



WES INFO BULLETIN REGIONAL ACTIVITY ON CONSTRUCTION & DEMOLITION WASTE MANAGEMENT

March 2024

Overview

As part of the "Water and Environment Support (WES) in the ENI Southern Neighbourhood region" project, a Regional Activity focusing on 'Management of Construction & Demolition Waste (CDW)' (RE-4-REG/ST/P2P) was tailor-designed and delivered to key stakeholders from the WES Partner Countries (PCs).

The Activity was developed from April 2022 till March 2023, in 3 phases which included a Study Visit with a Training/Workshop organised in Marseille, France, and several Peer-to-Peer exchanges that took place before, during and after the Study Visit.

The construction industry is one of the most significant industries which contribute to the social and economic development of every country. Nevertheless, construction and demolition waste (CDW), which contributes about 50% of the total global annual generated solid waste (SW), represents a growing challenge for the PCs. In order to address these problems, an Activity was organised to bring together the key stakeholders from the PCs and provide a high-level field visit focusing on CDW followed by a training/workshop to discuss outcomes of the visits, needs and challenges.

This WES regional activity is dedicated to supporting regional efforts towards improving the CDW management through identification and presentation of technologies and schemes already tested on the ground in the EU and Mediterranean region and suitable to be transferred in the MENA region. It is intended to inform about how to maximise the sustainability of CDW management, to demonstrate design/processes/operations leading to reductions in the environmental impact of CDW and to demonstrate good/best practice in the environmental performance of site activities.

Objectives

The objectives of this activity were to:

- Identify and analyse the recurrent problems encountered in the CDW management sector in Southern Mediterranean.
- Identify and analyse relevant existing projects/technologies/initiatives that may answer those problems to implement them in the concerned territories, stressing environmental and social benefits.
- Introduce to the participants an integrated approach to sustainable management of CDW at the local level based on EU standards and applicable best practices.
- Visit CDW management facilities using technology, which is effective, relevant and implementable in the WES PCs.
- Enable, encourage, and facilitate dialogue and exchange of experiences between public authorities and other key stakeholders from the PCs with those from the EU.
- Promote sharing of experiences among the PCs on CDW management practices; facilitate exchanges and the development of synergies and complementary activities within the Mediterranean.
- Analyse possibilities for the creation of a market for materials recovered from CDW.

Methodology and Implementation

Peer-to-Peer Process

Study Visit & Training/Workshop

This regional activity on CDW management was designed to benefit national governments (decision makers and administrators involved in different aspects of CDW management in PCs), local authorities, applied research and innovation institutions, and private sector along the value chain (construction companies, entrepreneurs, service providers in SW management, etc.).

Twenty-three key stakeholders from the PCs participated in the Activity which was developed in 3 phases:

❖ **Phase 1: Two online P2P meetings (07/04/2022 & 16/06/2022)**

The preparatory work was aimed at:

- Introducing all the participants (Peers, Experts, etc.) and consolidating the workplan, roles and expectations;
- Enhancing discussion among Peers on several issues related to C&DW and introducing the host (Region Sud – Provence-Alpes-Côte d'Azur) and the envisaged structure of the Study Visit.
- Launching the preparatory work for the development of the Desk Study on demolition and construction waste practices, whose objectives and structure were presented during the 2nd P2P meeting.

❖ **Phase 2: Study Visit & Training/Workshop & virtual P2P meeting (20-21-22/09/2023)**

The 3-day regional activity held in Marseille, France was embedded within this regional **Peer-to-peer activity**, which involves direct exchange of experiences between and among Peers from relevant institutions in the PCs and beyond in order to share knowledge, expertise and solutions in the CDW sector, as well as to boost South-South cooperation and to build lasting relations and exchanges.

The program of the **Study Visit** and the combined **interactive Workshop** was elaborated based on the discussions, consultations and outcomes of the abovementioned first two online P2P meetings.

- The aim of the Study Visit and interactive workshop was to showcase recent developments and innovative approaches in CDW management while promoting experience exchange among PCs. The visit(s) demonstrated simple technological solutions already tested on the ground in the EU/Mediterranean region and suitable to be transferred in the MENA region. Efforts have been invested in making links with other projects, pre-existing or ongoing, such as RE-MED.

The field visits were hosted by the Region Sud – Provence-Alpes-Côte d'Azur, France, ACR+ member.

- **The first day (20/09/2023) was dedicated to the visit** of the recycling Center and crushing platform of MAT'ILD company in Bouc-Bel-Air, the Sorting platform for Metals, Wood shredding and cardborads of MAT'ILD in Gardanne, the platform for sorting and recycling of inert waste of DURANCE Granulats Company.
- **The second day (21/09/2023) was dedicated to the visit** of the incineration bottom ash treatment platform of MAT'ILD company and ARCELOR Mittal-ECOCEM company in Fosse-sur-Mer.

- **The third day (22/09/2023) consisted in an interactive workshop** on CDW management where the following was presented:
 - An overview of CDW management in the EU;
 - A review of the main results of the ENI CBC-MED RE-MED project;
 - Presentation of a PHD thesis on solutions for better collection and management of CDW.
 - A deeper insight into the case of Tunisia;

The afternoon of the third day was dedicated to group work and a wrap-up of the lessons learnt during the visits and the previous **online workshops of P2P process**.

❖ **Phase 3: online P2P meeting (15/03/2023)**

A final on-line P2P meeting was organised with the aim to present the **Desk Study** on demolition and construction waste practices to all participants, conclude the P2P process, conduct the evaluation process, etc.

Although the Desk Study was a tool to strengthen the P2P exchange, it is also very useful for policy makers who play a role in enabling change toward circularity and sustainability in this sector.

Conclusions

Peer-to-Peer Process

- ✓ This P2P process primarily relied on active peer engagement, mobilisation, and collaborative contributions, fostering the exchange of experiences, knowledge, and expertise on the challenges associated with construction and demolition waste.
- ✓ The activity played a pivotal role in promoting South-South and North-South cooperation and facilitating fruitful exchanges on this topic.
- ✓ This is also reflected in the WES video on CDW that included testimonials of the participating Peers (see <https://www.youtube.com/watch?v=zgQrSYX8yOw>). The latter has been widely disseminated throughout the region via the WES communication and outreach channels.
- ✓ The WES project, serving as a facilitator and moderator, dedicated comprehensive logistical and technical resources to ensure the success of the initiative, including the coordination of several online sessions, bilateral communication with the Peers and the organisation of a technical study visit to Marseilles with a combined workshop session.
- ✓ The WES NKEs that supported the P2P exchange provided requested case studies, technical insights and also engaged the Peers in the development of the Desk Study on CDW management in Europe and in the South Mediterranean countries.
- ✓ Despite the inherent challenges in mobilising the busy peers and finding dates that suited everyone for the plenary online meetings, this P2P process succeeded in facilitating and sustaining a flow of interactions among the peers as well as between the peers and various experts. It was also assessed positively.
- ✓ The pivotal face-to-face interaction of the peers during the study visit to Marseilles played a crucial role in consolidating the progress of the P2P exchange and also for enriching the Desk Study.

Study Visit & Training/Workshop

The three days of visits, presentations and discussions were fruitful in sharing already established practices in Europe, in exchanging recurrent challenges and possible replicability of solutions in the WES PCs.

The economic aspects of making the sector environmentally sustainable were at the core of the discussions. Along this line, main lessons learnt that can function as conclusions are as follows:

- ✓ The most important thing is to have a legal framework on how to manage this type of waste and to have a good business model with incentives.
- ✓ Private-public partnership is a must.
- ✓ CDW management, if managed in an industrial symbiosis perspective, laid down by a good legal framework, can be economically profitable.
- ✓ Sorting is the first step to be done as it allows to get a better quality of inert waste quickly, economically and profitably.
- ✓ To make profit out of CDW management, it is useful to have an infrastructure able to sort inert waste (IW) (rubble, concrete, ceramics, cement or lime coatings, marble, bricks, excavated unpolluted soil, glass, etc.), non-inert non-hazardous waste (NINHW) (metals, paper, cardboard, plastic, untreated wood, gypsum plaster, insulation products, etc.) and hazardous waste (HW) (asbestos, paints, silicone, solvents, asphalt, bitumen, treated wood, aerosols, etc.), without forgetting their separation from household waste.
The recycling of the first two types (IW) and (NINHW) have a higher economic value.
- ✓ Quarry extraction activity with CDW management is a good combination of activities. Quarry owners have a lot of space and can use part of the recycled material to produce new products (aggregates or concrete).
- ✓ Certification is key to gain the trust of end users of recycled products. Ideally, having an R&D lab on site helps get the best product (with the best properties).
- ✓ Instead of authorities multiplying obligations and fines, it would be more efficient to support business models as mentioned above.



Useful Links

https://www.wes-med.eu/activities_type/re-4-reg-st-management-of-construction-demolition-waste-cdw/

https://www.wes-med.eu/activities_type/re-4-p2p-management-of-construction-demolition-waste-cdw/

WES Project

The EU funded Water and Environment Support (WES) is a regional project designed to contribute to the implementation of an integrated approach to pollution reduction and prevention, in line with the Union for the Mediterranean agendas and the Barcelona Convention. WES is also meant to contribute to a more efficient management of scarce water resources in the ENI Southern Neighbourhood region.

The project aims to do so by increasing the capacity of stakeholders that are involved in pollution reduction and water management and support them in formulating and implementing the environmental and water policies.

WES supports the shift to a more sustainable consumption and production model, promotes an integrated and efficient management of water, combats plastic pollution and marine litter and fosters dialogue on key environmental and sustainable development issues. In this way, WES also supports mutual understanding, cooperation, and peace in the region.

For any further information on WES project, please visit: www.wes-med.eu

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