



**NIA** National Insulation Association  
REDUCE EMISSIONS BY PRIORITIZING INSULATION™

# To infinity and beyond: Dizzying emission activities 2030 to 2050

**B**ack in May 2021, when I was president of the National Insulation Association (NIA), I wrote my monthly industry message to NIA members about the dizzying amount of news surrounding climate change and carbon emissions — after the U.S. and 37 countries convened for the Earth Day Leaders' Summit on Climate that April. The famous line by Buzz Lightyear in the movie *Toy Story* came to my mind as I tried to make sense of emissions goals. So, what has happened in the two years since President Biden announced a target for the U.S. to reach net-zero emissions by 2050? The actions by the U.S. government to address emissions has been stunning — the intent is there.

## Mechanical insulation and major legislative advancements

The Inflation Reduction Act (IRA) was signed into law in August 2022, creating the largest investment to combat the climate crisis in the history of the U.S. The EPA received \$41.5 billion to develop 24 new and existing programs that monitor and reduce GHG emis-

sions. Among their objectives is the development of a carbon label to report levels of embodied carbon, which are GHG emissions associated with the production, use and disposal of a product — sort of like nutritional information labels on grocery products.

The EPA has two new programs focused on lower carbon construction materials, made possible by a \$350 million investment from the IRA. The first is for administrative costs to develop a program to label construction materials/products that have substantially lower levels of embodied GHG emissions, based on Environmental Product Declarations (EPDs). The second is for grants and technical assistance to businesses and states to support the development of reporting criteria for EPDs for construction materials/products that will include measurements of the embodied GHG emissions across all life cycle stages.

The Federal Sustainability Plan establishes an ambitious path to achieve a goal of net-zero emissions in federal buildings by 2045. Federal agencies will set similarly ambitious 2030 goals and annual targets for energy and water reductions, based on lead-

ing performance benchmarks for building type categories. All new federal construction and major modernization projects larger than 25,000 gross square feet entering the planning stage will be designed for net-zero emissions by 2030.

The Federal Building Performance Standard was announced in December 2022 as the first-ever such building standard. Its goal is to reduce climate change by requiring that agencies cut energy use in the country's 300,000 federal buildings by electrifying equipment and appliances to achieve zero scope 1 emissions in 30% of building space owned by the federal government by 2030. The Federal Sustainability Plan seeks to power federal facilities with 100% carbon pollution-free electricity, including 50% on a 24/7 basis.

Governments and companies have different options available to address emissions, and there are several areas where mechanical insulation could help:

- Companies can offset. This means going carbon neutral, as companies can offset emis-

sions achieved by purchasing carbon offsets that reduce or prevent global emissions. While offsets generally do not directly reduce carbon emissions or help transition electric grids to clean energy, this is a good first step.

- Companies can reduce. This means achieving emission reductions by purchasing enough renewable energy from wind and solar farms to match annual electricity use. Companies can also use mechanical insulation to insulate bare pipes and fittings — especially those at higher temperatures.

- Companies can eliminate. This means eliminating emissions by sourcing carbon-free, clean energy for every location and every hour of operation — targeting absolute zero, which means never emitting carbon from operations in the first place. Insulation plays a part in eliminating emissions day after day while it is in use.

It is clear to me that the sustainable energy and carbon emissions reduction train has left the station, and our mechanical insulation industry has a good seat.

For more information, visit [insulation.org](http://insulation.org) or email [president@insulation.org](mailto:president@insulation.org).

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