MINNESOTA B3 SB 2030 ENERGY STANDARD

FACT SHEET

Minnesota Sustainable Building 2030 (SB 2030) is a progressive energy conservation program initiated by the Minnesota Legislature in the spring of 2008. Based on the national *Architecture 2030* program, SB 2030 has been tailored to the needs of Minnesota buildings. Like *Architecture 2030*, SB 2030 sets specific performance targets (Energy Standards) for energy use in buildings compared to representative buildings in existence in 2003. Every five years, the total carbon emissions target from buildings is reduced so that in 2030 a 100% reduction (net zero carbon) is achieved. For new buildings compared to representative buildings in existence in 2003, the reduction in carbon producing fuel used for building energy is:

- 2010 - 60% reduction
- 2015 - 70% reduction
- 2020 - 80% reduction
- 2025 - 90% reduction
- 2030 - 100% reduction

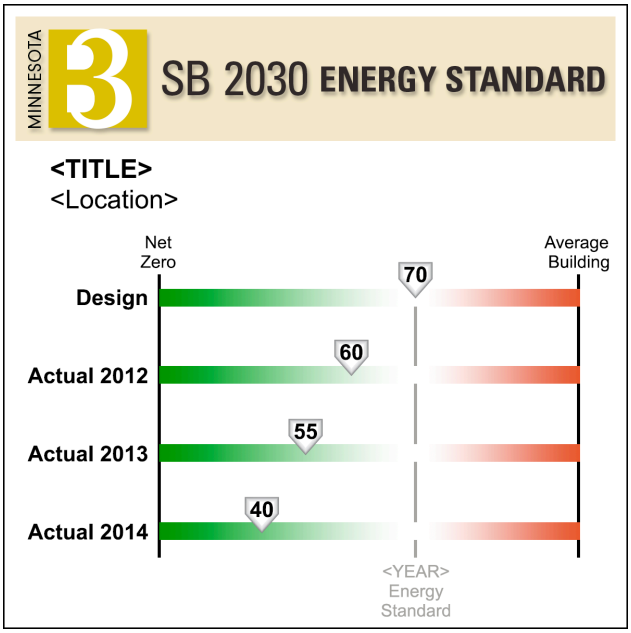
The SB 2030 program has established cost-effective energy-efficiency performance standards for new and substantially reconstructed commercial, industrial, and institutional buildings that can significantly reduce carbon dioxide emissions by lowering energy use. The mission of SB 2030 also includes training architects to incorporate the performance standards in building design; incorporating the performance standards in utility conservation improvement programs; and developing procedures for ongoing monitoring of energy use in buildings that have adopted the performance standards.

Buildings are significant contributors to greenhouse gases. It is estimated that between 38-48% of all U.S. greenhouse gases (GHG) are the results of building operations depending on fuel choices.[1] Energy conservation in buildings is most cost effective way to reduce these GHG.[2]

The SB 2030 Energy Standards Tool now can be applied to 17 building types based on energy modeling and another 27 types can be calculated using the Interim Standards. These Energy Standards use an Energy Use Intensity (EUI) Index in kBtu/SF/Yr that is a 60% energy reduction from a baseline building of the same type and location typical of the existing building stock in 2003. A demonstration version of the Energy Standard Tool for familiarization is available at http://sb2030.twgidemo.com/SB2030Calculator/.

SB 2030 Energy Standards are required for all state-bonded Minnesota buildings that have started Schematic Design after August 2009. It is anticipated in the near future, others owners and building projects will join the SB 2030 program on a voluntary basis and may qualify to receive utility incentives reserved for SB 2030. The Energy Standards along with other information about the program are available at: www.sb2030.b3mn.org

After the project construction is completed, actual energy data is collect in the B3 Benchmarking program. The B3 Benchmarking program normalizes the actual energy data for the year collected and returns it to SB 2030 Program tracking tool so that the proposed and actual building EIU can be compared. The tracking tool produces an SB Sustainable Building Energy Label shown below.



1 Architecture 2030: Data from the US Energy Information Administration illustrates that buildings are responsible for almost half (48%) of all energy consumption and GHG emissions annually; http://www.architecture2030.org/current_situation/building_sector.html

2 McKinsey Report: July 2009 Unlocking Energy Efficiency in the U.S. Economy; http://www.mckinsey.com/clientservice/electricpowernaturalgas/downloads/US_energy_efficiency_full_report.pdf