



GLOBAL ISSUES REQUIRE GLOBAL SOLUTIONS.

In the U.S. each year, the building sector accounts for about half (48 percent) of all energy consumption and greenhouse gas emissions that contribute to global warming. Globally, it is remarkably similar at approximately 40 percent.

www.wbcsd.org

Transforming the building sector is critical to addressing climate change. The global warming crisis itself has set the timeline, and therefore we must act immediately if we are to avoid dangerous climate change.

BUILDINGS THAT ARE BUILT RIGHT, AND BUILT TO LAST.

Building products from Dow deliver significant and long-lasting green advantages, including:

- Energy savings
- Fuel conservation
- Protection against thermal loss, moisture intrusion and air infiltration
- Reduced emissions
- Reusability (STYROFOAM™ Brand extruded polystyrene insulation)

Insulating and air sealing products from Dow can **save up to 20 percent** on an owner's heating/cooling costs.

Installed in over **20 million buildings worldwide**, STYROFOAM™ insulation insulates over **20 billion ft²**, saving over **\$10 billion** in energy costs annually.

One square foot of properly installed STYROFOAM™ insulation (one inch thick) can avert over **one ton of CO₂** emissions during the average life of a building.

For every million buildings insulated with STYROFOAM™ insulation, energy consumption is reduced by over **one billion barrels of oil** during the average life of the structures.

Dow has donated insulation for Habitat for Humanity homes for over 25 years. Employees continue to volunteer at Habitat builds worldwide. Sustainable homeownership demands a home be well insulated from the second highest family payment after the mortgage itself – the utility bill.

Virtually 100 percent of the scrap extruded polystyrene generated at Dow plants is recycled into Dow products. In addition, STYROFOAM™ insulation can be reused over and over again.

In Italy, a Passive House reference project incorporating a number of Dow products achieved a 92 percent reduction in energy consumption, compared to 1970s construction standards, and zero carbon emissions.

“What’s the use of a fine house if you haven’t got a tolerable planet to put it on?”

– Henry David Thoreau, essayist, poet and philosopher

As part of Dow’s commitment to address climate change, Dow Building Solutions is doing its part by helping preserve the environment with insulation and air sealants that help reduce greenhouse gas emissions, manage the consumption of natural fuel sources and more. And reduced energy use means savings for the building owner.

From simple everyday efforts to major investments in new technology, working toward a cleaner, greener planet is one of Dow’s top priorities.

In Hangzhou, China, a seven-building housing complex is insulated with STYROFOAM™ insulation. The project, “Prosperous Qiantang, Hangzhou,” serves as the China Ministry of Construction’s model for energy efficiency in residential buildings.

Dow will invest over \$50 million to enable the use of Building Integrated Photovoltaic (BIPV) roofing and other building materials that show great promise in powering homes and other buildings efficiently.

The green roof atop the Vancouver Public Library in British Columbia features STYROFOAM™ extruded polystyrene insulation in its sustainable design. Dow pioneered the protected membrane roof (PMR) assembly, key to green roof construction, more than 40 years ago.

Dow is enabling the generation of 2,400 megawatts of renewable energy through the use of STYROFOAM™ insulation in windmill blades. Dow epoxy is also a critical component of most wind turbines operating today.

“The best way to reduce any environmental impact is not to recycle more, but to produce and dispose less.”

– Robert Lilienfeld and William Rathje.
Use Less Stuff: Environmental Solutions for Who We Really Are, 1998.

Sustainability. It may be a new buzzword, but it's certainly not a new philosophy at Dow Building Solutions. Since the invention of BLUE™ STYROFOAM™ Brand extruded polystyrene insulation 60 years ago, we have continued to develop building products that enhance energy efficiency for the life of a building. What's more, our products help curb escalating utility bills, reduce a building's carbon footprint and provide a more comfortable indoor environment.

Providing humanity with a sustainable energy supply while addressing climate change is one of the most urgent environmental issues our society faces.

Now, with the development of a new foaming agent with no ozone-depleting potential – well in advance of the Montreal Protocol and U.S. Environmental Protection Agency guidelines – Dow underscores its determination to offer building solutions that contribute to sustainability and help protect against global warming while providing long-term insulation and weatherization performance.

EFFECTING POSITIVE CHANGE. One country, one corporation or one association cannot effectively and strategically address climate change. It takes a commitment of global proportions from every country, every industry and every concerned global citizen. That's why Dow Building Solutions aligns with and proudly supports many organizations, including:

- Alliance to Save Energy – www.ase.org
- Energy Star – www.energystar.gov
- Green Building Initiative – www.thegbi.org
- Habitat for Humanity International – www.habitat.org
- Live Green Live Smart – www.livegreenlivesmart.org
- Passive House – www.passive-on.org
- Solar Energy Industries Association – www.seia.org
- U.S. Department of Energy – www.doe.gov
- U.S. Green Building Council – www.usgbc.org

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including Dow can give assurance that mold will not develop in any specific system.

Dow Building Solutions
www.blue4greendesign.com • 1-866-583-BLUE (2583)

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