

**INSTITUTE FOR INNOVATION & SUSTAINABLE DEVELOPMENT,
AEIPLIOUS**

**1st General Stakeholder meeting for the CIRCLab of Western Greece
“Circular Innovation and Resilient City Labs in the Adrion Region”**

The Institute for Innovation & Sustainable Development, AEIPLIOUS (www.aeiplous.org), is a partner in the project **CIRCLE - Circular Innovation and Resilient City Labs in the Adrion Region**, funded by the INTERREG ADRION Programme (European Regional Development Funds, ERDF: 85%) and Greek National Resources (15%). The 14 partners are from **Italy** (*Coordinator: Municipality of Forli, Romagna Tech*), **Slovenia** (*School Center Velenje, RDA of Northern Primorska Ltd. Nova Gorica*), **Croatia** (*Regional development agency Međimurje REDEA Ltd., Energo-data*), **Greece** (*Anatoliki S.A Development Agency of Eastern Thessaloniki's Local Authorities, Institute AEIPLIOUS*), **Bosnia & Herzegovina** (*Environmental Protection and Energy Efficiency Fund of the Republic of Srpska, Municipality of Laktasi*), **Serbia** (*Faculty of Applied Ecology – Futura, Regional Agency for Socio – Economic Development – Banat Ltd*), **Montenegro** (*Municipality of Ulcinj*) and **Albania** (*Municipality of Tirana*).

CIRCLE aims at **increasing and spreading knowledge of circular economy principles regarding the viable management of waste which is produced within urban areas**, through a collaborative approach involving innovation producers (R&D and innovation public and private centers), business actors (companies, services and utility providers), administrative and financial organisms (regional and local authorities, banks), as well as civil society. CIRCLE will plan and develop Circular Innovation Resilient Cities Labs (**CIRCLabs**), through which circular models will be designed and tested on 4 pilot fields (industrial symbiosis, organic wastes, electronic and electrical equipment wastes (WEEE) and construction and demolition wastes (CDW)).

On Thursday, December 10, 2020, the first stakeholders' teleconference of the **CIRCLab of Western Greece** was held. Stakeholders from regional and local authorities, companies, the University of Patras but also citizens discussed and analyzed the needs of the region of Western Greece in terms of waste management produced in urban areas. The coordinator, Prof. Evangelos Papadakis, Dept. Of Environmental Engineering – Univ. Of Patras, elaborated on the specific objectives of the project and outlined the required steps in order to define the regional needs and to elaborate concrete action plans. Dr. C. Antonopoulos, Union of Municipalities of the region of Western Greece, described the legal framework and the existing financial tools for waste management. He presented the weaknesses of the market but also the challenges for the local potential.

Following, there was an open discussion. It was underlined that circular economy principles could be applied to the management of CDW and more specifically in the management of **gypsum-containing wastes** as their disposal with other biodegradable waste leads to the creation of hydrogen sulfide thus making the need for proper management and recycling urgent. Mrs. P. Moissiadou,

Decentralised Administration of Peloponnese, Western Greece and Ionian Islands, stressed that the need to fully record the extent of the problem is urgent, while Dr. A. Fatsikostas, Director of Saint-Gobain Hellas Factory in Aetoliko, expressed his interest in the recycling of gypsum boards, emphasizing however the high cost of their collection.

The lack of aggregate production in the region due to the limited number of quarries was emphasized. This situation could be addressed to an extent by producing **aggregates from recycled concrete**. Mr. C. Apostolopoulos, INTERBETON Construction Materials SA, underlined that the production of aggregates from recycled concrete is a feasible and realistic plan, while Mr. Geor. Anagnostopoulos, SYRMET SA, expressed his interest and intention to help.

There was an extensive discussion on the management of organic waste and more specifically on the agricultural waste generated in urban areas. Mrs. V. Karapapa, Municipality of Agrinio, Director of Cleaning and Recycling, and President of the Association of Agriculturists of Etoloakarnania as well as Mr. I. Farmakis, President of the Municipal Council of the Municipality of Agrinio, underlined the problem of collection and transportation costs, while Mr. C. Konstantakopoulos, Municipality of Patras, Department of Environment and Energy, stated that the Municipality of Patras has already launched the management of municipal organic waste (for composting). However, 8-10% of the solid waste constitutes of **pruning from gardens and tree lines** and currently are not utilized in any way.

Prof. C. Paraskeva, Department of Chemical Engineering, University of Patras, stated that the University has extensive experience in the management, recovery and reuse of waste waters, while Mr. E. Papachristopoulos, Region of Western Greece, Regional Fund for Development, underlined the lack of **cooperation between the private and public sector** in environmental management actions, the need to codify **environmental legislation** and the definition of **spatial planning** which is necessary for the allocation of areas for environmental investment where strong social reactions are encountered.

Mr. E. Panagiotopoulos, PANAGIOTOPOULOS CERAMICS SA, stated that the **use of by-products** (ceramic dust and biomass ash) in the production of bricks or other applications is under investigation, always taking appropriate measures to maintain safety and hygiene in the workplace, while Mr. P. Filippou, Polyeco SA, referred to the collection of the difficult and demanding material, elenite and suggested that the actions of CIRCLab be extended to other wastes. Mr. P. Papadatos, ERGOLOGIC SA, spoke about the **adoption of information & communication technologies** (ICT) for the collection and analysis of data in waste management either in the thematic field of CDW or organic waste, while Mr. G. Karelas, Oiniki Wine Company SA, stressed the need to utilize wine mud, which to date cannot be disposed of. Finally, N. Anifantis and S. Kaouris, environmental engineers, underlined the emergence of new job opportunities presented in the field of waste management.

At the end of the meeting, the participants agreed that through the definition of the difficulties, needs and challenges, a good basis is created for the support and development of action plans based on circular economy principles. They concluded that the next step would be to develop a detailed and realistic action plan.