THE AMERICAN INSTITUTE OF ARCHITECTS

Issue Brief

The American Institute of Architects • Government Advocacy • Federal Issue Position and Analysis

Key Points

- *Climate change is real, and federal legislation is needed to address it.*
- *Buildings are the indirect sources of over 40% of the carbon dioxide emissions in the United States – principally through their consumption of energy.*
- *Any climate change legislation put into law should include provisions that promote reductions in GHG emission contributions made by buildings and communities*

The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292
Phone: 202-626-7507
Fax: 202-626-7583
E-mail: govaffs@aia.org
Website: www.aia.org

DESIGNING A SUSTAINABLE FUTURE

Make Buildings A Part of the Climate Change Solution

AIA Position

The AIA supports climate change legislation that will reduce the amount of our nation's greenhouse gas emissions. Because buildings are a major contributor to climate change, Congress should pass provisions as a part of comprehensive climate change legislation that help reduce the amount of greenhouse gasses emitted by the building sector.

Explanation and Justification

Buildings in United States, including homes, offices, and industrial sites, account for over 40 percent of carbon dioxide emissions. Most of these emissions come from the combustion of fossil fuels to provide heating, cooling, and lighting and to run electrical equipment and appliances. When combined with other GHG impacts of buildings — such as emissions from the manufacture of building materials and products, the transport of construction and demolition materials, and the passenger and freight transportation associated with urban sprawl—the result is an even larger GHG footprint. An effective U.S. climate change strategy must consider options for reducing the GHG emissions associated with building construction, use, and location.

Energy efficient building design strategies and technologies currently exist and would require only modest levels of investment to implement. They pay back the capital investment required to implement them over a short period of time through energy savings and generate additional savings thereafter. By taking advantage of these opportunities, the United States could enjoy a more competitive economy, cleaner air, lower GHG emissions, and reduced dependence on foreign oil.

AIA Principles for Climate Change Legislation

1. **Climate change legislation should provide incentives to states, localities, energy providers and energy consumers to make buildings more energy efficient.** These incentives should be tied to measurable targets for energy reduction, such as Energy Star or energy building codes like ASHRAE 90.1 and the IECC, and should measure actual performance, not simply design intent.

2. **Climate change legislation should address energy use among existing buildings, not simply new buildings.** Incentives for energy efficient retrofits of existing buildings in the commercial, residential and institutional sectors – including historic properties - will help homeowners, building owners and managers reduce energy usage and avoid the energy costs of processing, manufacturing and transporting new building materials.

3. **Climate change legislation should encourage building in high density areas near public transportation.**

4. **Climate change legislation should provide incentives for state and local governments to reduce energy usage in public buildings.** The Energy Independence and Security Act of 2007 requires the federal government to meet aggressive targets for reducing fossil fuel-based energy use in new and significantly renovated federal buildings (Sec. 422). Incentives should be provided to state and local governments that institute similar requirements for their buildings.

5. **Climate change legislation should help load-serving entities promote energy efficiency across their entire building portfolios.** Legislation should create incentives for a wide range of innovative programs, including retrofits for commercial and residential customers, home energy audits, loan programs for renewable energy equipment, net metering programs, lease/lease purchase of renewable technology for remote customers, and energy saving performance contracts (ESPCs).

6. **Climate change legislation should promote the research and development of energy efficient building technologies**. Funds should be made available for the design and development of high-efficiency HVAC, lighting and window systems and energy-saving building shell technologies and materials, including insulation.

7. **Climate change legislation should provide support to state and local governments for public transportation to reduce vehicle miles traveled (VMT).** Providing increased support for the planning, design, construction and operation of public transportation systems will not only reduce greenhouse gas emissions in the transportation sector but reduce congestion, increase economic productivity and provide greater access to jobs and opportunities to more people.

8. **Climate change legislation should provide incentives for states and communities to develop and institute community planning processes and solutions that reduce VMT.** Community planning that balances economic growth with sustainable development can reduce VMT, helping contribute to reductions in greenhouse gases.