CONDEREFF NEWSLETTER

CONDEREFF
Interreg Europe

CONSTRUCTION & DEMOLITION WASTE MANAGEMENT POLICIES FOR IMPROVED RESOURCE EFFICIENCY

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In this issue

Dear reader,

Welcome to the sixth edition of Newsletter series of the CONDEREFF project!

CONDEREFF is a European project funded by the INTERREG Europe Program that aims to share and disseminate best practices of waste management, reduction and recycling to stimulate and support their implementation in partners' territories.

In the following pages, you will find interesting materials describing the overall context and objectives of the project as well as information on the latest developments and events, and the upcoming ones.

Do not hesitate to subscribe on our newsletter channel at: https://www.interregeurope.eu/condereff/

We shall keep you informed about our progress and key outcomes through the project website, thematic events, and newsletters.

The CONDEREFF project team

CONDEREFF in brief

C&D waste streams represent **20-30% of all wastes generated in Europe**, reaching up to the two-third of the total wastes generated in some countries. Reuse rates vary across EU countries (10-90%). The Waste Framework Directive (2008) and the Construction 2020 strategy set a **70% recycling and reuse rate of CDW by 2020** and the Circular Economy Package also prioritizes CDW.

CONDEREFF Interreg Europe
European Union European Regional Development Fund
€ 1.35 M ERDF
Jun 2018 May 2023

CONDEREFF aims to **strengthen regional capacities for increasing recycling and reusability rates of C&D waste** in the regions participating in the project.

Environment & resource efficiency

The project brings together 8 partners from 5 EU countries which work together during the 5 years of the program to analyze the CDW context in the regions, understand the stakes and get a clear view about brakes and levers on which to play with to ease the implementation of solutions.

To cope with the objectives, it is necessary to rethink the way products, materials and resources are designed, produced, used and disposed. Challenges are many: organizational, technical, logistical, cultural and economical, and call for investment in R&D, new techniques and support of the overall value chain development.

From a planning perspective, the project is split into **two major phases**. The first, which has started in June 2018, focuses on studies & analysis, including policy learning, market potential for CDW, network mapping, tools and resources for monitoring, tracking management of CDW. The second, starting at the latest in June 2021, is about implementation of action plans and testing of solutions in territories.

State of progress in Auvergne-Rhône-Alpes

New French environmental regulation for buildings

One of the objectives of the new RE2020 regulation is to reduce the carbon impact of the construction of new buildings by taking into account all the emissions of the building over its life cycle, from the moment of construction. Most of the carbon footprint is related to the construction and demolition phases, which represent between 60 and 90% of the total carbon impact calculated over a 50-year period. In calculating the impact of buildings, re-used components should be considered as having no impact. This should encourage the use of re-used materials in construction. This new regulation will apply from 1 January 2022.

RE 2020
RÉGLEMENTATION ENVIRONNEMENTALE

Collective action on reuse in Auvergne-Rhône-Alpes

A regional working group on reuse has been led since 2020 by the association Ville & Aménagement Durable. Nearly 60 actors, including AURA-EE for the CONDEREFF project, public and private project owners, contractors,

companies and associations participate in regular meetings to create an ecosystem favourable to the development of the reuse of building materials. At present, work is being carried out to propose a reuse pitch (respond to negative arguments and highlight the positive aspects of a materials reuse approach) as well as successful feedback sheets to encourage stakeholders to embark on reuse. A survey was conducted to identify these good practices. Other actions such as the identification of existing training courses or the development of training courses on re-use are underway.

The first French trophy for construction with reused materials

The “Trophées Bâtiments Circulaires” (Circular Buildings Awards) are being launched to highlight and promote exemplary reuse operations, and thus contribute to the dissemination and adoption of these practices by the construction industry. Participants have until June to submit their applications and an award ceremony will be held in autumn 2021.

Candidates' projects will be judged on several points: the consideration of the circular economy in terms of extending the life of materials (selective deconstruction, reuse), eco-design of buildings (dismantlability, reusability, recyclability) and environmental balance (water impact, waste, CO2 avoided). Its reproducibility and innovative character are also part of the evaluation criteria. This event is co-organised by Booster du Réemploi and Construction21. More information on the contest here (in French).

Trophées Bâtiments Circulaires

Remtech EXPO in Lazio Region

Remtech EXPO 2020: Participation of Lazio Region to the Event with Condereff Project

On September 24th, 2020, the Lazio Region participated to the exclusive international and permanent event specialized on remediations, coasts, floods, climate, seismic risk, urban regeneration and sustainable industry. This event is organized in parallel with the Event named "Inertia", the most specialized event in Italy about the re-use of inert waste and the natural, recycled and manufactured aggregates. Within this meeting, that took place virtually, the project officer of Lazio region, Mr. Alessandro Drago, presented the Condereff Project's objectives with the support of Mrs. Antonella Luciano, project officer of ENEA within a roundtable dedicated to “Circular Economy: how to apply it in the contest of EU Green Deal".

This event turned out to be an important chance to present the Condereff approach, methodology, preliminary deliverables, and the main objectives. The discussion that followed with the other participants demonstrated how our project fully meets the objectives of the Green Deal, with a view to developing the circular economy. Indeed, based on the strategy of the 3 Rs, reduce-reuse-recycle, the project identifies the best European practices capable of enhancing the recovery of construction and demolition aggregates to favor the market of first-second materials, following the indications of the EU Protocol on the Management of Construction and Demolition Waste.

The participants showed interest in the project’s goal to increase the confidence in the process of managing construction and demolition waste and of persuading people about the quality of recycled materials from C&DW, leveraging on improved identification, logistic and processing of waste, the quality management and the appropriate policy. The working language was the English and among the speakers, there were researchers from Italian, French and Argentinian Universities who made presentations focused on circular economy.

Regional Stakeholders Meeting in Thessaly

The Regional Meeting of 17th September 2020 gathered a vast majority of the Stakeholders in Thessaly. The Govenor of the Region of Thessaly, Konstantinos Agorastos the importance for the Region to turn towards the circular economy. Regarding the CDW, at the local level, in collaboration with the Technical Chambers of Central and Western Thessaly and Magnesia Branch, the Region of Thessaly has started a series of discussions aimed at informing about any developments in the relevant legislation and identifying problems that arise during its implementation.

The main issue discussed in the meeting was the present situation in Thessaly regarding CDW. Questions raised included:

- Is the legislative framework completed? Is there a market for recycled C&D Waste?
- Is there a lack of C&D WTP? What is the general mentality in the construction sector about C&D Waste? Is alternative management of C&D Waste really mandatory?
- Are the estimated quantities of non-hazardous C&D Waste and ACW produced accurate?

The main conclusions of the meeting were the following:

- There are not available detailed data concerning the exact amount of C&D waste generation, but just estimations, especially based on construction and demolition licenses. The estimation of the total quantities of C&D Waste produced needs to be based on the quantities declared by the treatment plants and the systems, so as to be more realistic.
- There is a lack of C&D WTP. The Region of Thessaly has included the C&D Waste sector in the priorities of funding from the Operational Program, regarding private investments.
- There is a lack of inert C&D Waste (residuals after the treatment) landfill. The under revision Regional Waste Management Plan of Thessaly 2020-2030 is suggested to include the construction of a landfill for inert C&D Waste.
- The market for recycled C&D Waste is still small. The use (at a certain percentage) of recycled C&D Waste is suggested to be mandatory in the public works (Green Public Procurement).
- There is a lack of hazardous (ACW) landfill. Exported hazardous C&D Waste (asbestos) to Germany for proper treatment, is very expensive. The revised new National Waste management Plan 2020-2030 includes the construction of a national landfill for hazardous waste.

The policy and industry symposium on promoting and incentivizing the re-use of C&D Waste

On February 24th, the Regional development agency of Pardubice Region hosted the Policy and Industry Symposium of the Condereff project. The symposium was broadcasted online from a virtual studio in Pardubice.

The event covered themes such as: Enablers & challenges of CDW reuse, recycling and recovery and Stimulating and enabling environment for CDW reuse, recycling and recovery.

The symposium was divided into three parts, each holding three speakers, who attended mostly online. The first part of the symposium covered mainly the legislative frame of CDW in regions, with Petra Urbanová from the Ministry of Environment of the Czech Republic and Dr. Ingrid Winter from Styria covering this topic.

The event also presented representatives of the private sector, who showed their ways of dealing with C&D Waste. From the private sector, there was a presentation from Markus Meissner from company Baukarusell. A very interesting project of Waste2Resource Marketplace was showed by Cyril Klepek, the CEO of Cyrkl company.

The aim of the symposium – meet together speaker from the public sector, private sector and other involved and interested parts, such as representatives of University, was met. The conclusion of the symposium was to give all involved parts their look into the topic of C&D Waste reuse, recycling and recovery, show tips and hints on how is being CDW dealt with from different points of view in different countries and shared their visions to the future.

CONDEREFF at the Recy & DepoTech 2020

Dr. Ingrid Winter, head of the Department Waste and Resource Management at Directorate 14, Office of the Regional Government of Styria, held a presentation at the Recy & DepoTech 2020 Conference, which is the largest waste management conference in Austria with over 500 participants. She explained the forward-looking approaches of the federal state of Styria to implement a resource-efficient circular economy.

The current policy instrument for implementing the circular economy at regional level is the Styrian Waste Management Plan 2019. The vision of a circular economy by 2050, it relies on three strategic pillars, the improved implementation of the waste hierarchy, innovation and technological development, and environmental friendliness and climate neutrality. One of its priority fields of action is the area of C&D waste, where essential measures are made possible by the CONDEREFF project.

The construction industry is one of the most resource-intensive sectors, contributing more than70% of the total waste generation in Austria. Despite high recycling rates of mineral C&D waste of well over 80%, downcycling often takes place instead of high-quality recycling, and the reuse of components is only just beginning.

This is where the CONDEREFF project comes in. In order to improve quality management and achieve greater consumer confidence in recycled building materials the "Styrian C&D Waste Guide", first published in 2012, was revised and amplified. The core of the revision is the addition of preparation for reuse. Although this is obligatory within the framework of the (orienting) pollutant and contaminant investigation according to the Austrian Recycling Building Materials Ordinance, in practice only a few building components have been reused so far. The Styrian C&D Waste Guide is now available free of charge not only in German but also in English at www.baurestmassen.steiermark.at

Styria: The investigation of pollutants and interfering substances before the demolition of buildings

When a building is demolished, many different materials accumulate that make the recovery and recycling of the waste materials difficult or even impossible. Therefore, these materials must be removed before demolition. The legal basis is the Austrian Recycling Building Materials Ordinance, which was last updated in 2016. The aim of this ordinance is to promote the circular economy and material

efficiency, in particular, to prepare building components for reuse and to ensure a high quality of recycled building materials to promote the recycling of construction and demolition waste.

This ordinance stipulates that a pollutant and interfering substance investigation must be carried out before the demolition of a structure that generates a total of more than 750 t of construction and demolition waste and with a total gross volume of more than 3,500 m^3. ÖNORM EN ISO 16000-32 describes how this investigation is to be carried out. Regardless of the size of the building and the amount of pollutants generated, hazardous waste must be separated from non-hazardous waste on site. This separation must therefore be ensured during all demolition and conversion work.

To illustrate the pollutant and interfering substance investigation, a video was produced for the interregional seminar in November 2020, which unfortunately could only be held online. This video shows three impressive and very different examples of how the on-site pollutant and interfering substance investigation, as well as the quality assurance for the recycled building materials, is carried out. The video is published on Youtube - the link is: https://www.youtube.com/watch?v=AKnV2xX4Oyo&t=5s

In the first example, we inspect an old restaurant building at a small lake (Thalersee) near Graz, which is a popular day-trip destination for the local population.

In the second example, we describe an area of the city of Graz, which is 25,000 square metres in size and is to be completely demolished.

The new resource park of the city of Graz will then be built on this site. What is remarkable about this example is that of the 27,500 tonnes of demolition material, around 21,000 tonnes can be processed directly on-site into recycled building materials and then reused. This saves enormous transport distances to construction waste landfills and thus also reduces additional fine dust pollution for the city of Graz.

In the third example, we show the process of quality assurance for recycled building materials at what is currently the largest construction site in Graz. The 54-hectare site of a large former brewery (Reininghaus) is being developed into a new district for about 10,000 people.

Last but not least, this video also shows which building elements could be reused, but that it is important to find a market for them. In this respect, the Recycling Building Materials Ordinance stipulates that such components must be offered on the market before they can be recycled.

Best practices in waste management in Cordoba, Spain

The CONDEREFF project in Spain, has identified a best practice in the field of waste management from GECORSA, a benchmark company in Cordoba in waste management. Compared to an average of 30% of the total volume of rubble being recycled in Spain, GECORSA is managing to revalue around 80% to 90% of the construction waste it manages at its treatment plant in Cordoba city. In the wide scope of action they cover, it can be highlighted a comprehensive and quality service in compliance with ISO standards. In addition, it is important to highlight the enormous work they do in the management of waste from construction and demolition (CDW), including those containing asbestos, as well as non-hazardous waste generated in the manufacturing process of their industry, plastics, cardboard, wood, bulky waste, as well as waste electrical and electronic equipment.

GECORSA produces a series of construction components and materials that come from the recovery of CDW and ensures that the quality, processes and optimum performance of each of the products it manufactures in its Industrial Plant are guaranteed and comply with the relevant regulations in each case.

In addition, on the website, whose link can be found below, you can see success stories achieved by the company such as asphalting of a school sports area, drainage base for water evacuation, drainage layer under a water tank or road base for a bicycle path.

This leading company in the treatment of CDW waste is up to date in complying with both state and regional regulations on waste management. These plans cover prevention, reuse, recycling, energy recovery and, lastly, disposal, and these priorities must form part of the environmental actions of the companies.

Among the services offered it can be highlighted: Management of construction waste and recycled aggregates, management of Non-Hazardous waste, management of waste with asbestos, management of electrical and electronic waste (WEEE). https://www.gecorsa.es/

Updates in the Spanish legislation for the management of CDW.

During the last few months, Spanish waste management regulations have been updated with relevant issues for all stakeholders related to the management of construction and demolition waste. In addition, a public participation period was launched in February for the elaboration of a Circular Economy Action Plan covering the period from 2021 to 2023. Some of the proposed lines are in line with the objectives of the CONDEREFF project.

- Royal Decree 553/2020 of 2 June, which regulates the transport of waste within the territory of the State.

On 2 June, legislation on the transport of waste within Spanish territory was reformed. In particular, the figure of the waste manager was affected.

- Royal Decree 646/2020 of 7 July regulating the disposal of waste by landfill.

On July 7, the new legislation on waste disposal by landfill in Spain was approved. It includes, among others, new obligations for waste and demolition waste. Some of the main objectives of the legislation are, to establish an appropriate legal and technical framework for landfill disposal activities, to ensure a progressive reduction of landfilled waste. The ultimate aim of this standard is to move towards a circular economy.

Circular Economy Action Plan 2021-2023

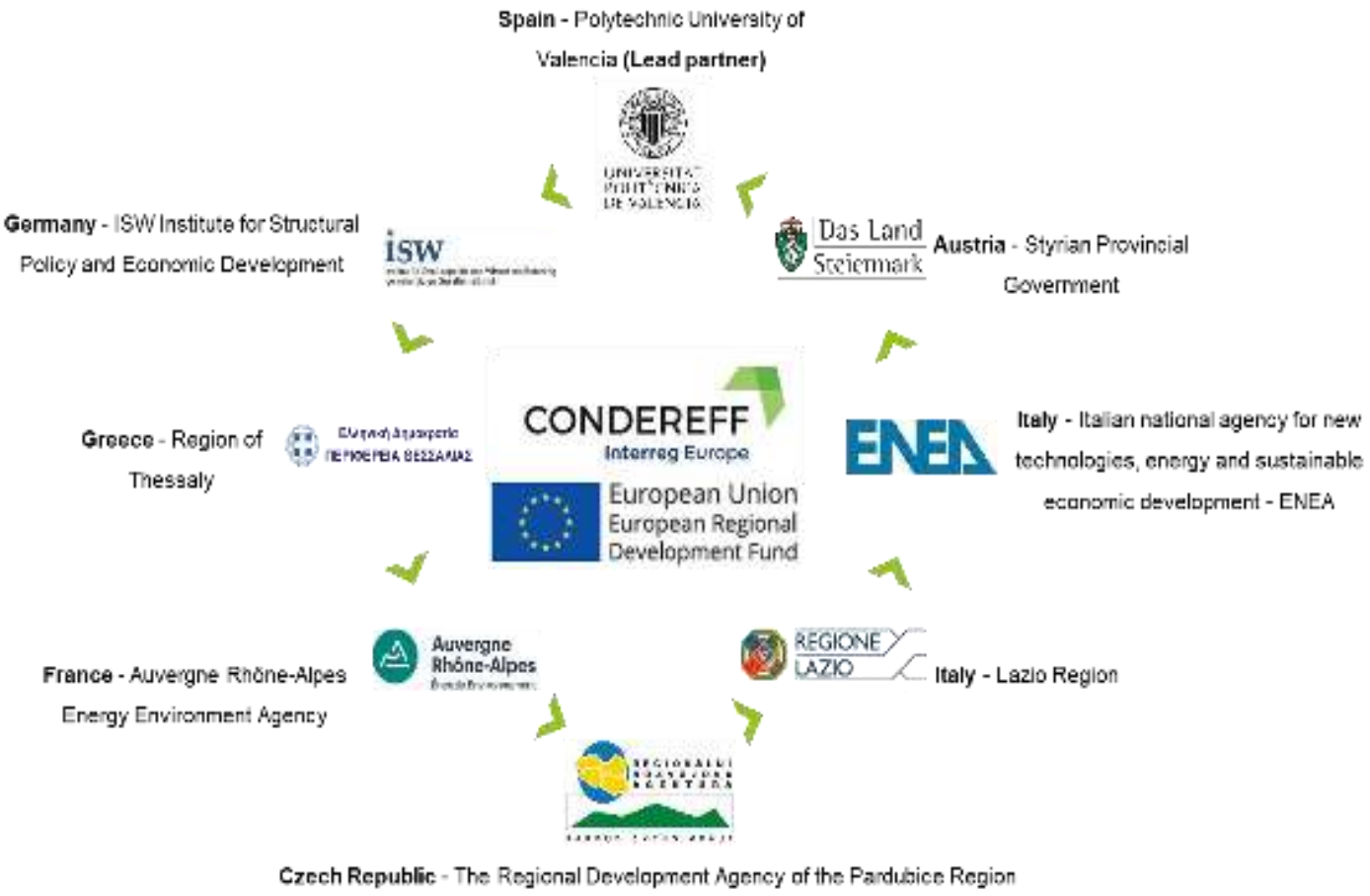
The Spanish response to promote a circular economy in our country is the Spanish Circular Economy Strategy (EEEC), approved by the Council of Ministers Agreement on 2 June 2020. This document lays the foundations for promoting a new model of production and consumption in which the value of products, materials and resources is maintained in the economy by using efficient waste management. The Strategy thus contributes to Spain's efforts to achieve a sustainable, decarbonised, resource-efficient and competitive economy.

The first part of this plan will be focused on the recovery of the economy affected by the pandemic, for which aid will be provided to stimulate initiatives that focus on a circular economy.

5 lines of action and 3 lines of action are proposed for this plan in relation to the management of CDW:

- ***Production*:**
  Primary sector and bioindustry (circularity in biological cycles), industrial production (circularity in technological cycles and tourism. Among the measures to influence the sector in the long term is the promotion of wood as construction materials, since in the long term they will become CDW.
- ***Consumption:***
  Labelling for the Circular Economy, Reduction of food waste, sustainable consumption and public procurement with circularity criteria. The inclusion of eco-labels that can guarantee that the products resulting from the recovery of CDW could be positive for the sector, today there are many aggregates and recycled materials that do not have CE marking, in this sense we must unify criteria on recycled aggregates, their characteristics and performance.
- ***Waste management:***
  A new regulatory framework on waste, revision of the legal regime of key waste streams, waste planning instruments, measures for climate change mitigation in the waste sector, measures to improve the prevention and management of some waste streams and control and surveillance of waste.
  https://www.miteco.gob.es/es/calidad-y-evaluacion-ambie ntal/participacion-publica/PP-Residuos-2021-Plan-de-Acci on -de-Economia-Circular-2021-2023.aspx

The CONDEREFF Partnership



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