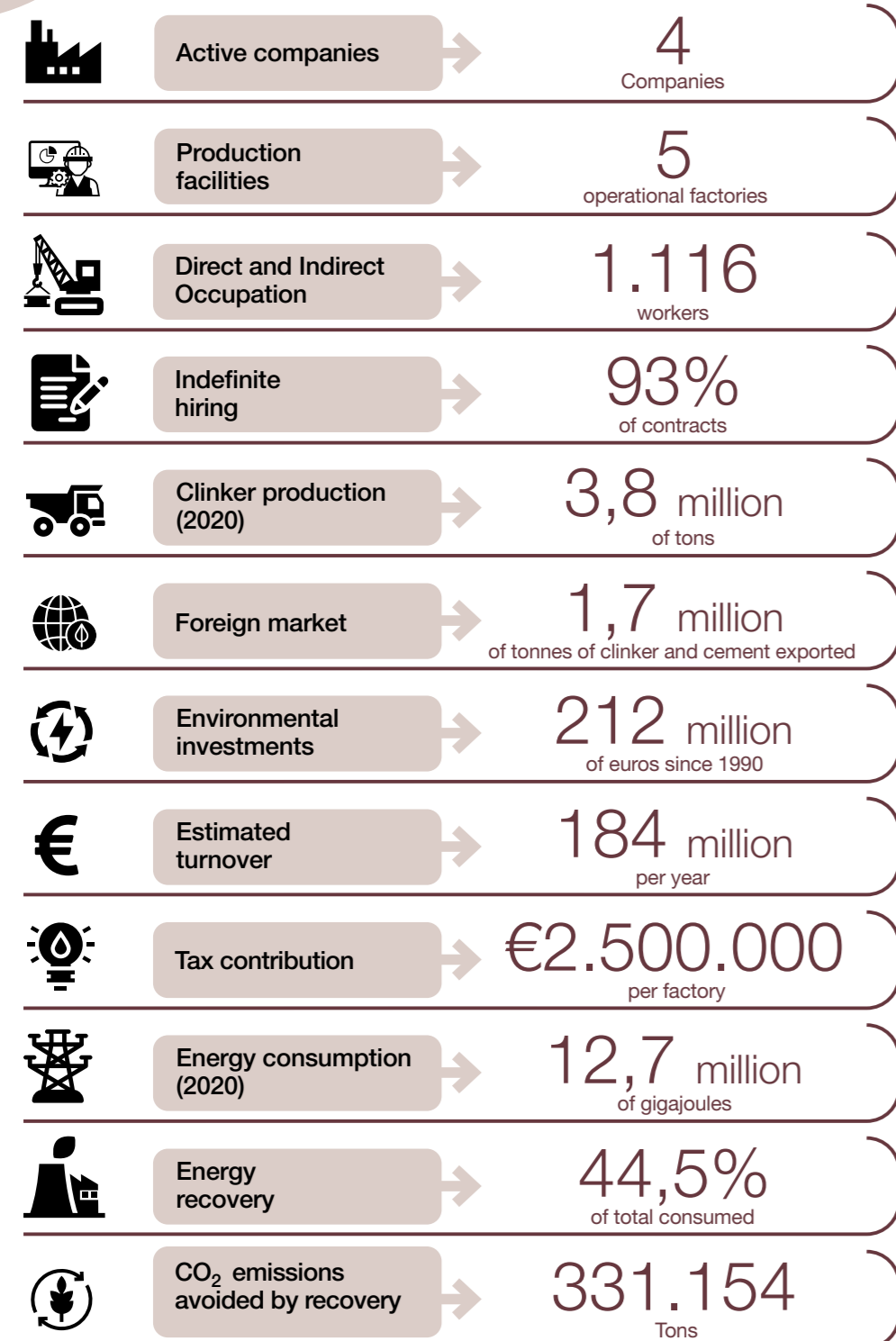


# RADIOGRAPHY TO THE CATALAN INDUSTRY

The dimensions, volume and capacities, the socio-economic influence and the investments for the protection of the natural spaces of the sector that manufactures the most sustainable construction material: cement.



## WHO WE ARE

Ciment Català is the entity that brings together all the companies with an integral cement production factory in Catalonia.

## OBJECTIVES

- Social Responsibility and Sustainability.
- The quality and good use of the product.
- Dissemination of technical knowledge.

## ACTIVITIES

- Representation before the AAPP.
- Preparation of studies and reports.
- Promotion of Sustainability.

## CEMENT

Due to its properties and applications, it is the product that contributes most to the development and making the planet habitable. Cement is synonymous with progress.

+ Info  
Catalan version:



+ Info  
Spanish version:



+ Info  
English version:



València 245, 3r 5a - 08007 BARCELONA  
Tel. 93 487 22 83

[www.ciment-catala.org](http://www.ciment-catala.org)



Ciment Català

# ACTIVITY REPORT 2021



The improvement in social and working conditions during the second year of the pandemic brought a recovery of the market. However, the Catalan cement sector experienced a sharp increase in electricity costs

and CO<sub>2</sub> emission rights, which weighed on its competitiveness. 2021 was also the year of renewal of the environmental commitment, with the publication of the Roadmap for Carbon Neutrality.



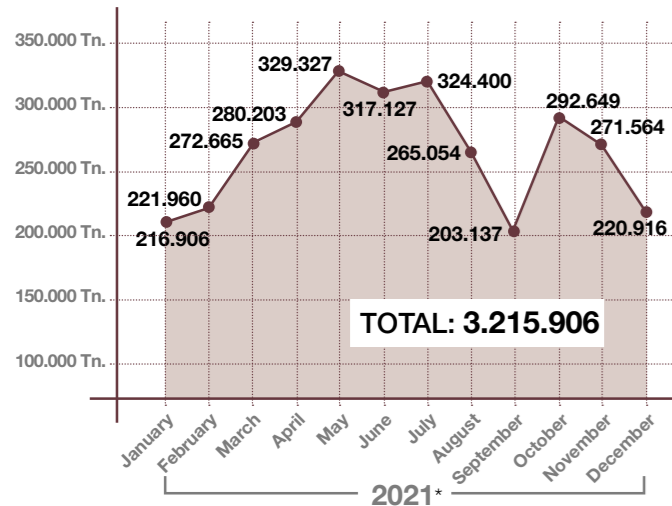
Ciment Català

# SECTORIAL BALANCE



## Cement production

Despite the increase of 10%, to 3.22 million tons, the figure only represents half of the available operating capacity of Catalan factories.

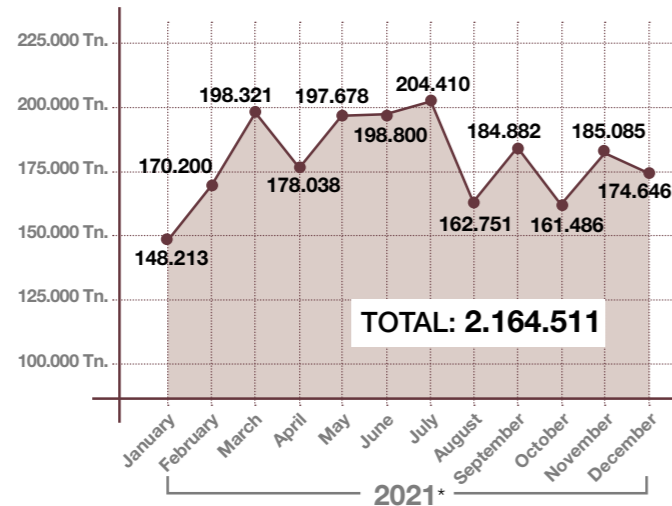


Note: Figures in tons. (\*) Provisional data  
Source: Oficemen



## Cement consumption

The recovery of 8.2% is insufficient to reach pre-pandemic levels, and places per capita consumption at only 280 kg per inhabitant/year.



Note: Figures in tons. (\*) Provisional data  
Source: Oficemen



## Foreign markets

In the last year, Catalan exports have been reduced by 7% due to electricity costs and the price reached by CO<sub>2</sub> emission rights.

	2021*
Exports	1.838.132
Imports	121.648

Note: Figures in tonnes. (\*) Provisional data  
Source: Oficemen



## Employment and induced economic activity

The recovery of activity after the lockdowns and mobility restrictions due to the pandemic in 2020 generated a significant increase in employment, which grew by 25%.

Evolution of the number of employees		
Year	2021	Var.
Direct employment	536	20%
Indirect employment	580	30%
<b>Total employment</b>	<b>1.116</b>	<b>25%</b>

Source: Oficemen

# SUSTAINABILITY REPORT

## Energy recovery

The use of the calorific value of the waste contributed to a 45% substitution of fossil fuels by alternatives in cement kilns. This figure is 10% higher than the previous year, but it is still far from that of countries such as Austria or Germany that exceed 70%.

TYPE OF WASTE	2021	Variation 2020
Plant biomass (industrial of agricultural origin, pomace, olive bones, industrial of agricultural origin, shell, energy crops, wood without treatment)	15.165	-63,5%
RDF-MSW	175.831	10,6%
Animal meal	30.183	-25,9%
Urban wastewater sludge	6.096	-5,5%
Wood (wood processing cuttings, bulky waste, packaging, construction and demolition waste, sleepers, urban and landscape elements)	40.573	83,1%
TDF	16.779	13,7%
<b>Total</b>	<b>284.627</b>	<b>0%</b>
% of energy replacement	45%	9,5%
<b>t of fossil CO<sub>2</sub> avoided</b>	<b>331.154</b>	<b>-4,7%</b>

Note: Data in tons. / Source: Government of Catalonia

## Material recovery

The more than 186 thousand tons of by-products or waste reused as raw material for the manufacture of clinker represented an increase of 145% in the savings in the consumption of stone resources. Granulated slag and concrete waste, the main origins of these supplies.

TYPE OF WASTE/BY-PRODUCT	2021	Variation 2020
Cement grinding ash	690	-97%
Dehydrated sludge for crude oil	1.810	125%
Carbonate sludge (industrial bins)	7.471	16%
Sands contaminated with hydrocarbons	872	-11%
Concrete waste	34.032	660%
Other alternative raw materials	10.651	82%
Iron chips	22.888	-12%
Granulated slags	100.531	268%
Steel white slag	3.917	416%
Thermal slags	2.142	-33%
<b>Total</b>	<b>185.555</b>	<b>62%</b>
% of materially recovered raw material	3,2%	75%
<b>tons avoided from exploitation of natural waste</b>	<b>180.711</b>	<b>145%</b>

Note: Data in tons. / Source: Government of Catalonia

## Environmental investments

The commitment to the protection of the natural and environmental environment reached an extraordinary result in 2021 thanks to an investment more than double that of the previous year. The €2.3 M destined to save CO<sub>2</sub> through the use of alternative fuels stands out.

DESTINATION OF THE INVESTMENT	AMOUNT
Reduction of particulate emissions into the atmosphere from localized sources (emission by stack)	390.908
Prevention and reduction of particulate emissions into the atmosphere from material storage, handling and transport operations	685.000
Reduction of emissions of nitrogen oxides (NO <sub>x</sub> ) and sulphur oxides (SO <sub>2</sub> )	59.306
Reduction of noise emissions	408.228
CO <sub>2</sub> savings through recycling and recovery of waste in the manufacture of cement through its use as alternative raw materials (material recovery)	618.799
CO <sub>2</sub> savings through waste recovery in the manufacture of cement as an use of alternative fuels (energy recovery)	2.323.642
Visual impact	1.006.558
Control of environmental effects	59.905
Energy efficiency	1.813.589
Biodiversity	19.542
<b>Total</b>	<b>7.385.476</b>

Note: figures in €

# THE HIGHLIGHTS OF 2021



SECTORIAL SUPPORT FOR THE EXPANSION OF BARCELONA AIRPORT  
Ciment Català signs the adhesion to the manifesto **Yes to the agreement to expand the airport.**



STRONG IMPACT OF THE INCREASE IN THE PRICE OF ELECTRICITY  
Electricity costs account for approximately 54% of the variable costs of cement manufacturing.



BOARDS OF DIRECTORS OF CIMENT CATALÀ AND OFICEMEN  
They demand the fulfillment and execution of the investments destined to build infrastructures.



THE WEBSITE OF THE CIRCULAR ECONOMY OBSERVATORY, IN CATALAN

It provides data on the material and energy recovery of waste, and on the saving of CO<sub>2</sub> emissions.



THE JUNTSXCAT PARLIAMENTARY GROUP, IN A CEMENT PLANT

Live information is provided on the production process and the environmental preservation measures of the factories.



ROUND OF VISITS TO PARLIAMENTARY GROUPS OF CASA CATALUÑA

Unions and employers defend the social and environmental benefits of replacing the use of fuels Fossils.



THE VOLUNTARY AGREEMENT, EXTENDED UNTIL 2025

For years, Generalitat and **Ciment Català** have been promoting efficiency in the use of resources and the transition towards a circular economy.



CONTRIBUTION OF THE CEMENT INDUSTRY TO INDUSTRIAL SYMBIOSIS

The study "**The contribution of the cement sector to industrial symbiosis**" puts figures to this practice of waste recovery.



THE SECTOR DEMANDS SUPPORT FOR POLICIES THAT FACILITATE EXPORTS

The Secretary of Territory and Mobility of the Catalan government, Isidre Gavín, visits the facilities of the Alcanar cement factory.