Sustainable Aggregates Resource Management: S A R M a

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Jointly for our common future
SUSTAINABLE APPROACH TO AGGREGATES
MANAGEMENT / SUPPLY
LOCAL, REGIONAL, NATIONAL, TRANSNATIONAL LEVEL
Content

• Project Background & Goals
• Partnership, Activities,
• Products, Dissemination
• Conclusion
Importance of Aggregates

- Within the EU, the aggregate sector represents almost 3% of Construction & Housing sector gross value added, just above 5% of EU economy. Main producers (over 400 million tons) are larger EU countries: France, Germany and Spain.
- Price varies between 3 € (south of Europe) and 8 € (mostly Scandinavian countries), while the majority of countries have a price ranging between 6,0 and 6,5 € per ton of aggregate.
- Access to land is restricted; for example, extraction is banned on more than 80% of sand and gravel territory.
- Aggregates are heavy and bulky. Transportation can add significantly to the cost of aggregate. Transportation range: 80% is used within 35-50 km radius in UK.
- Recycling rate of construction and demolition waste for use as aggregates varies from almost zero to up to 25% in NW Europe.
Contribution to EU policies

  – Fostering sustainable supply within the EU

• European Innovation Partnership proposal
  – Work Package 3 – mineral policy, regulation, authorisation, geological knowledge base….
Main objectives of the project are:

- to develop common approach to sustainable aggregates resource management (**SARM**) and
- to ensure sustainable supply mix (**SSM**) planning, at three scales, to ensure efficient and secure supply in SEE.

**SARM** is efficient, low socio-environmental impact quarrying and waste management.

**SSM** uses multiple sources, including recycled wastes and industrial by-products (slag) that together maximize net benefits of aggregate supply across generations.
• Local level
  – Environmentally friendly extraction
  – Illegal quarrying
  – Recycling
• Regional / National level
  – Management / Supply
• Transnational level
  – Management / Supply
  – After project structure / Regional centre
Description of the Partnership

• Expertise and responsibility
• Geographical coverage: 14 partners in 10 countries of SEE area,
• Inclusion of partners from old member states, new member states, and candidate countries
• Partnership: ministries in charge or mining, regional authorities, chamber of commerce and industry, geological surveys, institutes and faculties – internal dialogue
Project partners (14)

1. ERDF: GeoZS - **Geological survey of Slovenia, SI**
2. ERDF: MUL - University of Leoben, AT
3. ERDF: PELLA – Prefectural Authority of Pella, GR
4. ERDF: IGME - **Institute of Geology and Mineral Exploration, GR**
5. ERDF: TUC – Technical University of Crete, GR
6. ERDF: MBFH – Hungarian Office for Mining and Geology, HU
7. ERDF: ER – **Emilia-Romagna Region - Environment, Soil and Coast Defense Department, IT**
8. ERDF: PARMA – Parma Province - Territorial Planning Service, IT
10. ERDF: FGG – University of Bucharest, Faculty of Geology and Geophysics, RO
11. IPA: MGK10 – Herzeg – Bosnia Canton Government – Ministry of Economy, BiH
12. IPA: RGF – University of Belgrade, Faculty of Mining and Geology, SRB
14. 10% Partner: MINGORP – Ministry of Economy, Labor and Entrepreneurship, Energy and Mining Directorate, HR (Croatian Geological Survey)
Regional distribution of project partners
Internal dialogue & cooperation

• 14 Partners,
• 9 Observers,
• 6 Pool of stakeholders,
• 3 Advisory Board
• Subcontractors ….
Structure / Methodical approach

Project partners aim to achieve objectives through work packages (WP):

– WP1: project management
  • WP-leader: Geological Survey, Slovenia

– WP2: project dissemination
  • WP-leader: Technical University of Crete, Greece

– WP3: activities at local scale
  • WP-leader: Institute of Geology and Mineral Exploration, Greece

– WP4: regional/national scale
  • WP-leader: Hungarian Office for Mining and Geology

– WP5: transnational scale
  • WP-leader: University of Leoben, Austria
Questionaries, baseline (case) study reports......
Products

Output

Synthesis

Information

Manual, Recommendations, Supporting documents

Synthesis

Pilot Study Report

Questionnaire

Case Study

Jointly for our common future
Products

Concise planning manual for the recovery of aggregate quarries

Life Cycle Assessment (LCA) Guidelines to be used in the SARMa Project
Definition of a common methodology to boost use of LCA tools in sustainable production and recycling of aggregates
Step 1: Aggregate quarrying
Step 2: Aggregate recycling
Step 3: Integrated quarrying and recycling

February 15th, 2011
SARMa Numbers

- Case Study Reports (50), Analyses (10), Recommendations and supporting documents (9)
- Manuals (3) in 11 languages
  9,500 copies
- 48 articles …
workshops, conferences, articles, project meetings, field visits.....
External Cooperation
SARMa Numbers

- National / regional workshops (13) & Transnational activities / conferences (5) – with 1,100 participants
- Papers, articles, media appearance – estimation over 900,000 people reached
- PowerPoint's presentations too many
SARMa project with passion

- Sustainable Supply Mix – SSM Quiz
- Barriers and Solutions
- Memory Game
SARMa Impact

• Regional and national policies improved (11), including Greek National Minerals Policy

• Local, regional and national public authorities / expert level / private sector/ civil society and general public

• EU level contribution (Hungarian and Polish Presidency) to Raw Materials Initiative
SARMa details are on website

www.sarmaproject.eu
THANK YOU!

Questions ?!?