to achieve the objectives set out in Article 5(3a) of Directive 1999/31/EC [p.37] [p.375] by 2035 the amount of municipal waste landfilled must be reduced to 10 per cent, or a lower percentage, of the total weight of municipal waste produced [p.74] In 2019, the region with only 1.66% of MSW being sent to landfills belongs to one of the best performing in the EU and is already below the 10% target for 2035. More information is provided under 2.8 (see above)
2.23	Marine litter prevention and programme of measures,	✓		Requirements laid down in Article 13 of Marine Strategy Framework Directive 2008/56/EC include coverage by:

Does the WMP include	YES:	NO:	Please summarize information as		
information on required elements	√	×	included in WMP for each element:		
under WFD?					
Directive 2008/56 (Art. 28(5) WFD)			#Plastic-FreER strategy [p.424-427] that aims to reduce the pressure from plastic waste on the environment, with particular attention to the most vulnerable systems such as coastlines, marine areas, waterways and protected areas. The strategy includes 15 actions, ranging from replacement of single-use plastic, citizen education, to promotion of plastic-free sport.		
			[p. 341 – 346] Further, national Legislative Decree 116/2020 through implementation of EPR systems, correct and environmentally effective management of packaging and packaging waste is promoted.		
			[p.270] Legislative Decree 116/2020 on waste prevention also states that products that are major sources of waste dispersion, particularly in terrestrial and aquatic environments should be identified and appropriate measures should be taken, including the termination of input of waste to aquatic environments and as well as to reduce aquatic pollution of all kinds		
			Note: Chapters 15.8.3 and 15.8.4 address the issue, but more concrete actions are implemented through e.g., the #Plastic-FreER and other strategies. A more detailed reference to prevention of marine litter could be stated.		
			Additional information provided by the CA: First of all the measures required to meet the needs under Article 13 of Directive 2008/56/EC are included in the Water Protection Plan, which is the regional instrument aimed at achieving environmental quality targets in inland and coastal waters and providing a sustainable water supply for future generations. This plan is currently under review.		
			The PRRB refers to the Plastic FreER Strategy for the identification of detailed actions related to Waste Prevention. The strategy aims to reduce and eliminate the single-use plastics where possible in order to reduce the environmental pressure of these wastes, with a focus on the most		

Does the WMP include information on	YES: ✓	NO:	Please summarize information as included in WMP for each element:		
required elements under WFD?					
under WFD?			vulnerable systems such as coastlines, marine areas, waterways, and protected areas. Action 9 of this strategy especially provides initiatives to encourage the collection of Plastic Waste at sea. The following acts have been issued to implement this action: DGR 2103/2019 on Program Agreements for better management of Waste from shellfish activities PG 2021/0417124 patronage Summer Camp - the nature of the sea 2021 - Association "no more plastic at sea". The Strategy and documents produced by the Cabina di Regia are available at the following links: • https://ambiente.regione.emiliaromagna.it/it/rifiuti/documenti/forumeconomia-circolare/allegato-deliberastrategia-plastichedefinitivo.pdf/@@download/file/Allegato%20delibera%20strategia%20plastiche%20definitivo.pdf • https://ambiente.regione.emiliaromagna.it/it/rifiuti/temi/rifiuti/economia-circolare/strategia-plasticfreer-1/copy_of_cabina-di-regia-plasticfreer-1/copy_of_cabina-di-regia-plasticfreer-1/copy_of_cabina-di-regia-plasticfreer-1/copy_of_seidues, that are an integral part of the WMP, already include actions to encourage fishermen to clean up the seas through free delivery of fished waste to land and thus improve water quality. Finally, prevention measures also include the "environmental legality act signed by Camera di commercio, Comitato nazionale dell'Albo gestori ambientali, Unione Regionale delle Camere di Commercio, Agenzia regionale per la prevenzione, I'ambiente e I'energia dell'Emilia-Romagna, Procura della Repubblica di Bologna, Comando Carabinieri per la Tutela dell'Ambiente - Nucleo Operativo Ecologico Bologna, Comando Legione Emilia Romagna Carabinieri Forestale, Polizia di Stato, Compartimento Polizia Giudiziaria, Guardia di Finanza Comando Regionale Emilia Romagna" The act is approved by the Regional Council by resolution No. 2236 of 12/27/2018,		

Does the WMP include information on required elements under WFD?		YES: ✓	NO:	Please summarize information as included in WMP for each element:		
				extended for an additional 5 years by resolution No. 1552 of 9/19/2022 and signed on 17/01/2023. Comment by the evaluator: With the provided references, the criterion on can be rated as compliant.		
2.24	River basin district litter prevention, marine strategies, programme of measures, Art. 11 of Directive 2000/60 (Art. 28 (5) WFD)			First of all the measures required to meet the needs under Article 11 of Directive 2000/60/EC are included in the Water Protection Plan, which is the regional instrument aimed at achieving environmental quality targets in inland and coastal waters and providing a sustainable water supply for future generations. This plan is currently under review. The PRRB refers to the Plastic FreER Strategy for the identification of detailed actions related to Waste Prevention. The strategy aims to reduce and eliminate the single-use plastics where possible in order to reduce the environmental pressure of these wastes, with a focus on the most vulnerable systems such as coastlines, marine areas, waterways, and protected areas. Action 10 of this strategy especially provides initiatives to encourage the collection of Plastic Waste in rivers. The following acts have been issued to implement this action: DGR 1759/2020 for the transfer to the Regional Agency for Territorial Security and Civil Protection of € 1,000,000.00 for the implementation of a river cleaning program; Determina No. 8148/2021 for the approval of the River Cleaning Intervention Program; Determina No. 9768/2021 paying out the territorial agency for river cleaning actions; DGR 1260/2021 contribution to the municipality of Rimini for an experimental project, concerning the installation of a system of trapping and recovery of floating plastics in the Marecchia River. Finally, prevention measures also include the "environmental legality act signed by Camera		

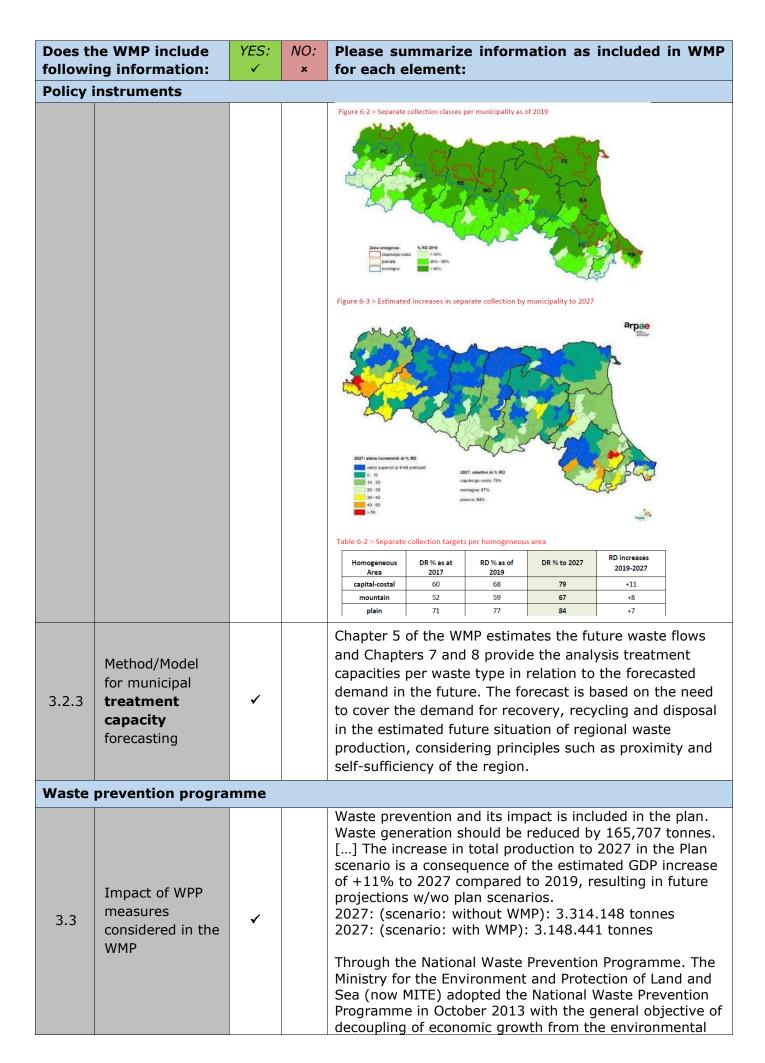
inform	the WMP include nation on ed elements WFD?	YES: ✓	NO:	Please summarize information as included in WMP for each element:
				di commercio, Comitato nazionale dell'Albo gestori ambientali, Unione Regionale delle Camere di Commercio, Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia-Romagna, Procura della Repubblica di Bologna, Comando Carabinieri per la Tutela dell'Ambiente - Nucleo Operativo Ecologico Bologna, Comando Legione Emilia Romagna Carabinieri Forestale, Polizia di Stato, Compartimento Polizia Ferroviaria per l'Emilia-Romagna – Squadra di Polizia Giudiziaria, Guardia di Finanza Comando Regionale Emilia Romagna" The act is approved by the Regional Council by resolution No. 2236 of 12/27/2018, extended for an additional 5 years by resolution No. 1552 of 9/19/2022 and signed on 17/01/2023. Comment by the evaluator: With the provided references, the criterion on can be rated as compliant.
2.25	Packaging waste, waste planning requirements (Art. 28(5) WFD)	✓		[p.335-361] Chapter 13 "Provisions for the management of packaging and packaging waste with provision of detailed state of present consortia involved in the management of packaging waste. Detailed measures for prevention and reuse, covered in chapter 13.7
2.26	Construction and demolition waste, targets in Art. 11(2) and (3) (Art. 28(5) WFD)	✓		Chapter 11 covers the topic of C&D waste. [p.240] more than 90% of C&D waste is sent for recovery, thereby being above the legal target of 70%
2.27	Biodegradable municipal waste (Art. 28 (5) WFD)	*		The reduction of biodegradable waste going to landfills is addressed in detail in: Chapter 14 represents a "programme for the reduction of biodegradable municipal waste (RUB) to landfill" - the percentage of biodegradable municipal waste present in total municipal waste is 68% - reduction of landfilled biodegradable waste of 76% achieved from 2013 (95 kg/capita) to 2019 (23 kg/capita). The value is calculated subtracting other treatments/destinations of biodegradable waste - Chapter 7.2 covers the handling and valorisation of the organic fraction.

Does the WMP include information on required elements under WFD?	YES: ✓	NO: ×	Please summarize information as included in WMP for each element:
under WFD?			Biodegradable waste is expected to increase until 2027 Figure 7-3 > Estimated quantities of green and organic matter treated in plants for the production of green, mixed and biomethane sol improver Strategies to reduce the landfilling of biodegradable municipal waste are: - interventions aimed at reducing waste at source; - design of collection services that reward separate collection of both quality and quantity of biodegradable fractions; - Provision or expansion of treatment facilities suitable for reducing the amount of RUB sent to landfill. Interventions for reducing production at source include: - environmental education/training - incentives to separate the various fractions at source Planned actions include [p.130]: - improving the quantity of separately collected organic fraction - maximisation of the quantities actually recovered - information campaigns on the final destination of the organic fraction - implementation of plant engineering with priority given to adaptation for the production of biomethane - promotion of the use of composted soil improver in agriculture; - promotion of home and community composting practices Comment: The amounts/percentages of biodegradable waste going to landfill or other treatment options had to be calculated from the table.
WMP covers <u>all mand</u> (compliant).	atory	require	ements of Article 28 of the WFD

3. Additional requirements for the fulfilment of the enabling conditions (CPR Regulation)

Does tl	Does the WMP include		NO:	Please summarize information as included in WMP
followi	ng information:	✓	×	for each element:
	instruments			
				Sources of revenues available to meet operation and maintenance costs of additional or upgraded waste infrastructure are rated as covered after provision of additional references, see additional information provided by the CA further below.
				However, a detailed calculation for the overall costs and revenues are present:
				[p.184] Dedicated chapter 9.4 "estimating the costs of achieving the plan's objectives". The following points are covered explicitly:
3.1	Sources of revenues to meet O&M costs of additional or upgraded waste infrastructure	or aste		- the percentage of separate collection: evaluation of costs and revenues in the different Sub-regions defined via the grouping of municipalities according to the range of separate collection achieved; - the separate collection percentage targets defined for the individual homogeneous plan areas: evaluation of costs and revenues per cluster broken down by individual sub-region; - the adoption of the "Punctual Tax Tariff (TCP) or the "Punctual Tax Tariff" (TTP)" (volume based pricing) - the target for waste sent for recycling; - analysis of disposal and recovery costs; - the analysis of only the operating costs of separate collection management and revenues per Fraction commodity; - the estimated cost of the service to 2027. The detailed cost and revenue analysis is estimated not only for the different subregions, but also for the different waste/resource fractions:
				Table 9-13 > Costs per tonne of separate collection and treatment/recycling by product fraction Costs of Separate Collection Collection CRD/t Costs of Treatment and Recycling Costs CTR/t CRD/t
				CARDBOARD PAPER 213,25 € 16,13 € 229,38 €
				INERTS 22,52 € 7,01 € 29,53 €
				INGOMBRANTS 127,28 € 131,11 € 258,39 €
				METALS 29,29 € 5,55 € 34,84 €
				MULTIMATERIAL 69,52 € 17,01 € 86,53 €
				OILS AND FATS 470,23 € 2,12 € 472,34 € ORGANIC 171,50 € 98,54 € 270,04 €
				PLASTIC 420,43 € 203,79 € 624,22 €
				PNEUMATICI 155,60 € 155,41 € 311,01 €
				POTATURES 64,74 € 43,52 € 108,26 € WEEE 15,52 € 2,06 € 17,59 €
				GLASS 178,30 € 27,41 € 205,71 €
				OTHER RD 57,64 € 19,45 € 77,08 €
				Additional information provided by the CA:
				Based on the plan scenarios (Section 8.2), it appears that
				during the period 2022-2027, there is no need for existing

Does t	he WMP include	YES:	NO:	Please summarize information as included in WMP	
	ng information:	✓	×	for each element:	
Policy	instruments				
				plants upgrades. No WTE will be closed, and consequently the related costs have not been provided.	
				The planning level related to the economic aspects is in the responsibility of ATERSIR. At the following link it is possible to consult the documents regarding the financial planning of the Waste service: https://www.atersir.it/argomento/servizio-rifiuti	
				Further:	
		The planning level responsibility of ATI economic and finance authority (ARERA) at the current tariff me All cost items (include maintenance of insemanagement service financial planning. We the item that cover maintenance of insemanate and fixed use costs. The reason for the latis the sufficient available.		The reason for the lack of information related to financing is the sufficient available waste treatment capacity that higher than required capacity for the projected MSW	
				With the provided references and comments, the criterion on is rated as compliant.	
Data q	uality: forecast				
3.2.1	Method/ Model for forecast / prognosis of municipal waste generation	✓		[p. 42-60, p.73-96] Based on the population trends, economic development, present MSW generation, the description of the forecast development is provided in chapter 3 "characteristics of the regional territory" and chapter 5.3 definition of production and collection scenarios"	
3.2.2	Method/Model for municipal waste collection schemes forecasting	1		[p.76] Based on the population trends, economic development, present MSW generation and amounts of separately collected waste fractions, derivation of improvement potentials are derived based on distance to the target for the three distinct types of collection territories defined. [p.102] separate waste collection performance shown	



Does the WMP include	YES:	NO:	Please summarize information as included in WMP
following information:	✓	×	for each element:
Policy instruments			
			 impacts associated with waste production and in particular articulates 3 prevention targets: -5% municipal waste generation per unit of GDP; -10% of hazardous special waste production per unit of GDP; -5% of the production of special non-hazardous waste per unit of GDP; [p. 388, and Articolo 8 Norme tecniche di attuazione]
			[p.467] For each of the waste prevention measures defined, Table 15-11 shows the corresponding measures of the National Prevention Programme and the corresponding measures and actions of the Prevention Programme Emilia-Romagna

4. Enabling conditions for waste (CPR Regulation)

This section provides an overview on how the enabling conditions for the use of EU Regional funds according to the Common Provisions Regulation (CPR Regulation) in the current programming period (2021-2027) have been reflected in the plan.

A final summary of coverage of the enabling conditions and the criteria assessed in this report which provide information on the different elements of the enabling conditions are presented in the Table in Section 4.2.

4.1 Criteria for the circular economy enabling conditions

Waste management plan(s) as referred to in Article 28 of Directive 2008/98/EC as amended by Directive EU 2018/851/EU are in place and covering the entire territory of the Member State and include:

- 1. An analysis of the current waste management situation in the geographical entity concerned, including the type, quantity and source of waste generated and an evaluation of their future development taking into account the expected impacts of measures set out in the Waste Prevention Programme(s) developed in accordance with Article 29 of Directive 2008/98/EC as amended by Directive 2018/851/EU.
- 2. An assessment of existing waste collection schemes, including the material and territorial coverage of separate collection and measures to improve its operation, as well as the need for new collection schemes.
- 3. An investment gap assessment justifying the need for the closure of existing waste installations and additional or upgraded waste infrastructure, with an information of the sources of revenues available to meet operation and maintenance costs.
- 4. Information on the location criteria for how future site locations identification will be determined and on the capacity of future waste treatment installations.

4.2 Summary of coverage of enabling conditions in the WMP

Enab	ling conditions	Criteria of the	Assessment Use the following rating
Direct 2018/	e management plan(s) as referred to in Article 28 of cive 2008/98/EC as amended by Directive EU '851/EU are in place and covering the entire territory of ember State and include:	standard assessment covering the enabling condition:	and colour code (cell colour): - Information included (green) - Information partially included (yellow) - Information not included (red) - Not assessable (include motivation) (white with red font) - Not relevant (include motivation) (grey)
1 a)	An analysis of the current waste management situation in the geographical entity concerned, including the type, quantity and source of waste generated	2.1, 2.2, 2.4, 2.5, 2.8	Information included
1 b)	and an evaluation of their future development	2.3, 2.9, 2.10, 2.11, 2.12, 2.16, 2.20, 3.2.1, 3.2.2, 3.2.3	Information included

taking into account the expected impacts of measures set out in the Waste Prevention Programme(s) developed in accordance with Article 29 of Directive 2008/98/EC as amended by Directive 2018/851/EU.

Information included

Summary of coverage condition 1

Information on definition, type, source of municipal waste generated is included (criterion 2.1). Total amounts of MSW are provided for different years in tonnes/a and per capita values (criterion 2.2). Existing waste collection schemes, including the material and territorial coverage of separate collection are described for the entire region and are also disaggregated to smaller departments, e.g. classified as mountain areas, low-land areas, and 'provincialcapital' and coastal areas, and further categorized by collection system the collection system in place. (criterion 2.4). Installations of waste treatment and disposal installations are provided and include mechanical and biological treatment MBT, WtE and landfills that change in capacity and availability over time, which is elaborated for each year of the planning horizon (criterion 2.5). Measures to prevent landfilling of all waste suitable for recycling or other recovery are described, e.g. a ban landfilling of untreated MSW. According to the plan's objectives, a reduction of waste amounts that can be landfilled is indicated, however, the very good performance in terms of quantity of MSW being landfilled puts the region in a good position to achieve the 2030 landfilling targets. Measures to prevent landfilling of waste that is suitable for recycling cover the entire region and include among others a dedicated programme for the reduction of biodegradable municipal waste going to landfill, separation at source, and an increase of separate waste collection (criterion 2.8).

The WMP includes a 2022 and 2027 trend forecast and a plan forecast with detailed projection based on demographic and economic developments and available waste treatment capacity. Two scenarios are modelled with WMP measures being introduced and another scenario that does not employ any measures of the WMP (criterion 2.3). Improvement needs are identified as a distance-to-target among others for organic fraction (distinguished into wet, green), paper and cardboard, plastic, glass, metals, and wood. For the different waste types, the mode of collection and the performance of collection per type of waste are considered (criterion 2.9). Based on that the organization of waste collection services is described considering local conditions such as population density, economic structure as well as natural conditions such as topography. For each type of region and waste type tools and actions for improving the performance of waste collection are derived and shown in separate tables (criterion 2.10). The need for additional installations is shown in the projections of the plant system for each year until 2027. However, given the situation that sufficient waste treatment capacity is present in the region, no additions of new plants are foreseen and are the main reason for the lack of assessment of required financing (criterion 2.11). For this reason and with the additional information provided by the CA, including additional funding sources being provided and discussed in this context the criterion is rated as compliant under these circumstances. Given several overcapacities regarding composting, MBT and WtE plants, the main approach is to increase quantity and quality of separate waste collection. This involves a gradual decommissioning of MBTs in the cases where their main function is the pre-treatment of waste prior to landfilling. In this context, the impact of waste prevention measures plays also an important part for improving the future performance of the waste management system. According to the planned waste prevention measures, waste generation should be reduced by 165,707 tonnes (criterion 3.3).

The monitoring results of the previous WMP (2014-2020) include an evaluation of strengths and weaknesses. The present WMP (2022-2027) also includes a forward-looking assessment based on two scenarios mentioned above. The flows in the waste management systems are calculated for each year of the plan considering detailed material flow diagrams and descriptions that match the available plant capacity (criterion 2.20). The future projections consider population trends, economic development, present MSW generation (criterion 3.2.1). For waste collection

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⁷ **Limitation**: the assessment includes information on the existence and to a certain extent the content of the WPP and makes an assessment of the coherence of WMP and the WPP regarding the baseline data and indicators, and quantitative targets, if applicable. However, the SAT does not include information on the assessment of the impacts of WPP measures.

several parameters are employed, including a disaggregated local situation that is presented on the local level and providing a detailed basis for future improvements (criterion 3.2.2), as well as for matching the available and future treatment capacities of the waste treatment plants (criterion 3.2.3).

2	An assessment of existing waste collection schemes, including				
2 a)	the material and territorial coverage of separate collection	2.4	Information included		
2 b)	and measures to improve its operation	2.8, 2.10	Information included		
2 c)	as well as the need for new collection schemes.	2.9	Information included		

Summary of coverage condition 2

Detailed information on collection performances are provided for each department in Emilia-Romagna. Departments classified as mountain areas have lower targets (67% of waste to be separately collected in 2027), while the targets for low-land areas are 84% and for 'provincial-capital' and coastal areas are set to 79%, leading to an average value of 80%. Existing MSW collection includes systems based on door-to-door collection, street containers, collection centres and others such as on-demand collection, collections carried out at non-household premises) (criterion 2.4).

Even though the present rate of landfilling is already low with only 1.66% of MSW being sent to landfills, further measures to prevent landfilling of waste that is suitable for recycling cover the entire region and include a ban on landfilling of untreated MSW, a dedicated programme for the reduction of biodegradable municipal waste going to landfill, separation at source, an increase of separate collection, reduction of waste quantities through a Waste Prevention Programme, as well as the introduction of a pricing mechanism for residual waste collection (criterion 2.8). The diversity of measures is present due to the consideration of local conditions, based on the three regional categories. For 'provincial-capital' and coastal areas the measures focus on increasing the quality of collection, for mountainous areas a tariff is applied based on the volume of MSW and an increase of separate waste collection. Further, based on the waste type, focused measures are also introduced, e.g. for the organic fraction separate collection, home and/or community composting is introduced (criterion 2.10). Based on the detailed evaluation of local circumstances and waste amount produced improvement needs are identified in terms of the distance-to-target assessment for key waste types (criterion 2.9).

3	An investment gap assessment				
3 a) ⁸	justifying the need for the closure of existing waste installations	2.14	Information included		
3 b) ₉	and additional or upgraded waste infrastructure,	2.11, 2.12	Information included		

⁸ **Limitation:** the assessment requires information on the type and number of installations to be closed; it is possible that Member States do not provide additional information on justifying the needs for closure and detailed information on the assessment methodology both from the technical and financial perspective.

⁹ **Limitation:** the assessment requires information on additional or upgraded infrastructure and its capacities, however, the information on the investment gaps and assessment of investment needs often is not provided in the WMPs. Additionally, the Standard Assessment does not provide for the information on the suitability of the planned infrastructure as well as does not assess the applicability of the investments needs.

Summary of coverage condition 3

Based on the improvement of the waste collection systems and attained reduction of waste production, e.g. through the waste prevention program, some waste treatment facilities such as landfills and MBTs are planned for gradual decommissioning. However, financial means for decommissioning could be addressed in more detail in the WMP. Nevertheless, the additional information provided the CA, namely that the plan establishes the stop of waste treatments of some facilities, but not the decommissioning of them is considered. It is further argued that no costs are related to the stop of the treatment of MW treatment facilities of the identified plants and that according to the Italian landfill regulation the plants begin a post-operation with the related costs being covered by the appropriate fund or by the MSW tariff, with the residual costs are paid by the owner. It is further referred by the CA that MBT plants that are no longer used by the public service are not decommissioned and remain in the owner's possession (criterion 2.14). Given that the additional capacity for waste treatment is only required for special waste, such as C&D waste, and for the treatment of MSW no additional capacities are planned, it explains the lack of assessment of required financing need. Further, it ATERSIR, the territorial agency for water and waste services, that is responsible for the financial planning, covers more detailed cost estimations (criterion 2.11). In the light of sufficient available waste treatment capacity (e.g., MBT, WtE), the projected future installations and respective capacities are not required (criterion 2.12).

A detailed cost and revenue analysis is estimated for the different subregions and also for the different waste/resource fractions. However, the sources of revenues are not directly linked to operation and maintenance costs. Costs are included as a full service until 2027. Based on the additional information provided by the CA, the planning level related to the economic aspects is in the responsibility of ATERSIR that is responsible for providing the national authority (ARERA) with economic and financial planning according to the criteria established in the current tariff method (MTR2 resolution 363/2021/R), that covers the cost of amortization and maintenance of installations (criterion 3.1).

4	Information on	
4 a)10	the location criteria for how future site locations identification will be determined	Information included
4 b)	and on the capacity of future waste treatment 2.12, 2.16 installations.	Information included

Summary of coverage condition 4

In a dedicated chapter criteria for the identification of locations for waste recovery and disposal installations are described. Other aspects include the consideration of the proximity principle, demonstration of treatment needs, the principle of fair distribution of environmental loads and principle of self-sufficiency in waste disposal (criterion 2.13).

However, available waste treatment capacity is higher than required capacity for MSW and indication that no additional treatment capacities are required (criterion 2.12). Therefore, with regard to municipal waste, it can be stated that the existing system is adequate to meet the estimated demand in all the years considered (criterion 2.16).

¹⁰ **Limitation:** the assessment includes the location criteria for the site identification but does not specifically ask for the approach or methodology used in order to determine the future site locations.

5. Open questions to Competent Authority

In this section is space to clarify open questions and inconsistencies with the Competent Authority, which has the opportunity to **comment and correct the evaluation report**. Also, questions going beyond the waste management plan, e.g. on adoption schedule or regarding the used methodology to receive data for the WMP (waste generation, providing forecasts, etc.) could be included.

Open questions and inconsistencies					
Question (to be filled by evaluator)	Referred element (in above tables)	Answer / Comment from Competent Authority (to be filled by CA)			
This criterion is rated as compliant, as the financing sources for upgrades are identified. However, additional information on assessment of the need for additional waste installation infrastructure (in this case upgrades), including an assessment of the investments and other financial means, on a more disaggregated level would be helpful, including for local authorities, required to meet those needs (Art. 28 (3) (c) WFD). Maybe this point is addressed by another planning level? Please provide a comment or additional information. Comment: Largely, new installations can be avoided, among others by improved system performance, also of single plants. In this context, investment for upgrades and depending on the lifetime of the existing plants potentially new plants will be required. For landfills decommissioning times are clarified, but for other technologies, e.g. for Waste-to-Energy plants, no indication of decommissioning time was found.	Part D 2.11	Based on the plan scenarios (Section 8.2), it appears that during the period 2022-2027, there is no need for existing plants upgrades. No WTE will be closed, and consequently the related costs have not been provided. The planning level related to the economic aspects is in the responsibility of ATERSIR. At the following link it is possible to consult the documents regarding the financial planning of the Waste service: https://www.atersir.it/argomento/servizio-rifiuti			
Could you please provide reference to any document containing information on the assessment of the need for closure of existing waste installations, including an assessment of the investments and other financial means, including for local authorities, required to meet those	Part D 2.14	The plan establishes the stop of waste treatments to some plants and not the decommissioning of them. Therefore, no costs are related to the stop of the treatment of Municipal Waste to the identified plants. As required in the Italian landfill regulation, it's provided at the end of			

needs (Art. 28 (3) (c) WFD)? Or is this addressed by another planning level? Please explain. Comment: From the comparisons of tables 8-1 to 8-8 it is possible to derive the installations that are decommissioned or will be decommissioned, but it is not clear by what financial means the closure and decommissioning will be performed.		waste treatment, the plant begin a post- operation and related costs are covered by the appropriate fund or by the MSW tariff. The residual costs are paid by the owner. That means, MBT plants no longer used by the public service are not decommissioned and remain in the owner's possession.
Could you please provide reference to any document containing information on the assessment planned waste management technologies/ methods to meet the requirements of (Art. 28 (3) (e) WFD)? Comment: In the WMP it is written that "with regard to municipal waste, it can be stated that the existing system is adequate to meet the estimated demand in all the years considered" [in the WMP]. However, it is not clear for all waste treatment technologies whether upgrades or additional plants for the treatment of waste are planned concerning MSW. As an example, it is mentioned that Granarolo incinerator that should start in 2024, is already included in for the year 2022 as existing capacity, providing some source for confusion.	Part D 2.16	No upgrades of existing installations or additional installations are planned during the PRRB period. The existing Granarolo WTE plant from 2024 will receive municipal waste belonging to the whole Provincia di Bologna (since the Gaggio Montano MBT, Gaggio Montano landfill, and Imola MBT will be decommissioned) without changing its capacity (as it is clearly shown in the flows in section 8.2.3). This is not a new plant.
Could you please provide reference to any document containing information Marine litter prevention and programme of measures, as referred to by Directive 2008/56 (Art. 28(5) WFD)? Comment: Even though some measures are included in the waste prevention strategy and the #Plastic-FreER strategy, these could be identified and highlighted to in more detail. In this context, no detailed derivation of measures based on	Part D 2.23	First of all the measures required to meet the needs under Article 13 of Directive 2008/56/EC are included in the Water Protection Plan, which is the regional instrument aimed at achieving environmental quality targets in inland and coastal waters and providing a sustainable water supply for future generations. This plan is currently under review. The PRRB refers to the Plastic FreER Strategy for the identification of detailed actions related to Waste Prevention.

Article 13 of Marine Strategy Framework Directive 2008/56/EC could be found. The strategy aims to reduce and eliminate the single-use plastics where possible in order to reduce the environmental pressure of these wastes, with a focus on the most vulnerable systems such as coastlines, marine areas, waterways, and protected areas.

Action 9 of this strategy especially provides initiatives to encourage the collection of Plastic Waste at sea.

The following acts have been issued to implement this action:

- DGR 2103/2019 on Program Agreements for better management of Waste from shellfish activities
- PG 2021/0417124 patronage Summer Camp - the nature of the sea 2021 -Association "no more plastic at sea".

The Strategy and documents produced by the Cabina di Regia are available at the following links:

- https://ambiente.regione.emiliaromagna.it/it/rifiuti/documenti/foru m-economia-circolare/allegatodelibera-strategia-plastichedefinitivo.pdf/@@download/file/Alle gato%20delibera%20strategia%20 plastiche%20definitivo.pdf
- https://ambiente.regione.emiliaromagna.it/it/rifiuti/temi/rifiuti/econ omia-circolare/strategiaplasticfreer-1/copy_of_cabina-diregia-plasticfreer

The Plans for the Collection and Management of Ship-generated Waste and Cargo Residues, that are an integral part of the WMP, already include actions to encourage fishermen to clean up the seas through free delivery of fished waste to land and thus improve water quality.

Finally, prevention measures also include the "environmental legality act signed by Camera di commercio, Comitato nazionale dell'Albo gestori ambientali, Unione Regionale delle Camere di Commercio, Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia-Romagna, Procura della Repubblica di Bologna, Comando Carabinieri per la Tutela dell'Ambiente - Nucleo Operativo Ecologico Bologna, Comando Legione Emilia Romagna Carabinieri Forestale, Polizia di Stato, Compartimento Polizia Ferroviaria per l'Emilia-Romagna -Squadra di

		Polizia Giudiziaria, Guardia di Finanza Comando Regionale Emilia Romagna" The act is approved by the Regional Council by resolution No. 2236 of 12/27/2018, extended for an additional 5 years by resolution No. 1552 of 9/19/2022 and signed on 17/01/2023.
Could you please provide reference to any document containing information on river basin district litter prevention marine strategies, programme of measures, required to meet those needs under Art. 11 of Directive 2000/60 (Art. 28 (5) WFD)? Comment: Some information could be present in the river basin plans by the regional basin authority, but it seems not to be included in the WMP (?).	Part D 2.24	First of all the measures required to meet the needs under Article 11 of Directive 2000/60/EC are included in the Water Protection Plan, which is the regional instrument aimed at achieving environmental quality targets in inland and coastal waters and providing a sustainable water supply for future generations. This plan is currently under review. The PRRB refers to the Plastic FreER Strategy for the identification of detailed actions related to Waste Prevention. The strategy aims to reduce and eliminate the single-use plastics where possible in order to reduce the environmental pressure of these wastes, with a focus on the most vulnerable systems such as coastlines, marine areas, waterways, and protected areas. Action 10 of this strategy especially provides initiatives to encourage the collection of Plastic Waste in rivers. The following acts have been issued to implement this action: DGR 1759/2020 for the transfer to the Regional Agency for Territorial Security and Civil Protection of € 1,000,000.00 for the implementation of a river cleaning program; Determina No. 8148/2021 for the approval of the River Cleaning Intervention Program; Determina No. 9768/2021 paying out the territorial agency for river cleaning actions; DGR 1260/2021 contribution to the municipality of Rimini for an experimental project, concerning the installation of a system of trapping and recovery of floating plastics in the Marecchia River. Finally, prevention measures also include the "environmental legality act

		signed by Camera di commercio, Comitato nazionale dell'Albo gestori ambientali, Unione Regionale delle Camere di Commercio, Agenzia regionale per la prevenzione, I'ambiente e I'energia dell'Emilia- Romagna, Procura della Repubblica di Bologna, Comando Carabinieri per la Tutela dell'Ambiente - Nucleo Operativo Ecologico Bologna, Comando Legione Emilia Romagna Carabinieri Forestale, Polizia di Stato, Compartimento Polizia Ferroviaria per l'Emilia-Romagna – Squadra di Polizia Giudiziaria, Guardia di Finanza Comando Regionale Emilia Romagna" The act is approved by the Regional Council by resolution No. 2236 of 12/27/2018, extended for an additional 5 years by resolution No. 1552 of 9/19/2022 and signed on 17/01/2023.
Could you please provide reference to sources of where revenues are explicitly related to meet O&M costs of (additional or) upgraded waste infrastructure? Comment: Information on upgrades and additional waste infrastructure as well as required investments seem not to be explicitly mentioned in relation to the operation and maintenance (O&M) costs of the waste treatment facilities.	Part D 3.1	The planning level related to the economic aspects is in the responsibility of ATERSIR. Atersir is responsible for the economic and financial planning proposal to the national authority (ARERA) according to the criteria established in the current tariff method (MTR2 resolution 363/2021/R). All cost items (including those related to the operation and maintenance of installations) necessary for the Waste management service are considered in the economic and financial planning. Within the MTR-2 ARERA tariff method, the item that covers the cost of amortization and maintenance of installations is the component (called Amortization of fixed assets) that is included in the capital use costs.