

#2030 ZERO

“Architects, as the leaders in design of the built environment, are responsible to act as stewards of the Earth.” – The American Institute of Architects

Currently, the federal government is moving to implement the Clean Power Plan with a goal of reducing carbon dioxide emissions by 32 percent. The EPA will require every state to come up with an approved implementation plan to meet these targets. While carbon reduction goals vary from state to state, New York has been a leader on the national stage when it comes to policies aimed at reducing carbon emissions, including the Regional Green House Initiative (RGGI) and the newly proposed goal to require 50 percent of the energy portfolio to come from renewable sources.

According to the National Science and Technology Council, commercial and residential buildings consume a third of the world’s energy and account for **40 percent of U.S. carbon emissions**. If worldwide energy-use trends continue, buildings will become the largest consumer of global energy by 2025—more than the transportation and industrial sectors combined. The domestic energy and climate change challenge cannot be addressed without changing the way our buildings are designed, constructed, and operated.

Architects are uniquely positioned in leading efforts to increase energy efficiency in the commercial building market through their work as creative commercial building problem solvers. From establishing the project mass and orientation to incorporating passive lighting and ventilation strategies, architects hold the key to reducing energy consumption of building designs.

Current trends in consumer demand for environmentally responsible buildings and products show high-performing building design will be a lasting theme in the construction industry. To meet this demand, the AIA has embarked on an ambitious 2030 Commitment to quantify and report the progress of AIA members to reduce greenhouse gas emissions in the built environment and ultimately reverse the trend of carbon output.

Through a partnership with the U.S. Department of Energy, the AIA developed the AIA 2030 Design Data Exchange, or DDx. This tool streamlines the process for firms to share project information in real time so other architects can view their building performance projections and measure them against their goals.

For 150 years, AIA members have been advancing the quality of life through innovations to the built environment. Architects have moved to the forefront of the 2030 Challenge by designing “net zero” buildings, where the amount of energy the building consumes is equivalent to the amount of energy produced. Further, there are more and more instances where architects are designing net positive buildings, to actually contribute more resources than used to operate. AIA members across the country have reported a 270% increase in net zero projects, indicative of the trend for efficient design. In beauty and function, all architecture is beginning to resemble energy efficient architecture.

Part of the commitment is also to design resilient buildings. In response to Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee, architects have been working with the NY Rising Community Reconstruction Program to mitigate the extreme effects of climate change.

Leading by Design: This is the architect’s contribution to the creation of a sustainable world.

For more information on how architecture affects you, contact AIA New York State at 518-449-3334 or visit www.aianys.org.