

Line

KlimCO₂

Environmental CO₂ - absorbing surfaces

Paving, cladding and urban equipment

We take on



CO₂



Inside and outside product range



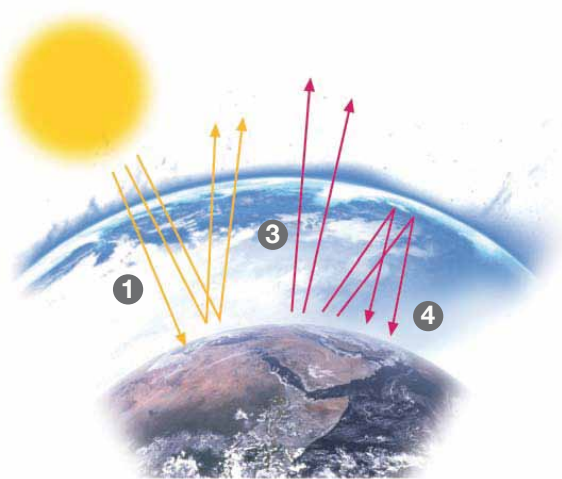
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English

Why do we need to reduce environmental CO₂?

The atmosphere is very transparent to visible light but much less so to infrared radiation and creates the same effect over the earth's surface as a glass roof does on a greenhouse; sunlight that reaches the ground without many obstacles heats it up producing the emission of infrared rays (heat waves), which, unlike the rays of the sun, are partially absorbed by the glass or the atmosphere and re-reflected to the earth's surface.

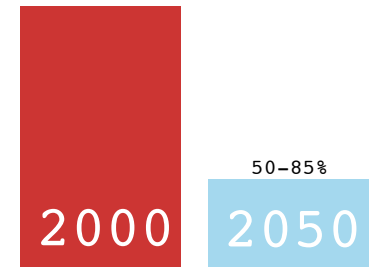
This is known as the greenhouse effect and is causing the **GLOBAL CLIMATE CHANGE**. The main element responsible for the greenhouse effect is CO₂ gas.



- 1 Solar Radiation.
- 2 Radiation reflected in the atmosphere returned to space.
- 3 Infrared radiation that heats the atmosphere and the earth.
- 4 Infrared radiation that returns to earth and heats the atmosphere and the ground.

2°C

A 2°C increase will cause irreversible effects on ecosystems, as well as on the economy and health.



Necessary reduction of worldwide emissions of CO₂

In order to prevent the 2°C global temperature increase at the end of the 21st century, global CO₂ emissions in 2050 must be reduced by 50%-85% compared to those of 2000.

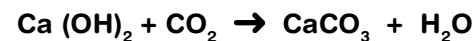
How does the **KlimCO₂** line help to reduce environmental CO₂?

The **KlimCO₂** line includes an additive called **GeoSilex®** a material produced by recycling industrial waste, which has an enormous potential for capturing CO₂.

The reduction of CO₂ occurs through two mechanisms. Firstly, thanks to the use of recycled materials, avoiding the emission of CO₂ by saving on natural resources (lime or cement). Secondly, due to its direct action on capturing CO₂.

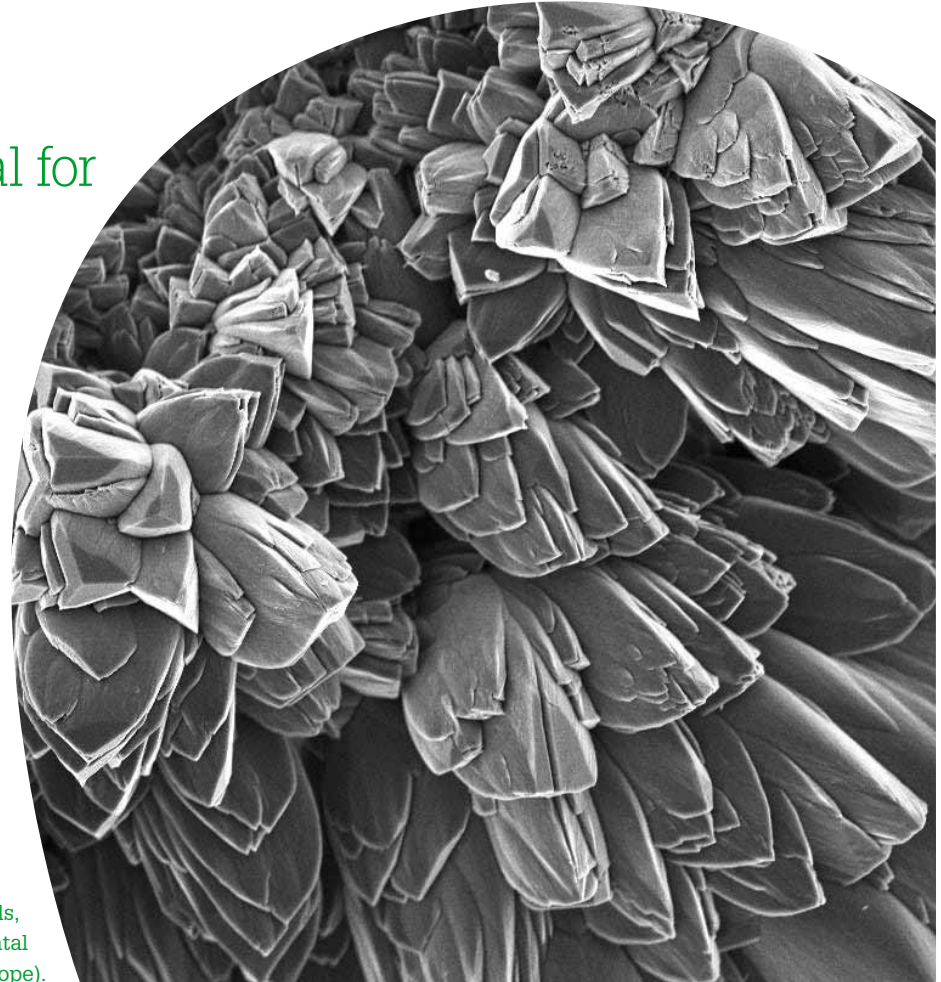
Chemically, **GeoSilex®** is calcium hydroxide Ca (OH)₂ resulting from the optimisation treatment and sanitation of carbide lime residue generated in the production process of acetylene gas.

The size of the primary particle, given this alternative production process, is below 100nm (nanomaterial) making a high reactivity to CO₂ possible.



According to this equation: 0.59 tonnes of CO₂ for each tonne of Ca (OH)₂

Nanometric GeoSilex® crystals,
image through ESEM (environmental
scanning electron microscope).



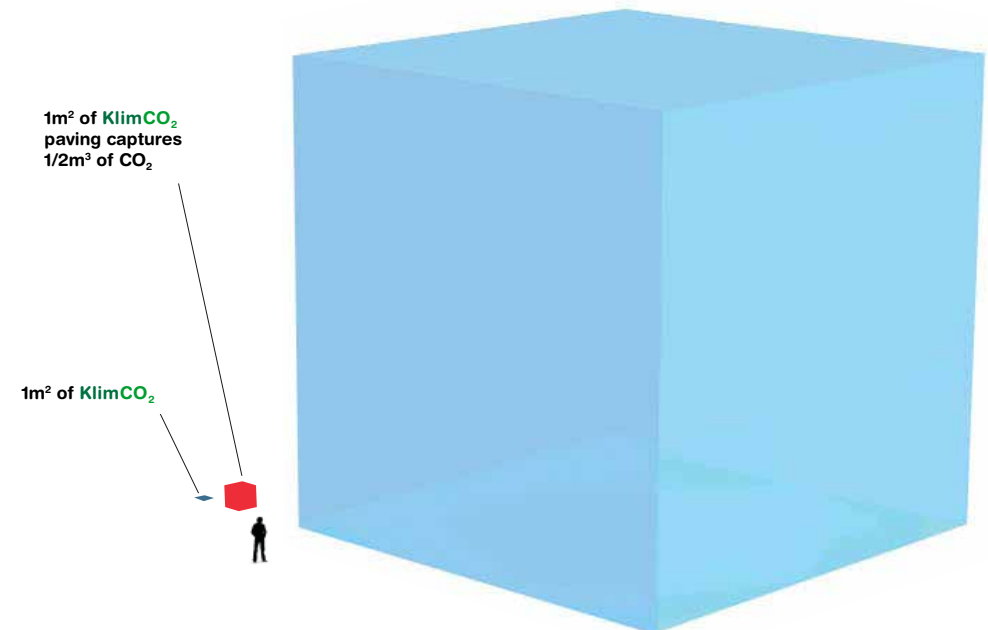
CO₂ - absorbing outside and inside paving

An opportunity to help in the fight against **climate change**

The **KlimCO₂** paving line is an initiative by **Mosaics Planas, S.A.**, in favour of a new generation of construction materials based on the concept of minimising the **carbon footprint** of projects. In this way, an element of high environmental value, with quantifiable effects, which contributes enormously in the fight against climate change and is of significant communicational value, is made available to the different municipal agents and urban planners.

1kg CO₂ is the excess of this gas contained in 5000 m³ of air compared to the pre-industrial era (280ppm in comparison to the current average of 390ppm in the atmosphere).

1m² of outside paving **KlimCO₂** cleans 5.000m³ of air



What environmental conditions are necessary so that CO₂ can be absorbed by KlimCO₂ surfaces?

Favourable conditions for the capture of CO₂ by the KlimCO₂ paving and cladding are a **relative humidity** of between 20% and 80% (neither completely dry nor extremely humid) and the presence of CO₂ in the area.

The photographs show typical environments that are ideal for the use of the KlimCO₂ line.

Inside its use is extremely favourable given the high concentrations generated by humans breathing.

For outside the use of KlimCO₂ for road surfaces and street pavements contributes very effectively to the capture of CO₂ emitted by combustion engines given that the gas, which is heavier than air (air; 1.4; CO₂: 1.8), tends to be concentrated closest to the ground.



Alzamora Shopping Centre
(Alcoi)



Santa Coloma de Farners
(Girona)

Our products

Outside paving



Inside paving and cladding



Urban equipment



**Enter www.mosaicsplanas.com
and discover all of the possibilities**



Mosaics Planas.s.a. has been manufacturing paving for over 80 years. Since its beginnings, improvement and innovation have been the indisputable values for the growth of our business.

The KlimCO₂ line unites aesthetic possibilities that we always provide in our designs (à la carte paving) with the commitment to contributing to a culture of more responsibility for the environment.



Tradition and innovation



Mosaics Planas.s.a.

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