



REMIX

Interreg Europe



European Union
European Regional
Development Fund

National Technical
University of Athens



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The Greek Smart and Green Mining Region

Region of Sterea Ellada

One of the most important mining regions of Greece, holding the largest deposit of bauxite in Europe as well as significant deposits of Ni, magnesite and chromite which contributed to the creation of dynamic mining sites. The strong mining-metallurgical background and the surrounding ecosystem of secondary processing industries, have rendered the Raw Material Sector as one of the four important economy sectors of the Region.



- ❖ Constant and Substantial contribution of the regional extractive industry to Greece's GDP, while the corresponding manufacturing sector holds the 35.7% of the Regional Gross Added Value
- ❖ Highly extroverted extractive sector with the exports of primary and processed materials accounting for over 40% of its sales while it employs 41.4% of the human resources of manufacturing
- ❖ Actively interested in EU Critical Raw Materials priorities (*MIREU* commitment, *SC5 call for regions* etc.) mirroring activities & several regional networks.



The Greek Smart and Green Mining Region's Delegate

National Technical University of Athens



- ✓ Institution of higher education and Research body for Mining in Greece; interactive, performs as a hub over the whole Raw Materials value chain connecting academia-research-industry of the Greek mining sector.
- ✓ Trusted partner of the Ministry of Environment & Energy and of the Regions involved in the Raw Materials sector while maintaining strong relations with the vast majority of the RM sector's stakeholders
- ✓ Competent in addressing relevant policy issues and active in various policy making projects and networks aiming at the development of the RM Sector at National and Regional level.



REMIX as a Challenge and Opportunity



ΠΕΡΙΦΕΡΕΙΑ
ΣΤΕΡΕΑΣ
ΕΛΛΑΔΑΣ

- Autonomous local authority
- Plans and implements policies at regional level within its remit
- Emphasizes in the 4 Dynamic Sectors of the Partnership Agreement 2014-2020 and the Regional Smart Specialization Strategy (RIS3).

Exchange of
Experience

Access to
Funding



Activate
Stakeholders

Crucial Objectives
for the Metal Sector

Strengthen the competitiveness &
Access European innovation networks

NTUA

engaged the Regional Authorities, Ministry representatives and the majority of Regional stakeholders/ representatives of mining and metallurgy industries, enabling a meaningful dialogue regarding regional R&D&I capacity and innovation support for the mining Sector.

The Region

acknowledged the importance of these outcomes.

NTUA

created a communication link between the Region of Sterea Ellada and other Remix European Regions and Mining and Metallurgy associations.

The Region

participates in the Smart Specialization Platform for Industrial Modernization, Mining Industry and global Value Chains Partnership.

A Good Practice: Lavrion Technological and Cultural Park (LTCP)

LTCP is the successor of the Pb and Ag mine complex, dated back in classical antiquity and operative until late 1980's. Between 1994 and 1997 a rehabilitation program was designed and deployed by National Technical University of Athens, transforming the old mine complex into the, a body of scientific research, education, business and culture. The NTUA Asset Management and Development Corporation (NTUA AMDC) undertook, under the Program "Competitiveness" funded by the Ministry of Development and the EU, the implementation of the project: "Soil Rehabilitation and supplemental infrastructure at LTCP" to conduct a vital environmental intervention on the heavily polluted site.



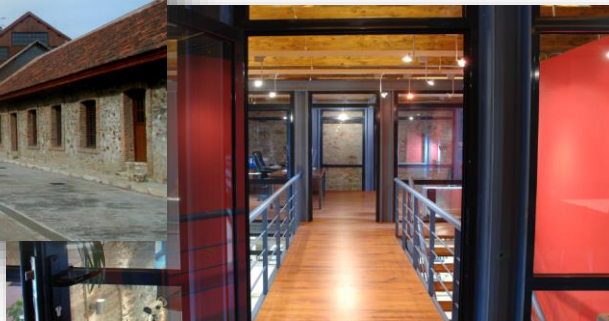
This plan executed, in addition to its practical significance has special scientific and educational value since it is a unique case study of an environmental rehabilitation of 10,000 sq.m, loaded with 150,000 tons of low sulfur content. So, what is, in fact, produced is an environment. One healthy structure, which consists of the link mechanisms, benefits and services undertaken to facilitate the creation of modern entrepreneurship; an environment that consists not only of technology transfer, interactive technological learning, business competition and profit-maximization behavior, but, also, of the social and cultural values and norms that are inextricably bound to the emerging new knowledge-based economy.



Expert opinion

Carl Arvid Dahlöf

This practice illustrates the challenges that may come with regional mining industry, even once production has ended, but also the opportunities that may arise if the challenges can be overcome. It highlights the problem of soil contamination and the large-scale intervention needed to restore the site and be able to re-purpose it for a new use. This kind of restoration is clearly a costly and complicated undertaking, affecting the transferability of the practice as a whole. At the same time there is potential for learning and inspiration for regions facing similar environmental challenges at sites of cultural value that could be brought into the modern era with a new purpose.



Time for Action

✓ Identification

The Action Plan is focused on the “*Regional Operational Programme of The Region of Sterea Ellada*”, Thematic Objective 1: “Enhancing research and innovation infrastructure and development capacities of excellence in research and innovation and promoting centers of competence, in particular European interest centers”.

✓ Objectives

Link the current policy instrument with Industry 4.0.

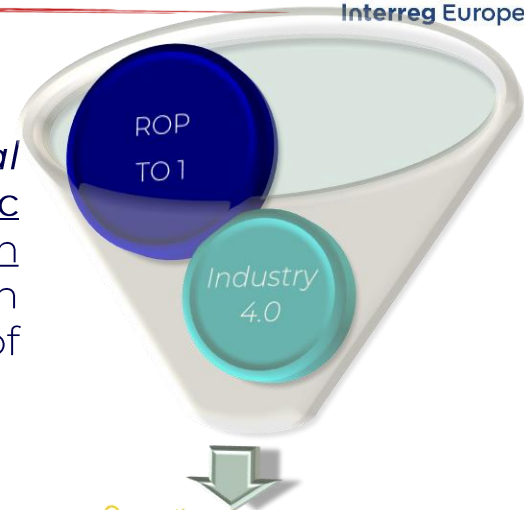
❖ Interregional Learning

PRM in Cornwall (May 2018) : “How can mining-related businesses benefit from the digital economy?”

The outputs provided the Greek representatives with initiative over the idea of introducing the prospective of digitalization in the Greek extractive industries’ ecosystem

Actions

- ❑ Setting up of meetings between the policy makers from the Region and the National authorities for the identification of common ground and synergies
- ❑ Mapping of the skills needed for the digitalization of needs in the Region of Sterea Ellada
- ❑ Activities for the promotion of industrial interest (including SMEs) for digitalization and funding opportunities
- ❑ Collaboration with EIT Raw materials- Regional Center Greece



Operational efficiency & productivity in mining /metallurgy industrial ecosystems



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Γενική Γραμματεία
Βιομηχανίας



EIT RawMaterials



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Thank you!
Dziękuję !



Questions welcome



Project smedia