



State of Wisconsin  
2009 - 2010 LEGISLATURE

LRB-3485/P7

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MUNDAY

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~~PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION~~

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1 AN ACT *to renumber and amend* 13.48 (15) and 101.025 (4) (intro.); *to amend*  
 2 16.84 (5), 101.027 (2), 101.027 (3) (a) 1., 101.027 (3) (b) 1., 101.05 (1) and (3),  
 3 101.65 (1) (a) (intro.) and 119.04 (1); and *to create* 13.48 (2) (jm), 13.48 (15) (b),  
 4 16.85 (3m), 16.856, 66.0902, 101.02 (23), 101.025 (4) (ar), 101.028, 120.24 and  
 5 145.133 of the statutes; **relating to:** energy conservation standards for the  
 6 construction of certain buildings, energy and environmental design standards  
 7 for state buildings, structures, and facilities, energy and environmental design  
 8 standards for school district facilities and other local government buildings,  
 9 leasing of state buildings, structures, and facilities, standards for the  
 10 construction and use of graywater systems, and granting rule-making  
 11 authority.

*Analysis by the Legislative Reference Bureau*

~~This analysis is not complete. A complete analysis will be provided in a later version.~~

Currently, with certain exceptions, the Department of Administration (DOA) must ensure that the specifications for each state construction project require the use

of recovered and recycled materials to the extent that such use is technically and economically feasible. With certain exceptions, DOA must also prescribe and enforce energy efficiency standards for energy consuming equipment that is installed in connection with state construction projects. The standards must meet or exceed specified statutory standards. The Building Commission must also apply these standards when entering into certain leases on behalf of the state. Current law also requires the commission to employ a design for cogeneration of steam and electricity in state-owned central steam generating facilities unless the commission determines that such a design is not cost-effective and technically feasible. Currently, the commission must also ensure that state-operated steam generating facilities are designed to allow the use of biomass fuels and refuse-derived fuels to the greatest extent cost-effective and technically feasible. In addition, under current law, the commission is prohibited from approving the construction or major remodeling of or addition to any state building or structure unless the building or structure makes maximum practical use of passive solar energy system design elements and, unless not technically or economically feasible, incorporates an active solar energy system or photovoltaic solar energy system or other renewable energy system.

or for the expansion of an existing state building, structure or facility that add at least 10,000 gross square feet of conditioned space

This bill directs DOA and the Building Commission to ensure that the plans and specifications for each major state construction project (each project for the construction of any new state building, structure, or facility containing at least 10,000 gross square feet of conditioned space, or for the repair, renewal, renovation, ~~or expansion~~ of any existing building, structure, or facility for occupancy by any state entity if the building, structure, or facility contains at least 10,000 gross square feet of conditioned space and the project affects more than 50 percent of the existing gross square feet of conditioned space in the building, structure, or facility) conform at a minimum to the requirements under the LEED green building rating system at the silver performance level, as prescribed by the Department of Commerce (Commerce) based upon the standards of the U.S. Green Building Council. The bill also directs DOA and the Building Commission to ensure that each such building, structure, or facility conforms to specific standards specified by Commerce that are derived from various national and international building codes for energy performance, ~~reuse of demolition materials~~, ventilation components, indoor air quality performance, and water usage level. The bill also directs the commission to enforce compliance with the bill's requirements with respect to all major construction projects whenever the buildings, structures, or facilities being constructed are purchased by the state under a purchase agreement or whenever construction, repair, renewal, renovation, or expansion of a building, structure, or facility is performed for the state under a lease agreement with option to purchase.

The bill also directs the Building Commission to apply all moneys available for its use under the Authorized State Building Program to achieve certification as of January 1, 2015, by the U.S. Green Building Council for not less than 15 percent of the gross square footage of conditioned space owned or leased by state agencies, as determined by DOA, as meeting minimum LEED energy performance requirements for the operation and maintenance of existing buildings. In addition, the bill directs

directs DOA and the commission to ensure that each project to construct such a building, structure, or facility for the state shall conform to specified requirements for recycling of construction waste and demolition materials. In addition, the bill

DOA to promulgate rules that require the Building Commission to continue to apply all moneys available for its use under the Authorized State Building Program during the period from January 1, 2015, to January 1, 2030, to achieve certification by the U.S. Green Building Council for greater percentages of the gross square footage of conditioned space owned or leased by state agencies as meeting minimum LEED performance requirements for the operation and maintenance of existing buildings by specified dates.

Currently, DOA has responsibility for the negotiation and administration of leases of real property by this state, except as otherwise provided by law. The Building Commission has authority to approve leases of real property by the state, except as otherwise provided by law. This bill directs DOA, before entering into any lease, or renewing or extending any lease, for improved real property to be used by a state agency, to require the prospective lessor to disclose the energy use intensity for the total property and the annual energy usage for the total property, calculated in accordance with Energy Star standards, as determined by Commerce, and to verify and forward that information to the Building Commission. The bill directs DOA to require other state agencies that have authority to enter into leases for improved real property to obtain and forward the same information to the Building Commission before entering into, or renewing or extending, any lease for real property. The bill then prohibits the Building Commission from approving any lease for improved real property to be used by this state unless DOA certifies to the commission that the energy use intensity for the total property and the annual energy usage for the total property conform to Energy Star standards at a level sufficient to meet the minimum threshold for compliance with the LEED Green Building Rating System for existing buildings-operation and maintenance performance requirements, as determined by Commerce. The bill directs the Building Commission to require other state agencies that have authority to enter into leases for improved real property, to certify to the commission, before entering into, or renewing or extending, any lease for real property to be used by this state, that the energy use intensity for the total property and the annual energy usage for the total property conform to the same standards. (X)

The bill also requires DOA, with limited exceptions, to ensure that major state buildings, structures, and facilities that are constructed by or for the state conform to specified energy performance standards at increasingly stringent levels by specified dates beginning on the first day of the 7th month beginning after the day the act resulting from the bill becomes law and ending on January 1, 2030, by which date all major state buildings, structures, and facilities that are constructed by or for the state must achieve a zero net energy level of energy performance. In addition, the bill directs DOA to report annually to the governor and the Building Commission concerning the percentage level of adherence to the requirements imposed upon DOA under the bill that become effective on a date later than the end of the preceding year and the percentage level of adherence to the requirement imposed upon the Building Commission to apply all moneys available to the commission to achieve certification for at least 15 percent of conditioned space in existing owned or leased

state buildings, structures, or facilities as meeting the LEED energy performance standards specified in the bill.

Under current law, Commerce is required to promulgate an energy conservation code that sets design requirements for construction and equipment for the purpose of energy conservation in public buildings and places of employment. Commerce must consider incorporating into the energy conservation code design requirements from the most current national energy efficiency design standards, including the International Energy Conservation Code (IECC) or another energy efficiency code that is generally accepted and used by engineers and the construction industry. Current law requires that Commerce review the code on a regular basis, including whenever there is a revision of the IECC, and update the code accordingly.

This bill requires Commerce to incorporate into the energy conservation code a standard that is based upon a specific standard of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and eliminates the requirement to use other standards specified under current law. As with the revision requirements under current law, the bill requires Commerce to update the code whenever the ASHRAE standard is revised.

Current law also requires Commerce to promulgate rules for ventilation systems in public buildings and places of employment. This bill requires Commerce to incorporate a specific ASHRAE standard into those rules and to update the rules when the standard is revised.

Under current law, a city, village, town, or county may exercise jurisdiction over the construction of new dwellings by passing an ordinance, provided that the ordinance meets the requirements of the one- and two-family dwelling code under current law, this bill provides that such an ordinance may exceed the requirements of that code as they relate to energy conservation in the construction of new dwellings.

This bill authorizes Commerce to promulgate rules that establish standards for the installation of graywater and rainwater systems and that authorize the reuse of graywater and rainwater within the building, or on the property surrounding the building, from which the graywater or rainwater was generated. Under the bill, graywater is defined as wastewater generated from the use of a clothes washer, sink, shower, or bathtub.

For further information see the *state and local* fiscal estimate, which will be printed as an appendix to this bill.

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***The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:***

- 1           **SECTION 1.** 13.48 (2) (jm) of the statutes is created to read:
- 2           13.48 (2) (jm) 1. In this paragraph, "conditioned space" means space that is
- 3           designed to have controlled environmental conditions.

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1           2. The building commission shall not approve the design or construction of any  
 2 project for the construction of any building, structure, or facility for a board, agency,  
 3 officer, department, commission, or body corporate, if the building, structure, or  
 4 facility after construction will contain at least 10,000 gross square feet of conditioned  
 5 space for occupancy by any such entity, or of any project for the repair, renewal,  
 6 renovation, or expansion of any existing building, structure, or facility for occupancy  
 7 by any such entity if the building, structure, or facility contains at least 10,000 gross  
 8 square feet of conditioned space and the project affects more than 50 percent of the  
 9 existing gross square feet of conditioned space in the building, structure, or facility,  
 10 regardless of the funding source of the project, unless the department of  
 11 administration verifies and certifies to the commission, after reviewing the plans  
 12 and specifications, all of the following:

13           a. That the ~~energy performance for the~~ project conforms at a minimum to the  
 14 requirements under the LEED <sup>G</sup> green <sup>B</sup> building <sup>R</sup> rating <sup>S</sup> system at the silver level, as  
 15 defined in s. 16.856 (1) (f), for construction projects.

16           b. That the energy performance for the project is at least 30 percent better than  
 17 the performance standard prescribed by the department of commerce under s.  
 18 101.028 based upon standard 90.1-2007 of the American Society of Heating,  
 19 Refrigerating and Air Conditioning Engineers or its most current equivalent, as  
 20 documented by energy modeling and certified in writing by the chief engineer for the  
 21 project.

22           c. That at least 75 percent of the demolition materials from any demolition  
 23 required to undertake the project are ~~reused~~ <sup>recycled</sup> in the project or transferred to a 3rd  
 24 party for ~~reuse~~ <sup>recycling</sup> as a part of another construction project for an agency, as defined in  
 25 s. 16.70 (1e), or a local governmental unit, as defined in s. 19.42 (7u).

construction materials delivered to the project site but not used in the project and the

## SECTION 1

1 d. That the ventilation components for the project are strictly in conformity  
2 with standards prescribed by the department of commerce under s. 101.028 based  
3 upon standard 62.1-2004 of the American Society of Heating, Refrigerating, and Air  
4 Conditioning Engineers, and the chief engineer for the project certifies in writing  
5 that no exemptions from strict conformity with that standard have been authorized.

6 e. That the project has an indoor air quality management plan that addresses  
7 adherence to the heating, ventilation, and air conditioning performance standards  
8 for the project, source control that ensures use of low emission materials and  
9 finishes, pathway interruption to prevent migration of contaminants during the  
10 construction process, housekeeping procedures to prevent the spread and growth of  
11 contaminants during the construction process, and construction activity scheduling  
12 to prevent cross contamination of materials used in the project during the  
13 construction process. The plan shall be consistent at a minimum with standards  
14 promulgated by the department of commerce under s. 101.028 based upon indoor air  
15 quality guidelines for occupied building of the Sheet Metal and Air Conditioning  
16 Contractors' National Association, 2nd edition, 2007.

17 f. That the project upon completion will attain a level of interior water use no  
18 greater than 30 percent below the interior water use baseline, as determined by the  
19 department of administration in accordance with the LEED <sup>G B R</sup> green building rating  
20 <sup>S</sup> system, as defined in s. 16.856 (1) (e) assuming that 100 percent of the indoor  
21 plumbing fixtures used in the project are in compliance with standards promulgated  
22 by the department of commerce under s. 101.028 based upon the strictest applicable  
23 standard under the Uniform Plumbing Codes-2006 promulgated by the  
24 International Association of Plumbing and Mechanical Officials or the International

1 Plumbing Codes-2006 fixture and fitting performance requirements promulgated  
2 by the International Code Council.

3 3. The building commission shall not enter into an agreement for the purchase  
4 of or for the lease of, or renewal of a lease of, with option to purchase, any building,  
5 structure, or facility that is constructed or to be constructed for occupancy by any  
6 board, agency, officer, department, commission, or body corporate, if the building,  
7 structure, or facility after construction will contain at least 10,000 gross square feet  
8 of conditioned space for occupancy by any such entity, or any building, structure, or  
9 facility that is to be repaired, renewed, renovated, or expanded for occupancy by any  
10 such entity if the building, structure, or facility contains at least 10,000 gross square  
11 feet of conditioned space and the repair, renewal, renovation, or expansion affects  
12 more than 50 percent of the existing gross square feet of conditioned space in the  
13 building, structure, or facility, regardless of the funding source of the agreement,  
14 unless the department of administration verifies and certifies that the building,  
15 structure, or facility conforms or will after construction, repair, renewal, renovation  
16 or expansion conform to all of the standards specified in subd. 2.

17 4. The building commission shall apply all moneys available for its use under  
18 the authorized state building program to achieve certification as of January 1, 2015,  
19 by the U.S. Green Building Council for not less than 15 percent of the total gross  
20 square footage of conditioned space in buildings, structures, and facilities that are  
21 owned or leased by agencies on that date, as determined by the department of  
22 administration under s. 16.856 (3), for meeting the minimum LEED performance  
23 requirements for the operation and maintenance of existing buildings, as defined in  
24 s. 16.856 (1) (h).

**SECTION 1**

1           5. The building commission shall apply all moneys available for its use under  
2 the authorized state building program to achieve certification by the dates specified  
3 by rule of the department of administration under s. 16.856 (6) by the U.S. Green  
4 Building Council for not less than the percentages specified by that rule of the total  
5 gross square footage of conditioned space in buildings, structures, and facilities that  
6 are owned or leased by agencies on the dates specified by that rule, as determined  
7 by the department of administration under s. 16.856 (3), for meeting the minimum  
8 LEED performance requirements for the operation and maintenance of existing  
9 buildings, as defined in s. 16.856 (1) (h).

10           **SECTION 2.** 13.48 (15) of the statutes is renumbered 13.48 (15) (a) and amended  
11 to read:

12           13.48 (15) (a) Subject to the requirements of par. (b) and s. 20.924 (1) (i), the  
13 building commission shall have the authority to acquire leasehold interests in land  
14 and buildings where such authority is not otherwise provided to an agency by law.

15           **SECTION 3.** 13.48 (15) (b) of the statutes is created to read:

16           13.48 (15) (b) The building commission shall not approve the leasing of, or the  
17 renewal or extension of any lease for, property for use by this state unless the  
18 department of administration has certified to the commission that the energy use  
19 intensity for the total property and the annual energy usage for the total property  
20 conform to standards promulgated by the department of commerce under s. 101.028  
21 based upon Energy Star standards consistent with the minimum LEED performance  
22 requirements for the operation and maintenance of existing buildings. The  
23 commission shall also require other agencies, as defined in s. 16.70 (1e), that have  
24 authority to lease improved real property, to certify to the commission, before  
25 entering into, or renewing or extending, any lease of real property, that the energy

1 use intensity for the total property and the annual energy usage for the total property  
2 conform to the same standards.

3 **SECTION 4.** 16.84 (5) of the statutes is amended to read:

4 16.84 (5) Have responsibility, subject to approval of the governor, for all  
5 functions relating to the leasing, acquisition, allocation and utilization of all real  
6 property by the state, except where such responsibility is otherwise provided by the  
7 statutes. In this connection, the Prior to entering into any lease, or renewing or  
8 extending any lease, for property to be used by this state, the department shall  
9 require the prospective lessor to disclose the energy use intensity for the total  
10 property, measured on a square foot basis, and the annual energy usage for the total  
11 property, calculated in accordance with standards promulgated by the department  
12 of commerce under s. 101.028 based upon Energy Star standards, as defined in s.  
13 13.48 (15) (b), consistent with the minimum LEED performance requirements for the  
14 operation and maintenance of existing buildings, as defined in s. 16.856 (1) (h). The  
15 department shall verify and certify this information to the building commission  
16 before the commission considers approval of the lease, or the renewal or extension  
17 of the lease. The department shall also require other agencies, as defined in s. 16.70  
18 (1e), that have authority to enter into leases for real property to obtain, verify, and  
19 certify the same information to the commission before entering into any lease, or  
20 renewing or extending any lease, for property to be used by those agencies. The  
21 department shall, with the governor's approval, require physical consolidation of  
22 office space utilized by any executive branch agency having fewer than 50 authorized  
23 full-time equivalent positions with office space utilized by another executive branch  
24 agency, whenever feasible. The department shall lease or acquire office space for  
25 legislative offices or legislative service agencies at the direction of the joint

1 committee on legislative organization. In this subsection, “executive branch agency”  
2 has the meaning given in s. 16.70 (4).

3 **SECTION 5.** 16.85 (3m) of the statutes is created to read:

4 16.85 (3m) To appoint or approve the appointment of a chief engineer for each  
5 major construction project, as defined in s. 16.856 (1) (g).

6 **SECTION 6.** 16.856 of the statutes is created to read:

7 **16.856 Energy and environmental design standards for certain state**  
8 **buildings, structures, and facilities. (1)** In this section:

9 (a) “Agency” has the meaning given in s. 16.70 (1e).

10 (b) “ASHRAE standard” means the standard promulgated by the department  
11 of commerce under s. 101.028 based upon standard 90.1-2007 of the American  
12 Society of Heating, Refrigerating and Air Conditioning Engineers or its current  
13 equivalent as determined by the department of commerce under s. 101.028.

14 (c) “Conditioned space” means space that is designed to have controlled  
15 environmental conditions.

16 (d) “IECC standards” means the energy efficiency design standards  
17 promulgated by the department of commerce under s. 101.028 based upon the  
18 national energy efficiency design standards of the International Energy  
19 Conservation Code or their current equivalents as determined by the department of  
20 commerce under s. 101.028.

21 (e) “LEED G green B building R rating S system” means the green building rating  
22 system of the U.S. Green Building Council designated as the leadership in energy  
23 and environmental design system or its current equivalent as determined by the  
24 department of commerce under s. 101.028.

1 (f) "LEED silver level" means the performance level designated as the silver  
2 level under the LEED <sup>G</sup>green <sup>B</sup>building <sup>R</sup>rating <sup>S</sup>system or its current equivalent as  
3 determined by the department of commerce under s. 101.028.

4 (g) "Major construction project" means a project for the construction of a state  
5 building, structure, or facility that will, upon completion, contain at least 10,000  
6 gross square feet of conditioned space, or for the repair, renewal, renovation, or  
7 expansion of an existing state building, structure, or facility containing at least

8 10,000 gross square feet of conditioned space that affects more than 50 percent of the  
9 existing gross square feet of conditioned space in that building, structure, or facility

10 (h) "Minimum LEED performance requirements for the operation and  
11 maintenance of existing buildings" means the performance requirements so  
12 designated under the LEED <sup>G</sup>green <sup>B</sup>building <sup>R</sup>rating <sup>S</sup>system, as prescribed by the U.S.  
13 Green Building Council, or its current equivalent as determined by the department  
14 of commerce under s. 101.028.

15 (i) "Zero net energy" means an energy consumption level under which a  
16 building, structure, or facility produces as much energy for electricity, heating, and  
17 cooling from renewable sources in any calendar year as the building, structure, or  
18 facility consumes during the same period.

19 (2) The department shall ensure that the plans and specifications for each  
20 major construction project conform at a minimum to the requirements for  
21 certification at the LEED silver level. The department shall also ensure that the  
22 energy performance, use and recycling of construction materials, ventilation  
23 components, indoor air quality performance, and water usage level for each major  
24 construction project conform to the standards specified s. 13.48 (2) (jm) 2.

Handwritten notes in the right margin: "add at least 10,000 gross square feet of conditioned space" with arrows pointing to lines 8 and 9. Another note: "or for the expansion of an existing state building, structure, or facility" with an arrow pointing to line 7.

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1           (3) The department shall maintain a current inventory of the location and  
2 gross square footage of the conditioned space in all buildings, structures, and  
3 facilities that are owned or leased by any agency for its use or the use of another  
4 agency. The inventory shall include for each building, structure, or facility  
5 information concerning the conditioned space in the building, structure, or facility  
6 and whether the building, structure, or facility or any portion thereof is certified or  
7 eligible for certification by the U.S. Green Building Council as meeting the minimum  
8 LEED performance requirements for the operation and maintenance of existing  
9 buildings.

10           (4) Except as provided in sub. (5), the department shall ensure that each  
11 building, structure, or facility constructed, repaired, renewed, renovated, or  
12 expanded by or for the state that is a major construction project conforms to  
13 whichever of the following energy performance standards applies, based upon the  
14 year in which construction, repair, renewal, renovation, or expansion of the building,  
15 structure, or facility begins:

16           (a) For a building, structure, or facility the construction, repair, renewal,  
17 renovation, or expansion of which begins on or after the first day of the 7th month  
18 beginning after the effective date of this paragraph .... [LRB inserts date], but before  
19 January 1, 2015, the energy performance shall be at least 30 percent better than the  
20 energy performance under the ASHRAE standard or the IECC standards, whichever  
21 is the most stringent.

22           (b) For a building, structure, or facility the construction, repair, renewal,  
23 renovation, or expansion of which begins after December 31, 2014, but before  
24 January 1, 2020, the energy performance shall be at least 70 percent better than the

1 performance under the ASHRAE standard or the IECC standards, whichever is the  
2 most stringent.

3 (c) For a building, structure, or facility the construction, repair, renewal,  
4 renovation, or expansion of which begins after December 31, 2019, but before  
5 January 1, 2025, the energy performance shall be at least 80 percent better than the  
6 energy performance under the ASHRAE standard or the IECC standards, whichever  
7 is the most stringent.

8 (d) For a building, structure, or facility the construction, repair, renewal,  
9 renovation, or expansion of which begins after December 31, 2024, but before  
10 January 1, 2030, the energy performance shall be at least 90 percent better than the  
11 energy performance under the ASHRAE standard or the IECC standards, whichever  
12 is the most stringent.

13 (e) For a building, structure, or facility the construction, repair, renewal,  
14 renovation, or expansion of which begins after December 31, 2029, the energy  
15 performance shall be 100 percent better than the energy performance under the  
16 ASHRAE standard or the IECC standards, whichever is more stringent, and the  
17 building, structure, or facility shall consume zero net energy.

18 (5) Subsection (4) does not apply to the gross square footage of enclosed space  
19 of any building, structure, or facility that is dedicated for laboratory usage if the  
20 ventilation requirements for that gross square footage do not permit compliance with  
21 sub. (4) in that area.

22 (6) The department shall assess the feasibility of achieving certification by the  
23 U.S. Green Building Council for greater than 15 percent of the total gross square  
24 footage of conditioned space in buildings, structures, and facilities that are owned or  
25 leased by agencies, as determined under sub. (3), for meeting the minimum LEED

1 performance requirements for the operation and maintenance of existing buildings  
2 and shall, by rule, specify, for purposes of s. 13.48 (2) (jm) 5., increased levels of  
3 certification and dates during the period from January 1, 2015, to January 1, 2030,  
4 by which those increased levels are to be achieved.

5 (7) Annually no later than March 31, the department shall report to the  
6 governor and the building commission concerning the percentage level of adherence  
7 as of the preceding December 31 to each of the requirements under s. 13.48 (2) (jm)  
8 and this section that become effective on a date following that December 31 and the  
9 percentage level of adherence as of the preceding December 31 to the applicable  
10 requirement under s. 13.48 (2) (jm) 4. or 5.

11 SECTION 7. 66.0902 of the statutes is created to read:

12 **66.0902 Energy and environmental design standards for political**  
13 **subdivision facilities. (1) In this section:**

→ controlled environmental conditions

14 (a) ~~“ASHRAE standards” has the meaning given in s. 16.856 (1) (b).~~

→ conditioned space means space that is designed to have

15 ~~“IECC standards” has the meaning given in s. 16.856 (1) (d).~~

16 (b) “LEED silver level” has the meaning given in s. 16.856 (1) (f).

17 (c) “Major construction project” means a project for the construction of a public

18 building by or for a political subdivision that will, upon completion of the project,

19 contain at least 10,000 gross square feet of ~~enclosed~~ <sup>conditioned</sup> office space or for the repair,

20 renewal, <sup>or</sup> renovation, or expansion of an existing public building by or for a political

21 subdivision containing at least 10,000 gross square feet of ~~enclosed~~ <sup>conditioned</sup> office space that

22 affects more than 50 percent of the existing gross square feet of ~~enclosed~~ <sup>conditioned</sup> office space

23 in that building.

24 (d) “Minority group member” has the meaning given in s. 560.036 (1) (f).

25 (e) “Political subdivision” means any city, village, town, or county.

by or for a political subdivision

↑ or for the expansion of an existing public building to add at least 10,000 gross square feet of conditioned space

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~~(g) "Zero net energy" has the meaning given in s. 16.856 (1) (i).~~

(2) A political subdivision shall ensure that a person to whom it awards a contract for a major construction project agrees, as a condition to receiving the contract, that his or her goal shall be to ensure that at least 25 percent of the employees hired because of the contract will be minority group members and at least 5 percent of the employees hired because of the contract will be women.

A political subdivision shall also ensure that a contract for a major construction project requires the project to meet one of the standards in sub. (3), based on the year in which the project begins. For purposes of this section, a major construction project begins with the issuance of a request for proposal by the political subdivision.

(3) (a) For a project that begins on or after the first day of the 7th month after the effective date of this paragraph .... [LRB inserts date], but before January 1, 2015, the energy performance for the project shall be at least 30 percent better than the performance under the ASHRAE standards or the IECC standards, whichever is the most stringent.

(b) For a project that begins after December 31, 2014, but before January 1, 2020, the energy performance for the project shall be at least 70 percent better than the performance under the ASHRAE standards or the IECC standards, whichever is the most stringent.

(c) For a project that begins after December 31, 2019, but before January 1, 2025, the energy performance for the project shall be at least 80 percent better than the performance under the ASHRAE standards or the IECC standards, whichever is the most stringent.

(d) For a project that begins after December 31, 2024, but before January 1, 2030, the energy performance for the project shall be at least 90 percent better than

1 the performance under the ASHRAE standards or the IECC standards, whichever  
2 is the most stringent.

3 (e) For a project that begins after December 31, 2029, the energy performance  
4 for the project shall be 100 percent better than the performance under the ASHRAE  
5 standards or the IECC standards, whichever is more stringent, and the project shall  
6 consume zero net energy.

7 (7) (3) (4) A political subdivision shall ensure that the plans and specifications for  
8 each major construction project conform at a minimum to the requirements for  
9 certification at the LEED silver level. The political subdivision shall also ensure that  
10 the <sup>energy performance</sup> use and disposal of construction <sup>and demolition</sup> materials, ventilation components, indoor air  
11 quality performance, and water usage level for each major construction project  
12 conform to the standards specified s. 13.48 (2) (jm) 2.

13 SECTION 8. 101.02 (23) of the statutes is created to read:

14 101.02 (23) The department may promulgate rules that establish building and  
15 design requirements for public buildings and places of employment that are based  
16 upon standard 189.1-2009 developed by the American Society of Heating,  
17 Refrigerating and Air-Conditioning Engineers in conjunction with the U.S. Green  
18 Building Council and the Illuminating Engineering Society or that are based upon  
19 the current equivalent of that standard. If the department promulgates rules under  
20 this subsection, the department shall review the rules whenever a revision of  
21 standard 189.1-2009, or its current equivalent, is published. The department shall  
22 complete its review of the rules and submit to the legislature proposed rules  
23 changing the requirements no later than 18 months after the date on which the  
24 revision of the standard is published.

1           **SECTION 9.** 101.025 (4) (intro.) of the statutes is renumbered 101.025 (4) (ag),  
2 and 101.025 (4) (ag) (intro.), as renumbered, is amended to read:

3           101.025 (4) (ag) (intro.) For ventilation systems in public buildings and places  
4 of employment, the department shall ~~adopt~~ promulgate rules setting that  
5 incorporate standard 62.1-2007, or its current equivalent, of the American Society  
6 of Heating, Refrigerating and Air Conditioning Engineers and that set all of the  
7 following:

8           **SECTION 10.** 101.025 (4) (ar) of the statutes is created to read:

9           101.025 (4) (ar) The department shall review the rules promulgated under par.  
10 (ag) whenever a revision of standard 62.1-2007, or its current equivalent, of the  
11 American Society of Heating, Refrigerating and Air Conditioning Engineers, is  
12 published. The department shall complete its review of the rules and submit to the  
13 legislature a proposed rule changing the rules no later than 18 months after the date  
14 on which the revision of the standard is published.

15           **SECTION 11.** 101.027 (2) of the statutes is amended to read:

16           101.027 (2) The department shall review the energy conservation code and  
17 shall promulgate rules that change the requirements of the energy conservation code  
18 to improve energy conservation. No rule may be promulgated that has not taken into  
19 account the cost of the energy conservation code requirement, as changed by the rule,  
20 in relationship to the benefits derived from that requirement, including the  
21 reasonably foreseeable economic and environmental benefits to the state from any  
22 reduction in the use of imported fossil fuel. The proposed rules changing the energy  
23 conservation code shall be submitted to the legislature in the manner provided under  
24 s. 227.19. In conducting a review under this subsection, the department shall  
25 ~~consider incorporating~~ incorporate, into the energy conservation code, ~~design~~

1 requirements from standard 90.1-2007, or its current equivalent, of the most current  
2 national energy efficiency design standards, including the International Energy  
3 Conservation Code or an energy efficiency code other than the International Energy  
4 Conservation Code if that energy efficiency code is used to prescribe design  
5 requirements for the purpose of conserving energy in buildings and is generally  
6 accepted and used by engineers and the construction industry American Society of  
7 Heating, Refrigerating and Air Conditioning Engineers.

8 **SECTION 12.** 101.027 (3) (a) 1. of the statutes is amended to read:

9 101.027 (3) (a) 1. A revision of standard 90.1-2007, or its current equivalent,  
10 of the International Energy Conservation Code American Society of Heating,  
11 Refrigerating and Air Conditioning Engineers is published.

12 **SECTION 13.** 101.027 (3) (b) 1. of the statutes is amended to read:

13 101.027 (3) (b) 1. If the department begins a review under sub. (2) because a  
14 revision of standard 90.1-2007, or its current equivalent, of the International  
15 Energy Conservation Code American Society of Heating, Refrigerating and Air  
16 Conditioning Engineers is published, the department shall complete its review of the  
17 energy conservation code, as defined in sub. (1), and submit to the legislature  
18 proposed rules changing the energy conservation code, as defined in sub. (1), no later  
19 than 18 months after the date on which the revision of standard 90.1-2007, or its  
20 current equivalent, of the International Energy Conservation Code American  
21 Society of Heating, Refrigerating and Air Conditioning Engineers is published.

22 **SECTION 14.** 101.028 of the statutes is created to read:

23 **101.028 Energy performance and environmental design standards for**  
24 **certain public buildings, structures and facilities.** (1) In this section:

1 (a) "Energy Star standards" means the standards prescribed by the U.S.  
2 Environmental Protection Agency under 42 USC 7403 (g) for energy use in buildings.

3 (b) "LEED <sup>G</sup> green <sup>B</sup> building <sup>R</sup> rating <sup>S</sup> system" means the green building rating  
4 system of the U.S. Green Building Council designated as the leadership in energy  
5 and environmental design system or its current equivalent as determined by the  
6 department.

7 (c) "LEED silver level" means the performance level designated as the silver  
8 level under the LEED <sup>G</sup> green <sup>B</sup> building <sup>R</sup> rating <sup>S</sup> system or its current equivalent as  
9 determined by the department.

10 (d) "Minimum LEED performance requirements for the operation and  
11 maintenance of existing buildings" means the performance requirements so  
12 designated under the LEED <sup>G</sup> green <sup>B</sup> building <sup>R</sup> rating <sup>S</sup> system, as prescribed by the U.S.  
13 Green Building Council, or its current equivalent as determined by the department.

14 (e) "U.S. Green Building Council" means the United States Green Building  
15 Council or any successor organization that is substantially the same organization,  
16 as determined by the department.

17 (2) The department shall prescribe, by rule, standards for energy performance  
18 and environmental design in buildings, structures, and facilities which shall apply  
19 to the extent required under ss. 13.48 (2) and (15), 16.84 (5), 16.856, 66.0902, and  
20 120.24. The standards shall be based upon the following standards or, if they are  
21 updated, their current equivalents:

22 (a) The LEED silver level ~~(of energy performance)~~ for new building construction.

23 (b) Minimum LEED performance requirements for the operation and  
24 maintenance of existing buildings.

25 (c) Energy Star standards.

**SECTION 14**

1 (d) Energy performance standard 90.1-2007 of the American Society of  
2 Heating, Refrigerating, and Air Conditioning Engineers.

3 (e) Standard 62.1-2004 of the American Society of Heating, Refrigerating, and  
4 Air Conditioning Engineers.

5 (f) National energy efficiency design standards of the International Energy  
6 Conservation Code adopted the the International Code Council-2006.

7 (g) The Uniform Plumbing Codes-2006 promulgated by the International  
8 Association of Plumbing and Mechanical Officials.

9 (i) Indoor air quality guidelines for occupied buildings promulgated by the  
10 Sheet Metal and Air Conditioning Contractors' National Association, 2nd edition,  
11 2007.

12 (j) The International Plumbing Codes-2006 fixture and fitting performance  
13 requirements promulgated by the International Code Council.

14 (3) The department shall review a rule promulgated under sub. (2) whenever  
15 a revision of a standard on which the rule is based is published. The department  
16 shall complete its review of the rule and submit to the legislature a proposed rule  
17 changing the standard no later than 18 months after the date on which the revision  
18 of the standard is published.

19 **SECTION 15.** 101.05 (1) and (3) of the statutes are amended to read:

20 101.05 (1) ~~No~~ Except for rules promulgated under s. 101.028, no building code  
21 adopted by the department under this chapter shall affect buildings located on  
22 research or laboratory farms of public universities or other state institutions and  
23 used primarily for housing livestock or other agricultural purposes.

1           **(3)** ~~No~~ Except for rules promulgated under s. 101.028, no standard, rule, code  
2 or regulation of the department under this subchapter applies to construction  
3 undertaken by the state for the purpose of renovation of the state capitol building.

4           **SECTION 16.** 101.65 (1) (a) (intro.) of the statutes is amended to read:

5           101.65 (1) (a) (intro.) Exercise jurisdiction over the construction and inspection  
6 of new dwellings by passage of ordinances, provided such ordinances meet the  
7 requirements of the one- and 2-family dwelling code adopted in accordance with this  
8 subchapter. An ordinance under this paragraph may exceed the requirements of the  
9 one- and 2-family dwelling code that relate to energy conservation in the  
10 construction of new dwellings. Except as provided by s. 101.651, a county ordinance  
11 shall apply in any city, village or town which has not enacted such ordinance.

12           **SECTION 17.** 119.04 (1) of the statutes, as affected by 2009 Wisconsin Acts 60  
13 and 96, is amended to read:

14           119.04 (1) Subchapters IV, V and VII of ch. 115, ch. 121 and ss. 66.0235 (3) (c),  
15 66.0603 (1m) to (3), 115.01 (1) and (2), 115.28, 115.31, 115.33, 115.34, 115.343,  
16 115.345, 115.361, 115.365 (3), 115.38 (2), 115.445, 115.45, 118.001 to 118.04, 118.045,  
17 118.06, 118.07, 118.075, 118.10, 118.12, 118.125 to 118.14, 118.145 (4), 118.15,  
18 118.153, 118.16, 118.162, 118.163, 118.164, 118.18, 118.19, 118.20, 118.225, 118.24  
19 (1), (2) (c) to (f), (6) and (8), 118.255, 118.258, 118.291, 118.30 to 118.43, 118.51,  
20 118.52, 118.55, 120.12 (5) and (15) to (25), 120.125, 120.13 (1), (2) (b) to (g), (3), (14),  
21 (17) to (19), (26), (34), (35), (37), (37m), and (38), 120.14, 120.21 (3), 120.24, and  
22 120.25 are applicable to a 1st class city school district and board.

23           **SECTION 18.** 120.24 of the statutes is created to read:

24           **120.24 Energy <sup>performance</sup> and environmental design standards for school district**  
25 **facilities.** (1) In this section:

SECTION 18

1

(a) ~~"ASHRAE standard"~~ <sup>"Conditioned space"</sup> has the meaning given in s. 16.856 (1) ~~(a)~~ <sup>(c)</sup> ✓

2

~~(b) "IECC standards" has the meaning given in s. 16.856 (1) (d).~~

3

(b) ~~(a)~~ "LEED silver level" has the meaning given in s. 16.856 (1) (f).

4

(c) ~~(a)~~ "Major construction project" means a project for the construction of a

5

building that will, upon completion, contain at least 10,000 gross square feet of

6

~~enclosed space~~ <sup>conditioned space</sup> or for the repair, renewal, <sup>or</sup> renovation ~~or expansion~~ of an existing

7

building containing at least 10,000 gross square feet of ~~enclosed~~ <sup>conditioned</sup> space that affects

8

more than 50 percent of the existing gross square feet of ~~enclosed~~ <sup>conditioned</sup> space in that

9

building. <sup>or for the expansion of an existing building to add at least 10,000 gross square feet of conditioned space.</sup>

10

(2) Each school board shall ensure that the plans and specifications for each

11

major construction project conform at a minimum to the requirements for

12

certification at the LEED silver level. The school board shall also ensure that the <sup>energy performance,</sup> use

13

and disposal of construction <sup>and demolition</sup> materials, ventilation components, indoor air quality

14

performance, and water usage level for each major construction project conform to

15

the standards specified s. 13.48 (2) (jm) 2.

16

~~(3) Each school board shall ensure that each building constructed, repaired,~~

17

~~renewed, renovated, or expanded by or for the school district that is a major~~

18

~~construction project conforms to one of the following energy performance standards,~~

19

~~based upon the year in which construction, repair, renewal, renovation, or expansion~~

20

~~of the building begins:~~

21

~~(a) For a building for which construction, repair, renewal, renovation, or~~

22

~~expansion begins on or after the first day of the 7th month beginning after the~~

23

~~effective date of this paragraph .... [LRB inserts date], but before January 1, 2015,~~

24

~~the energy performance shall be at least 30 percent better than the energy~~

1 performance under the ASHRAE standard or the IECC standards, whichever is the  
2 most stringent.

3 (b) For a building for which construction, repair, renewal, renovation, or  
4 expansion begins after December 31, 2014, but before January 1, 2020, the energy  
5 performance shall be at least 70 percent better than the performance under the  
6 ASHRAE standard or the IECC standards, whichever is the most stringent.

7 (c) For a building for which construction, repair, renewal, renovation, or  
8 expansion begins after December 31, 2019, but before January 1, 2025, the energy  
9 performance shall be at least 80 percent better than the energy performance under  
10 the ASHRAE standard or the IECC standards, whichever is the most stringent.

11 (d) For a building for which construction, repair, renewal, renovation, or  
12 expansion begins after December 31, 2024, but before January 1, 2030, the energy  
13 performance shall be at least 90 percent better than the energy performance under  
14 the ASHRAE standard or the IECC standards, whichever is the most stringent.

15 (e) For a building for which construction, repair, renewal, renovation, or  
16 expansion begins after December 31, 2029, the energy performance shall be 100  
17 percent better than the energy performance under the ASHRAE standard or the  
18 IECC standards, whichever is more stringent, and the building shall consume zero  
19 net energy, as defined in s. 16.856 (1) (i).

20 **SECTION 19.** 145.133 of the statutes is created to read:

21 **145.133 Graywater systems. (1)** In this section:

22 (a) "Graywater" means wastewater generated from the use of a clothes washer,  
23 sink, shower, or bathtub.

24 (b) "Graywater system" means a system for the collection and reuse of  
25 graywater.

1 (c) "Rainwater system" means a system for the collection and reuse of  
2 rainwater generated from building roofs.

3 (2) The department shall promulgate rules that establish standards for the  
4 installation of graywater and rainwater systems. The standards shall authorize the  
5 reuse of graywater and rainwater within the building, or on the property  
6 surrounding the building, from which the graywater or rainwater was generated.

7 **SECTION 20. Initial applicability.**

8 (1) The treatment of section 13.48 (2) (jm) 2. and 3. of the statutes first applies  
9 with respect to projects approved and agreements entered into on the effective date  
10 of this subsection.

11 (2) The treatment of section 16.856 (2) of the statutes first applies with respect  
12 to projects for which design is commenced on the effective date of this subsection.

13 (3) The treatment of section 16.84 (5) of the statutes, the renumbering and  
14 amendment of section 13.48 (15) of the statutes, and the creation of section 13.48 (15)  
15 (b) of the statutes first apply with respect to leases of real property by the state that  
16 are entered into, renewed, or extended on the effective date of this subsection.

17 (4) The treatment of section 120.24 (2) of the statutes first applies with respect  
18 to projects for which design is commenced on the effective date of this subsection.

19 (5) The treatment of section 66.0902 (~~4~~<sup>3</sup>) of the statutes first applies with respect  
20 to projects for which a request for proposal is issued by a political subdivision on the  
21 effective date of this subsection.

22 (END)

INS ANL-MES

This bill also imposes on a political subdivision (any city, village, town, or county) certain requirements for a major construction project. Under the bill, a major construction project means a project for the construction of a public building by or for a political subdivision that will contain at least 10,000 gross square feet of office space, or for the repair, renewal, renovation, or expansion of an existing public building that contains such space if the repair, renewal, renovation, or expansion affects more than 50 percent of the existing building. The requirements imposed on a political subdivision under the bill are based on the requirements that the bill imposes on DOA and the Building Commission for a major state construction project.

The bill requires a political subdivision to ensure that the plans and specifications for each major construction project conform at a minimum to the requirements for certification at the ~~LEED~~ silver level, and that the energy performance, use and disposal of construction and demolition materials, ventilation components, indoor air quality performance, and water usage level for each major construction project conform to the standards that apply to a major state construction project of DOA and the Building Commission. In addition, a political subdivision must ensure that a person to whom it awards a contract for a major construction project agrees that his or her goal will be to ensure that at least 25 percent of the employees hired because of the contract will be minority group members and at least 5 percent of the employees hired because of the contract will be women.

or for the expansion of an existing public building that adds at least 10,000 gross square feet of such space

performance

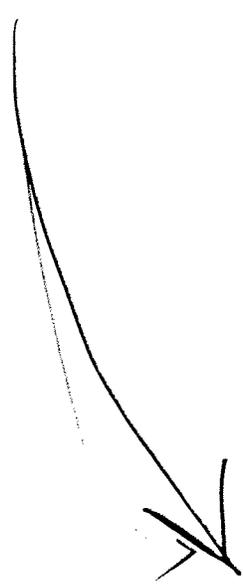
or

STET



\*

under the LEED Green Building Rating System, as prescribed by Commerce and Building Council based on the standards of the U.S. Green



INS ANL-PG

(7) This bill imposes similar requirements for major construction projects of school districts. Each school board must ensure that the plans and specifications for each major construction project conform at a minimum



ANL - PG

§ This bill directs each school board to ensure that the plans and specifications for each major construction project (a project for the construction of a building that will contain at least 10,000 gross square feet of enclosed space, or for the repair, renewal, renovation, or expansion of an existing building containing at least 10,000 gross square feet of enclosed space that affects more than 50 percent of the existing gross square feet of enclosed space) conform at a minimum

to the requirements for ~~certification~~ <sup>performance</sup> at the ~~gold~~ silver level as prescribed by Commence

of the LEED Green Building Rating System

(no #) The bill also directs each school board to

ensure that ~~any building~~ <sup>the use</sup> and demolition ~~of~~ <sup>construction</sup> materials, and disposal of construction materials,

ventilation components, indoor air quality

performance, and water usage level for

each major construction project conform

to standards specified by Commerce that are derived from various national and international building codes.

standards

~~# Finally, the bill requires each school board to ensure that any building constructed, renovated, or expanded as part of a major construction project conforms to specified energy performance standards at increasingly stringent levels by specified dates with buildings begun between beginning of the first day of the 7th month~~

**Parisi, Lori**

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**From:** Van de Bogert, Abigail  
**Sent:** Monday, February 22, 2010 3:32 PM  
**To:** LRB.Legal  
**Subject:** Draft Review: LRB 09-3485/1 Topic: Energy-efficient and environmental design for buildings

Please Jacket LRB 09-3485/1 for the ASSEMBLY.



State of Wisconsin  
2009 - 2010 LEGISLATURE

LRB-3485/1  
JTK/RNK/PG/MES:cjs:rs

2  
+nwn

RMK

2009 BILL

today

SAV

Regen.

1 AN ACT *to renumber and amend* 13.48 (15) and 101.025 (4) (intro.); *to amend*  
2 16.84 (5), 101.027 (2), 101.027 (3) (a) 1., 101.027 (3) (b) 1., 101.05 (1) and (3),  
3 101.65 (1) (a) (intro.) and 119.04 (1); and *to create* 13.48 (2) (jm), 13.48 (15) (b),  
4 16.85 (3m), 16.856, 66.0902, 101.02 (23), 101.025 (4) (ar), 101.028, 120.24 and  
5 145.133 of the statutes; **relating to:** energy conservation standards for the  
6 construction of certain buildings, energy and environmental design standards  
7 for state buildings, structures, and facilities, energy and environmental design  
8 standards for school district facilities and other local government buildings,  
9 leasing of state buildings, structures, and facilities, standards for the  
10 construction and use of graywater systems, ~~and~~ granting rule-making  
11 authority. *and making an appropriation*

**Analysis by the Legislative Reference Bureau**

Currently, with certain exceptions, the Department of Administration (DOA) must ensure that the specifications for each state construction project require the use of recovered and recycled materials to the extent that such use is technically and economically feasible. With certain exceptions, DOA must also prescribe and enforce

**BILL**

energy efficiency standards for energy consuming equipment that is installed in connection with state construction projects. The standards must meet or exceed specified statutory standards. The Building Commission must also apply these standards when entering into certain leases on behalf of the state. Current law also requires the commission to employ a design for cogeneration of steam and electricity in state-owned central steam generating facilities unless the commission determines that such a design is not cost-effective and technically feasible. Currently, the commission must also ensure that state-operated steam generating facilities are designed to allow the use of biomass fuels and refuse-derived fuels to the greatest extent cost-effective and technically feasible. In addition, under current law, the commission is prohibited from approving the construction or major remodeling of or addition to any state building or structure unless the building or structure makes maximum practical use of passive solar energy system design elements and, unless not technically or economically feasible, incorporates an active solar energy system or photovoltaic solar energy system or other renewable energy system.

This bill directs DOA and the Building Commission to ensure that the plans and specifications for each major state construction project (each project for the construction of any new state building, structure, or facility containing at least 10,000 gross square feet of conditioned space, or for the repair, renewal, or renovation, of any existing building, structure, or facility for occupancy by any state entity if the building, structure, or facility contains at least 10,000 gross square feet of conditioned space and the project affects more than 50 percent of the existing gross square feet of conditioned space in the building, structure, or facility, or for the expansion of an existing state building, structure, or facility to add at least 10,000 gross square feet of conditioned space) conform at a minimum to the requirements under the LEED Green Building Rating System at the silver performance level, as prescribed by the Department of Commerce (Commerce) based upon the standards of the U.S. Green Building Council. The bill also directs DOA and the Building Commission to ensure that each such building, structure, or facility conforms to specific standards specified by Commerce that are derived from various national and international building codes for energy performance, ventilation components, indoor air quality performance, and water usage level. The bill also directs DOA and the commission to ensure that each project to construct such a building, structure, or facility for the state shall conform to specified requirements for recycling of construction waste and demolition materials. In addition, the bill directs the commission to enforce compliance with the bill's requirements with respect to all major construction projects whenever the buildings, structures, or facilities being constructed are purchased by the state under a purchase agreement or whenever construction, repair, renewal, renovation, or expansion of a building, structure, or facility is performed for the state under a lease agreement with option to purchase.

The bill also directs the Building Commission to apply all moneys available for its use under the Authorized State Building Program to achieve certification as of January 1, 2015, by the U.S. Green Building Council for not less than 15 percent of the gross square footage of conditioned space owned or leased by state agencies, as

**BILL**

determined by DOA, as meeting minimum LEED energy performance requirements for the operation and maintenance of existing buildings. In addition, the bill directs DOA to promulgate rules that require the Building Commission to continue to apply all moneys available for its use under the Authorized State Building Program during the period from January 1, 2015, to January 1, 2030, to achieve certification by the U.S. Green Building Council for greater percentages of the gross square footage of conditioned space owned or leased by state agencies as meeting minimum LEED performance requirements for the operation and maintenance of existing buildings by specified dates.

Currently, DOA has responsibility for the negotiation and administration of leases of real property by this state, except as otherwise provided by law. The Building Commission has authority to approve leases of real property by the state, except as otherwise provided by law. This bill directs DOA, before entering into any lease, or renewing or extending any lease, for improved real property to be used by a state agency, to require the prospective lessor to disclose the energy use intensity for the total property and the annual energy usage for the total property, calculated in accordance with Energy Star standards, as determined by Commerce, and to verify and forward that information to the Building Commission. The bill directs DOA to require other state agencies that have authority to enter into leases for improved real property to obtain and forward the same information to the Building Commission before entering into, or renewing or extending, any lease for real property. The bill then prohibits the Building Commission from approving any lease for improved real property to be used by this state unless DOA certifies to the commission that the energy use intensity for the total property and the annual energy usage for the total property conform to Energy Star standards at a level sufficient to meet the minimum threshold for compliance with the LEED Green Building Rating System for existing buildings-operation and maintenance performance requirements, as determined by Commerce. The bill directs the Building Commission to require other state agencies that have authority to enter into leases for improved real property, to certify to the commission, before entering into, or renewing or extending, any lease for real property to be used by this state, that the energy use intensity for the total property and the annual energy usage for the total property conform to the same standards.

The bill also requires DOA, with limited exceptions, to ensure that major state buildings, structures, and facilities that are constructed by or for the state conform to specified energy performance standards at increasingly stringent levels by specified dates beginning on the first day of the 7th month beginning after the day the act resulting from the bill becomes law and ending on January 1, 2030, by which date all major state buildings, structures, and facilities that are constructed by or for the state must achieve a zero net energy level of energy performance. In addition, the bill directs DOA to report annually to the governor and the Building Commission concerning the percentage level of adherence to the requirements imposed upon DOA under the bill that become effective on a date later than the end of the preceding year and the percentage level of adherence to the requirement imposed upon the Building Commission to apply all moneys available to the commission to achieve

**BILL**

certification for at least 15 percent of conditioned space in existing owned or leased state buildings, structures, or facilities as meeting the LEED energy performance standards specified in the bill.

Under current law, Commerce is required to promulgate an energy conservation code that sets design requirements for construction and equipment for the purpose of energy conservation in public buildings and places of employment. Commerce must consider incorporating into the energy conservation code design requirements from the most current national energy efficiency design standards, including the International Energy Conservation Code (IECC) or another energy efficiency code that is generally accepted and used by engineers and the construction industry. Current law requires that Commerce review the code on a regular basis, including whenever there is a revision of the IECC, and update the code accordingly.

This bill requires Commerce to incorporate into the energy conservation code a standard that is based upon a specific standard of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and eliminates the requirement to use other standards specified under current law. As with the revision requirements under current law, the bill requires Commerce to update the code whenever the ASHRAE standard is revised.

Current law also requires Commerce to promulgate rules for ventilation systems in public buildings and places of employment. This bill requires Commerce to incorporate a specific ASHRAE standard into those rules and to update the rules when the standard is revised.

Under current law, a city, village, town, or county may exercise jurisdiction over the construction of new dwellings by passing an ordinance, provided that the ordinance meets the requirements of the one- and two-family dwelling code under current law, this bill provides that such an ordinance may exceed the requirements of that code as they relate to energy conservation in the construction of new dwellings.

This bill authorizes Commerce to promulgate rules that establish standards for the installation of graywater and rainwater systems and that authorize the reuse of graywater and rainwater within the building, or on the property surrounding the building, from which the graywater or rainwater was generated. Under the bill, graywater is defined as wastewater generated from the use of a clothes washer, sink, shower, or bathtub.

This bill also imposes on a political subdivision (any city, village, town, or county) certain requirements for a major construction project. Under the bill, a major construction project means a project for the construction of a public building by or for a political subdivision that will contain at least 10,000 gross square feet of office space, or for the repair, renewal, or renovation of an existing public building that contains such space if the repair, renewal, renovation, or expansion affects more than 50 percent of the existing building, or for the expansion of an existing public building that adds at least 10,000 gross square feet of such space. The requirements imposed on a political subdivision under the bill are based on the requirements that the bill imposes on DOA and the Building Commission for a major state construction project.

**BILL**

The bill requires a political subdivision to ensure that the plans and specifications for each major construction project conform at a minimum to the requirements for certification at the silver performance level under the LEED Green Building Rating System, as prescribed by Commerce and based on the standards of the U.S. Green Building Council, and that the energy performance, use and disposal of construction and demolition materials, ventilation components, indoor air quality performance, and water usage level for each major construction project conform to the standards that apply to a major state construction project of DOA and the Building Commission. ~~In addition, a political subdivision must ensure that a person to whom it awards a contract for a major construction project agrees that his or goal will be to ensure that at least 25 percent of the employees hired because of the contract will be minority group members and at least 5 percent of the employees hired because of the contract will be women.~~

This bill imposes similar requirements for major construction projects of school districts. Each school board must ensure that the plans and specifications for each major construction project conform at a minimum to the requirements of the LEED Green Building Rating System at the silver performance level, as prescribed by Commerce. The bill also directs each school board to ensure that the energy performance, use and disposal of construction and demolition materials, ventilation components, indoor air quality performance, and water usage level for each major construction project conform to standards specified by Commerce that are derived from various national and international building codes.

For further information see the *state and local* fiscal estimate, which will be printed as an appendix to this bill.

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***The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:***

- 1           **SECTION 1.** 13.48 (2) (jm) of the statutes is created to read:
- 2           13.48 (2) (jm) 1. In this paragraph, "conditioned space" means space that is
- 3           designed to have controlled environmental conditions.
- 4           2. The building commission shall not approve the design or construction of any
- 5           project for the construction of any building, structure, or facility for a board, agency,
- 6           officer, department, commission, or body corporate, if the building, structure, or
- 7           facility after construction will contain at least 10,000 gross square feet of conditioned
- 8           space for occupancy by any such entity, or of any project for the repair, renewal,
- 9           renovation, or expansion of any existing building, structure, or facility for occupancy

*Upon <sup>the</sup> request of a school district the state must pay all necessary LEED registration and certification fees on behalf of the school district.*

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1 by any such entity if the building, structure, or facility contains at least 10,000 gross  
2 square feet of conditioned space and the project affects more than 50 percent of the  
3 existing gross square feet of conditioned space in the building, structure, or facility,  
4 regardless of the funding source of the project, unless the department of  
5 administration verifies and certifies to the commission, after reviewing the plans  
6 and specifications, all of the following:

7 a. That the project conforms at a minimum to the requirements under the  
8 LEED Green Building Rating System at the silver level, as defined in s. 16.856 (1)  
9 (f), for construction projects.

10 b. That the energy performance for the project is at least 30 percent better than  
11 the performance standard prescribed by the department of commerce under s.  
12 101.028 based upon standard 90.1-2007 of the American Society of Heating,  
13 Refrigerating and Air Conditioning Engineers or its most current equivalent, as  
14 documented by energy modeling and certified in writing by the chief engineer for the  
15 project.

16 c. That at least 75 percent of the construction materials delivered to the project  
17 site but not used in the project and the demolition materials from any demolition  
18 required to undertake the project are recycled in the project or transferred to a 3rd  
19 party for recycling as a part of another construction project for an agency, as defined  
20 in s. 16.70 (1e), or a local governmental unit, as defined in s. 19.42 (7u).

21 d. That the ventilation components for the project are strictly in conformity  
22 with standards prescribed by the department of commerce under s. 101.028 based  
23 upon standard 62.1-2004 of the American Society of Heating, Refrigerating, and Air  
24 Conditioning Engineers, and the chief engineer for the project certifies in writing  
25 that no exemptions from strict conformity with that standard have been authorized.

**BILL**

1 e. That the project has an indoor air quality management plan that addresses  
2 adherence to the heating, ventilation, and air conditioning performance standards  
3 for the project, source control that ensures use of low emission materials and  
4 finishes, pathway interruption to prevent migration of contaminants during the  
5 construction process, housekeeping procedures to prevent the spread and growth of  
6 contaminants during the construction process, and construction activity scheduling  
7 to prevent cross contamination of materials used in the project during the  
8 construction process. The plan shall be consistent at a minimum with standards  
9 promulgated by the department of commerce under s. 101.028 based upon indoor air  
10 quality guidelines for occupied building of the Sheet Metal and Air Conditioning  
11 Contractors' National Association, 2nd edition, 2007.

12 f. That the project upon completion will attain a level of interior water use no  
13 greater than 30 percent below the interior water use baseline, as determined by the  
14 department of administration in accordance with the LEED Green Building Rating  
15 System, as defined in s. 16.856 (1) (e) assuming that 100 percent of the indoor  
16 plumbing fixtures used in the project are in compliance with standards promulgated  
17 by the department of commerce under s. 101.028 based upon the strictest applicable  
18 standard under the Uniform Plumbing Codes-2006 promulgated by the  
19 International Association of Plumbing and Mechanical Officials or the International  
20 Plumbing Codes-2006 fixture and fitting performance requirements promulgated  
21 by the International Code Council.

22 3. The building commission shall not enter into an agreement for the purchase  
23 of or for the lease of, or renewal of a lease of, with option to purchase, any building,  
24 structure, or facility that is constructed or to be constructed for occupancy by any  
25 board, agency, officer, department, commission, or body corporate, if the building,

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1 structure, or facility after construction will contain at least 10,000 gross square feet  
2 of conditioned space for occupancy by any such entity, or any building, structure, or  
3 facility that is to be repaired, renewed, renovated, or expanded for occupancy by any  
4 such entity if the building, structure, or facility contains at least 10,000 gross square  
5 feet of conditioned space and the repair, renewal, renovation, or expansion affects  
6 more than 50 percent of the existing gross square feet of conditioned space in the  
7 building, structure, or facility, regardless of the funding source of the agreement,  
8 unless the department of administration verifies and certifies that the building,  
9 structure, or facility conforms or will after construction, repair, renewal, renovation  
10 or expansion conform to all of the standards specified in subd. 2.

11 4. The building commission shall apply all moneys available for its use under  
12 the authorized state building program to achieve certification as of January 1, 2015,  
13 by the U.S. Green Building Council for not less than 15 percent of the total gross  
14 square footage of conditioned space in buildings, structures, and facilities that are  
15 owned or leased by agencies on that date, as determined by the department of  
16 administration under s. 16.856 (3), for meeting the minimum LEED performance  
17 requirements for the operation and maintenance of existing buildings, as defined in  
18 s. 16.856 (1) (h).

19 5. The building commission shall apply all moneys available for its use under  
20 the authorized state building program to achieve certification by the dates specified  
21 by rule of the department of administration under s. 16.856 (6) by the U.S. Green  
22 Building Council for not less than the percentages specified by that rule of the total  
23 gross square footage of conditioned space in buildings, structures, and facilities that  
24 are owned or leased by agencies on the dates specified by that rule, as determined  
25 by the department of administration under s. 16.856 (3), for meeting the minimum

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1 LEED performance requirements for the operation and maintenance of existing  
2 buildings, as defined in s. 16.856 (1) (h).

3 **SECTION 2.** 13.48 (15) of the statutes is renumbered 13.48 (15) (a) and amended  
4 to read:

5 13.48 (15) (a) Subject to the requirements of par. (b) and s. 20.924 (1) (i), the  
6 building commission shall have the authority to acquire leasehold interests in land  
7 and buildings where such authority is not otherwise provided to an agency by law.

8 **SECTION 3.** 13.48 (15) (b) of the statutes is created to read:

9 13.48 (15) (b) The building commission shall not approve the leasing of, or the  
10 renewal or extension of any lease for, property for use by this state unless the  
11 department of administration has certified to the commission that the energy use  
12 intensity for the total property and the annual energy usage for the total property  
13 conform to standards promulgated by the department of commerce under s. 101.028  
14 based upon Energy Star standards consistent with the minimum LEED performance  
15 requirements for the operation and maintenance of existing buildings. The  
16 commission shall also require other agencies, as defined in s. 16.70 (1e), that have  
17 authority to lease improved real property, to certify to the commission, before  
18 entering into, or renewing or extending, any lease of real property, that the energy  
19 use intensity for the total property and the annual energy usage for the total property  
20 conform to the same standards.

21 **SECTION 4.** 16.84 (5) of the statutes is amended to read:

22 16.84 (5) Have responsibility, subject to approval of the governor, for all  
23 functions relating to the leasing, acquisition, allocation and utilization of all real  
24 property by the state, except where such responsibility is otherwise provided by the  
25 statutes. ~~In this connection, the~~ Prior to entering into any lease, or renewing or

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1 extending any lease, for property to be used by this state, the department shall  
2 require the prospective lessor to disclose the energy use intensity for the total  
3 property, measured on a square foot basis, and the annual energy usage for the total  
4 property, calculated in accordance with standards promulgated by the department  
5 of commerce under s. 101.028 based upon Energy Star standards, as defined in s.  
6 13.48 (15) (b), consistent with the minimum LEED performance requirements for the  
7 operation and maintenance of existing buildings, as defined in s. 16.856 (1) (h). The  
8 department shall verify and certify this information to the building commission  
9 before the commission considers approval of the lease, or the renewal or extension  
10 of the lease. The department shall also require other agencies, as defined in s. 16.70  
11 (1e), that have authority to enter into leases for real property to obtain, verify, and  
12 certify the same information to the commission before entering into any lease, or  
13 renewing or extending any lease, for property to be used by those agencies. The  
14 department shall, with the governor's approval, require physical consolidation of  
15 office space utilized by any executive branch agency having fewer than 50 authorized  
16 full-time equivalent positions with office space utilized by another executive branch  
17 agency, whenever feasible. The department shall lease or acquire office space for  
18 legislative offices or legislative service agencies at the direction of the joint  
19 committee on legislative organization. In this subsection, "executive branch agency"  
20 has the meaning given in s. 16.70 (4).

21 **SECTION 5.** 16.85 (3m) of the statutes is created to read:

22 16.85 (3m) To appoint or approve the appointment of a chief engineer for each  
23 major construction project, as defined in s. 16.856 (1) (g).

24 **SECTION 6.** 16.856 of the statutes is created to read:

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1           **16.856 Energy and environmental design standards for certain state**  
2 **buildings, structures, and facilities. (1)** In this section:

3           (a) “Agency” has the meaning given in s. 16.70 (1e).

4           (b) “ASHRAE standard” means the standard promulgated by the department  
5 of commerce under s. 101.028 based upon standard 90.1-2007 of the American  
6 Society of Heating, Refrigerating and Air Conditioning Engineers or its current  
7 equivalent as determined by the department of commerce under s. 101.028.

8           (c) “Conditioned space” means space that is designed to have controlled  
9 environmental conditions.

10           (d) “IECC standards” means the energy efficiency design standards  
11 promulgated by the department of commerce under s. 101.028 based upon the  
12 national energy efficiency design standards of the International Energy  
13 Conservation Code or their current equivalents as determined by the department of  
14 commerce under s. 101.028.

15           (e) “LEED Green Building Rating System” means the green building rating  
16 system of the U.S. Green Building Council designated as the leadership in energy  
17 and environmental design system or its current equivalent as determined by the  
18 department of commerce under s. 101.028.

19           (f) “LEED silver level” means the performance level designated as the silver  
20 level under the LEED Green Building Rating System or its current equivalent as  
21 determined by the department of commerce under s. 101.028.

22           (g) “Major construction project” means a project for the construction of a state  
23 building, structure, or facility that will, upon completion, contain at least 10,000  
24 gross square feet of conditioned space, or for the repair, renewal, or renovation of an  
25 existing state building, structure, or facility containing at least 10,000 gross square

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1 feet of conditioned space that affects more than 50 percent of the existing gross  
2 square feet of conditioned space in that building, structure, or facility, or for the  
3 expansion of an existing state building, structure, or facility to add at least 10,000  
4 gross square feet of conditioned space.

5 (h) "Minimum LEED performance requirements for the operation and  
6 maintenance of existing buildings" means the performance requirements so  
7 designated under the LEED Green Building Rating System, as prescribed by the  
8 U.S. Green Building Council, or its current equivalent as determined by the  
9 department of commerce under s. 101.028.

10 (i) "Zero net energy" means an energy consumption level under which a  
11 building, structure, or facility produces as much energy for electricity, heating, and  
12 cooling from renewable sources in any calendar year as the building, structure, or  
13 facility consumes during the same period.

14 (2) The department shall ensure that the plans and specifications for each  
15 major construction project conform at a minimum to the requirements for  
16 certification at the LEED silver level. The department shall also ensure that the  
17 energy performance, recycling of construction and demolition materials, ventilation  
18 components, indoor air quality performance, and water usage level for each major  
19 construction project conform to the standards specified s. 13.48 (2) (jm) 2.

20 (3) The department shall maintain a current inventory of the location and  
21 gross square footage of the conditioned space in all buildings, structures, and  
22 facilities that are owned or leased by any agency for its use or the use of another  
23 agency. The inventory shall include for each building, structure, or facility  
24 information concerning the conditioned space in the building, structure, or facility  
25 and whether the building, structure, or facility or any portion thereof is certified or

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1 eligible for certification by the U.S. Green Building Council as meeting the minimum  
2 LEED performance requirements for the operation and maintenance of existing  
3 buildings.

4 (4) Except as provided in sub. (5), the department shall ensure that each  
5 building, structure, or facility constructed, repaired, renewed, renovated, or  
6 expanded by or for the state that is a major construction project conforms to  
7 whichever of the following energy performance standards applies, based upon the  
8 year in which construction, repair, renewal, renovation, or expansion of the building,  
9 structure, or facility begins:

10 (a) For a building, structure, or facility the construction, repair, renewal,  
11 renovation, or expansion of which begins on or after the first day of the 7th month  
12 beginning after the effective date of this paragraph .... [LRB inserts date], but before  
13 January 1, 2015, the energy performance shall be at least 30 percent better than the  
14 energy performance under the ASHRAE standard or the IECC standards, whichever  
15 is the most stringent.

16 (b) For a building, structure, or facility the construction, repair, renewal,  
17 renovation, or expansion of which begins after December 31, 2014, but before  
18 January 1, 2020, the energy performance shall be at least 70 percent better than the  
19 performance under the ASHRAE standard or the IECC standards, whichever is the  
20 most stringent.

21 (c) For a building, structure, or facility the construction, repair, renewal,  
22 renovation, or expansion of which begins after December 31, 2019, but before  
23 January 1, 2025, the energy performance shall be at least 80 percent better than the  
24 energy performance under the ASHRAE standard or the IECC standards, whichever  
25 is the most stringent.

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1           (d) For a building, structure, or facility the construction, repair, renewal,  
2 renovation, or expansion of which begins after December 31, 2024, but before  
3 January 1, 2030, the energy performance shall be at least 90 percent better than the  
4 energy performance under the ASHRAE standard or the IECC standards, whichever  
5 is the most stringent.

6           (e) For a building, structure, or facility the construction, repair, renewal,  
7 renovation, or expansion of which begins after December 31, 2029, the energy  
8 performance shall be 100 percent better than the energy performance under the  
9 ASHRAE standard or the IECC standards, whichever is more stringent, and the  
10 building, structure, or facility shall consume zero net energy.

11           (5) Subsection (4) does not apply to the gross square footage of enclosed space  
12 of any building, structure, or facility that is dedicated for laboratory usage if the  
13 ventilation requirements for that gross square footage do not permit compliance with  
14 sub. (4) in that area.

15           (6) The department shall assess the feasibility of achieving certification by the  
16 U.S. Green Building Council for greater than 15 percent of the total gross square  
17 footage of conditioned space in buildings, structures, and facilities that are owned or  
18 leased by agencies, as determined under sub. (3), for meeting the minimum LEED  
19 performance requirements for the operation and maintenance of existing buildings  
20 and shall, by rule, specify, for purposes of s. 13.48 (2) (jm) 5., increased levels of  
21 certification and dates during the period from January 1, 2015, to January 1, 2030,  
22 by which those increased levels are to be achieved.

23           (7) Annually no later than March 31, the department shall report to the  
24 governor and the building commission concerning the percentage level of adherence  
25 as of the preceding December 31 to each of the requirements under s. 13.48 (2) (jm)

**BILL**

1 and this section that become effective on a date following that December 31 and the  
2 percentage level of adherence as of the preceding December 31 to the applicable  
3 requirement under s. 13.48 (2) (jm) 4. or 5.

15-3

4 **SECTION 7.** 66.0902 of the statutes is created to read:

5 **66.0902 Energy and environmental design standards for political**  
6 **subdivision facilities. (1)** In this section:

7 (a) "Conditioned space" means space that is designated to have controlled  
8 environmental conditions.

9 (b) "LEED silver level" has the meaning given in s. 16.856 (1) (f).

10 (c) "Major construction project" means a project for the construction of a public  
11 building by or for a political subdivision that will, upon completion of the project,  
12 contain at least 10,000 gross square feet of conditioned space, or for the repair,  
13 renewal, or renovation of an existing public building by or for a political subdivision  
14 containing at least 10,000 gross square feet of conditioned space that affects more  
15 than 50 percent of the existing gross square feet of conditioned space in that building,  
16 or for the expansion of an existing public building by or for a political subdivision to  
17 add at least 10,000 gross square feet of conditioned space.

18 (d) "Minority group member" has the meaning given in s. 560.036 (1) (f).

19 (e) "Political subdivision" means any city, village, town, or county.

20 (2) A political subdivision shall ensure that a person to whom it awards a  
21 contract for a major construction project agrees, as a condition to receiving the  
22 contract, that his or her goal shall be to ensure that at least 25 percent of the  
23 employees hired because of the contract will be minority group members and at least  
24 5 percent of the employees hired because of the contract will be women.

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(1) (2) (3) A political subdivision shall ensure that the plans and specifications for  
2 each major construction project conform at a minimum to the requirements for  
3 certification at the LEED silver level. The political subdivision shall also ensure that  
4 the energy performance, use and disposal of construction and demolition materials,  
5 ventilation components, indoor air quality performance, and water usage level for  
6 each major construction project conform to the standards specified s. 13.48 (2) (jm)  
7 2.✓

8 **SECTION 8.** 101.02 (23) of the statutes is created to read:

9 101.02 (23) The department may promulgate rules that establish building and  
10 design requirements for public buildings and places of employment that are based  
11 upon standard 189.1-2009 developed by the American Society of Heating,  
12 Refrigerating and Air-Conditioning Engineers in conjunction with the U.S. Green  
13 Building Council and the Illuminating Engineering Society or that are based upon  
14 the current equivalent of that standard. If the department promulgates rules under  
15 this subsection, the department shall review the rules whenever a revision of  
16 standard 189.1-2009, or its current equivalent, is published. The department shall  
17 complete its review of the rules and submit to the legislature proposed rules  
18 changing the requirements no later than 18 months after the date on which the  
19 revision of the standard is published.

20 **SECTION 9.** 101.025 (4) (intro.) of the statutes is renumbered 101.025 (4) (ag),  
21 and 101.025 (4) (ag) (intro.), as renumbered, is amended to read:

22 101.025 (4) (ag) (intro.) For ventilation systems in public buildings and places  
23 of employment, the department shall ~~adopt~~ promulgate rules ~~setting that~~  
24 incorporate standard 62.1-2007, or its current equivalent, of the American Society

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1 of Heating, Refrigerating and Air Conditioning Engineers and that set all of the  
2 following:

3 **SECTION 10.** 101.025 (4) (ar) of the statutes is created to read:

4 101.025 (4) (ar) The department shall review the rules promulgated under par.  
5 (ag) whenever a revision of standard 62.1-2007, or its current equivalent, of the  
6 American Society of Heating, Refrigerating and Air Conditioning Engineers, is  
7 published. The department shall complete its review of the rules and submit to the  
8 legislature a proposed rule changing the rules no later than 18 months after the date  
9 on which the revision of the standard is published.

10 **SECTION 11.** 101.027 (2) of the statutes is amended to read:

11 101.027 (2) The department shall review the energy conservation code and  
12 shall promulgate rules that change the requirements of the energy conservation code  
13 to improve energy conservation. No rule may be promulgated that has not taken into  
14 account the cost of the energy conservation code requirement, as changed by the rule,  
15 in relationship to the benefits derived from that requirement, including the  
16 reasonably foreseeable economic and environmental benefits to the state from any  
17 reduction in the use of imported fossil fuel. The proposed rules changing the energy  
18 conservation code shall be submitted to the legislature in the manner provided under  
19 s. 227.19. In conducting a review under this subsection, the department shall  
20 ~~consider incorporating~~ incorporate, into the energy conservation code, ~~design~~  
21 ~~requirements from standard 90.1-2007, or its current equivalent, of the most current~~  
22 ~~national energy efficiency design standards, including the International Energy~~  
23 ~~Conservation Code or an energy efficiency code other than the International Energy~~  
24 ~~Conservation Code if that energy efficiency code is used to prescribe design~~  
25 ~~requirements for the purpose of conserving energy in buildings and is generally~~

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1 ~~accepted and used by engineers and the construction industry~~ American Society of  
2 Heating, Refrigerating and Air Conditioning Engineers.

3 **SECTION 12.** 101.027 (3) (a) 1. of the statutes is amended to read:

4 101.027 (3) (a) 1. A revision of standard 90.1-2007, or its current equivalent,  
5 of the International Energy Conservation Code American Society of Heating,  
6 Refrigerating and Air Conditioning Engineers is published.

7 **SECTION 13.** 101.027 (3) (b) 1. of the statutes is amended to read:

8 101.027 (3) (b) 1. If the department begins a review under sub. (2) because a  
9 revision of standard 90.1-2007, or its current equivalent, ~~of the International~~  
10 ~~Energy Conservation Code~~ American Society of Heating, Refrigerating and Air  
11 Conditioning Engineers is published, the department shall complete its review of the  
12 energy conservation code, as defined in sub. (1), and submit to the legislature  
13 proposed rules changing the energy conservation code, as defined in sub. (1), no later  
14 than 18 months after the date on which the revision of standard 90.1-2007, or its  
15 current equivalent, ~~of the International Energy Conservation Code~~ American  
16 Society of Heating, Refrigerating and Air Conditioning Engineers is published.

17 **SECTION 14.** 101.028 of the statutes is created to read:

18 **101.028 Energy performance and environmental design standards for**  
19 **certain public buildings, structures and facilities.** (1) In this section:

20 (a) "Energy Star standards" means the standards prescribed by the U.S.  
21 Environmental Protection Agency under 42 USC 7403 (g) for energy use in buildings.

22 (b) "LEED Green Building Rating System" means the green building rating  
23 system of the U.S. Green Building Council designated as the leadership in energy  
24 and environmental design system or its current equivalent as determined by the  
25 department.

**BILL**

1 (c) "LEED silver level" means the performance level designated as the silver  
2 level under the LEED Green Building Rating System or its current equivalent as  
3 determined by the department.

4 (d) "Minimum LEED performance requirements for the operation and  
5 maintenance of existing buildings" means the performance requirements so  
6 designated under the LEED Green Building Rating System, as prescribed by the  
7 U.S. Green Building Council, or its current equivalent as determined by the  
8 department.

9 (e) "U.S. Green Building Council" means the United States Green Building  
10 Council or any successor organization that is substantially the same organization,  
11 as determined by the department.

12 (2) The department shall prescribe, by rule, standards for energy performance  
13 and environmental design in buildings, structures, and facilities which shall apply  
14 to the extent required under ss. 13.48 (2) and (15), 16.84 (5), 16.856, 66.0902, and  
15 120.24. The standards shall be based upon the following standards or, if they are  
16 updated, their current equivalents:

17 (a) The LEED silver level for new building construction.

18 (b) Minimum LEED performance requirements for the operation and  
19 maintenance of existing buildings.

20 (c) Energy Star standards.

21 (d) Energy performance standard 90.1-2007 of the American Society of  
22 Heating, Refrigerating, and Air Conditioning Engineers.

23 (e) Standard 62.1-2004 of the American Society of Heating, Refrigerating, and  
24 Air Conditioning Engineers.

**BILL****SECTION 14**

1 (f) National energy efficiency design standards of the International Energy  
2 Conservation Code adopted the the International Code Council-2006.

3 (g) The Uniform Plumbing Codes-2006 promulgated by the International  
4 Association of Plumbing and Mechanical Officials.

5 (i) Indoor air quality guidelines for occupied buildings promulgated by the  
6 Sheet Metal and Air Conditioning Contractors' National Association, 2nd edition,  
7 2007.

8 (j) The International Plumbing Codes-2006 fixture and fitting performance  
9 requirements promulgated by the International Code Council.

10 (3) The department shall review a rule promulgated under sub. (2) whenever  
11 a revision of a standard on which the rule is based is published. The department  
12 shall complete its review of the rule and submit to the legislature a proposed rule  
13 changing the standard no later than 18 months after the date on which the revision  
14 of the standard is published.

15 **SECTION 15.** 101.05 (1) and (3) of the statutes are amended to read:

16 101.05 (1) ~~No~~ Except for rules promulgated under s. 101.028, no building code  
17 adopted by the department under this chapter shall affect buildings located on  
18 research or laboratory farms of public universities or other state institutions and  
19 used primarily for housing livestock or other agricultural purposes.

20 (3) ~~No~~ Except for rules promulgated under s. 101.028, no standard, rule, code  
21 or regulation of the department under this subchapter applies to construction  
22 undertaken by the state for the purpose of renovation of the state capitol building.

23 **SECTION 16.** 101.65 (1) (a) (intro.) of the statutes is amended to read:

24 101.65 (1) (a) (intro.) Exercise jurisdiction over the construction and inspection  
25 of new dwellings by passage of ordinances, provided such ordinances meet the

**BILL**

1 requirements of the one- and 2-family dwelling code adopted in accordance with this  
2 subchapter. An ordinance under this paragraph may exceed the requirements of the  
3 one- and 2-family dwelling code that relate to energy conservation in the  
4 construction of new dwellings. Except as provided by s. 101.651, a county ordinance  
5 shall apply in any city, village or town which has not enacted such ordinance.

6 **SECTION 17.** 119.04 (1) of the statutes, as affected by 2009 Wisconsin Acts 60  
7 and 96, is amended to read:

8 119.04 (1) Subchapters IV, V and VII of ch. 115, ch. 121 and ss. 66.0235 (3) (c),  
9 66.0603 (1m) to (3), 115.01 (1) and (2), 115.28, 115.31, 115.33, 115.34, 115.343,  
10 115.345, 115.361, 115.365 (3), 115.38 (2), 115.445, 115.45, 118.001 to 118.04, 118.045,  
11 118.06, 118.07, 118.075, 118.10, 118.12, 118.125 to 118.14, 118.145 (4), 118.15,  
12 118.153, 118.16, 118.162, 118.163, 118.164, 118.18, 118.19, 118.20, 118.225, 118.24  
13 (1), (2) (c) to (f), (6) and (8), 118.255, 118.258, 118.291, 118.30 to 118.43, 118.51,  
14 118.52, 118.55, 120.12 (5) and (15) to (25), 120.125, 120.13 (1), (2) (b) to (g), (3), (14),  
15 (17) to (19), (26), (34), (35), (37), (37m), and (38), 120.14, 120.21 (3), 120.24, and  
16 120.25 are applicable to a 1st class city school district and board.

17 **SECTION 18.** 120.24 of the statutes is created to read:

18 **120.24 Energy performance and environmental design standards for**  
19 **school district facilities. (1)** In this section:

20 (a) "Conditioned space" has the meaning given in s. 16.856 (1) (c).

21 (b) "LEED silver level" has the meaning given in s. 16.856 (1) (f).

22 (c) "Major construction project" means a project for the construction of a  
23 building that will, upon completion, contain at least 10,000 gross square feet of  
24 conditioned space, or for the repair, renewal, or renovation of an existing building  
25 containing at least 10,000 gross square feet of conditioned space that affects more

**BILL****SECTION 18**

1 than 50 percent of the existing gross square feet of conditioned space in that building,  
2 or for the expansion of an existing building to add at least 10,000 gross square feet  
3 of conditioned space.

4 (2) Each school board shall ensure that the plans and specifications for each  
5 major construction project conform at a minimum to the requirements for  
6 certification at the LEED silver level. The school board shall also ensure that the  
7 energy performance, use and disposal of construction and demolition materials,  
8 ventilation components, indoor air quality performance, and water usage level for  
9 each major construction project conform to the standards specified s. 13.48 (2) (jm)

10 2.

11 **SECTION 19.** 145.133 of the statutes is created to read:

12 **145.133 Graywater systems.** (1) In this section:

13 (a) "Graywater" means wastewater generated from the use of a clothes washer,  
14 sink, shower, or bathtub.

15 (b) "Graywater system" means a system for the collection and reuse of  
16 graywater.

17 (c) "Rainwater system" means a system for the collection and reuse of  
18 rainwater generated from building roofs.

19 (2) The department shall promulgate rules that establish standards for the  
20 installation of graywater and rainwater systems. The standards shall authorize the  
21 reuse of graywater and rainwater within the building, or on the property  
22 surrounding the building, from which the graywater or rainwater was generated.

23 **SECTION 20. Initial applicability.**

**BILL**

1           (1) The treatment of section 13.48 (2) (jm) 2. and 3. of the statutes first applies  
2 with respect to projects approved and agreements entered into on the effective date  
3 of this subsection.

4           (2) The treatment of section 16.856 (2) of the statutes first applies with respect  
5 to projects for which design is commenced on the effective date of this subsection.

6           (3) The treatment of section 16.84 (5) of the statutes, the renumbering and  
7 amendment of section 13.48 (15) of the statutes, and the creation of section 13.48 (15)  
8 (b) of the statutes first apply with respect to leases of real property by the state that  
9 are entered into, renewed, or extended on the effective date of this subsection.

10          (4) The treatment of section 120.24 (2) of the statutes first applies with respect  
11 to projects for which design is commenced on the effective date of this subsection.

12          (5) The treatment of section 66.0902 (3) of the statutes first applies with respect  
13 to projects for which a request for proposal is issued by a political subdivision on the  
14 effective date of this subsection.

15

**(END)**

1 ventilation requirements for that gross square footage do not permit compliance with  
2 sub. (4) in that area.

3 (6) Annually no later than March 31, the department shall report to the  
4 governor and the building commission concerning the percentage level of adherence  
5 as of the preceding December 31 to each of the requirements under s. 13.48 (2) (jm)  
6 and this section that become effective on a date following that December 31 and the  
7 percentage level of adherence as of the preceding December 31 to the requirement  
8 under s. 13.48 (2) (jm) 4.

9 **SECTION 7.** 20.255 (2) (ed) of the statutes is created to read:

10 20.255 (2) (ed) *LEED fees.* A sum sufficient to pay LEED registration and  
11 certification fees on behalf of school districts under s. 120.24.

12 **SECTION 8.** 66.0902 of the statutes is created to read:

13 **66.0902 Energy and environmental design standards for political**  
14 **subdivision facilities. (1)** In this section:

15 (a) "ASHRAE standards" means standard 90.1-2007 of the American Society  
16 of Heating, Refrigerating and Air Conditioning Engineers.

17 (b) "IECC standards" means the most current national energy efficiency design  
18 standards of the International Energy Conservation Code.

19 (c) "Major construction project" means a project for the construction of a public  
20 building by or for a political subdivision that will, upon completion of the project,  
21 contain at least 10,000 gross square feet of enclosed office space or for the repair,  
22 renewal, renovation, or expansion of an existing public building by or for a political  
23 subdivision containing at least 10,000 gross square feet of enclosed office space that  
24 affects more than 50 percent of the existing gross square feet of enclosed office space  
25 in that building.

1 (17) to (19), (26), (34), (35), (37), (37m), and (38), 120.14, 120.21 (3), 120.24, and  
2 120.25 are applicable to a 1st class city school district and board.

3 SECTION 19. 120.24 of the statutes is created to read:

4 **120.24 Energy and environmental design standards for school district**  
5 **facilities. (1)** In this section:

6 (a) "LEED building rating system" means the rating system of the U.S. Green  
7 Building Council designated as the leadership in energy and environmental design  
8 system or its successor system as determined by the department.

9 (b) "LEED silver standard" means the LEED building rating system standard  
10 designated by the U.S. Green Building Council as the silver standard in effect on the  
11 effective date of this paragraph .... [LRB inserts date], or its successor standard as  
12 determined by the department.

13 (c) "Major construction project" means a project for the construction of a  
14 building containing at least 10,000 square feet of enclosed space.

15 (2) Each school board shall ensure that the plans and specifications for each  
16 major construction project conform at a minimum to the LEED silver standard of  
17 construction.

18 (3) Upon request, the department shall pay necessary LEED registration and  
19 certification fees for a major construction project on behalf of a school district. The  
20 department shall pay the fees from the appropriation under s. 20.255 (2) (ed).

21 SECTION 20. 145.133 of the statutes is created to read:

22 **145.133 Graywater systems. (1)** In this section:

23 (a) "Graywater" means wastewater generated from the use of a clothes washer,  
24 sink, shower, or bathtub.

**Kuesel, Jeffery**

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**From:** Van de Bogert, Abigail  
**Sent:** Wednesday, March 03, 2010 1:18 PM  
**To:** Kuesel, Jeffery  
**Subject:** FW: FW: bill language

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**From:** Sherrie Gruder [mailto:gruder@epd.engr.wisc.edu]  
**Sent:** Wednesday, March 03, 2010 11:38 AM  
**To:** Van de Bogert, Abigail  
**Cc:** Rep.Molepske; 'Sherrie Gruder'  
**Subject:** RE: FW: bill language

There is a simple language fix to consider to capture new buildings for certification:  
At completion, the project shall be third party certified by the US Green Building Council. Add this sentence to p 7 line 16 and p 11 line 24. (It already says that for existing buildings on p7, line 19.)

Ultimately it is Louis' call of course. I'm just providing the analysis.

Sherrie

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**From:** Van de Bogert, Abigail [mailto:Abigail.VandeBogert@legis.wisconsin.gov]  
**Sent:** Wednesday, March 03, 2010 10:38 AM  
**To:** Sherrie Gruder; Rep.Molepske  
**Subject:** RE: FW: bill language

Hi Sherrie,

It looks like Garrick is correct; the bill requires that buildings be built to LEED silver standards but does *not* require the builder to acquire official LEED certification. Somehow we missed this subtlety. I checked with Jeff Kuesel and he said that it is still enforceable law; if a state building is not built to meet LEED silver requirements (for example) then that would be breaking the law. DOA must certify that these buildings are built to the right level.

At this point, Louis has said he doesn't want to do any more drafts. The current draft may also result in a lower fiscal impact

because we are not requiring organizations to pay for certification, and having a low fiscal estimate is critical right now.

What are your thoughts?

Abby

Abby Van de Bogert  
Office of Rep. Louis Molepske, Jr.  
214 N, State Capitol  
(608) 267-9649  
abigail.vandebogert@legis.wisconsin.gov

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**From:** Sherrie Gruder [mailto:gruder@epd.engr.wisc.edu]  
**Sent:** Wednesday, March 03, 2010 10:09 AM  
**To:** Rep.Molepske; Van de Bogert, Abigail  
**Subject:** FW: FW: bill language  
**Importance:** High

Rep. Molepske,

The concern stated below from Flad & Associates' primary LEED architect was discussed at our face to face meeting with the drafters given that your intent was that the buildings be third party certified to LEED. The language states that the DOA verifies and certifies that the building conforms or will after construction...(p7 lne 14; pg 11 lne 20). While I commented to the drafters that it is USGBC that is the ultimate certification body, and that the DOA would need to verify design evidence up front that the project is on the path toward LEED certification with WI thresholds to allow the project to go forward (given that LEED certification is after project completion), the language seems to reflect the DOA role without including the ultimate third party certification. Would you be willing to reconnect with them to clarify that this does not create a run around the third party certification?

Sherrie

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**From:** Garrick Maine [mailto:gmaine@flad.com]  
**Sent:** Wednesday, March 03, 2010 9:18 AM  
**To:** Sherrie Gruder  
**Subject:** Re: FW: green building bill

Sherrie,

One question. In scanning the bill's language I note that it states:

"That the project conforms at a minimum *to the requirements* (my emphasis) under the LEED Green Building Rating System at the silver level, as defined in s. 16.856 (1) (f), for construction projects."

but doesn't seem to actually require certification. Only later, in reference to total building stock, does it explicitly required certification, and then only as money allows:

"The building commission shall apply all moneys available for its use under the authorized state building program to achieve certification ...by the U.S. Green Building Council for not less than 15 percent of the total gross square footage of conditioned space in buildings, structures, and facilities that are owned or leased by agencies..."

The accompanying summary from Representative Molepske states that buildings bound by this bill will require certification. I've seen similar language like this before. The U.S. Army is a case in point. They require that all of their projects meet LEED requirements but don't require actual project certification. Request for LEED certification is made and must be approved on an individual project basis by the local base or project team. Am I right to voice some concern here?

Garrick

On 3/2/2010 4:25 PM, Sherrie Gruder wrote:

Garrick,

For your review is a green building bill that addresses state, local government and school projects.

Please contact Rep. Molepske's office with support, comments or concerns at 267-9649. It is in process to be heard this floor session that ends in April.

Sherrie

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**From:** Rep.Molepske [<mailto:Rep.Molepske@legis.wisconsin.gov>]

### **High Performance Green Building Bill**

The High Performance Green Building Bill sets the bar for saving both energy and water in public buildings in Wisconsin, saving tax dollars, energy, and water and reducing our dependence on foreign energy sources. The High Performance Green Building Bill will ensure that the Wisconsin government leads by example by reducing energy use of its new and existing buildings and by creating healthy and resource efficient spaces for workers and students. This bill codifies and builds upon the Governor's High Performance Green Building and Energy Conservation Executive

Order (EO145) of 2006.

## Features

- New state, municipal and school buildings (including renovations and leaseholds of the state) will be required to certify to LEED at the silver level.
- There are additional Wisconsin-specific thresholds for these buildings relating to energy, water conservation, construction/demolition materials recycling, and indoor air quality.
- The bill requires that the state upgrade 15 percent of the gross square footage of existing state buildings to LEED EB:O&M standards.
- State leaseholds must measure and disclose their energy use and meet Energy Star standards.
- New state buildings, on a progressive time table, will be designed to achieve zero net energy by 2030.
- Gray water and rainwater systems that reuse the water within the building will be authorized through rules to be developed by Department of Commerce.

Green buildings lessen the huge environmental impacts and operational costs of buildings to taxpayers. Green buildings typically achieve 26% reduced energy consumption, 13% lower maintenance costs (\$2.88/SF vs. \$3.30/SF), 27% higher occupant satisfaction and 33% reduction in carbon dioxide emissions compared to the national average (as measured by the US General Services Administration). The move toward sustainable, high performance design is addressed nationwide by applying the LEED Green Building Rating System ([www.usgbc.org](http://www.usgbc.org)) – Leadership in Energy and Environmental Design- and ENERGY STAR ([www.energystar.gov/](http://www.energystar.gov/)).

A copy of the bill is attached.

<<09-34851.pdf>>