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Interreg Europe



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Development Fund

CE in Valencia Region (Spain) Status Quo

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Valencia Institute of Building (IVE)

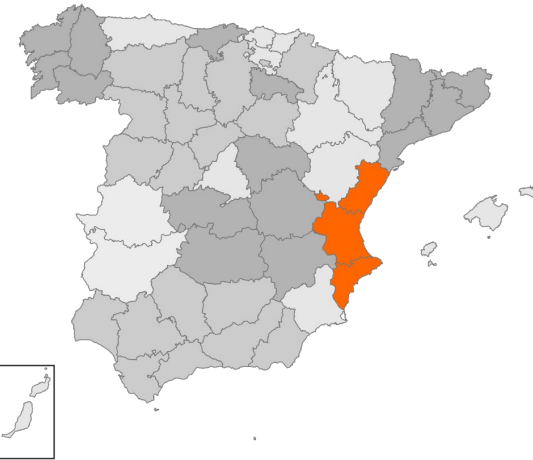
Nuria Matarredona Desantes

General Director of Ecological Innovation in Construction from
Valencia Region Government (GVA)

Kick-off meeting Turku, November 19th, 2019.

Comunitat Valenciana profile:

- **Population:** 4,935,182 inhabitants (Eurostat, 2018) 10.6% of Spanish population
- **Area:** 23,255 km²
- The region is divided in 3 provinces (Alicante, Castellón y Valencia), 34 counties, and 542 municipalities.
- **GDP:** €104.6bn in 2016 (Eurostat, 2018), 9.4% of Spanish GDP



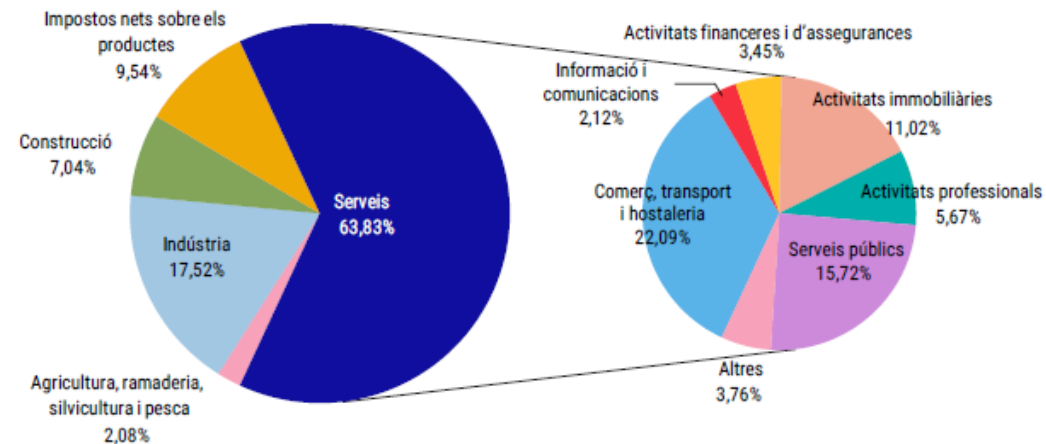
- **Main productive sectors:**

Services	65%
Industry	18%
Construction	6,1%
Agricultural	2,2%

- **Industrial strategic sectors:**

Ceramics and tiles;
Shoe industry and leather goods;
Games and toys;
Wood and furniture;
Textile and clothing industry; and
Automotive industry.

PIB 2018 (1a estimació): 112.127.515 €



CE regulatory framework:

NATIONAL SCALE

- **Draft of Spanish Strategy for Circular Economy 2030 (Under public consultation)**
- Draft Law on Climate Change and Energy Transition (Under public consultation)
- Spanish Bioeconomy Strategy Horizon 2030
- Action Plan for the Implementation of the 2030 Agenda, towards a Spanish Strategy for Sustainable Development (Circular Economy is included as a “leverage policy” to accelerate the implementation of the Sustainable Development Goals (SDGs)).
- Spanish Urban Agenda
- State Framework Plan of Waste Management (PEMAR) 2016-2022

CE regulatory framework:

REGIONAL SCALE

- Industrial Policy Strategy of Valencia Region 2020
- Plan for Energy Efficiency saving, Renewable Energies promotion and self-consumption in buildings, infrastructures and equipment of the public sector in Valencia Region (PAEEG)
- Valencian Plan for Ecologic Production
- Valencian Strategy to Climate Change
- Plan for Rural Development 2014-2020
- Territorial Action Plan for the Green Infrastructure of the Coast of Valencia Region (PATIVEL)
- Integral Waste Plan of Valencia Region

LOCAL SCALE

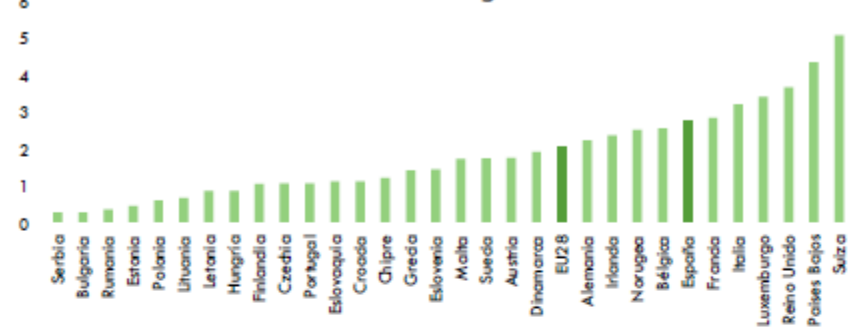
- Local Circular Economy Strategy Model (FEMP). Circular axis, with cross-cutting policies: Development and implementation of new technologies, sustainable and socially responsible public procurement, and transparency and shared governance

CE indicators in Spain:

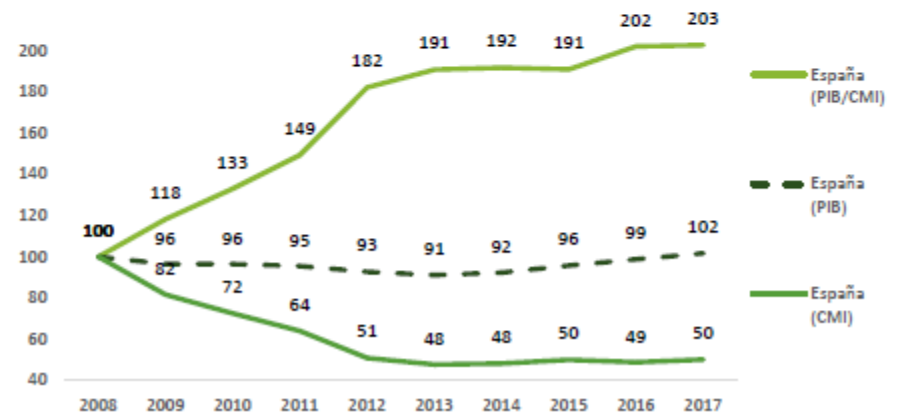
Productivity of resources:

- The economic recovery has revealed a high degree of coupling between economic processes and the use of resources.
- Spain maintains production and consumption patterns with strong structural rigidities that make it difficult to introduce more circular and sustainable models.

Productividad de los recursos (€/Kg). 2017. Fuente: EUROSTAT (2019)



Evolución de la productividad de los recursos, el PIB y el consumo material interior (CMI) para España 2008-2017 (2008=100). Fuente: EUROSTAT (2019)

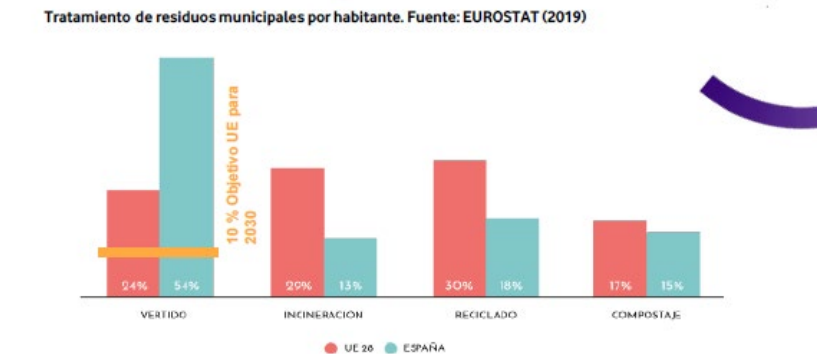
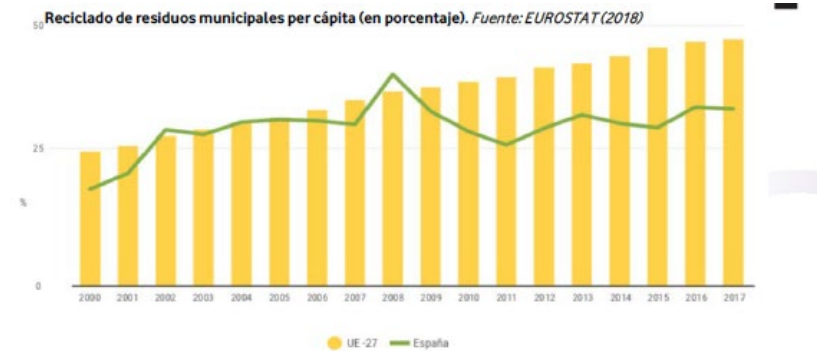
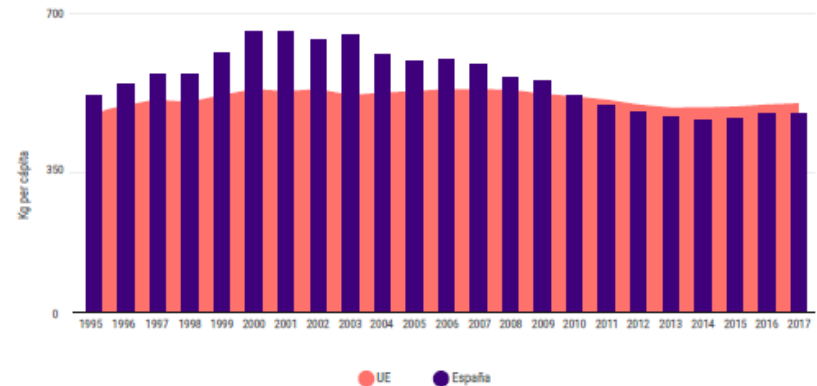


Source: Cecotec Report 2019. Situation and evolution of Circular Economy in Spain.

CE indicators in Spain:

Generation of municipal waste:

- The level of municipal waste generation per capita shows a tendency of reduction with the beginning of the economic and financial crisis in 2008.
- Trend change unfavorably as of 2014.
- Waste generation rebounds in the years of economic recovery, highlighting the economic-environmental coupling of the development model.



Municipal waste management:

- In 2017, the percentage of municipal waste recycled in Spain (33.5%) was below the EU average (46.5%) and far from the target set by the Commission for 2030 (60%).
- Regarding the type of treatment, in Spain the discharge is the destination of 54% of municipal waste, more than double the EU28 average, and more than five times the objective established by the Commission for the year 2030, which stipulates a limit of 10% of the total for this method of treatment.

Source: Cecotec Report 2019. Situation and evolution of Circular Economy in Spain.

Policy instrument and relation to CE:

Name:

DECREE 151/2009, of October 2, of the Consell, by which the basic requirements of design and quality in housing and accommodation buildings are approved

Targets:

The main purpose is to regulate the **conditions of design and quality** in **residential buildings** by defining the technical conditions for the satisfaction and effective application of the aforementioned requirements in the Valencia Region

Relation to CE & business models:

The Valencian Government is currently initiating a process to proceed with its updating in order to include different aspects of sustainability, circular economy and accessibility. The following topics related with the circular economy will be addressed:

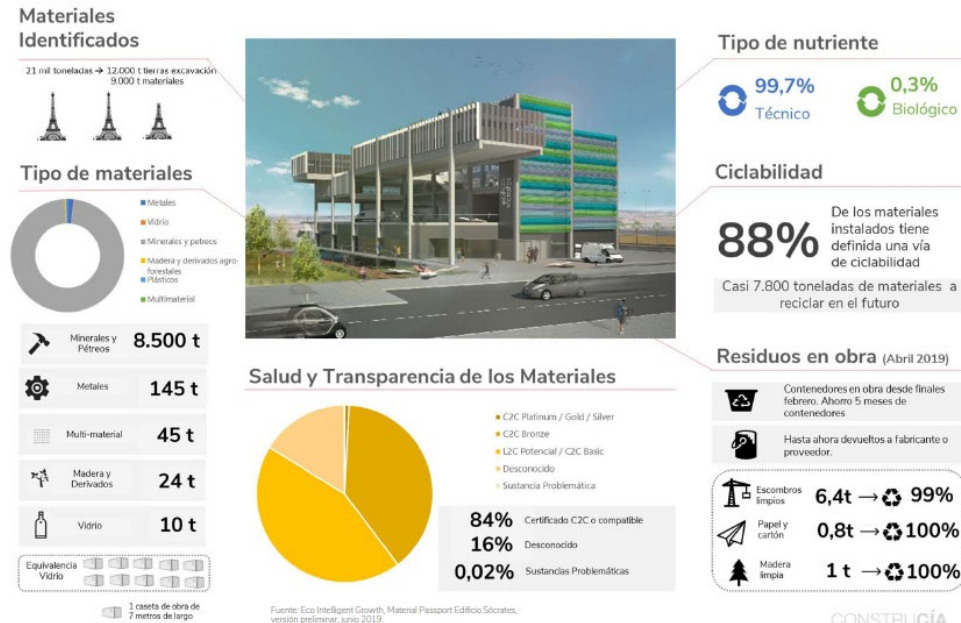
- Advanced materials, products and processes with low environmental impact
- Reduction of the environmental impact of the housing construction
- Renewable energies in housing.
- Promotion of new models of consumption and tenure that prioritize the use instead of the property
- Promotion of the secondary raw material market
- New models of tenure, use and maintenance of residential buildings
- Efficient management of resources used.
- Establishment of an integral strategy for waste management in housing.
- Continuous regeneration of housing
- Intensive use of built heritage

CE best practice identified:



Eco Intelligent Growth:

- EIG is dedicated to facilitating the transformation and transition of companies and organizations towards the Circular Economy, on the **Cradle to Cradle® principles, in the construction sector.**
- Philosophy: **Buildings designed as construction materials banks.**
- Buildings built under this philosophy have the **same cost of construction** than conventional ones and retain **greater value over time.**
- Material Passport** tool enables:
 - Identification of materials:
 - Traceability/ Separability / Healthy.
 - Identification / location of problematic substances



CE best practice identified:

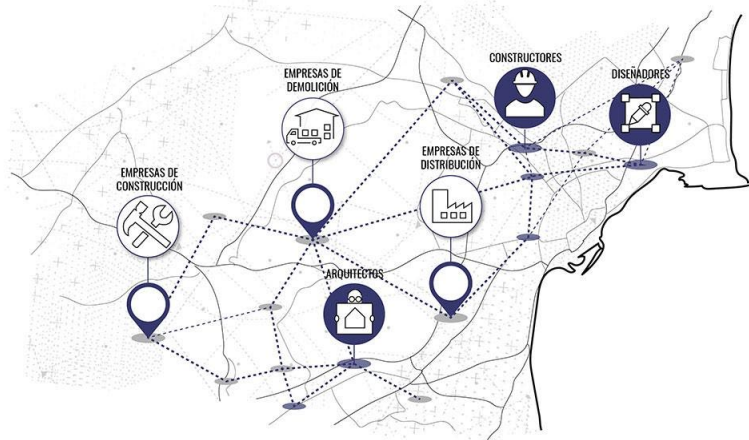


Mat Map

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www.matmap.com

SOLUCIÓN
RED DE OFERTA DEMANDA



Mat Map:

- Business model arises from the question: **Is this a resource or a waste?**
- **Web-based platform** for buying and selling construction materials based on Circular Economy and Sustainable Architecture.
- **How?** Taking advantage of construction materials from demolition, surplus materials and end-of-line & ex-catalogue products.
- The platform **connects supply and demand** sides. Storage and/or dumping of materials implies a cost for the distributors. Customers (buyers) want to save time and money.
- The platform offers them to visit several material distributors online. The prices of materials offered are below market prices. In addition Mat Map manages transport and logistics from one location to another..

CE best practice identified:



InHAUS:

- Construction of prefabricated housing, 100% factory developed, applying sustainability and circular economy criteria.
- Housing design under nZEB criteria (Energy classification A or A +)
- 82% of the materials can be disassembled and reused in another building.
- All suppliers and workers are located in the region.
- Nearly zero water expenditure and waste production during construction process
- Productive process developed in 64 tasks, all of them adding value to the final product.
- Continuous innovation and introduction in new markets: schools, hotels, high-rise / rental housing, etc.

BÚSQUEDA DE VIVIENDAS

Modelo	Descripción	Superficie (m²)	Plantas
MODELO TOLEDO	Vivienda prefabricada de diseño Toledo 3D 1P 2.154	154 m	2 / 3
MODELO SAN RAFAEL	Vivienda prefabricada de diseño San Rafael 3D 1P 2.195	195 m	2 / 4
MODELO POZUELO	Vivienda prefabricada de diseño MODELO Pozuelo 4D 1P 2.263	263 m	2 / 4
MODELO MURCIA	Vivienda prefabricada de diseño MODELO Murcia 3D 2P 2.536	556 m	6 / 5
MODELO GALAPAGAR	Vivienda prefabricada de diseño MODELO Galapagar 4D 2P 2.299	299 m	3 / 4
MODELO EL PRAT	Vivienda prefabricada de diseño MODELO El Prat 5D 2P 2.562	562 m	6 / 5



Casas inHAUS

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Fotos: inHAUS

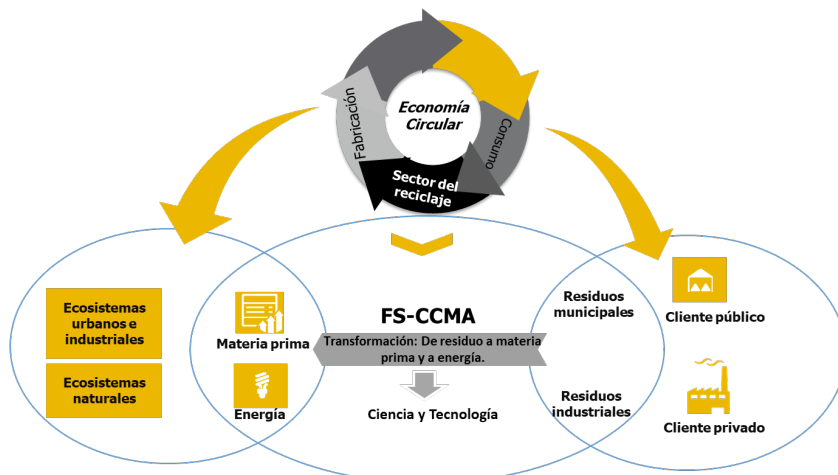
CE best practice identified:



ferrovial
servicios

Ferrovial servicios:

- Services company that offers innovative integral solutions for infrastructure and cities.
- Their main objective is to transform urban & industrial waste into new material resources and energy.
- They are developing several innovative projects related to circular management of waste in cities:
 - Transformation of agricultural waste into coal.
 - Revive project: online platform to citizen exchange (in Clean Points facilities) of objects used in good condition with the aim of promoting their reuse.
 - Recovery of brine from pickle industry for its reintroduction in other sectors.
 - others



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Thank you!

<https://www.interregeurope.eu/reduces/>

