



1298 Cronson Blvd., Suite 201  
Crofton, MD 21114  
800-607-3772 / [www.espmolders.org](http://www.espmolders.org)

*For Immediate Release*

## **EPS REDUCES GLOBAL WARMING**

### ***NEW LIFE CYCLE ANALYSIS CLEARLY DEMONSTRATES ENVIRONMENTAL CONTRIBUTIONS OF ADDING EPS INSULATION TO NORTH AMERICAN HOMES***

Crofton, Maryland (May 26, 2009) – A new study shows that expanded polystyrene (EPS) provides a substantial reduction in greenhouse gas emissions when used to insulate homes in North America. This study, *Energy and Greenhouse Gas Savings for EPS Foam Insulation Applied to Exterior Walls of Single Family Residential Housing in the U.S. and Canada*, calculated the resources used and emissions produced in the manufacturing and delivery of EPS and concludes that EPS insulation will reduce the operational impact of the building to an extent that far outweighs the environmental impact caused by its manufacture.

“Everyone knows that adding insulation to your home will reduce energy costs,” acknowledges Betsy Steiner, executive director of the EPS Molders Association (EPSMA). “However, consumers are increasingly aware that product manufacture requires resource and energy consumption. We want our customers to know that energy and environmental payback on this investment is substantial, making EPS insulation one of the quickest and easiest ways to reduce energy usage.”

With mainstream support for the green movement, consumers are asking new and different questions about how products perform and are increasingly making purchasing decisions that take environmental considerations into account. This is particularly true in the area of construction, as buildings are responsible for 40% of all greenhouse gas emissions. Life Cycle Analysis (LCA), a measurement tool that provides comprehensive environmental data, is a widely accepted method of evaluating a product’s environmental footprint.

Franklin Associates, an independent consulting firm in Prairie Village, Kansas, conducted this study to analyze and quantify energy use and emissions with regard to EPS insulation. Franklin used data from the U.S. Life Cycle Index (LCI) Database and data collected from the EPS manufacturing industry. Homes were evaluated in all climate zones in the U.S. and Canada. The thermal performance evaluation of the homes was based on R-value data from Oakridge National Laboratories.

Using this approach, the study assessed the energy and resources used during the extraction, manufacturing, processing, delivery, use and disposal of EPS insulation, and the greenhouse gas emissions produced throughout the process. The energy and greenhouse gas savings were determined by comparing the heating and cooling energy requirements for the modeled home with added EPS insulation to a similar structure without added insulation. This provides the 'net' footprint or the environmental payback that is achieved by using increased insulation.

Insulation is measured in terms of thermal resistance, called R-value, which indicates the resistance to heat flow. The higher the material's R-value, the greater the insulating effectiveness or, the better walls and roof resist the flow of heat either into or out of the building. When EPS insulation was added to the exterior walls, using R-4 and R-6 foam, the energy payback periods in Canada are less than one year in all Provinces. In the U.S., the energy payback time for R-4 insulation is less than two years with shorter payback times in colder regions. R-6 payback times for energy are slightly longer but ultimately result in higher energy savings over the life of the building. These energy values directly correlate to the resulting greenhouse gas reductions.

According to the U.S. Department of Energy, heating and cooling account for 50 to 70% of the energy used in the average American home, and inadequate insulation and air leakage are the leading causes of energy waste in most homes. While ongoing research is aiming to identify renewable energy options, immediate green house gas reductions and efficiencies upgrades can be achieved with added insulation, and most importantly allows homeowners to take action now.

"The exceptional performance of EPS insulation offers the construction industry a means to achieve newer energy efficiency goals being revised and updated on an ongoing basis," adds Steiner. "Architects, designers, and material specifiers can be confident they are providing an environmentally responsible choice when selecting EPS to insulate their buildings."

For more information on this study and other EPS insulation resources, contact Virginia Lyle at the EPS Molders Association at (800) 607-3772 or visit [www.epsmolders.org](http://www.epsmolders.org). The EPS Molders Association is a trade organization for the U.S. and Canadian manufacturers of expanded polystyrene building and construction products.

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