

CASE STUDY

BAYER MATERIALSCIENCE



Today's homes for tomorrow's living

The need for innovation

Buildings are currently responsible for more than 40 percent of the world's energy use and about 30 percent of global greenhouse gas emissions. How can the building industry improve climate protection? Bayer is helping to answer this question and meet these challenges with sustainable solutions for the construction industry – in today's homes for tomorrow's living, from eco-construction elements to energy-efficient lights and 'smart' acoustics and optics.

The response through innovation

As part of its global EcoCommercial Building (ECB) program, Bayer MaterialScience are providing innovations in the form of integrated energy and material concepts for industrial, commercial and office buildings, where local climate conditions and the energy requirements of each building are taken into account. One example is the Bayer CropScience child care centre in Monheim, Germany, which has been built to meet its own energy needs without generating CO₂ emissions. The project was one of ten to be awarded the "Energy-optimized Building 2009" prize by the German Federal Ministry of Economics.



With the ECB program, Bayer draws on a network of experts to provide construction decision-makers with energy-efficient, environmentally compatible and economical solutions.

These solutions include Makrolon® polycarbonate sheets, offering better heat management through infrared-absorbing or reflecting roofs, allowing light to pass through while reflecting heat and providing hail-impact resistance as well as good weathering stability. Through its acquired know-how and production of innovative materials, Bayer MaterialScience has brought many products to market besides Makrolon®, including polyurethane insulating panels for roofs, walls and floors, polyurethane systems for floor coatings, energy-efficient LED indoor and outdoor lighting and solvent-free adhesives.

Further information on this innovation may be found under:
www.bayermaterialscience.com/internet/global_portal_cms.nsf/id/EN_EcoCommercialBuilding