

# 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.)

1           Section 1. [*Short Title.*] This Act may be cited as “An Act to Promote the Conservation of  
2 Energy and Natural Resources in the Design of State Building Projects.”  
3

4           Section 2. [*Legislative Findings.*] It is found and determined by the [Legislature] that:

5           (1) State-funded building projects have a significant impact on the environment of our  
6 State, the economy, and the health and productivity of building inhabitants;

7           (2) State government currently spends approximately [seventy million dollars] annually  
8 for electricity and natural gas consumed in state buildings, and energy expenditures have been  
9 increasing at nearly [four percent (4%)] per year over the last [ten (10) years];

10           (3) It is incumbent upon this state government to lead by example to minimize energy use  
11 and environmental impact in state buildings;

12           (4) Innovations in building science, technology, and operations are available to maximize  
13 the economic utility of state-funded building projects and reduce energy costs, while achieving  
14 the best environmental performance, and while reducing adverse impacts on the environment;  
15 and

16           (5) (A) Incorporating principles of sustainability in building design will enhance  
17 efficient management of material resources and waste, protection of health and indoor  
18 environmental quality, reduce the longer term costs of construction and operation of state-funded  
19 buildings, and promote the use of appropriate state products in the buildings.

20           (B) In recognition of the economic, energy conservation, and environmental  
21 benefits of sustainable building design, it is in the best interest of this state to initiate a process to  
22 encourage improved building practices, to provide support and information to assist state  
23 agencies in carrying out the purposes of this Act, and to continue development of best building  
24 practices through a legislative task force to evaluate and report to the [General Assembly] the  
25 progress being made under this Act.  
26

27           Section 3. [*Definitions.*] As used in this Act:

28           (1) “Adaptive reuse” means the modification, to accommodate a function other than its  
29 original intent, of any building site and existing inhabited structure;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

76 (12) “Public funding” means federal or state funds that are allocated for a state building  
77 project;

78 (13) “Rehabilitation project” means any building project involving the modification or  
79 adaptive reuse of an existing facility in which [twenty-five percent (25%)] or more of the  
80 physical structure, façade, or interior space of a facility is being changed or modified;

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

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

85 (A) A state agency secures the design or construction contract; and

86 (B) Public funding is used in whole or in part to design or construct the project;

87 and

88 (16) “Sustainable” means that:

89 (A) A building integrates building materials and methods that promote  
90 environmental quality, energy conservation, economic vitality, and social benefit through the  
91 design, construction, and operation of the built environment;

92 (B) A building merges sound, environmentally responsible practices into [one (1)]  
93 discipline that looks at the environmental, economic, and social effects of a building or built  
94 project as a whole; and

95 (C) The design encompasses the following broad topics:

96 (i) Efficient management of energy and water resources;

97 (ii) Management of material resources and waste;

98 (iii) Protection of environmental quality;

99 (iv) Protection of health and indoor environmental quality;

100 (v) Reinforcement of natural systems; and

101 (vi) Integrating the design approach.

102  
103 Section 4. [*State Standards.*]

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

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

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

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

120 (C) Under LEED Credit MR 6, [one (1) point] shall also be awarded for  
121 the use of renewable, bio-based materials for [five percent (5%)] of the total value of all the  
122 products used in the project that are either residuals of or products grown or harvested under a  
123 recognized sustainable management system, such as the Forest Stewardship Council, the  
124 Sustainable Forestry Initiative Program, the American Tree Farm System, the Canadian  
125 Standards Association, the Organic Trade Association, and the Association for Bamboo in

126 Construction. The applicable vendor's or manufacturer's certification documentation must be  
127 provided;

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

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

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

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

148 (A) An additional [fifteen (15) points] shall be awarded if [five percent  
149 (5%)] or more of the mass of all building materials used are carbon sequestering wood bio-based  
150 products; and

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

158

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

163

164 Section 6. [*Legislative Task Force on Sustainable Building Design and Practices.*]

165 (a) The Legislative Task Force on Sustainable Building Design and Practices is  
166 established to:

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

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

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

172 (4) ask for a review of sustainable building design and practices performed by  
173 state agencies.

174 (b) (1) The task force shall be composed of no more than [twenty (20)] members. The  
175 number of members shall be determined by agreement between the [Chair of the Senate Interim  
176 Committee on Public Health, Welfare, and Labor and the Chair of the House Interim Committee  
177 on Public Health, Welfare, and Labor].

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

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

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

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

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

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

191

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

199

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

201

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

203

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