



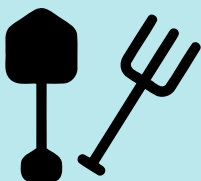
Projects to promote Circular Economy in the Construction Sector



In this Call from the Environment Programme, the selected projects contributed to increase the application of Circular Economy principles in the Construction sector, by reducing the use of materials and waste production, in particular by applying innovation at the level of the construction materials production chain.

PRIORITY AREAS

Development and implementation of construction projects demonstrating economic and environmental advantages, of concepts that assume zero waste, the energy efficiency and material productivity, namely through the use of technologically innovative construction solutions, such as modularity.



The developed projects took into account all the environmental and economic advantages observed, and included a life cycle approach, including the deconstruction phase and the implementation of reuse and recycling of recovered materials and components.

Promotion of the performance and environmental profile of materials, components and products developed in Portugal, including buildings, through the application and promotion of innovative methodologies and technologies:

- i. Circularity passports for buildings and components;
- ii. Development and application of environmental product declarations;
- iii. Projects demonstrating the application of the European Commission's LEVEL(S) system.



Promotion of cooperation between companies to reduce construction and demolition waste and promoting materials and products that incorporate materials recovered from waste:

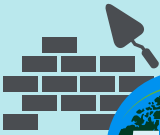
- i. Cooperative systems, aimed at small and medium-sized builders, for the application of specific protocols and guides to reduce the production of construction and demolition waste, and achieve its material recovery;
- ii. Cooperative systems for the removal, repair and reuse of components on construction sites;
- iii. Development of materials and/or products that incorporate materials from waste (RCD or others), promoting the demonstration of their application on site.



Results



Construction and demolition waste avoided by supported sectors



Increased use of secondary materials in supported sectors



Number of innovative solutions to increase resource efficiency



Number of jobs created



Results



**Number of
small and
medium-sized
companies
supported**



**Number of
demonstration
buildings
constructed**



**Number of
product
declarations**



**Number of
standards and
good practices
developed**



25 Applications

Allocation 3.767.367€



Total Approved Investment
15.183.219,82€



TELLUS

- Promoter: Oliveira & Ferro, Serviços e Consultoria, Lda.
- Project Value: 1.062.159 €
- Alentejo



CIRCULAR BUILD

- Promoter: Concexec - Arquitectura Lda
- Project Value: 567 842,63€
- Oliveira de Azeméis



(DES)CONSTRUIR ECONOMIA CIRCULAR

- Promoter: Comunidade Intermunicipal do Baixo Alentejo
- Project Value: 587 801,86 €
- Beja



CIRCULAR ECOBIM

- Promoter: 3 Drivers - Engenharia Inovação Ambiente
- Project Value: 586 561,00 €
- Lisbon



GROWINGCIRCLE

- Promoter: Instituto da Construção
- Project Value: 216.255,24 €
- Porto

10 Projects

Allocation 3.767.367€



Total Investment Supported
5.498.935 €



REBUILD 17

- Promoter: Secretaria Regional dos Transportes e Obras Públicas- LREC
- Project Value: 474.576,90 €
- Açores



CIRMAT

- Promoter: Domingos da Silva Teixeira, S.A.
- Project Value: 588.196,08 €
- Braga



SECCLAS

- Promoter: ISCTE-IUL
- Project Value: 303 915,71 €
- Lisbon



GREENBUILDINGS

- Promoter: University of Aveiro
- Project Value: 472.010,17 €
- Aveiro



CIRCULAR2B

- Promoter: Engineering Faculty of Porto University
- Project Value: 496.390,90 €
- Porto

4 Applications

4 Projects

Allocation 1.000.000€



Total Investment 234.080,64€



SUSTAINABLE VALUE

- Promoter: Bongreen
- Project Value: 57.807,89 €
- Braga



CLOSER

- Promoter: LNEC - Laboratório Nacional de Engenharia Civil, I.P.
- Project Value: 58.816,48 €
- Lisbon



EDÍFÍCIOS CIRCULARES

- Promoter: Associação Smart Waste Portugal
- Project Value: 58.746,38 €
- Póvoa do Varzim



C + D

- Promoter: Instituto Superior Técnico
- Project Value: 58.710,00 €
- Lisbon

Iceland
Liechtenstein
Norway grants

Results Promoting Circular Economy in the Construction Sector



- 80% IN THE REPLACEMENT OF MATERIALS WITH OTHERS MORE ENERGY EFFICIENT AND WITH GREATER CIRCULAR POTENTIAL
- ALL PANELS WERE BUILT WITH RECYCLED MATERIALS THAT ARE INDUSTRIALLY VIABLE
- 60% OF ENERGY EFFICIENCY
- 100% UTILIZATION OF SECONDARY RAW MATERIALS RESULTING FROM THE SEPARATION OF MATERIALS
- 208 PEOPLE REACHED WITH THE PROJECT RESULTS
- 708 PEOPLE WHO RECEIVED INFORMATION ABOUT EEA GRANTS



- INFORMATION ABOUT CDW OF 12 MUNICIPALITIES
- 24 GOOD PRACTICES
- 3 ACTIONS TO MONITOR ILLEGAL RCD DEPOSITION
- DEVELOPMENT OF 1 MODEL
- 31 STAKEHOLDERS CONSULTED TO VALIDATE THE MODEL
- 8 BEST PRACTICES USED FOR PRE-DEMOLITION AUDITS
- PREPARATION OF A PRE-DEMOLITION GUIDE
- 158 PARTICIPANTS IN PUBLICITY ACTIONS



- 50 COMPLETED PRODUCT DECLARATIONS
- 82 BIM OBJECTS WITH CIRCULARITY INDICATORS
- 3 BUILDINGS USING ECOBIM CIRCULAR
- 275 PARTICIPANTS IN EVENTS



- 5 SPECIALIZED ARTICLES
- 3 SCIENTIFIC ARTICLES
- 4 CONFERENCE PAPERS
- 8 PROMOTIONAL VIDEOS
- 3 GUIDELINES
- DEVELOPMENT OF 6 INNOVATIVE SOLUTIONS TO INCREASE RESOURCE UTILIZATION EFFICIENCY

Iceland
Liechtenstein
Norway grants

Results Promoting Circular Economy in the Construction Sector



- 160 STAKEHOLDERS IDENTIFIED
- 6 DEMO MODELS
- 6 EXPERIMENTAL PROCEDURES
- 6 CONFERENCE PARTICIPATIONS
- 4 PROTOTYPES DEVELOPED
- 3 PUBLICITY ACTIONS



- DEVELOPMENT AND PROMOTION OF THE USE OF ECO-EFFICIENT CONSTRUCTION MATERIALS, BOTH IN BUILDINGS AND IN ROAD INFRASTRUCTURE.
- MINIMIZING THE QUANTITIES OF RCD SENT TO LANDFILL.
- INCREASED USE OF SECONDARY MATERIALS
- DEVELOPMENT OF ENVIRONMENTAL PRODUCT DECLARATIONS



- 3 JOBS CREATED
- 5% OF CONSTRUCTION AND DEMOLITION WASTE AVOIDED BY SUPPORTED SECTORS
- 1 SME SUPPORTED
- 5 DEMONSTRATION BUILDINGS CONSTRUCTED
- 1 INNOVATIVE RESOURCE-EFFICIENT SOLUTION



- DEFINITION OF SUSTAINABLE SOLUTIONS AT THE CONSTRUCTION LEVEL
- 5 PME SUPPORTED
- 4 INNOVATIVE SOLUTIONS FOR EFFICIENT USE OF RESOURCES



- 5 JOBS CREATED
- 1 PME SUPPORTED
- 2 INNOVATIVE SOLUTIONS FOR EFFICIENT USE OF RESOURCES
- INCORPORATION OF 0.2 TONS/YEAR OF RCD IN THE DEVELOPMENT OF INNOVATIVE SOLUTIONS

Iceland
Liechtenstein
Norway grants

Results Development of standards in the Construction Sector that promote the Circular Economy



- DEVELOPMENT OF A TYPE 1 ENVIRONMENTAL LABEL BASED ON THE INTERNATIONAL STANDARD ISO14024:2018
- ONLINE PLATFORM WHERE IT IS POSSIBLE TO OBTAIN THIS LABEL
- MORE THAN 10 COMPANIES AND MORE THAN 20 PRODUCTS ARE ALREADY REGISTERED, WITH REQUESTS AND EVALUATION
- EUROPEAN UNION TRADEMARK APPLICATION, EUIPO



- 2 LISTS OF DANGEROUS SUBSTANCES
- 1 LIST OF PRACTICES FOR CDW SEPARATION
- 1 PRE DEMOLITION AUDIT GUIDE
- 10% INCREASE IN RCD RECOVERY
- 50% REDUCTION IN HAZARDOUS SUBSTANCES
- 2 SCIENTIFIC ARTICLES



- 3 STANDARDS DEVELOPED
- 1 CASE STUDY
- 1 MATERIAL PASSPORT PROTOTYPE
- 1 CALCULATION TOOL WITH A DATABASE OF 77 CONSTRUCTION PRODUCTS



- DEVELOPMENT OF AN ONLINE PLATFORM
- DEVELOPMENT OF A GOOD PRACTICE GUIDE
- DEVELOPMENT OF ENVIRONMENTAL COST AND IMPACT DATABASES
- COLLECTION OF NATIONAL AND INTERNATIONAL INFORMATION



[@eeagrantspt](https://www.instagram.com/eeagrantspt)



[@EEAGrantsPT](https://twitter.com/EEAGrantsPT)



www.linkedin.com/company/eeagrantsportugal



www.eeagrants.gov.pt/pt/programas/ambiente/

www.eeagrants.gov.pt/en/programmes/environment/

**Working together for a green
competitive and inclusive Europe!**