Conservation of Energy and Natural Resources in the Design of State Building Projects

This Act encourages state agencies that are constructing new, or renovating existing, buildings to use either the Green Globes or Leadership in Energy and Environmental Design (LEED) sustainable building programs to assess the environmental attributes of the structure. The legislation also creates a Legislative Task Force on Sustainable Building Design and Practices to review and advise state agencies about “green” building practices.

Submitted as:
Arkansas
Act 1770 of the 2005 Regular Session
Status: Enacted into law in 2005.

Suggested State Legislation

(Title, enacting clause, etc.)

Section 1. [Short Title.] This Act may be cited as “An Act to Promote the Conservation of Energy and Natural Resources in the Design of State Building Projects.”

Section 2. [Legislative Findings.] It is found and determined by the [Legislature] that:
(1) State-funded building projects have a significant impact on the environment of our State, the economy, and the health and productivity of building inhabitants;
(2) State government currently spends approximately [seventy million dollars] annually for electricity and natural gas consumed in state buildings, and energy expenditures have been increasing at nearly [four percent (4%)] per year over the last [ten (10) years];
(3) It is incumbent upon this state government to lead by example to minimize energy use and environmental impact in state buildings;
(4) Innovations in building science, technology, and operations are available to maximize the economic utility of state-funded building projects and reduce energy costs, while achieving the best environmental performance, and while reducing adverse impacts on the environment; and
(5) (A) Incorporating principles of sustainability in building design will enhance efficient management of material resources and waste, protection of health and indoor environmental quality, reduce the longer term costs of construction and operation of state-funded buildings, and promote the use of appropriate state products in the buildings.

(B) In recognition of the economic, energy conservation, and environmental benefits of sustainable building design, it is in the best interest of this state to initiate a process to encourage improved building practices, to provide support and information to assist state agencies in carrying out the purposes of this Act, and to continue development of best building practices through a legislative task force to evaluate and report to the [General Assembly] the progress being made under this Act.

Section 3. [Definitions.] As used in this Act:
(1) “Adaptive reuse” means the modification, to accommodate a function other than its original intent, of any building site and existing inhabited structure;

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(2) (A) “Building project” means any inhabited physical structure and project building site.

(B) “Building project” does not include ancillary structures or buildings with temporary occupancy such as park restrooms, pavilions, storage facilities, or similar structures.

(C) “Building project” includes any structure in which any individual spends more than an hour of time within the structure, such as residences, offices, visitors’ centers, classrooms, administration buildings, etc.;

(3) “Grant applicant” means any individual, institution, governmental jurisdiction, or other organization recognized by the granting department or agency as qualified to apply for financial assistance from any state department, agency, or office for the purpose of planning, designing, or constructing a new or rehabilitated building;

(4) (A) “Green Globes” means the online environmental assessment tool as developed by the Green Building Initiative as of December 2004.

(B) “Green Globes” allows designers, property owners, and managers to evaluate and rate buildings against best sustainable building design and practices, and integrate principles of sustainable architecture at every stage of project delivery in order to design and construct buildings that will be energy and resource efficient, achieve operational savings, and provide healthier environments in which to live and work;

(5) (A) “Leadership in Energy and Environmental Design” means the following building rating systems developed by the United States Green Building Council:

(i) LEED-NC 2.1, as it exists on January 1, 2005;

(ii) LEED-EB, as it exists on January 1, 2005; or

(iii) LEED-CI, as it exists on January 1, 2005.

(B) “Leadership in Energy and Environmental Design” allows designers, property owners, and managers to evaluate and rate buildings against best sustainable building design and practices, and integrate principles of sustainable architecture at every stage of project delivery in order to design and construct buildings that will be energy- and resource-efficient, achieve operational savings, and provide healthier environments in which to live and work;

(6) “Newly designed construction project” means any building and its building site for which a contract has been entered into beginning [July 1, 2005], to construct a building and building site improvements as outlined in Leadership in Energy and Environmental Design or Green Globes rating systems;

(7) “Project building site” means all property associated with a building, including the defined legal description of the property or the defined project limits;

(8) (A) “Project limits” means the physical boundaries of a construction project within which all construction activity must occur.

(B) “Project limits” includes material and equipment storage space, lay down or prefabrication space, clearing, grubbing, and drainage improvements;

(9) “Project team” means the persons or individuals representing the state agency or owner, professional design consultants, and building contractor, if a contractor is determined prior to design;

(10) “Proposed construction project” means all building construction projects in the conceptual planning stages for which a design contract has been executed after [July 1, 2005];

(11) “Public and private partnerships” means any private development that uses state money to assist in the planning, design, or construction of a building project, such as a building project providing economic incentives for development;

(12) “Public funding” means federal or state funds that are allocated for a state building project;
“(13) “Rehabilitation project” means any building project involving the modification or adaptive reuse of an existing facility in which [twenty-five percent (25%)] or more of the physical structure, façade, or interior space of a facility is being changed or modified;

(14) “State agency” means all departments, offices, boards, commissions, and institutions of the state, including the [state-supported institutions of higher education];

(15) “State building project” means any inhabited physical structure and project building site in which:

(A) A state agency secures the design or construction contract; and
(B) Public funding is used in whole or in part to design or construct the project;

(16) “Sustainable” means that:

(A) A building integrates building materials and methods that promote environmental quality, energy conservation, economic vitality, and social benefit through the design, construction, and operation of the built environment;
(B) A building merges sound, environmentally responsible practices into [one (1)] discipline that looks at the environmental, economic, and social effects of a building or built project as a whole; and
(C) The design encompasses the following broad topics:

(i) Efficient management of energy and water resources;
(ii) Management of material resources and waste;
(iii) Protection of environmental quality;
(iv) Protection of health and indoor environmental quality;
(v) Reinforcement of natural systems; and
(vi) Integrating the design approach.

Section 4. [State Standards.]

(a) If a state agency decides to pursue either the Leadership in Energy and Environmental Design certification or the Green Globes certification, the standards of this section shall apply for the purpose of this state’s building projects.

(b) (1) Use of the Leadership in Energy and Environmental Design rating system shall be with the following supplemental provisions specific to this state’s building projects:

(A) Under LEED Credit EQ 4.4, [one (1) point] shall be awarded for the use of composite wood and agrifiber products if the architect or responsible party provides appropriate documentation that the products are third-party certified as meeting the American National Standards Institute standard requirements, ANSI A208.1 for Particleboard Standard and ANSI A 2808.2 for MDF, for formaldehyde emissions or contain no added urea-formaldehyde;

(B) Under LEED Credit MR 4, [one (1) point] shall be awarded when the sum of postconsumer recycled content plus [one-half (1/2)] of the preconsumer recycled content constitutes at least [ten percent (10%)] of the total value of the materials in the project. A [second point] shall be awarded if the sum of postconsumer recycled content plus [one-half (1/2)] of the preconsumer content constitutes at least [twenty percent (20%)] of the total value of the materials in the project. The valuation is to be determined by using the LEED-NC letter template;

(C) Under LEED Credit MR 6, [one (1) point] shall also be awarded for the use of renewable, bio-based materials for [five percent (5%)] of the total value of all the products used in the project that are either residuals of or products grown or harvested under a recognized sustainable management system, such as the Forest Stewardship Council, the Sustainable Forestry Initiative Program, the American Tree Farm System, the Canadian Standards Association, the Organic Trade Association, and the Association for Bamboo in
Construction. The applicable vendor’s or manufacturer’s certification documentation must be provided;

(D) Under LEED Credit MR 7, [one (1) point] shall also be awarded for the use of renewable, bio-based raw materials certified in accordance with [one (1) or more] premier certification programs for environmental management for [fifty percent (50%)] of the total value of all bio-based materials and products used in the project. Certification programs include, but are not limited to, the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, the Canadian Standards Association, the Organic Trade Association, and the Association for Bamboo in Construction. The applicable vendor’s or manufacturer’s certification documentation must be provided;

(E) Under LEED Innovation in Design Credit 1.1, [one (1) point] will be awarded if [five percent (5%)] or more of the mass of all building materials used are carbon sequestering bio-based products managed under a recognized sustainable management plan; and

(F) Under LEED Innovation in Design Credit 1.2, [one (1) point] will be awarded for the use of bio-based materials derived from multiple credible certified sources supported by an environmental management system certified under the International Organization for Standardization standard ISO 14001, including the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, the Canadian Standards Association, the Organic Trade Association, and the Association for Bamboo in Construction. The applicable vendor’s or manufacturer’s certification documentation must be provided.

(2) Use of the Green Globes rating system shall be with the following supplemental provision specific to this state’s building projects:

(A) An additional [fifteen (15) points] shall be awarded if [five percent (5%)] or more of the mass of all building materials used are carbon sequestering wood bio-based products; and

(B) [Fifteen (15) points] will be awarded for the use of bio-based materials derived from multiple credible certified sources supported by an environmental management system certified under the International Organization for Standardization standard ISO 14001, including the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, the Canadian Standards Association, the Organic Trade Association, and the Association for Bamboo in Construction. The applicable vendor’s or manufacturer’s certification documentation must be provided.

Section 5. [Application to State Building Projects.] State agencies conducting or funding a public building project or rehabilitation project are encouraged to refer to and should utilize whenever possible and appropriate the Leadership in Energy and Environmental Design or Green Globes rating systems referred to in this Act.

Section 6. [Legislative Task Force on Sustainable Building Design and Practices.] (a) The Legislative Task Force on Sustainable Building Design and Practices is established to:

(1) continue to review, discuss, and advise on issues related to sustainable design and practices for buildings;

(2) monitor case study projects and evaluate performance and outcomes relevant to high performance building strategies;

(3) serve as a reference for educational resources; and

(4) ask for a review of sustainable building design and practices performed by state agencies.
(b) (1) The task force shall be composed of no more than [twenty (20)] members. The number of members shall be determined by agreement between the [Chair of the Senate Interim Committee on Public Health, Welfare, and Labor and the Chair of the House Interim Committee on Public Health, Welfare, and Labor].

(2) The [Chair of the Senate Interim Committee on Public Health, Welfare, and Labor and the Chair of the House Interim Committee on Public Health, Welfare, and Labor] shall appoint the membership pursuant to procedure agreed upon by the chairs.

(3) The task force shall include members of the [General Assembly] and members of the public.

(4) The cochairs of the task force shall be members of the [General Assembly]. One (1) cochair shall be a member of the [Senate] and one (1) cochair shall be a member of the [House of Representatives].

c) The legislative members of the task force shall be entitled to mileage and per diem at the same rate as for attending other legislative committees.

d) The task force shall receive staff support from the [Bureau of Legislative Research].

e) The task force shall expire on [July 1, 2007], unless continued by an Act of the [General Assembly].

Section 7. [Emergency Clause.] It is found and determined by the [General Assembly] of this state that there is a need to incorporate energy and natural resource conservation measures into state buildings and state-funded buildings; that this Act will assist the state to provide better use of natural resources, and that this Act is immediately necessary because of the need to incorporate standards into new construction. Therefore, an emergency is declared to exist and this Act being necessary for the preservation of the public peace, health, and safety shall become effective on [July 1, 2005].

Section 8. [Severability.] [Insert severability clause.]

Section 9. [Repealer.] [Insert repealer clause.]

Section 10. [Effective Date.] [Insert effective date.]