

## 00. General concepts



### Circular Economy

Our economy's linear system (extraction, manufacture, use and disposal) has reached its limits. The circular economy proposes a new model of society which uses and optimises materials, energy and waste. The waste of one sector is converted into resources for others.



### Industrial symbiosis

Industrial symbiosis is a systems approach to a more sustainable and integrated industrial system, which identifies business opportunities that leverage underutilised resources.



### Just transition

A just transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.

### About us:

Cement and Environment Labour Foundation (CEMA Foundation) was created by Oficemen (Spanish Cement Association) and the two largest trade unions, both in our country and in the Spanish cement industry, CCOO del Hábitat and UGT-FICA.

The foundation represents the sector's clear commitment to sustainability through the implementation of an inclusive model. It is a pioneering organisation in the European cement industry and differs from equivalent organisations operating in other sectors.

CEMA Foundation was created in 2005 with the aim of encouraging the transition towards climate neutrality, the sustainable use of resources, protection of the environment and people's health, and improving the competitiveness of the cement sector, through a just transition that leaves nobody behind.

Material and energy recovery  
in the cement industry

# Your waste, our energy

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Fundación Laboral del Cemento  
y el Medio Ambiente

# YOUR WASTE, OUR ENERGY

## 01. The problem of waste

It is estimated that each person generates one bag of rubbish each day. In Spain, 455 kilos of municipal waste are generated per person per year, and multiplied by the 47 million inhabitants, we are facing a large scale problem.

The correct separation of waste at source is key to increase recycling rates and prepare higher quality waste derived fuels.

In our country we only recycle 1/3 of waste.



## 02. Material and energy recovery

Cement factories recover waste and by-products from multiple economic activities. In this way, the transition from waste to resource becomes a reality and replaces the current linear model of "use and throw".

Industrial symbiosis:  
The cement industry recovers materials and energy from more than **88 economic sectors**



## 03. Benefits for society

The use in the cement industry of alternative raw materials or waste derived fuels is a solution which benefits everyone: society, the environment and industry.

Thanks to the use of waste as an energy source and raw material, each year 2,5 million tons of waste are saved from landfill.

Volume of the waste used by cement factories in Spain in one year:

**529 OLYMPIC SWIMMING POOLS**

In Spain most waste ends up in landfill.



Percentage of municipal waste recycled in Spain:

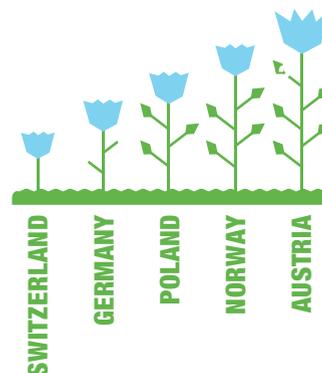
**36%**



This percentage is far below from the EU average of 48%, or from countries such as Germany and Belgium with rates above 50%.

**37% of the energy used in our kilns comes from waste derived fuel.**

This percentage is far below of countries such as Germany, Norway and Austria, with percentages above 70%.



Annually the cement industry saves more than 1,000,000 tons of CO<sub>2</sub> through the use of waste as biomass, instead of traditional fossil fuels.



**WE STOP WASTE BEING BURIED IN LANDFILL**



**WE REDUCE THE USE OF OIL AND COAL**



**WE REDUCE CO<sub>2</sub> EMISSIONS**



**WE SAVE ENERGY AND NATURAL RAW MATERIALS**

