

# ENERGY EFFICIENCY = A HEALTHY RETURN ON INVESTMENT

To drive down wasted energy, high costs and greenhouse gas emissions (GHGs), America must focus on energy efficiency upgrades. Energy efficiency technologies and policies can provide a healthy return on investment. For our nation. And our environment.

## **ENERGY EFFICIENCY BENEFITS**



Reduce Energy Costs for Our Homes

Reduce Energy Cost for Businesses



Create Healthier Homes

Year after year, energy efficiency programs reduce energy costs, which are disproportionately high for middle- and lowincome households. Utility bills, including heating and cooling costs, are often one of the top three operating expenses for small businesses.

Energy efficiency measures (e.g., insulation, sealing, ventilation) can reduce infiltration of air pollution, moisture, allergens and pests, which helps protect respiratory health.

# ENERGY EFFICIENCY = REDUCED GHG, INCREASED SECURITY



Energy efficiency in construction/retrofits supports long term carbon reductions (our products are durable/typically last the life of buildings with little/no maintenance.)



Energy efficiency reduces demand on energy grid, improving energy reliability.

**39%** 

U.S. Greenhouse Gas Emissions (GHG) Produced by Building Sector



High performance insulation and air sealing enables more efficient use of our nation's energy, regardless of the fuel source.



High performance insulation and air sealing enables electrification of HVAC systems and can also reduce the size and cost of the units, delivering even greater cost savings.

FUN FACT: Future energy savings due to innovations in chemistry could result in a 41% reduction in energy use and a 70% reduction in building related GHG emissions by 2050.

### ENERGY CODES = \$\$ SAVINGS AND HOUSING AFFORDABILITY

DOE

Energy cost savings for 2021
International Energy Conservation
Code (IECC) = 8.7% over 2018
IECC and ≈35% over current HUDUSDA requirements (2009 IECC).

HUD

Updating requirements for federally financed mortgages to the 2021 IECC would = up to ≈\$1.5 billion in savings for homeowners/renters over 30 years.

HUD

Reduced energy demand from homes constructed to the 2021 IECC for federal financed mortgages = avoiding **2.2 million** metric tons of CO<sub>2</sub> over 30 years.

Additional down payment of ≈\$400 for energy efficiency upgrades can lead to savings of \$14,500 on 30-year mortgage.

≈\$400

\$14,500

#### **POLICY ASKS**



Fund and support Department of Energy efforts to enable rapid adoption of the 2021 IECC and ASHRAE 90.1-19 codes throughout the nation, including helping states train code officials and educate builders.



Maintain support for the 2021 IECC and ASHRAE 90.1-19 energy codes to save energy and \$\$ in IRA and BIL implementation.

- Pacific Northwest National Laboratory: Model energy codes predicted to save \$126 billion and avoid 841 million metric tons of CO<sub>2</sub>.
- Updating energy codes = low-cost option for meeting energy demand, reducing energy waste.
- Increased energy efficiency requirements for insulation and air sealing deliver huge return on investment.
- Recognize energy efficiency as foundational for energy/carbon savings and electrification.



Encourage the Department of Housing and Urban Development to implement its proposed energy efficiency standards for manufactured homes.



Support energy efficiency tax credits and SAVE Act.

- Upfront costs for energy efficiency upgrades today can be defrayed through tax credits that lead to long-term saving of energy and \$\$, while helping drive down GHGs. Ensure these credits remain available.
- The Sensible Accounting to Value Energy (SAVE) Act would allow homebuyers to account for monthly energy savings from efficiency upgrades when determining affordability of mortgage payments, which will encourage greater energy efficiency measures and monetize savings directly to consumers.



**Plastics Division** 

The American Chemistry Council (ACC) and its members are integral stakeholders in the energy efficiency and building sector. Our members play an equally important role as home builders, contractors and other building sector stakeholders. We are job creators, innovators and solution providers. Plastic and polymer-based materials provide critical solutions in residential and commercial energy efficiency.

#### For more information contact

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