

PIMA I Public Policy Position



Testimony on the Environmental Protection Agency's Energy Star Programs

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The Polyisocyanurate Insulation Manufacturers Association (PIMA) is pleased to submit testimony on EPA's fiscal year 2004 appropriations for the Energy Star programs. These programs have proven to be highly successful in preventing pollution caused by energy production and generation and we urge Congress to continue its strong bipartisan support for the programs. PIMA is the trade association for manufacturers of rigid polyiso foam insulation, a product that is used in over 60 percent of new commercial roof construction, in 30 percent of new residential construction, and in most re-insulation of existing commercial building roofs. PIMA members have a nationwide presence with 26 polyiso manufacturing facilities in 16 states and Canada. PIMA and its members are strong supporters of federal programs and policies that promote cost-effective improvements in the energy efficiency of buildings, both residential and commercial.

The voluntary Energy Star programs and EPA's other Climate Protection Programs (CPP) are innovative and effective policies that have been established to address critical environmental problems. Taken together, the efforts under the CPP will result in net energy savings of more than \$70 billion (and greenhouse gas reductions of 500 MMTCE) through 2012 from investments made through 2002. Under the Energy Star programs, EPA acts as a catalyst and a facilitator helping to create a market transformation that favors energy-efficient products. Also, the Energy Star programs avoid the shortcomings of a command-and-control approach to regulation, but instead they create jobs and economic and environmental benefits for our country. We believe that EPA should be applauded for its creative and economically sound thinking in finding solutions to environmental problems. This testimony focuses on the Energy Star Homes, Energy Star Home Sealing, Energy Star Buildings, and Energy Star Roofs programs of which members of PIMA participate in.

As part of the country's efforts to prevent air pollution and to reduce the emissions of global warming gases, EPA launched the Energy Star Homes program in 1995. Household energy use is a major source of U.S. carbon dioxide (CO₂) emissions, accounting for about 20 percent of total emissions. Home energy use is a significant cause of other air pollutants as well, such as sulfur dioxide, nitrogen oxides, and particulate matter. The Energy Star Homes program reduces energy use and prevents pollution by encouraging builders and developers to construct energy-efficient homes. Energy improvements result from the use of improved insulation, tighter ducts, high efficiency heating and air conditioning, and high performance windows.

Energy Star homes are new homes that are at least 30 percent more energy-efficient in its heating, cooling and water heating than a comparable home built to the 1993 Model Energy Code (MEC), and 15 percent more efficient than the applicable state energy code. Although the value of these homes is greater than those that are less energy efficient (i.e., a higher sticker price), Energy Star homes actually cost less to own and operate on a monthly basis than comparable homes that are not as energy efficient. This is because the savings from lower monthly energy bills is greater than the small increase to a person's monthly mortgage payment due to the extra energy saving features. In addition, banks are now providing favorable mortgages for energy-efficient homes, lowering monthly payments even more. As of July 2001, about 770 builder partners have constructed approximately 34,600 Energy Star homes, "locking in" financial savings for homeowners of more than \$11 million annually.

The Energy Star Label for Buildings program is designed to facilitate comparisons of commercial building energy performance of and recognize the most efficient and cost effective buildings in the country. This program considers and hopes to influence the design, construction, and energy efficient operations of buildings. It is essentially a benchmarking tool, with the Energy Star label being awarded to the top performers.

The Energy Star Home Sealing program is aimed at energy use in the existing housing stock. Manufacturers of insulation, windows and other products work together to educate contractors, retail sales people and consumers about R-values and the proper use of home envelope components. This program had its start in 1996 as the Energy Star Insulation program, but in 2002 evolved into a program that adopted more of a systems approach that considers the entire building envelope and a broader range of products.

Another Energy Star program that we would like to highlight is the Energy Star Roofs program, which awards the Energy Star label for roof products based on their solar reflectance. The intentions of this program are good, but we are concerned that it focuses too much on one attribute, solar reflectance, at the expense of other roof system attributes. It is our hope that, as with the Energy Star Insulation program mentioned above, the Roofs program would eventually evolve and incorporate more of a systems approach that does not ignore the energy impacts and attributes of the other roof components. We are currently working with the Agency to address this issue.

The Importance of a Well Funded Energy Star Program

Unfortunately, the market for energy efficient products and services does not always work, as it should. Even though in most areas of the country it costs less to own and operate a home that is more energy efficient, this is rarely a determining criterion in designing and building homes. We believe that if it were not for building energy codes, there would be little incentive for builders to construct even minimally energy-efficient homes. The construction and marketing of new homes, which is largely controlled by the builder, is dominated by concerns over construction costs, with little thought given to energy costs. Also, the typical consumer assumes his or her new home uses the latest in building technologies, including energy-efficient technologies. Without an independent, widely accepted labeling system, such as EPA's Energy Star labels, it is too difficult for the average consumer to evaluate the energy efficiency of a new home.

Those builders with an interest in building and marketing energy-efficient homes, like most builders, are small businesses that do not have the resources to obtain unbiased information on the latest energy-efficient products and construction methods and to package an effective marketing strategy for selling energy-efficient homes. Without the information and marketing tools that are made available through the Energy Star program it might be too risky for a homebuilder to make the types of investments needed to change old habits and to build and sell energy-efficient homes.

To create the market for energy-efficient homes there has to be an organized effort to educate consumers and to teach builders how to change their old ways of approaching consumers. Because of the critical importance