RE-MED

Apply innovation for the development of circular economy for sustainable construction in the Mediterranean

RE-MED arises from the need to reduce the environmental and health impacts due to failures in the management of construction and demolition waste (CDW). The project aims to transfer and experiment technologies enabling these CDW to be transformed into resources for the construction and maintenance of roads.

The project includes the construction of a CDW recycling plant and aims to leverage the societal, environmental and digital transition of Mediterranean territories. A road section integrating the CDW will be built and evaluated to demonstrate the concept. A full work program will be set up and shared on the RE-MED Community collaborative platform. The project will implement structured training, scientific and public dissemination, methodological guides and draft standards, as well as models of efficient economy to integrate the dimension of sustainable development in the road sector. The project also intends to support the Tunisian and Lebanese environment ministries in order to change the regulations to facilitate the use of at least 20% of recycled aggregates in road construction, and thus open up a construction waste market.

Start		04/09/2020	**End**	03/03/2023
Budget		EUR 3.084.250	**European Union's ENI CBC Med programme, for education, research, technological development and innovation, under the grant agreement number 28/1682**	
Coordinateur	**FR**	CEREMA	**9 partners from 4 countries**	
Chef de projet CEREMA Mme Oumaya MARZOUK ✉ oumaya.marzouk@cerema.fr ☎ : +33 6 47 20 06 35				

Partnership:

CEREMA- Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning
SARL DYNEDOC (FR)
University of Palermo (IT)
CETEC Center of Testing and Construction Techniques (TN)
Ministry of Local Affairs and Environment (TN)
Afrique-Travaux Company (TN)
Ministry of Environment (LB)
Lebanon Syndicate of Contractors of Public Works (LB)
American University of Beirut (LB)

Project description

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Objective To support the technology transfer to increase the value of construction waste and boost its use in road construction, integrating at least 30% of recycled materials, while transferring and disseminating recycling practices, thus accelerating the development of a new market.

What will be improved?

Open up a niche in the construction market, environmentally sustainable, by using CDW as an economic value. The project will promote a regulatory evolution establishing the use of recycled CDW in road construction of 20% of the total in the short term and 40% in the long term, as well as the adoption of new standards related to the treatment of CDW and their characteristics, such as the nomenclature of the waste and the standards of the tests.

The cooperation will enable the promotion of CDW techniques and innovative technologies in the 4 partner countries and produce demonstrations and tools never developed in Tunisia or Lebanon, as well as create cross-border training so that future professionals in the sector can apply these techniques.

Who will benefit?

- ✓6 National public authorities: Ministries of equipment, Economy and Finance, Interior, which will be involved in the regulatory evolution process
- ✓3 National Agencies
- ✓50 Road owners and managers
- ✓6 Federations and associations in the road and solid waste sector
- ✓1 Standardization body
- ✓7 Expert networks such engineers' international associations
- ✓5 Technology platforms and research centers
- ✓Construction companies
- ✓Motorway users

Expected achievements

- 3 Plants of CDW sorting and treatment built
- 1 km of innovative pilot roads built
- 1 RE-MED community online platform set up for knowledge sharing
- 6 training programs implemented
- 6 scientific publications released
- 4 law/decree proposals
- 1 registered patent
- 3 established spin-offs

Contribution to policy-making

The project will greatly contribute to the evolution of public policies in Tunisia and Lebanon for the development of its CDW markets. Nowadays, the construction material storage facilities have reached their limits and do not have the institutional and technological capacities for recycling. RE-MED will support the ministries in drafting laws and regulations as well as new standards, which will thus get closer to EU standards. It is also planned at the end of the project that the Tunisian government imposes on construction companies to work with recycling companies and sets up a subsidy system up to 20% of investments in the collection and recycling of CDW.

Programme: European Union's ENI CBC Med programme, for education, research, technological development and innovation, under the grant agreement number 28/1682

Budget : 3.1 M€ **(90% EU Contribution)**

Duration 30 months (04 September 2020- 03 March 2023)

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