

2030 Implementation Guidelines
A Resource for Firms and Organizations Adopting
The 2030 °Challenge

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Synopsis

Buildings are the major source of demand for energy and materials that produce by-product greenhouse gases (GHG). Slowing the growth rate of GHG emissions and then reversing it over the next ten years is the key to keeping global warming under one degree centigrade (°C) above today's level. It will require immediate action and a concerted global effort.

To accomplish this, Architecture 2030 has 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 50% of the regional (or country) average 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 50% of the regional (or country) average for that building type.
- The fossil fuel reduction standard for all new buildings shall be increased to:
 - 60% in 2010
 - 70% in 2015
 - 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 and/or certified renewable energy credits.

Responsibilities of Adoptees

Architecture 2030 asks that all firms, organizations and individuals choosing to adopt The 2030 °Challenge commit to design all of their projects to meet the targets outlined by the initiative. This requires each new building project or major renovation to be designed to achieve an energy consumption performance standard of 50% of the regional (or country) average for that project's buildings type. For new building projects, this performance standard will increase to 60% of the regional (or country) average in the year 2010. Every five years the standard will increase by an additional 10%, achieving carbon-neutral buildings in the year 2030. Major renovations are only required to meet the 50% target throughout this timeline, but are encouraged to achieve the increased reductions.

If a firm or office is unable to achieve the targeted reductions for 100% of its projects, there are no penalties. However, Architecture 2030 urges firms who wish to adopt to have a clear implementation plan that will assist designers and team members in reaching the goals outlined by The 2030 °Challenge.

Implementation Plan

The 2030 °Challenge outlines real and obtainable targets for the building sector to curb global warming. In order to meet the described timeline, Architecture 2030 recommends that each firm or organization adopting The 2030 Challenge prepare a plan of action for implementing the initiative's targets.

Each implementation plan will be different and unique to suit the adopting firm or organization's structure and philosophy. However, each plan should contain the following key elements:

- Inform all partners, employees, consultants and clients that the firm has adopted The 2030 °Challenge. Explain what The °Challenge entails and why the firm has committed to its targets.
- Establish energy-efficiency as a central tenet of your firm's design philosophy. Require energy-wise practices in the firm's day-to-day activities.
- Require that all employees become educated in the design of energy-efficient buildings. Outline energy-efficient design strategies, technologies, and opportunities for each project. Organize regularly scheduled meetings to discuss how this information can be applied to all projects.
- Engage clients in discussions relating to energy efficiency. Explain that reducing carbon emissions from the building sector is now a major focus for the firm and that the firm plans to incorporate cost-effective design strategies that should not increase the overall cost of the work. Provide a life-cycle cost analysis for each project and encourage clients to review those costs to ascertain the true cost of each project.
- Establish a portfolio of the firm's work that highlights energy efficiency. Demonstrate that the firm's designers are knowledgeable professionals, with regard to energy-efficient design, who can produce quality projects within an allotted budget that meet an agreed upon schedule.
- Hire consultants and engineers who have adopted The 2030 °Challenge and have a similar implementation plan within their firm. Approach every project with an energy focus and review the project for further energy reductions at every stage of development.
- Create a database that contains energy-consumption statistics for your projects. Include outside projects as a reference if your firm does not have a portfolio of energy-efficient work yet. Use this information as a tool to analyze strategies that work and those that may need improvement. Share this information with clients and collaborators. Include each completed project's energy achievements in the database.
- Verify that your project meets The 2030 °Challenge targets, either through a final energy-analysis or through post-occupancy measured consumption. Document this data for future reference and in the firm's portfolio to establish an energy priority.