REPORT: USING PLASTIC INSULATION CAN SAVE A WHOLE LOT OF CARBON

Lifecycle Analysis Shows Huge Carbon Avoidance, Need for Smart Policy

When insulating our homes and buildings, high-performance materials can significantly reduce carbon emissions that contribute to climate change.

A 2023 REPORT FOUND SOME ASTONISHING BENEFITS RELATED TO PLASTIC INSULATION.
ICF Consulting looked at four major types of plastic insulation:

EPS expanded polystyrene	**XPS** extruded polystyrene	**SPF** spray foam	**PIR** polyisocyanurate

WHAT DID THEY FIND?

FAST CARBON PAYBACK

Carbon payback is a measure of how quickly the embodied carbon* in insulation is offset by the carbon savings the insulation provides during the operation of homes/buildings. Obviously, the quicker the payback, the better.

HUGE CARBON AVOIDANCE

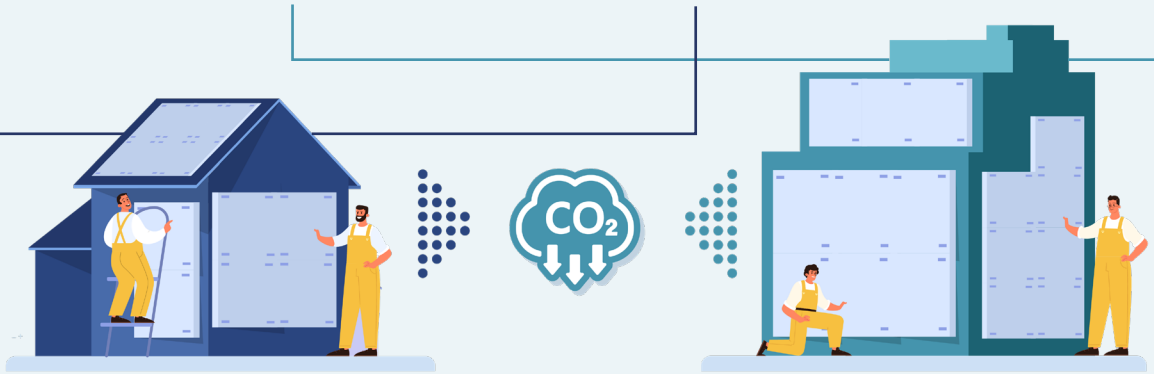
Carbon avoidance basically answers the question: How much more carbon does the insulation save over the 75-year life of your home/building compared to its embodied carbon? When measuring carbon avoidance, a larger number is better.

FOR HOMES 6 months or less

FOR BUILDINGS 10 months or less

FOR HOMES up to 348 times

FOR BUILDINGS up to 305 times



CARBON PAYBACK PERIOD

CARBON AVOIDANCE

Conclusion: The carbon invested in the plastic insulation (embodied carbon) is paid back many times over during the life of our homes and buildings.

Simply put: Using plastic insulation can save a whole lot of carbon.

Builders and policymakers should take notice.
When choosing materials like insulation to make homes and buildings, it's important to look at the overall lifecycle of these materials, instead of using just one data point. Public policy should consider the overall lifecycle benefits of materials. Including the huge carbon avoidance benefits of plastic insulation.

ICF Consulting Report

Read Here

AMERICA'S PLASTICMAKERS™ MAKING SUSTAINABLE CHANGE

Learn more at PlasticMakers.org/buildingsustainability.

*Embodied carbon refers to greenhouse gas emissions resulting from making a product (from raw materials extraction, manufacturing energy, transportation to the job site, etc.). It's a commonly used measure of a product's global warming potential.