

## LAFARGE AND SUSTAINABLE CONSTRUCTION: OUTLOOK FOR THE FUTURE

The environment is a focal point of the Group's strategic development in particular its policy in terms of quarrying, energy use and climate change.

However, the Group's commitment goes further than this. Lafarge has realised that today, environmental management should not be limited to production, but should be extended upstream (suppliers, subcontractors), and downstream (customers, specifiers).

In addition to materials and their production and use, other challenges are therefore emerging. Once created, the structure must also meet environmental standards that ensure it is energy-efficient and limits its impact on the environment throughout its lifetime.

We now talk about sustainable construction, sustainable towns, high environmental quality.

These concepts are still in the experimental stage. But Lafarge considers them to be extremely important for the construction sector overall.

We must:

- provide a healthy and pleasant environment for users of the building,
- and design buildings with a limited environmental impact, whether in terms of energy, water or waste.

For example, we know that 80 to 90% of CO<sub>2</sub> emissions for a building are generated through its use over its lifetime.

It is therefore important to design lighting, heating or air-conditioning so that the energy used can be reduced. The design of the building's shell and effective heat insulation are more important than ever. We are returning to older concepts, favouring thermal inertia, heat or cold storage in materials. Bio-climatic engineering is rediscovering the seasons, emphasising the choice of the building's location and exposition, and using mechanisms such as natural convection.

In this context, materials all have a role to play, and it is by working with specifiers, design offices, architects and general contractors that Lafarge is working towards new constructive choices.

The movement is underway, as public authorities have decided to encourage these procedures by promoting the HEQ (high environmental quality) concept.

*For 2005, 20% of State constructions should meet the HEQ procedure, or the high-energy-performance label or equivalent, and 50% by 2008.*

Lafarge strongly believes that this involves an extensive promise-oriented movement for the sector, which will benefit society as a whole. The Group intends to encourage and support this.