

**State of Tennessee Pilot Project
Case Study**

developed for
The Consortium for Energy Efficiency
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May 26, 1999

Organization and Functions

The state government of Tennessee is organized into 23 departments, each of which has numerous agencies. The State has several procurement organizations, the major one being the Division of Purchasing (which is responsible for procurement for most state organizations other than institutions of higher learning). This organization develops product specifications and then negotiates all statewide term purchasing contracts and all agency term contracts. It also handles all purchases over \$2,000. EnergyStar® related products represent about 5% of the Division's total annual purchases of \$243 million. Over 70% of those energy-related purchases are for microcomputers, which are mostly energy efficient. Another 20% are for copiers that are rented rather than purchased, although energy-efficiency could of course be a specification for rented as well as purchased products. The next largest category, at 5%, is lamps and ballasts, and the Division has already established a statewide contract for energy efficient lamps and ballasts, although it is not yet being used extensively by agencies. Thus, while additional energy efficiency gains are still possible, and are a goal of the Division, greater energy saving benefits may be available elsewhere.

The Division of Purchasing is, and has been, interested in purchasing energy efficient products. The Division established an Energy unit several years ago to help it identify, specify, and procure such products. About a year ago, this unit was transferred to the Division of Capital projects and Real Property Management. This Division is responsible for building new facilities and major facility renovations (again, for most state organizations other than institutions of higher learning). Within it, in addition to the Energy unit, is a group of architects and engineers that performs the design and engineering functions for smaller projects, and another group that manages third party consultants who perform those same functions for larger projects. These construction and renovation projects often include procurement of large volumes of energy-using products, although the Division does not track those expenditures separately. At least to date, the Division has not included energy-saving specifications in its project designs. It should be noted, however, that the State of Tennessee entered into the EPA's EnergyStar® Buildings Program earlier this year.

The Energy unit that is now located within the Division of Capital Projects and Real Property Management has been active. It was instrumental in piloting the use of energy-efficient lamps and ballasts in a state prison, and it is sponsoring and supporting energy efficient facility renovations, several of which have been successfully completed. It is also preparing to negotiate the State's first Performance Contract with an Energy Service Company. The unit is also beginning to address the challenging task of influencing new building construction to make it energy-efficient as well. Finally, the Energy unit is a major sponsor of a recurring energy-efficiency conference held at a local university.

Findings and Recommendations

Both of the Divisions discussed above are internally self-motivated to purchase energy-efficient products. The interest and involvement of senior managers has been critical to the Divisions' successes to date, and it will be key to their future successes as well. The importance of this critical factor – internal energy-efficiency “*ombudsmen*” – cannot be overestimated, even though it is difficult to institutionalize into an energy-efficiency program. Because of its self-motivation, the past successes in Tennessee will no doubt be matched or exceeded by future successes, although they will be more difficult to achieve because the audience for them is more diverse

and disinterested. Thus, Tennessee is the case study of a State that is well down the path to energy-efficiency, but that still has some significant roadblocks and challenges to overcome.

The Purchasing Division must educate both its own buyers and the procurement officers in the state agencies to the benefits of energy-efficient products. The State's outlook, like its budget, is "one fiscal year at a time." Further, agencies do not pay their electric bills directly, but rather pay one uniform charge (on a per square foot of occupancy basis). Thus, the agencies would not directly see any energy savings generated by the new products. When faced with potentially higher initial product costs, many agencies will have to be sold on the value of energy-efficient products based on other benefits, such as reduced maintenance, and increased user comfort and convenience.

The Division of Capital Projects and Real Property Management faces considerable challenges of its own. It must educate its own architects and engineers about energy-efficiency benefits and, even more difficult, it must do the same thing with its outside consultants, architects and designers. Furthermore, construction projects must be approved by the State Building Commission, so that group must be in agreement as well. The State's *Designers' Manual*, which governs new construction design, will also have to be revised appropriately. Finally, state agencies must be educated about, and agree with, the concept of energy-efficient facility construction, just as is the case with direct energy-efficient product purchases.

A brief "status report" on Tennessee's energy-efficiency program might read as follows:

- Develop an interest in energy-efficiency; find "sponsors" and "ombudsmen" - Done
- Introduce energy-efficient products and programs on a "test" basis - Ongoing
- Educate employees in the procurement and capital projects functions - Begun
- Educate users and customers in state agencies - A future effort
- Institutionalize energy-efficiency in policies, procedures, and specifications - Just begun
- Overcome process barriers, e.g., budgeting, planning, etc. - A future effort
- Educate third parties, i.e., vendors, architects, engineers, consultants - A future effort

Other states can learn from the steps that Tennessee has taken, and how it has addressed obstacles in its path. The reverse is true as well. Some states may have already overcome the same internal challenges still facing Tennessee, and learning how this was done would be helpful. External barriers, e.g., educating third party architects, could be met most efficiently by means of a broad-based, concerted effort. In summary, though, Tennessee has made an excellent start toward energy-efficiency, and it will surely continue its successes in the future.