



碳减排先锋
Defensores do Clima
クライメート・セイバーズ
Climate Savers



World leader in building materials lightens its footprint.

Lafarge is the world leader in building materials.



Solar Wall - an example of an Efficient Building™ system promoted by Lafarge.

Lafarge's Climate Savers commitments:

Lafarge has been a member of WWF's Climate Savers programme since 2001. These are the company's second-generation commitments, after successfully exceeding their 2001 targets:

- To continue reducing its net greenhouse gas emissions to 33 percent per tonne of cement below 1990 levels by 2020.
- To develop sustainable construction initiatives by 2015 to achieve a lower carbon footprint and greater energy efficiency. To contribute to the design of 500 sustainable buildings by 2015, worldwide.
- To advocate for ambitious national and global climate change policies, through trade associations and international organizations as well as for post-2020 climate policies.

As with all Climate Savers commitments, these commitments have been assessed and validated by several experts from the cement sector. Lafarge's pledges demonstrate leadership and ambition in their segment, covering emissions from a variety of sources within the company's activities, ranging from direct, on-site emissions to the indirect emissions from the construction sector and up to climate policy.

The Lafarge achievements:

- Reduction of 21.7% of its net CO₂ emissions *per tonne of cement between 1990 and 2010*.
- In the same period, reduction of 36.5% of its absolute CO₂ gross emissions¹ in industrialized countries compared to 1990.

REDUCING ON-SITE EMISSIONS

The '33 percent' target described above is about reducing emissions originated on-site and from other sources that the company owns and controls. When achieved, it will mean that the net CO₂/t cementitious emissions in Lafarge plants will be 518kg/t, compared to 774kg/t in 1990. Lafarge's efforts to achieve this target will focus on three key performance indicators:

¹ Net CO₂ emissions are the gross emissions less the emissions that come from burning waste

“Lafarge has made the reduction of its CO₂ emissions a major objective, and has met its commitments. I am pleased with our partnership with WWF, which helps us to progress even faster. It is no longer a matter of just reducing the CO₂ emitted in the production of our materials, but also of developing construction solutions for buildings that consume less energy.”

Bruno Lafont
Chairman and CEO, Lafarge



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- to reduce the clinker to cement ratio of the cement (clinker has a high carbon content, and can be replaced by substitute materials);
- to increase the energy performance of its cement plants by improving and modernising production processes;
- to replace fossil fuels by industrial waste and biomass.

Sustainable Construction

Under this new commitment, Lafarge will expand its contribution to the area of sustainable construction, by addressing energy conservation and CO₂ emissions in the building sector. According to company figures, 80% of the GHG emissions of a building are situated in its actual use, compared to 10% in the construction materials and another 10% in the end use phase. It is therefore encouraging to have a lead player of the construction sector extending their core business, and hence their Climate Savers commitment, from the production of the basic materials, such as cement, to the design of more complete solutions for the buildings. Lafarge will be working in partnership with customers, architects, engineering companies, construction companies and designers for more sustainable buildings based on existing solutions as well as on innovative solutions.

An example of this approach is the “Solar Wall” which is one of many Efficient Building™ systems promoted by Lafarge. This concrete based wall system captures solar energy on the exterior face. This energy is then stored within the concrete (thermal mass) until it is released on the interior face of the wall with a certain delay.

A BluePrint for the cement industry

Through its innovative work in China, WWF and Lafarge have produced for the cement sector a document that many companies wish they could produce for their own sectors: a BluePrint report proposing solutions for how the cement industry can radically reduce its carbon footprint.

This report proposes solutions for an industry sector responsible for 5% of global CO₂ emissions. The report finds reduction potentials through a more efficient use of cement and by increasing the amount of additives and substitutes. There is a booming global demand for construction materials and nowhere is this more visible than in emerging economies. The report proves that it is possible to disassociate economic growth from increased greenhouse gas emissions. This is a valuable lesson for industry and politics, especially when discussing development in emerging economies like China.²

² This report is available online on panda.org/climatesavers, under 'publications'.