



CLOSER

Close to Resources Recovery



On behalf of the CLOSER project, we are pleased to welcome you to the fourth edition of our newsletter

Here you will find information about project activities, as well as news and events related to construction and demolition waste (CDW). We hope the topics in this fourth newsletter are of your interest.

If you are not registered to receive the newsletter please subscribe [here](#)

Highlights:

- *Portuguese pre-demolition guide and case study*
- *European Researchers' Night*
- *Summer course SoRc*

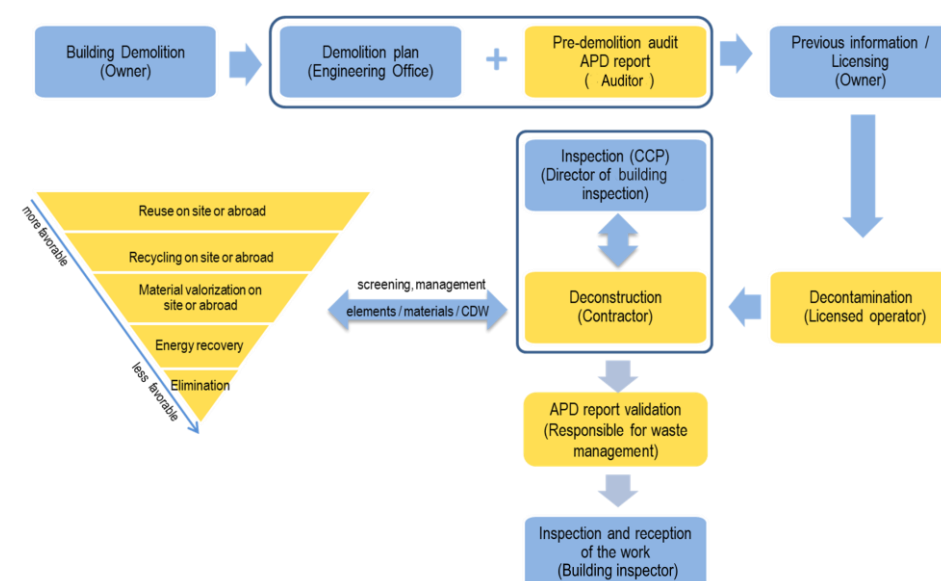
Portuguese pre-demolition guide

The CLOSER – Close to Resources Recovery project, intended to prepare the Portuguese guide for pre-demolition or renovation audits for buildings (PGPDA) meets the objective of increasing the application of circular economy principles in the construction sector, contributing to reduce the generation of construction and demolition waste (CDW), minimizing the contamination of this flow and promoting the production of better quality secondary materials. Pre-demolition audits (PDA) allow for a more accurate identification of the types and quantities of existing materials, presenting suggestions for future applications, whether for the reuse of materials or recycling of CDW.

PDA has to be planned and carried out by auditors with specific training before the application for licensing the demolition of the building and, consequently, before carrying out any work. The removal of hazardous substances is the first step to increase the value of elements, materials and CDW present. The importance of correct sorting, identification and segregation of the various components should be noted.

The scope of the PGPDA is defined by authorities at the national level. At the local level the guide may have more demanding requirements, based on environmental, social and economic requirements. This document is developed by the members of the CLOSER project team – LNEC as promoter and APA and IMPIC as partners and the contribution of entities that showed interest in it.

PGPDA comprises: i) Introduction; ii) Classification of construction and demolition waste; iii) Legislation; iv) Roles and responsibilities; v) Audit of pre-demolition waste; vi) Requirements vii) Waste management; viii) PDA reporting templates.



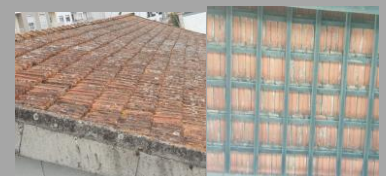
Simplified scheme of pre-demolition audit implementation

Case study

In recent years, recommendations and technical specifications have been developed in different countries, aiming to present reuse and recycling solutions for materials and waste from the demolition of buildings.

Proposing the most appropriate solution implies knowledge of the quality and quantities of materials, their location, condition and associated hazardous characteristics, information that is identified in pre-demolition audits.

In a first approach to the application of the actions proposed in the Portuguese Guide for Pre-Demolition Audits (PGPDA), the partners of the CLOSER project and Infraestruturas de Portugal agreed to develop case studies of the buildings to be demolished within the scope of the “Modernization of the section” project Mira Sintra-Meleças - Torres Vedras (excl.), from the West Line”. More specifically, the Cais Coberto da Malveira case study is in progress.



Follow us:

<http://www.closer.lnec.pt>



European Researchers' Night

The European Researchers Night 2021 initiative (ERN 2021) took place, at European level, on the 24th of September and, in this pandemic year, again in person. With a creative character, ERN2021 included the participation of different segments of the scientific community, during the event and in the preparatory activities, aiming at the communication of science and the active involvement of the public.

The theme of ERN 2021 in Portugal, Science for the Climate, was aligned with the European Green Deal which proposes climate-neutral impact in Europe by 2050, through the promotion of initiatives that protect the environment and boost the green economy, reducing pollution.

ERN 2021 encompassed the social, economic and environmental dimensions of sustainability, promoting the relevance of science and research in contributing to climate neutrality in the future.

The participation of the CLOSER project took place at Jardim do Príncipe Real, in Lisbon, between 16:00 and 23:00. There was an interesting participation of young people, who were the target audience of the Quiz "What Dangerous Substances Do We Have in Our Houses?", developed for this purpose.

Summer course SoRc

CLOSER Project Research Fellow Seyed MHS Rezvani participated in the School of Reconstruction (SoR-c) organized by the Brighton School of Architecture and Design to rethink, reuse and recreate new structures based on discarded building materials.

School of Reconstruction consisted of 11 groups that worked on different subjects in online workshops using MS teams and Miro. Seyed Rezvani was in Group F named Material Flow that was supervised by Mark Oldengarm and Nicole Maurer from Netherland. The study of material flows relates to two sites in two cities (ENCI Maastricht and Harculo Zwolle) within the Netherlands.

The challenge was to use the material flows present to make proposals for the improvement of the sites under analysis, addressed to the public, colleagues and policy makers (and the planet!).

Seyed Rezvani used analytical hierarchy process known as AHP to weigh the criteria and rank the proposals within the group to reach a comprehensive conclusion in which option will work the best for the two sites.

The proposals ranked by decreasing order of relevance for the two sites were: used material market, a renewable energy central, a training center, a totem, a boat, new housing and refuse to do anything.