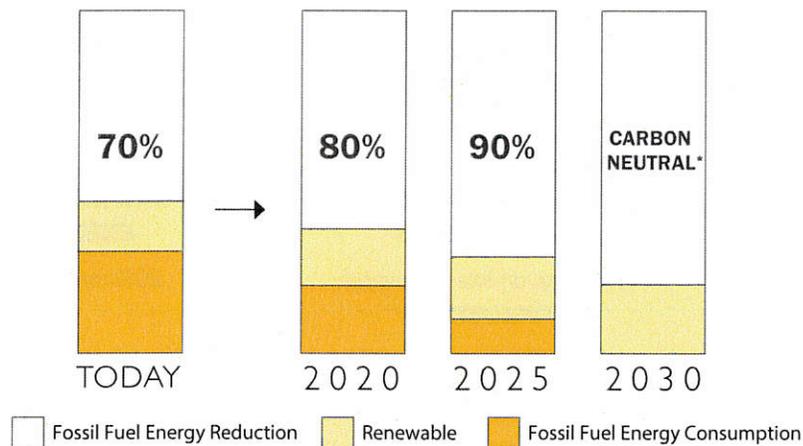


The 2030 Challenge

All new buildings, developments, and major renovations shall be carbon-neutral by 2030



The 2030 Challenge

Source: ©2015 2030, Inc. / Architecture 2030. All Rights Reserved.
*Using no fossil fuel GHG-emitting energy to operate.

Buildings are the major source of global demand for energy and materials that produce by-product greenhouse gases (GHG).

Slowing the growth rate of GHG emissions and then reversing it is the key to addressing climate change and keeping global average temperature below 2°C above pre-industrial levels.

To accomplish this, Architecture 2030 issued The 2030 Challenge asking the global architecture and building community to adopt the following targets:

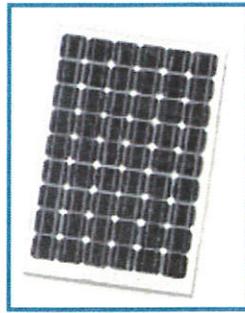
- All new buildings, developments and major renovations shall be designed to meet a fossil fuel, GHG-emitting, energy consumption performance standard of 70% below the regional (or country) average/median for that building type.
- At a minimum, an equal amount of existing building area shall be renovated annually to meet a fossil fuel, GHG-emitting, energy consumption performance standard of 70% of the regional (or country) average/median for that building type.
- The fossil fuel reduction standard for all new buildings and major renovations shall be increased to:
 - 80% in 2020
 - 90% in 2025
 - Carbon-neutral in 2030 (using no fossil fuel GHG emitting energy to operate).

These targets may be accomplished by implementing innovative sustainable design strategies, generating on-site renewable power and/or purchasing (20% maximum) renewable energy.



DESIGN STRATEGIES

The largest energy reductions can be achieved through design.



TECHNOLOGIES AND SYSTEMS

Including on-site renewable energy systems.



OFF-SITE RENEWABLE ENERGY

20% maximum.

Meeting the 2030 Challenge

Source: ©2010 2030, Inc. / Architecture 2030. All Rights Reserved.

The Impact of the 2030 Challenge

The targets set out in the 2030 Challenge have been adopted and is being implemented by 80% of the top 10 and 65% of the top 20 architecture/engineering/planning firms in the U.S. In addition, the AIA, ASHRAE, the U.S. Conference of Mayors, the federal government, and many other organizations and state and local governments and agencies have adopted the Challenge. In Canada, the Royal Architectural Institute of Canada, the Ontario Association of Architects and cities such as Vancouver have also adopted the Challenge targets.

Since 2006, the landscape for low-carbon building has been transformed, and building with sustainability and high performance in mind has become the standard approach. Zero Net Energy (ZNE) buildings have gone from being prototypes and experiments to being widely built and, in the case of California, being the standard that will be adopted for new residential buildings in 2020 and commercial buildings in 2030. Of course, this entire shift is not only due to the 2030 Challenge, but it has been key in helping focus the industry's attention on the problem, and suggested a path to solving it.

Source: http://architecture2030.org/2030_challenges/2030-challenge/