

H.B. 2324 – State Buildings; energy conservation standard Fact Sheet – February 2003

Prepared by the Arizona Clean Energy and Efficiency Coalition (ACEEC)
and the Southwest Energy Efficiency Project (SWEET)

Summary

HB 2324 (state buildings; energy conservation standard) would increase energy efficiency and reduce energy costs in state and public buildings by amending current statutes (Section 34-451, A.R.S.) in three ways:

1. Update an energy code reference for state and public buildings;
2. Adopt energy savings goals for state agency, university, and community college district building systems; and
3. Adopt energy efficiency product procurement standards for state purchases (certified by the federal government as Energy Star or FEMP-designated).

The three subsections are described in more detail below.

None of the proposed provisions in HB 2324 require new state funding, and the bill has been designed to have a significant positive financial impact on the state.

For example, in the Phoenix-area state agency buildings managed by the Department of Administration, the bill is projected to save about \$0.5 million annually in electricity costs by 2008 (10%), and about \$0.7 million annually by 2011 (15%), with total projected cumulative savings of over \$9 million from 2003 to 2020. Savings in other state agency, university, and community college building systems would be on top of this amount.

HB 2324 is supported by the Arizona Clean Energy and Efficiency Coalition (ACEEC) a newly formed non-profit coalition dedicated to strengthening Arizona's economy and protecting its natural heritage by significantly increasing energy efficiency and the use of renewable energy.

Introduced by: Representatives Graf, Downing, Jayne, Rosati

Assigned to: Government & Retirement, Environment

Amendment by Mr. Graf (Environment Committee, February 24)

The sponsor of HB 2324, Mr. Graf, is expected to offer an amendment in the Environment Committee that will:

1. Modify the subsection relating to energy conservation in state building systems by specifying the state agencies and political subdivisions affected (Department of Administration, Department of Transportation, Board of Regents for the universities, and community college districts); adjusting the baseline year; identifying the State Energy Office as a technical resource for and monitor of agency progress; and requiring the State Energy Office to explain the reasons for any failure to achieve the reductions in energy use per square foot. These changes are a result of review and discussion with the affected agencies.
2. Clarify language on energy efficiency products certified by the U.S. DOE or EPA as Energy Star or certified by the Federal Energy Management Program (FEMP).

Amendment by Mr. Huppenthal (Government and Retirement, February 4)

HB 2324 was amended in the Government and Retirement committee as follows: stipulates that the state agencies "shall set an objective to reduce energy use" instead of "shall reduce energy use."

1. Update an Energy Code Reference for State and Public Buildings

In this subsection the bill would replace an existing reference in A.R.S. 34-451 to an outdated building energy code standard for public buildings with a reference to the up-to-date International Energy Conservation Code (IECC). Per existing legislation, the code references would apply to all public buildings and all new capital projects as defined in A.R.S. 41-790, including school districts, community colleges, and universities. Because of the diversity of public and state buildings, the subsection would retain references to two building energy codes: the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) code, and the International Energy Conservation Code (IECC). This is a technical correction.

2. Adopt Energy Savings Goals for State Agency Buildings

This subsection encourages the state to lead by example and implement cost-effective energy efficiency and renewable energy measures in its state agency, university, and community college district building systems, with the goal of reducing overall energy use per square foot by 10% by 2008 (5 years) and by 15% by 2011 (8 years). It sets goals that are very achievable. The goals are lower than similar federal goals,¹ and lower than the energy efficiency potential documented in the recent study by the Southwest Energy Efficiency Project (SWEET).

Each dollar invested in energy efficiency in state facilities returns about \$3 in direct benefits to the state.

This bill would set the overall goals, and the state agencies would have substantial flexibility regarding how best to achieve the goals (e.g., in which facilities, in which projects, and when), as long as the overall goals were achieved.

How would the energy efficiency projects be funded? First, energy efficiency does not have to cost more, especially when incorporated during new construction, renovation, or remodeling of state facilities. Second, for those projects that require additional upfront capital and/or technical assistance with implementation, the state could use energy service companies to design, finance, implement, and guarantee the performance of energy efficiency measures in existing and new state facilities. The energy service companies could be paid through the savings on the energy bill using performance contracting. Performance contracting has been a very effective and cost-efficient approach for reducing energy costs and improving energy efficiency in federal, state, and institutional facilities, as well as in the private sector. Several state agencies and universities have used and are currently using performance contracts for energy efficiency retrofits.

3. Adopt Energy Efficiency Product Procurement Standards for State Purchases

This subsection would require all state agencies to procure energy efficient products in all categories that they are available, unless the products are shown not to be cost-effective on a life-cycle cost basis. The energy efficient products are certified by the U.S. Department of Energy or the U.S. Environmental Protection Agency as Energy Star, or certified under the Federal Energy Management Program (FEMP).

¹ Federal agencies are operating under an Executive Order to reduce their energy consumption by 30% per square foot of floor area by 2005, and by 35% by 2010, using 1985 as the reference year. Federal agencies had already achieved a 17% reduction through 1997.

Energy Star is a label for energy efficient products promoted by the U.S. Department of Energy and the U.S. Environmental Protection Agency – it is not a private brand name or a set of products from one private company. Over 13,000 product models in 38 product categories bear the Energy Star label. Products must meet certain standards and are certified before receiving the Energy Star label. Consumers have come to rely on the Energy Star label to identify quality energy efficient products in the marketplace – much like a Good Housekeeping Seal for energy efficient products.

Cost-effective Energy Star and FEMP-designated products are available in many categories, including personal computers, monitors, printers, and office equipment, and would save money for the state as well as show a commitment to energy efficiency within state government. Federal agencies already are required to buy Energy Star and FEMP-designated products as long as they are cost-effective on a life-cycle cost basis.

There is no extra first cost for key Energy Star products purchased on a large scale by state agencies, such as computers, monitors, and printers. Any Energy Star or FEMP-designated products that might have a higher initial cost are not required to be purchased if they are not cost-effective. This provision is supported by the life-cycle costing requirements in existing legislation (A.R.S. 34-452.B.).

The Potential for Energy Efficiency in Arizona, and the Benefits to the State

The Southwest Energy Efficiency Project (SWEEP) recently completed its study of the potential for energy efficiency gains in Arizona and other southwest states (“The New Mother Lode: The Potential for More Efficient Electricity Use in the Southwest”). The study found that adoption of cost-effective commercially-available energy efficiency technologies in Arizona would reduce total electricity consumption 18% by 2010 and 34% by 2020, and reduce average annual load growth from 3% per year to 0.7% per year.

Increasing the efficiency of energy use in Arizona by implementing the SWEEP recommendations would:

- Eliminate the need to construct twelve 500 megawatt power plants or their equivalent over the next 18 years, as well as the transmission lines needed to serve these plants;
- Save consumers and businesses \$10.5 billion during 2003-2020;
- Increase statewide employment by over 24,000 jobs by 2020;
- Save 9.0 billion gallons of water per year by 2010 and 22.4 billion gallons per year by 2020; and
- Reduce air pollution from power plants by 11% and carbon dioxide emissions by 36% by 2020.

See the SWEEP web site (www.swenergy.org) for the complete study and additional information on energy efficiency.

The legislation proposed in HB 2324 would make progress towards achieving a portion of these benefits in Arizona, within the state and public buildings sector, while considering the overall context and priorities for the 2003 legislative session.