

## **On Sustainability**

Buildings consume about 40% of all energy consumed and are responsible for approximately 39% of all CO2 emissions world-wide. How responsibly we act to improve the energy efficiency of buildings, thereby reducing the demand for fossil fuels and emissions of greenhouse gasses today will affect our world environmentally and economically for generations to come. Insulation is the single most cost-effective way to reduce energy use and greenhouse gas emissions from buildings. Insulation products and their inherent impact as an energy efficiency solution positively affect the lives of people today and in the future. Knauf Insulation's mission and vision are driven by the desire to provide sustainable, innovative solutions for energy efficiency, productivity and comfort.

To meet the challenge to provide sustainable, innovative solutions that improve energy efficiency we continually strive for improvements in manufacturing operations and product design and performance.

Our commitment to sustainability goes beyond our manufacturing floor and is seen in our Corporate Engineering, Human Resources and Product & Process Development Offices built to LEED® NC Gold building requirements; a building that uses 30% less energy and water than a conventional building.

Our products are designed for optimal performance for energy conservation and preservation of natural resources. Our insulation products have an inherent impact on energy consumption; they save hundreds of times more energy in use than required to make them, and all our products are made from renewable and abundant resources, such as recycled glass and sand. Through the development of revolutionary solutions like ECOSE Technology we continually focus our efforts on providing solutions that save energy and resources to positively affect the lives of people today and tomorrow.

"We make insulation, the single most important product in the world responsible for reducing energy use and greenhouse gas emissions. Our products reduce man's need to burn fossil fuels...reducing CO<sub>2</sub> emissions and other gasses that contribute to climate change. Our actions and our products are building a more sustainable world for our children and grandchildren to inherit. I can't think of a more important mission in life or a more noble strategic vision for a company."

Robert Claxton
 President, Knauf Insulation GmbH

## **Sustainability and Insulation Quick Facts**

- In residential or commercial buildings, energy efficiency through insulation is the simplest and most cost effective way to reduce energy use and greenhouse gas emissions.
- By reducing energy consumption, insulation cuts pollution from the utility infrastructure, slashing carbon dioxide emissions by 780 million tons every year in North America. This is the equivalent to the electricity use of over 90 million homes for one year.
- Insulation saves 12 times more energy every year it is in place than it takes to manufacture it.
- If all existing and new homes in the U.S. were insulated to just the 2000 International Energy Conservation Code, the U.S. would save 800 trillion BTUs each year—equivalent of 75,000 supertankers of oil.
- On average, the total energy spent during the manufacture and transportation (embodied energy) of the glasswool insulation used in a typical 2500 sq ft. home in our nation's capitol is recovered in energy savings in just 14 days. Approximately 1,700 recycled bottles are used to make the Knauf glasswool insulation in that 2,500 square foot home.
- In just one year, the glasswool insulation installed in a 2500 sq ft. home in a
  moderate climate saves the fuel quantity equivalent of 2,315 gallons of gasoline—
  enough to drive a typical American car around the world two times.
- The insulation industry is second only to the bottling industry in the amount of glass it prevents from going to landfills through recycling.

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