



# WHAT IS CO-PROCESSING?



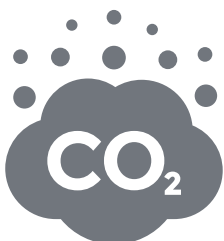
The European cement industry is continuously using waste as a resource, thanks to what is called 'co-processing'. Co-processing is the combination of simultaneous material recycling and energy recovery from waste in a thermal process, which results in replacing natural mineral resources and fossil fuels such as coal and petroleum products.

Already, the cement sector in Europe is substituting an average 48% of its fuel with alternative sources, and it wants to grow this even further. Studies have shown that there are no technical barriers to raising this to 60% across Europe by 2030. Co-processing is already having a very real impact on the sustainability of the cement industry in Europe:

In the cement industry **more than 40% of thermal energy** used to supply the clinker-making process comes from **waste & biomass**



## Co-processing leads to four important outcomes



Reducing the CO<sub>2</sub> intensity of cement manufacturing

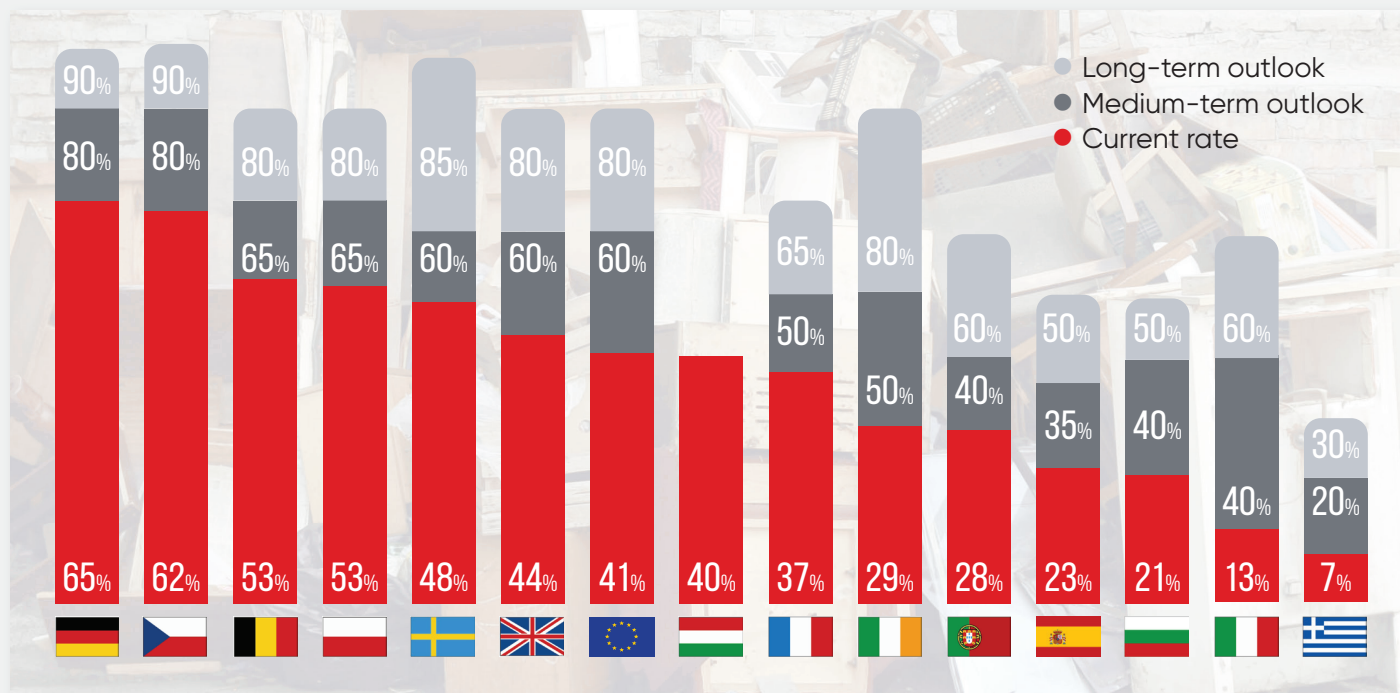
Reducing our dependence on virgin fossil fuels



Decreasing the amount of landfill waste



Minimising public investment costs in new dedicated facilities



Co-processing is already having a very positive impact on the **sustainability** of the cement industry in Europe:



- 21 million tonnes of avoided CO<sub>2</sub> emissions each year
- The use of alternative fuels, including waste biomass, is saving about 7.8 million tonnes of coal
- About 5% of the raw materials needed in the production of the cement clinker in Europe consisted of recycled material and ashes from alternative fuels

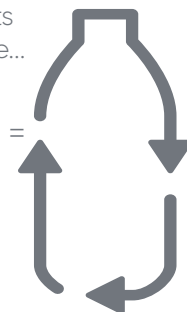
The potential of co-processing can be enhanced further through legislative and regulatory measures that recognises this form of material recycling and its contribution towards achieving Europe's ambitious recycling targets.



Used tyres, wood, unrecyclable plastics, chemicals and other types of waste are **co-combusted in cement kilns** in plants across Europe, where...

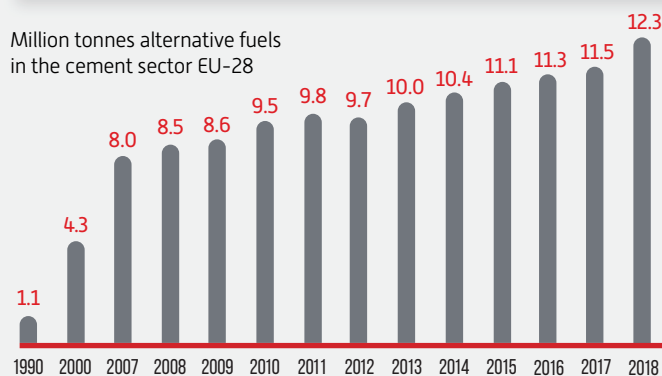
the average substitution rate =

**48% in the EU**



Co-processing is a more **efficient waste management solution** than landfilling or incineration, and means the **cement industry is a net consumer of waste** and is **at the heart of the circular economy**

Million tonnes alternative fuels in the cement sector EU-28



% of thermal energy from alternative fuels in the cement sector EU-28

