

A bill for an act
relating to energy; providing for development and application of building energy
usage performance standards; amending Minnesota Statutes 2006, section
16B.325; Minnesota Statutes 2007 Supplement, section 216B.241, subdivision
1e, by adding a subdivision.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. Minnesota Statutes 2006, section 16B.325, is amended to read:

16B.325 SUSTAINABLE BUILDING GUIDELINES.

Subdivision 1. Development of sustainable building guidelines. The Department
of Administration and the Department of Commerce, with the assistance of other agencies,
shall develop sustainable building design guidelines for all new state buildings by January
15, 2003, and for all major renovations of state buildings by February 1, 2009. The
primary objectives of these guidelines are to ensure that all new state buildings, and
major renovations of state buildings, initially exceed ~~existing~~ the state energy code, as
established in Minnesota Rules, chapter 7676, by at least 30 percent.

Subd. 2. Lowest possible cost; energy conservation. The guidelines must focus
on achieving the lowest possible lifetime cost for new buildings and major renovations,
and allow for changes in the guidelines that encourage continual energy conservation
improvements in new buildings: and major renovations. The guidelines must define
"major renovations" for purposes of this section. The definition may not allow "major
renovations" to encompass less than 10,000 square feet or to encompass less than the
replacement of the mechanical, ventilation, or cooling system of the building or a section
of the building. The design guidelines must establish sustainability guidelines that include
air quality and lighting standards and that create and maintain a healthy environment

and facilitate productivity improvements; must specify ways to reduce material costs; and must consider the long-term operating costs of the building, including the use of renewable energy sources and distributed electric energy generation that uses a renewable source or natural gas or a fuel that is as clean or cleaner than natural gas.

Subd. 3. **Development of guidelines; applicability.** In developing the guidelines, the departments shall use an open process, including providing the opportunity for public comment. The guidelines established under this section are mandatory for all new buildings receiving funding from the bond proceeds fund after January 1, 2004, and for all major renovations receiving funding from the bond proceeds fund after February 1, 2009.

Subd. 4. **Revisions.** The commissioners of administration and commerce shall review the guidelines periodically and as soon as practicable revise the guidelines to incorporate performance standards developed under section 216B.241, subdivision 9.

Sec. 2. Minnesota Statutes 2007 Supplement, section 216B.241, subdivision 1e, is amended to read:

Subd. 1e. **Applied research and development grants.** (a) The commissioner may, by order, approve and make grants for applied research and development projects of general applicability that identify new technologies or strategies to maximize energy savings, improve the effectiveness of energy conservation programs, or document the carbon dioxide reductions from energy conservation programs. When approving projects, the commissioner shall consider proposals and comments from utilities and other interested parties. The commissioner may assess up to \$3,600,000 annually for the purposes of this subdivision. The assessments must be deposited in the state treasury and credited to the energy and conservation account created under subdivision 2a. An assessment made under this subdivision is not subject to the cap on assessments provided by section 216B.62, or any other law.

(b) The commissioner, as part of the assessment authorized under paragraph (a), shall annually assess and grant up to \$500,000 for the purpose of subdivision 9.

Sec. 3. Minnesota Statutes 2007 Supplement, section 216B.241, is amended by adding a subdivision to read:

Subd. 9. **Building performance standards; Sustainable Building 2030.** (a) The purpose of this subdivision is to establish cost-effective energy-efficiency performance standards for new and substantially reconstructed residential, commercial, industrial, and institutional buildings that can significantly reduce carbon dioxide emissions by lowering energy use in new and substantially reconstructed buildings. For the purposes of

this subdivision, the establishment of these standards may be referred to as Sustainable Building 2030.

(b) The commissioner shall contract with the Center for Sustainable Building Research at the University of Minnesota to coordinate development and implementation of energy-efficiency performance standards, strategic planning, research, data analysis, technology transfer, training, and other activities related to the purpose of Sustainable Building 2030. The commissioner and the Center for Sustainable Building Research shall, in consultation with utilities and experts in building design and technology, develop a Sustainable Building 2030 implementation plan that must address, at a minimum, the following issues:

(1) training architects to incorporate the performance standards in building design;

(2) incorporating the performance standards in utility conservation improvement programs; and

(3) developing procedures for ongoing monitoring of energy use in buildings that have adopted the performance standards.

The plan must be submitted to the chairs and ranking minority members of the senate and house of representatives committees with primary jurisdiction over energy policy by July 1, 2009.

(c) Sustainable Building 2030 energy-efficiency performance standards must be firm, quantitative measures of total building energy use and associated carbon dioxide emissions per square foot for different building types and uses, that allow for accurate determinations of a building's conformance with a performance standard. The energy-efficiency performance standards must be updated every three or five years to incorporate all cost-effective measures. The performance standards must reflect the reductions in carbon dioxide emissions per square foot resulting from actions taken by utilities to comply with the renewable energy standards in section 216B.1691. The performance standards should be designed to achieve reductions equivalent to the following reduction schedule, measured against energy consumption by an average building in each applicable building sector in 2003: (1) 60 percent in 2010; (2) 70 percent in 2015; (3) 80 percent in 2020; and (4) 90 percent in 2025. A performance standard must not be established or increased absent a conclusive engineering analysis that it is cost-effective based upon established practices used in evaluating utility conservation improvement programs.

(d) The annual amount of the contract with the Center for Sustainable Building Research is up to \$500,000. The Center for Sustainable Building Research shall expend no more than \$150,000 of this amount each year on administration, coordination, and oversight activities related to Sustainable Building 2030. The balance of contract funds

4.1 must be spent for subcontracts with not-for-profit energy organizations, architecture and
4.2 engineering firms, and other qualified entities to undertake technical projects and activities
4.3 in support of Sustainable Building 2030. The primary work to be accomplished each
4.4 year by qualified technical experts under subcontracts is the development and thorough
4.5 justification of recommendations for specific energy-efficiency performance standards.

4.6 Additional work may include:

4.7 (1) research, development, and demonstration of new energy-efficiency technologies
4.8 and techniques suitable for residential, commercial, industrial, and institutional buildings;

4.9 (2) analysis and evaluation of practices in building design, construction,
4.10 commissioning and operations, and analysis and evaluation of energy use in the residential,
4.11 commercial, industrial, and institutional sectors;

4.12 (3) analysis and evaluation of the effectiveness and cost-effectiveness of Sustainable
4.13 Building 2030 performance standards, conservation improvement programs, and building
4.14 energy codes;

4.15 (4) development and delivery of training programs for architects, engineers,
4.16 commissioning agents, technicians, contractors, equipment suppliers, developers, and
4.17 others in the building industries; and

4.18 (5) analyze and evaluate the effect of building operations on energy use.

4.19 (e) The commissioner shall require utilities to develop and implement conservation
4.20 improvement programs that are expressly designed to achieve energy efficiency goals
4.21 consistent with the Sustainable Building 2030 performance standards. These programs
4.22 must include offerings of design assistance and modeling, financial incentives, and the
4.23 verification of the proper installation of energy-efficient design components in new
4.24 and substantially reconstructed buildings. A utility making an expenditure under its
4.25 conservation improvement program that results in a building meeting the Sustainable
4.26 Building 2030 performance standards may claim the energy savings toward its energy
4.27 savings goal established in section 216B.241, subdivision 1c.

4.28 (f) The commissioner shall report to the legislature every three years, beginning
4.29 January 15, 2010, on the cost-effectiveness and progress of implementing the Sustainable
4.30 Building 2030 performance standards and shall make recommendations on the need to
4.31 continue the program as described in this section.

4.32 **Sec. 4. EFFECTIVE DATE.**

4.33 Sections 1 to 3 are effective the day following final enactment.