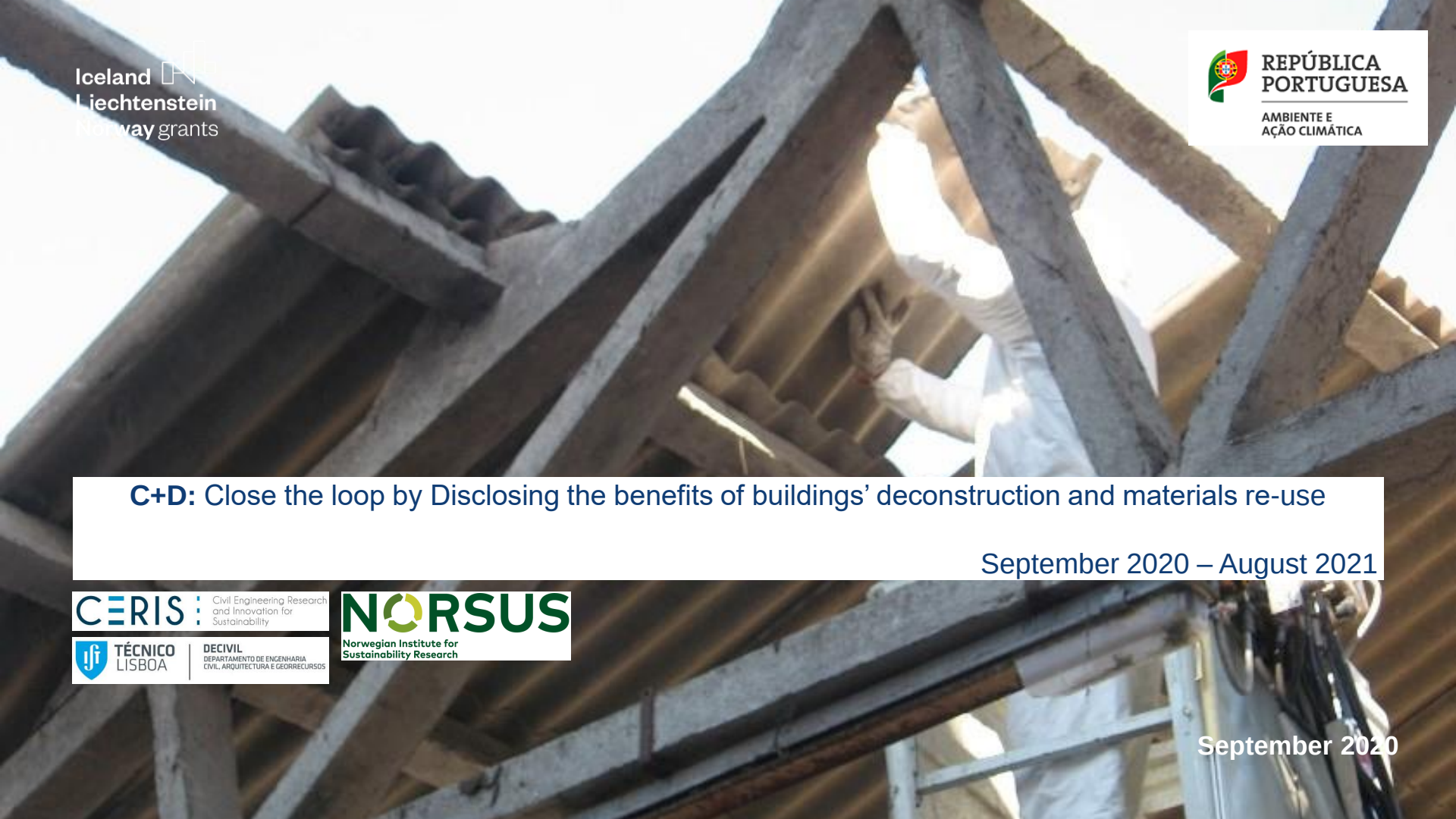


Iceland Liechtenstein Norway grants

REPÚBLICA PORTUGUESA
AMBIENTE E AÇÃO CLIMÁTICA

C+D: Close the loop by Disclosing the benefits of buildings' deconstruction and materials re-use

September 2020 – August 2021

CERIS Civil Engineering Research and Innovation for Sustainability

TÉCNICO LISBOA | DECIVIL DEPARTAMENTO DE ENGENHARIA CIVIL, ARQUITETURA E GEORRECURSOS

NORSUS Norwegian Institute for Sustainability Research

September 2020

Consortium

Positive group@CERIS Cycle

CERIS: Civil Engineering Research and Innovation for Sustainability

TÉCNICO LISBOA | DECIVIL DEPARTAMENTO DE ENGENHARIA CIVIL, ARQUITECTURA E GEORRECURSOS

- The C+D project is **promoted by the "Civil Engineering Research and Innovation for Sustainability" - CERIS** research center **from Instituto Superior Técnico of Universidade de Lisboa, in Portugal,**

NORSUS Norwegian Institute for Sustainability Research

- And has the **"Norwegian Institute for Sustainability Research" – NORSUS, from Norway,** as a **partner**.

Background

The construction sector:

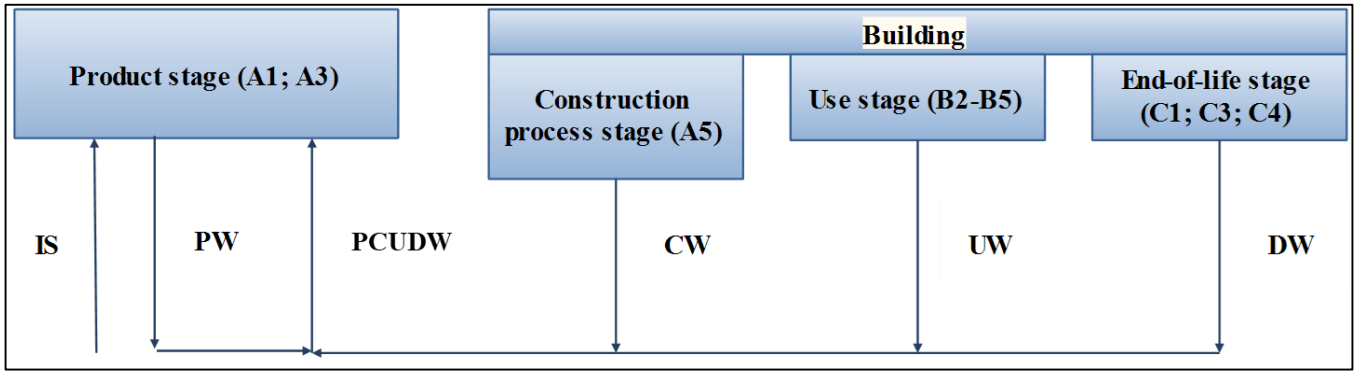
- makes an intensive use of primary resources;
- has a low level of circularity;
- has a great circularity potential.

Traditional demolition is still the most common practice in Portugal.

However, selective demolition maximizes the re-use, or at least the recycling, of demolition waste.

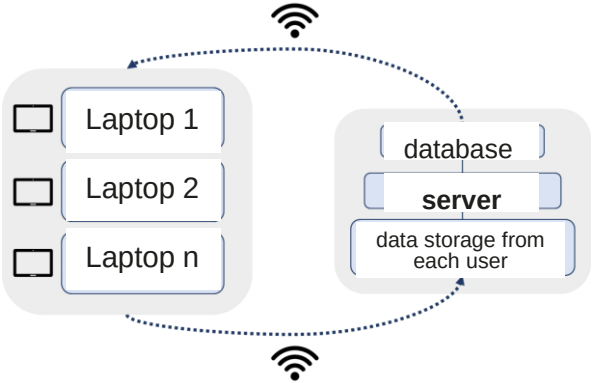
Main aim

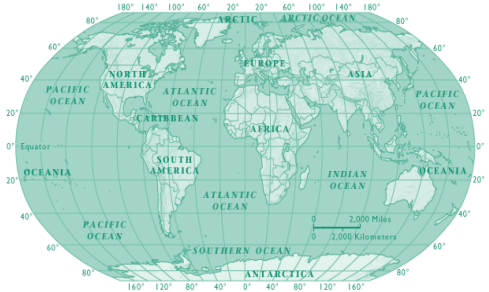
Develop the web-based **C+D platform** for calculating the **economic and environmental benefits** associated with the process of **deconstruction of buildings** and of **re-use of Construction and Demolition Waste (CDW, or C+D waste).**



Waste flows from the production of construction materials (including industrial symbiosis), and from the construction, use, and demolition of buildings

Specific objectives





- Develop the C+D platform, which will be comprehensive, upgradeable and innovative, and that will include a circularity indicator;

- Make this platform available to the public in Portugal, Norway and other countries, in Portuguese and in English, along with a handbook in the same languages.

Activities

1. Development of databases of environmental and economic impacts
2. Collection of national and international data
3. Development of an indicator of the environmental and economic advantages of circularity
4. Development of the C+D platform
5. Development of the C+D handbook
6. Communication and dissemination of the results

C+D: Close the loop by Disclosing the benefits of buildings' deconstruction and materials re-use

Activities

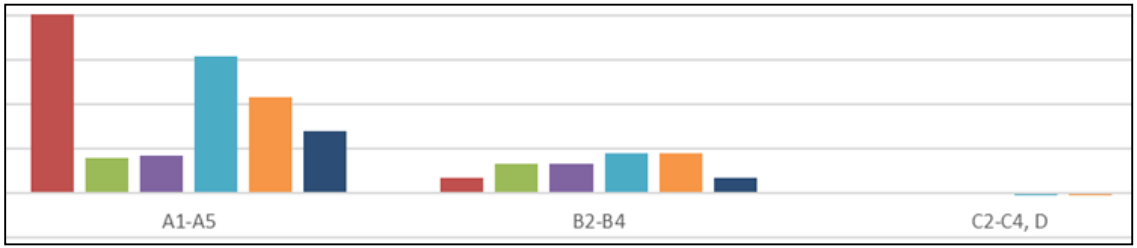
1. Development of databases of environmental and economic impacts
2. Collection of national and international data
3. Development of an indicator of the environmental and economic advantages of circularity
4. Development of the C+D platform
5. Development of the C+D handbook
6. Communication and dissemination of the results

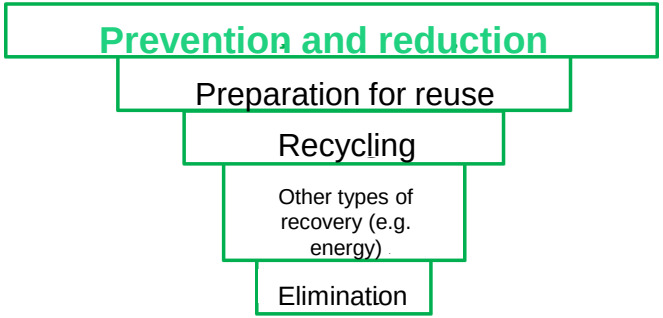
Expected results

- **Dissemination** of the C+D platform and of the corresponding handbook to their potential users;
- **Reduction** of CDW production and increased recovery of secondary materials;
- **Promotion** of building assemblies with higher reuse (or recycling) potential;
- **Selection** of the deconstruction (demolition) technique that **minimize** the environmental and economic **impacts**;
- **Dissemination of the knowledge** produced in courses at the University level.

Contribution to the program (1/3)

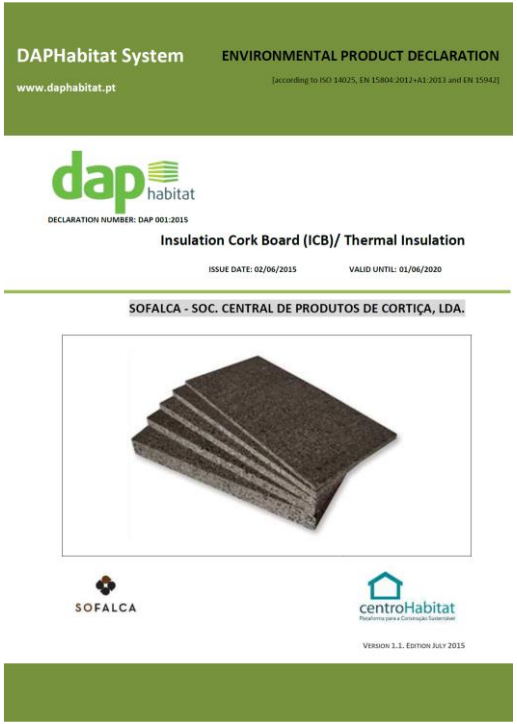
By calculating and disseminating these **environmental and economic impacts** through C+D platform to the stakeholders that can influence the decisions at the **end of life of buildings**, it is expected the **adoption of the best practices according to the principle of the waste management hierarchy.**





Contribution to the program (2/3)

The figures of the environmental **impacts at the end of life of each construction material** are also necessary to develop their **environmental Declarations and Footprints**.

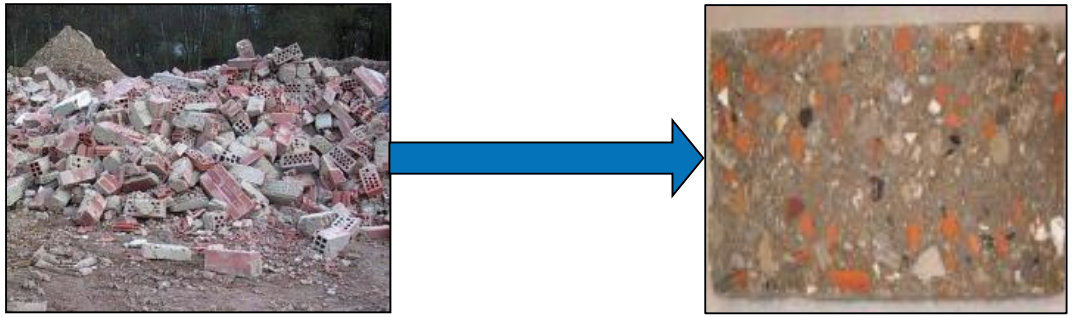

DAPHabitat System
www.daphabitat.pt
ENVIRONMENTAL PRODUCT DECLARATION
[according to ISO 14025, EN 15804:2012+A1:2013 and EN 15942]
dap habitat
DECLARATION NUMBER: DAP 001:2015
Insulation Cork Board (ICB)/ Thermal Insulation
ISSUE DATE: 02/06/2015
VALID UNTIL: 01/06/2020
SOFALCA - SOC. CENTRAL DE PRODUTOS DE CORTIÇA, LDA.
SOFALCA
centroHabitat
VERSION 1.1. EDITION JULY 2015

Contribution to the program (3/3)

The C+D project therefore promotes the **circular economy of the construction sector**

and its results will create new
business opportunities at the end of life stage of buildings

and will contribute for a **higher rate of CDW reuse**.



About the EEA Grants

Através do Acordo sobre o Espaço Económico Europeu (EEE), a Islândia, o Liechtenstein e a Noruega são parceiros no mercado interno com os Estados-Membros da União Europeia.

Como forma de promover um contínuo e equilibrado reforço das relações económicas e comerciais, as partes do Acordo do EEE estabeleceram um Mecanismo Financeiro plurianual, conhecido como EEA Grants.

Os EEA Grants têm como objetivos reduzir as disparidades sociais e económicas na Europa e reforçar as relações bilaterais entre estes três países e os países beneficiários.

Para o período 2014-2021, foi acordada uma contribuição total de 2,8 mil milhões de euros para 15 países beneficiários. Portugal beneficiará de uma verba de 102,7 milhões de euros.

More information in eeagrants.gov.pt

Iceland Liechtenstein Norway grants

Thank you!

Site: www.eeagrants.gov.pt

Facebook: ww.facebook.com/EEAGrantsPortugal/

Instagram: @eeagrantspt

Youtube: youtube.com/channel/UCXywLHBsmkaGfCniCLyfXsw

Twitter: @EEAGrantsPortugal

Linkdin: EEA Grants Portugal

E-mail: geral@eeagrants.gov.pt

Program operator:

REPÚBLICA PORTUGUESA
AMBIENTE E AÇÃO CLIMÁTICA

Promotor:

CERIS: Civil Engineering Research and Innovation for Sustainability
TÉCNICO LISBOA | DECIVIL DEPARTAMENTO DE ENGENHARIA CIVIL, ARQUITECTURA E GEORRECURSOS

Partner:

NORSUS
Norwegian Institute for Sustainability Research