



Nano-technology protects the climate

The need for innovation

Is it possible to use less energy and emit less CO₂ in the production of an essential construction material: concrete?

The response through innovation

Precast concrete components facilitate particularly rapid and cost-effective construction. During the production of concrete components, heat is the traditional method that ensures the material will harden more quickly. However, the generation of heat is energy consuming and often causes CO₂ emissions. In addition, elevated curing temperatures mean that the concrete does not last as long. This is where BASF's innovation helps.

Using nano-technology, X-SEED® from BASF is an innovative additive that increases speed, flexibility and efficiency of concrete application. With the addition of nano-scale crystal seeds, concrete is hardening more rapidly during the first six to twelve hours after its application. The necessity for heating during the production process becomes superfluous.

Thus, less energy is consumed and CO₂ emissions are reduced. In addition, X-SEED® helps concrete elements to meet high standards of strength, durability and aesthetic appearance.

Further information on this innovation may be found under:
www.construction-chemicals.basf.com/en/innovations