



## Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #184

### **Energy Conservation Construction Projects (Building Program)**

#### *Base Agency*

[LFB 2007-09 Budget Summary: Page 625, #1, Page 629, #2, Page 631, #5]

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#### **CURRENT LAW**

Under 2005 Act 141, the Department of Administration (DOA) and state agencies are required to develop energy cost reduction plans that identify opportunities to increase efficiency of energy use in their facilities and find options other than general purpose revenues to finance the efficiency improvements. The Act also directs DOA to create special energy standards for state building projects and state purchases of energy consuming equipment.

DOA may contract with a qualified contractor for an energy conservation audit to be performed at any state-owned building, structure or facility. For this audit, the contractor prepares a report containing a description of the physical modifications to be performed that are required to accomplish specific future energy savings within a specified period and a determination of the minimum savings in energy usage that will be realized by the state from making these modifications within that period. Subject to any required approval by the Building Commission, DOA may contract for construction work to be performed at the building, structure or facility as identified in the audit, if DOA determines that the anticipated savings to the state after completion of the work will enable recovery of the costs of the work within a reasonable period of time.

The contract for energy conservation construction projects may be financed by the state or by the contractor. Under the contract, the state would be required to pay a stated amount, including any financing costs incurred by the contractor. The stated amount may not exceed the minimum savings determined under the energy audit to be realized by the state within the period specified in the audit. The state is required to make payments under the contract as the savings identified in the audit are realized by the state, in the amounts actually realized, but not to exceed

the lesser of the stated amount or the actual amount of the savings realized by the state within the period specified in the audit. Contracts are required to include a provision stating in substance that payments under the contract are contingent upon available appropriations.

If DOA provides financing for construction work, the Department may finance any portion of the cost of the work under a master lease. If the Department provides financing for the construction work and the stated amount to be paid by the state under the contract is greater than the amount of the savings realized by the state within the period the contractor is required to remit the difference to the Department.

DOA has authority to charge the cost of payments made by the state to the contractor to the applicable appropriation for fuel and utility costs at the building, structure or facility where the work is performed in the amounts equivalent to the savings that accrue to the state under that appropriation from expenditures not made as a result of the construction work, as determined by the DOA in accordance with the contract. DOA may also charge its costs for negotiation, administration, and financing of the contract to the same appropriation.

## **BUILDING COMMISSION**

Provide \$50,000,000 in general obligation bonding to DOA for state agency energy conservation construction projects. Authorize DOA to provide funding to agencies for energy conservation construction projects at state facilities under the jurisdiction of the agencies to enhance the energy efficiency of the facilities. Require DOA to prescribe standards for the evaluation of the proposed projects and the allocation of available moneys for those projects.

Authorize DOA to annually assess any agency that receives funding for an energy conservation project in an amount determined by DOA. Specify that the amount of the assessment could not exceed the agency's proportional share of debt service costs on the general obligation bonding issued to fund these projects or the amount of the agency's energy cost savings from the energy conservation project funded by DOA, whichever is greater. Require DOA to credit all revenues received from the assessments to a DOA debt service appropriation that would be created to pay debt service on the \$50 million in bonds issued for the energy conservation construction projects. Specify that this appropriation could also be used to provide additional funding for these energy conservation projects. Modify the Building Commission's debt service appropriation that guarantees the full payment of principal and interest costs on self-amortizing or partially self-amortizing facilities enumerated under the various state agencies to include the proposed DOA debt service appropriation.

Modify the existing fuel and utilities appropriations of the following state agencies to allow payments of assessments levied by DOA to pay debt service costs and energy cost savings generated at departmental facilities for energy conservation construction projects to be made from the appropriations: (a) the Educational Communications Board; (b) the State Historical Society; (c) the Wisconsin Educational Services Program for the Deaf and Hard of Hearing and

the Wisconsin Center for the Blind and Visually Impaired under the Department of Public Instruction; (d) the University of Wisconsin System; (e) the Department of Corrections; (f) the Department of Health and Family Services; (g) the Department of Military Affairs; (h) the Department of Veterans Affairs veterans memorial cemeteries; and (i) the Department of Administration.

## **DISCUSSION POINTS**

### **Wisconsin Energy Initiative**

1. The proposed \$50 million in bonding for energy conservation projects would follow the three previous phases of the state's Wisconsin Energy Initiative (WEI). In 1992, the State of Wisconsin created a public/private partnership known as the WEI-1 to conserve on utilities in all state facilities. WEI-1 involved energy audits of state buildings, steam trap improvements, building automation projects, and the replacement of lighting fixtures and ballasts with higher efficient equipment. Under the 1993-95 biennial budget, \$25 million in GPR-supported bonding was provided to fund projects under the initiative and the 1995-97 biennial budget added \$10 million in GPR-supported bonding. According to DOA, WEI-1 has resulted in annual energy savings to the state of \$3.7 million and has reduced emissions of environmentally harmful pollutants.

2. Subsequently, WEI-2 expanded the initiative to include a K-12 energy conservation program for the state's schools. In 1998, WEI-3 expanded the initiative beyond its primary focus of lighting retrofit and replacement projects to include the improvement of the energy efficiency of heating, ventilation, and air conditioning systems in state buildings. WEI-3 also included building system improvement to reduce water usage in state facilities. WEI-3 was managed under a performance contracting arrangement, whereby the annual energy savings associated with a project paid for the cost of the improvements, with certain guarantees from the contractor to cover costs in the event the savings do not accrue to the extent expected. Financing of the WEI-3 projects was done under the state's master lease borrowing program, which typically involved 10- to 15-year contracts. Nearly \$75 million in energy conservation improvements have been undertaken with approximately 95% of the projects installed at this time. DOA estimates that WEI-3 has resulted in annual energy savings to the state of \$12 million annually and reduced emissions of pollutants.

### **2007-09 Proposal**

3. In addition to current law provisions, the Governor issued Executive Order #145 in April, 2006, relating to energy conservation in state buildings. Among other requirements, the Governor directed DOA to do the following: (a) work with agencies and the UW System to set and implement measures to reach energy efficiency goals for state facilities, office buildings, or complexes that would reduce overall actual energy use per square foot by 10% by 2007-08; (b) work with state agencies and the UW System to establish programs for energy analysis of state-owned buildings, identify any reduced energy use under associated with an energy conservation contract, and examine the feasibility of entering into a performance contract for energy and

operational savings of a construction project; (c) provide centralized reporting and coordination of comprehensive capital energy improvements; and (d) work with the Building Commission and the Energy Center of Wisconsin to ensure that new state facilities are constructed to be 30% more energy efficient than commercial code.

4. Documents included with the Building Commission recommendations cite the need for agencies to comply with the requirements of Act 141 and the executive order as the reason the \$50 million in funding is needed. Similar to the WEI projects, it is expected that most of the energy conservation projects funded under this recommendation would generate utility savings. The Commission recommendations propose that those savings be used to support the PR-supported bonding. Savings in excess of the amounts needed to retire debt service on the bonds could be used in a revolving loan fund that would be available to fund additional projects.

5. Most of the agency fuel and utilities or general operations appropriations from which the debt service on the bonds would be assessed are GPR appropriations. Therefore, while the bonding recommended for energy conservation project would be PR-supported bonding, under the Commission's recommendations much of the revenue supporting the bonds would be general fund revenue. In addition, the energy savings generated from energy conservation projects within a state agency do not guarantee that the overall energy costs of that agency will be lower. While agency energy consumption rates may be reduced, if energy prices increase at a greater rate, an agency's total energy costs may increase.

6. Funding for other energy conservation efforts within enumerated projects are included in the recommended funding to support that project enumeration. However, the specific energy conservation projects for which the \$50 million in bonding would be issued are not enumerated under the Building Commission's 2007-09 state building program recommendations. The projects are included as part of the category of projects known as "All Agency" projects. These broad types of projects are enumerated under titles that indicate a general category of work and that establish an overall budget for the biennium for that purpose. The "All Agency" enumerations are used for types of projects, such as maintenance, that recur, but where the Commission may need to address unanticipated needs during the biennium. In the 2007-09 building program, funding for energy projects would represent nearly one-fifth of the new general obligation bonding for all agency projects under the Building Commission's recommendations.

7. Building Commission documents indicate that the requests for this energy conservation funding would include projects with the following requirements: (a) equipment purchases and installations on construction projects that meet federal standards for energy efficient equipment and construction techniques; (b) heating, ventilation, and air conditioning equipment and control sequence changes, and operating schedule changes through automated systems that allow for more flexible building system controls and make building operations more energy efficient and easier to operate; (c) electrical lighting and light fixture replacements; (d) automated controls to reduce peak load energy use; and (e) explore geothermal, solar, waste by product, wind, biomass, photovoltaic, and fuel cell energy sources.

8. DOA indicates that instead of continuing to finance these projects through master leases, the Commission is recommending bonding because it is a less expensive financing option for the state. DOA also indicates that \$50 million in bonding is an estimate of the funding that may be needed in the biennium based in part on preliminary surveys of some agencies, including the UW Madison campus. They note that the funding request also takes into account the WEI-3 project expenditure history adjusted for inflation.

9. The WEI-3 program history may provide an indication of the amount projects that could be completed and the amount of bonding authority that may be needed in the biennium to fund those projects. The following table lists when the nearly \$75 million in funding for WEI-3 energy conservation projects was expended.

**WEI-3 Project Costs by Fiscal Year**

<u>Year</u>	<u>Energy Projects</u>
1997-98	\$1,607,846
1998-99	2,807,023
1999-00	24,360,745
2000-01	5,176,746
2001-02	17,201,814
2002-03	1,728,066
2003-04	1,277,530
2004-05	0
2005-06	8,602,154
2006-07	<u>11,520,812</u>
Total	\$74,282,736

10. As indicated in the table, the level of project funding needed each year for the WEI-3 program varied widely from a low of \$0 in projects entered into in 2004-05 to a high of \$24.4 million in 1999-00. The expenditure history of the WEI-3 program indicates that the state may not need \$50 million in funding for energy conservation projects in the 2007-09 biennium. Therefore, the Committee could reduce the bonding. Providing \$30 million in bonding for the biennium would make an average of \$15 million available each year of the biennium, which would meet the annual contracted amount for most years of the WEI-3 program's history. While this would reduce the Building Commission's recommendation by \$20 million, it would provide a significant level of funding to continue these projects.

11. Conversely, any portion of the \$50 million in bonding not needed in the biennium would carryover and would be available for energy conservation projects in subsequent biennia. Further, the state does not incur any debt service costs associated with the authorized bonding until the bonds are issued.

## Debt Service on Bonds Issued for Energy Conservation Projects

12. Under the bill, DOA would be allowed to assess any agency that receives funding for an energy conservation project in an amount determined by DOA. The amount of the assessment could not exceed the agency's proportional share of debt service costs on the general obligation bonding issued to fund these projects or the amount of the agency's energy cost savings from the energy conservation project funded by DOA, whichever is greater. DOA would have to deposit these assessments into a newly-created DOA debt service appropriation that would be used to pay the debt service on the \$50 million in bonds issued for the energy conservation construction projects. Similar to the debt service appropriation for all the PR-supported bonding, the bill would also modify the Building Commission's debt service appropriation that guarantees the full payment of principal and interest costs on program revenue supported bonds from the general fund to include the proposed DOA debt service appropriation

13. The newly-created DOA appropriation that would be used to make annual debt service payments on the bonds issued for energy conservation projects could also be used to provide additional funding to state agencies for energy conservation projects. DOA indicates that this provision is being recommended because in the event that the energy savings that accrue from the energy conservation projects within an agency exceed the amounts needed to cover the debt service on the bonds issued for that agency, DOA would use these amounts to establish a revolving loan fund to make payments or loans to agencies to fund additional energy conservation projects without using bonding. If the Committee were to delete this authority, any energy savings that accrue that are in excess of the amounts necessary to retire the debt on the bonds issued for an agency's energy conservation projects would reduce expenditures from the agency's fuel and utility appropriation rather than being provided to DOA to make project loans or payments for additional projects.

14. Conversely, in order to allow DOA to make such loans or payments but allow for better legislative oversight of the expenditure of funds on energy conservation projects, a separate appropriation could be created for the purposes of making loans or payments to agencies for additional energy conservation projects. Similar to the Commission's recommendation, any agency energy savings in excess of those amounts needed to cover annual debt service in a year could be deposited to this appropriation.

## ALTERNATIVES TO BASE

### A. Authorized Bonding Level

1. Approve the Building Commission's recommendation to provide \$50,000,000 in PR-supported general obligation bonding to DOA for state agency energy conservation construction projects. Authorize DOA to carry out these energy conservation projects.

ALT A1	Change to Bill Revenue	Change to Base Revenue
BR	\$50,000,000	\$50,000,000

2. Modify the Building Commission's recommendation and provide \$30,000,000 in PR-supported general obligation bonding to DOA for state agency energy conservation construction projects. Authorize DOA to carry out these energy conservation projects.

ALT A2	Change to Bill Revenue	Change to Base Revenue
BR	\$30,000,000	\$30,000,000

3. Maintain current law (no bonding would be provided for energy conservation projects and DOA would not be provided any additional authority relative to these projects).

**B. DOA Debt Service Appropriation -- Assessments in Excess of Debt Service**

1. Approve the Building Commission's recommendation that would allow DOA to assess an agency for energy savings amounts in excess of the agency's proportional share of debt service costs on the bonding issued for energy conservation projects.

2. Modify the Building Commission's recommendation to create a separate appropriation for the purposes of making loans or payments to agencies for additional energy conservation projects. Specify that any assessment of agency energy savings in excess of those amounts needed to cover the agency's annual debt service on the bonding issued for energy conservation projects would be deposited to this appropriation. (This would eliminate the dual purpose for the proposed appropriation.)

3. Modify the Building Commission's recommendation to only allow assessments in the amount of the agency's proportional share of debt service costs on the bonding issued for energy conservation projects. (This would allow the agency to reduce expenditures from the agency's fuel and utility appropriation with any excess energy savings beyond the amounts needed to cover debt service.)

4. Maintain current law (no debt service appropriation would be created).

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