

Green Spending:
An Update on Massachusetts' Environmental Purchasing Program
Incorporating ENERGY STAR Office Equipment

Prepared for:

The Consortium for Energy Efficiency, Inc.

In Support of

THE ENVIRONMENTAL PROTECTION AGENCY'S
ENERGY STAR PURCHASING TOOL KIT INITIATIVE

Prepared by:

Katherine Johnson
KJ Consulting

Final

November 16, 2001

Foreword

This case study describes the process the Commonwealth of Massachusetts used to incorporate ENERGY STAR -compliant equipment into its copier and computer contracts. It describes the opportunities the state purchasing staff identified for ongoing customer education and training and the challenges associated with developing and implementing this innovative approach.

The case study provides useful guidance to other state and local institutions interested in incorporating energy efficiency into purchase decisions. By being among the first in the nation to incorporate ENERGY STAR guidelines into purchasing contracts, the State of Massachusetts has made it easier for other organizations to follow suit.

Although this case study describes some of the barriers that the purchasing staff faced as it moved into this new area, this is not meant to discourage other state or local agencies from trying.

Through their early experiences in incorporating ENERGY STAR specifications into computers and copiers contracts, the state purchasing staff identified potential areas of concern, provided additional clarifications on ENERGY STAR specifications for computers, and led to an increased level of vendor participation.

Despite their initial setbacks, specifying ENERGY STAR-labeled products has also led to a number of improvements in customer-vendor-staff relations. For example, Massachusetts developed an innovative way of linking product performance and installation rates to overall vendor performance. The state also required its copier vendors to provide both the traditional customer education regarding machine operation as well as providing an explanation of the benefits of purchasing and using ENERGY STAR-labeled equipment.

Massachusetts provides an excellent example of the way that purchasing staff and user agencies can work together to achieve long-term and lasting energy efficiency savings. As this case study clearly indicates, achieving that worthy objective requires patience in working out problems and persistence in looking for new ways to incorporate energy efficiency training and specifications.

Contents

Foreword	2
I. Introduction.....	4
II. Procurement Reform and Its Impact on Purchasing.....	4
III. Putting ENERGY STAR Purchasing Into Action.....	5
IV. Lessons Learned.....	10
V. Tips from the Massachusetts' Experience.....	12
VI. For More Information.....	14
Appendix A- Implementation Strategies.....	15
Appendix B- ENERGY STAR Procurement Resources	17

I. INTRODUCTION

Purchasing goods and services by state and local governments represents significant buying power in the national economy. The Federal government purchases more than \$200 billion worth of goods and services annually. The Commonwealth of Massachusetts purchases more than \$600 million annually in various goods and services ranging from paper supplies to services contracts.

The Operational Services Division (OSD) acts as the central purchasing arm for Massachusetts departments. It provides contracting services for a range of products to more than 220 diverse agencies throughout the Commonwealth.

The state leverages its buying power by developing statewide purchasing contracts. This market power further motivates vendors to look for ways to improve current products and services, often leading to offering products that focus on resource or energy conservation. In the mid-1990s, the Commonwealth of Massachusetts began incorporating environmental considerations into its procurement decisions. This initiative, begun as the Environmentally Preferable Purchasing Program (EPP), is coordinated through OSD.

Environmentally Preferable Products are products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Such products or services may include, but are not limited to, those that contain recycled content, minimize waste, conserve energy or water, and reduce the amount of toxics disposed or consumed.

II. PROCUREMENT REFORM AND ITS IMPACT ON PURCHASING

In Fiscal Year 1997, the Commonwealth revamped its purchasing procedures through its “Procurement Reform” program. This program consolidated current procurement regulations and established a new set of purchasing policies and procedures. Through these new policies and procedures, Procurement Management Teams (PMT) and individual user agencies are encouraged to search out vendors and products based on “best value” rather than the lowest price.

“Best value (means) they have the authority to take into accounts other factors that bring added value to the contract, such as vendor performance or delivery.” (OSD Staff)

The increased emphasis on “best value” allowed the Commonwealth to more effectively consider factors that influence overall product performance, including energy efficiency in their procurement decisions. This was an important reason that OSD decided to specify ENERGY STAR-compliant equipment into its statewide contracts, where applicable.

III. PUTTING ENERGY STAR PURCHASING INTO ACTION

Procurement officials must ensure that the bidding process is fair to all potential vendors. To do that, purchasing staff need to determine that the products specified in the contracts are *readily available, meet acceptable performance standards*, and are *cost competitive*.

OSD staff researched ENERGY STAR-compliant products and determined that they were cost competitive. Staff also learned that ENERGY STAR-labeled equipment is readily available from a variety of manufacturers. ENERGY STAR-labeled products also met or exceeded current performance standards.

“Basically we started looking at ENERGY STAR (labeled) computers, because we were interested in the issues, such as environmental impacts, energy efficiency, and overall performance. We took a look at the list of ENERGY STAR (labeled) products, talked to a number of manufacturers and vendors about performance, and determined that specifying ENERGY STAR (compliant) computers would be relatively easy to do.”(OSD Staff)

The purchasing staff also had to consider if the ENERGY STAR-compliance guidelines should be voluntary or mandatory in future purchasing contracts. Some organizations opt to phase in new requirements through a voluntary process in an effort to encourage greater vendor participation. But based the widespread availability of this equipment, the procurement staff decided to make purchasing ENERGY STAR-compliant equipment mandatory.

Next, the Commonwealth of Massachusetts issued bids through a Request for Response (RFR), which provides detailed specifications for desired item. Writing RFR’s are typically a difficult and time-consuming task, since they require providing detailed guidance for potential bidders on a variety of topics. However, the process for including energy efficiency specifications in the RFR was fairly easy. The purchasing staff incorporated the appropriate information from EPA’s web page (www.energystar.gov) into its RFR’s for ENERGY STAR-labeled computers and copiers.

Then OSD staff reviewed the energy efficiency criteria and sample specifications with the appropriate members of the Procurement Management Team (PMT) and representatives from various user agencies. Examples of this contract language are provided in Section VI.

“Energy efficiency was part of the Environmentally Preferable Product (EPP) program. Since we had already focused on the recycled paper content, we moved into energy efficiency.” (OSD Staff)

A. Purchasing ENERGY STAR Computers

ENERGY STAR-compliant computers differ from standard computers only in their power management functions. These computers power down or “go to sleep,” when the computer is inactive for a period of time.

While the specifying process was fairly straightforward, the OSD staff soon learned that enforcing, monitoring, and tracking ENERGY STAR-compliant purchases proved more difficult. The staff faced several issues relating to ensuring compliance associated with purchasing and installing ENERGY STAR-labeled computers.

The first challenge was getting the computer hardware and software manufacturers to work together to meet the ENERGY STAR guidelines. Even though computer manufacturers could provide the ENERGY STAR-compliant hardware, software manufacturers did not always support those functions.

One striking example was when OSD staff discovered that certain versions of Microsoft’s Windows software, specifically Windows NT- Version 4.0, was not compatible with the ENERGY STAR power management functions. This recognition came only after state agencies had purchased thousands of ENERGY STAR-labeled computers and installed them with Windows NT 4.

“Windows NT is the most popular network software package among user agencies, so this incompatibility effectively disabled thousands of otherwise ENERGY STAR-compliant machines.” (OSD Staff)

1. Vendor Concerns

The incompatibility issue developed because of the disconnect that often occurs between computer hardware and software suppliers. Simply put, hardware manufacturers are not aware of the software that will be installed on each machine.

“Computers are complex. Making them work right is a challenge.” (EPA Official)

Based on the Massachusetts’ experience, the EPA has now incorporated additional ENERGY STAR guidelines “requiring that manufacturers shall attempt to provide general guidelines to consumers regarding network compatibility.”

“In most cases, when you specify ‘ENERGY STAR-compliant’ that should be an overriding criteria. Manufacturers should be able to do that, irrespective of the hardware or software configurations.” (EPA Official)

Perhaps the best outcome from this experience is that as the technology has evolved, this problem has been addressed, Microsoft has assured the EPA that this problem has been addressed in future software releases, including Windows NT 5.0 and Windows 2000.

2. User Agency Reaction

Overall, the response among user agencies has been positive. ENERGY STAR-compliant computers work seamlessly with other computer systems purchased previously.

“The computers are set to the ENERGY STAR features when shipped. So far as I know, there haven’t been any problems with the ENERGY STAR computers crashing the networks. The ENERGY STAR label is good for our environment. People make the best effort to purchase ENERGY STAR (labeled) machines.” (IT Staff Member)

3. Remaining Barriers and Challenges

Several challenges still face the Commonwealth as it works to incorporate ENERGY STAR specifications into its purchasing contracts.

Documenting actual ENERGY STAR purchase and installation rates.

The Commonwealth of Massachusetts still must address the difficulty of actually **confirming** that the ENERGY STAR-compliant features remain in place after the initial set up and installation. Occasionally users may try to disable the power management functions, because they view them as annoying or troublesome. However the IT staff strongly discourage such activities by preventing users from having direct access to the commands that could disable the ENERGY STAR functions.

“We have the “sleep mode” locked (from the individual end user), and it can only be accessed by IT staff with administrative privileges...In order to change the sleep mode, the end user would have to access the (main system controls). We don’t let the end users do that because that could be detrimental to the overall functioning of the IT shop.”(IT Staff Member)

The Commonwealth also has the daunting task of tracking and monitoring ENERGY STAR-labeled equipment purchases from more than 200 user agencies. Since these agencies operate independently, it is impossible to track purchases at the individual user agency level. Therefore, the state is exploring alternative strategies to facilitate product tracking.

One suggested approach is to rely on the equipment vendors to provide product information since they are the critical link between the end user and the purchasing staff. For example, vendors would be required to complete and mail a prepaid postcard to OSD documenting the equipment type, user agency, and date installed. This information could then be collected by OSD and entered into a tracking database. The database would track both product installation rates and provide estimates on energy usage and savings. Appendix A provides more detailed information regarding implementing this suggested tracking strategy.

Developing a comprehensive solution to integrate computer systems that preserve the ENERGY STAR features.

The real barrier to integrating ENERGY STAR-compliant computer systems is to facilitate ongoing communication between hardware and software manufacturers. Unfortunately, this cannot be achieved unless vendors are sufficiently motivated to do so. This requires both a skillful legal understanding, to ensure fair and competitive practices, as well as continued and ongoing enforcement of these provisions among state contract officials

The Massachusetts' experience illustrates that the EPA should continue to take an active role in communicating with hardware and software vendors about ENERGY STAR-compliance standards. The continued interaction between EPA and these manufacturers will help to resolve any technical issues before it filters down to the individual state level.

However, state procurement officials need to remain vigilant. Only ongoing monitoring and enforcement of these requirements will ensure that the vendors will provide and enable ENERGY STAR-labeled equipment.

B Purchasing ENERGY STAR Copiers

ENERGY STAR-labeled copiers differ from standard copiers since shut down after a specific period of inactivity, usually ten minutes. The default copier function is for duplexing (or two-sided) copies rather than standard one-sided setting.

Since copier vendors routinely provide some level of user training and orientation after the machine is installed, OSD saw that as an opportunity to also include ENERGY STAR training. The final RFR required that all copier vendors incorporate instruction on the features and benefits of ENERGY STAR-labeled copiers in all training provided.

2. Vendor Reaction

The vendors viewed this as a highly desirable contract, and did not perceive the ENERGY STAR training requirements as particularly difficult.

“The state of Massachusetts is our largest account. We sell thousands of copiers to every school, town, city and named non profit that can buy off the state contract...”(Copier Vendor)

“We sell Canon copiers and those copiers already complied with Energy Star specifications... it is a good symbol (or label).” (Copier Vendor)

But several vendors indicated that despite the contract requirements, some end users complain about enabling the ENERGY STAR features.

“The normal user doesn’t care for being forced to use ENERGY STAR features.” (Copier Vendor)

3. End User Reaction

The reaction among user agencies has been mixed. Some users do not like the ENERGY STAR features, especially the power management function.

“The folks on the 4th floor don’t like to wait for that feature at all wait for it to warm up, even though it takes less than 10 seconds... They want to bypass that feature during working hours...it is a nuisance to them..”(User Agency)

However, other agencies have embraced the ENERGY STAR features. One department structured the copier workload so the power management function does not disrupt the workflow.

Several agency officials also believe that ENERGY STAR-labeled copiers require less maintenance and are superior to other machines.

“My overall impression is that the ENERGY STAR-(labeled) copier is a much better functioning machine. ENERGY STAR-(labeled) machines don’t heat up as much and thus requires lower maintenance, less trouble because the machine isn’t getting too hot.” (User Agency)

Even though user agencies are aware of the features, they don’t necessarily see or appreciate the energy savings that are achieved. Several agency officials pointed out since user agencies do not pay their energy bills directly, they are not likely to view energy savings as having any direct impact on their organizations’ budgets.

“We see the ENERGY STAR label, but don’t think about it... It is good to sell the value, but it is not relevant to end users.” (User Agency).

OSD staff thought they had addressed this lack of understanding among user agencies by requiring copier vendors to also provide information on the benefits of using ENERGY STAR-labeled copiers. Specifically, OSD wanted the vendors to provide tangible and meaningful examples to copier purchasers that would help to make energy savings more understandable and relevant. However, this requirement was difficult to implement.

Occasionally, the ENERGY STAR features are also disabled to meet specific needs of unique to a particular agency. For example, some high usage copiers do not have the sleep mode feature enabled, since the machines are in continuous use. Another agency that makes off-size or non-traditional copies disabled the duplexing function, since it does not meet that agency’s specific needs.

4. Remaining Barriers and Challenges

The previous examples of user agencies either complaining about or disabling the ENERGY STAR features illustrate the ongoing struggle that the purchasing staff face to educate both vendors and end users. Rather than completely disabling these copiers, the individual user agencies could have merely adjusted the ENERGY STAR settings to better reflect individual usage patterns. These examples reinforce the need for better communication between the vendors and the end users.

These cases also illustrate the difficulties of balancing the vendor's instinctive desire to please the customer, while also ensuring that its machines meet the contract requirements.

Vendor Education:

Even though the original contract specified that vendors must provide ENERGY STAR education in their standard customer training and orientation program, this rarely occurred. Through discussions with both contractors and user agencies, OSD personnel learned that most vendors were not including ENERGY STAR training. The staff attributed this failure to the separation that exists between the management teams that actually prepare the contract bids, and the sales and service personnel that execute those contracts. That lack of internal communication, combined with normal turnover and personnel changes, contributed to the lack of emphasis that most vendors put on ENERGY STAR education when this contract first began.

"We asked for an outline of the training proposed. Some had elaborate presentations, and some had just a few paragraphs...this was frustrating." (OSD staff)

To remind the vendors of this important requirement, the procurement team met with vendors on several occasions to focus on compliance and training issues. This experience illustrated that it was not sufficient to merely designate ENERGY STAR training on the contract, but also required ongoing involvement and monitoring by the purchasing staff. The staff needed to clarify the contract requirements and provide additional resources to help vendors clearly articulate the various benefits associated with purchasing and using ENERGY STAR-labeled copiers.

OSD staff also developed some ENERGY STAR fact sheets to supplement and reinforce vendor training activities. Examples of these fact sheets are in Appendix B. The staff also holds periodic meetings with the contract vendors and PMT members to further review and reinforce this contract requirement.

Evaluating Vendor Performance:

Until recently, it was difficult for the purchasing staff to receive any type of ongoing feedback regarding vendor performance. OSD now requires its vendors to provide quarterly reports on performance and customer satisfaction. The report also provides feedback on ENERGY STAR training that has been provided. Each time a state agency installs a copier, the equipment vendor is **required** to have the customer complete a satisfaction and performance survey. The vendor is then responsible for providing this

information back to OSD staff on a periodic basis. Compliance is an important part of the vendor's annual performance review, and negative ratings could adversely affect their contract status. By putting the burden on vendors rather than customers, OSD hopes to monitor and improve the energy efficiency element of the copier procurement program even more effectively in the future.

IV. Lessons Learned

The Commonwealth of Massachusetts' experiences with specifying and purchasing both ENERGY STAR-labeled copiers and computers provide useful lessons for other government agencies. By specifying energy efficient copiers and computers, the Commonwealth reaffirmed its commitment to environmental stewardship.

OSD staff learned that specifying energy-efficient equipment is not enough. As this case study illustrates, changing purchasing behavior within large organizations and among vendors requires continuing patience and persistence. Other lessons learned include:

Communication among buyers, sellers, and end users is **critical** to long-term success.

Buyer Communication: The state's strategy for consensus building among buyers and purchasing staff provides an excellent way to identify potential issues, share concerns, and address specific user needs. This approach eases the transition of ENERGY STAR specifications into upcoming product bids. It also creates an avenue to discuss concerns or issues that may arise during the contract period.

Seller/Vendor Communication: Massachusetts meets regularly with its vendors to ensure a continuous line of communication. By hosting informational sessions at the beginning of a new bid process, vendors are made aware of the new requirements well in advance. Including them early on in the process also allows vendors to voice any specific concerns.

Through these meetings, the State learned that vendors were willing, indeed eager, to offer ENERGY STAR-labeled products. These meetings were a critical indicator that ENERGY STAR compliant equipment could be easily included on future state contracts.

The State also holds periodic vendor meetings to review contract provisions and address any concerns or issues. This ongoing dialogue ensures a continued commitment by vendors to comply with contract requirements.

As one vendor summed up, "Once I learned how we will be rated as a vendor on this contract, that put an exclamation point on this for us to develop ENERGY STAR training." (Copier Vendor)

End User Communication: This case study reinforces the need for ongoing customer education as part of any energy efficiency purchasing initiative. To effect real change in

consumer behavior at the user agencies requires continual reminders and consistent communication from both purchasing staff and vendors.

Users need to be reminded---through posters, brochures, stickers, and memos-- the reasons and benefits for purchasing and using ENERGY STAR-compliant equipment. Several agency officials suggested providing more reminders near locations where ENERGY STAR-labeled computers or copiers are in use. These informational pieces would reinforce the messages of energy and environmental savings. By placing them near the copier machines, users would have a chance to read them, as they wait the few seconds for the ENERGY STAR copiers to warm up! It is important to place these materials in high traffic areas, to ensure that everyone in the user agency has a better understanding of and appreciation for the ENERGY STAR-labeled equipment.

One suggested approach is to have the EPA work with equipment manufacturers to develop informational posters and stickers describing the energy and environmental benefits that each model provides. These materials could then be given to the customer at the point of sale, or to the end user agency for display on or near the machines. These materials would help to reinforce the ENERGY STAR message in meaningful and memorable ways.

Several examples of the types of messages that could be included on these posters are Appendix B. The ENERGY STAR Purchasing Tool Kit and Communications Kit also provide other ideas for helping organizations publicize energy efficient purchases more effectively to internal audiences.

Coordination among the purchasing department and vendors is necessary to ensure a consistent and appropriate message.

By requiring that vendors, rather than customer agencies, track equipment purchases, OSD will gain a much better sense of the overall impacts that ENERGY STAR-complaint purchases have both on energy costs and environmental savings. This tracking provides a valuable way to objectively document the savings achieved from ENERGY STAR purchases.

Tracking equipment purchases also increases the level of feedback it receives from end users, by holding the vendors accountable for ensuring that customers complete product and vendor evaluation and satisfaction surveys.

Due to the persistence of OSD staff, vendors are now fully aware of how their overall performance will be judged and evaluated. Extending the vendor performance evaluation to include ENERGY STAR education further reinforces and motivates vendors to actually follow through.

V. Tips from the Massachusetts' Experience

The Commonwealth of Massachusetts' experiences contracts provides some useful tips for other organizations interested in incorporating ENERGY STAR requirements into purchasing contracts.

Enlist Support From the Top: The Environmentally Preferable Purchasing Program receives support from high levels within the Commonwealth's government. OSD staff used that support to request a letter from the Secretary of Administration and Finance specifically addressing energy efficiency as way to meet the Commonwealth's environmental goals. A senior-level endorsement will make it easier convince the user agencies that purchasing ENERGY STAR-compliant equipment is a good idea.

Build Consensus Among the Key Players: The purchasing staff brings diverse user agencies together to discuss concerns and share ideas. This process educates purchasing staff regarding user needs and shares information about product features, benefits, and characteristics.

Make ENERGY STAR Features a Competitive Advantage: OSD uses a point system to evaluate vendor bids and make final award decisions. The state gives additional points to vendors that meet or exceed various environmental or energy efficiency criteria. Other state agencies looking to incorporate ENERGY STAR specifications into their equipment contracts could follow Massachusetts' lead by either making ENERGY STAR-compliant equipment mandatory, or by awarding points based on the vendors' ability to provide ENERGY STAR-compliant equipment, and proposed ongoing user support, including energy efficiency education.

Provide Carrots and Sticks: OSD is considering establishing an award program for outstanding EPP vendors. The department is seeking ways to recognize vendors that have done an exceptional job of meeting or exceeding current contract requirements regarding environmental issues. Vendor recognition strategies could include letters of commendation, certificates, and other awards to acknowledge those vendors that have been outstanding performers in the ENERGY STAR program. The EPA currently has a recognition program in place to acknowledge exceptional ENERGY STAR partners. This type of program could be modified to meet the needs of purchasing departments at the local or state level.

Conversely, vendors that consistently fail to perform as expected, including not providing ENERGY STAR training, risk poor performance ratings that could jeopardize future contracts with OSD. By establishing clear performance objectives and measuring results on a periodic basis, purchasing departments will be able to both identify and evaluate vendor performance.

Be Patient and Persistent: Change does not happen overnight. Even though the state has made progress toward educating its end users about the benefits of incorporating energy efficiency into their purchasing decisions, much work remains.

Energy efficiency is not a high priority for most purchasers, no matter how concerned they may be about environmental or resource conservation. Sometimes it is even viewed as an annoyance rather than a benefit. So, it is important to remind users that saving energy is worth spending a little extra time waiting for the equipment to warm up. These moments also provide an excellent opportunity to remind end users about the ENERGY STAR –features through strategically positioned posters or stickers.

Getting Started: Developing Your Own ENERGY STAR Purchasing Program

The following provides a checklist of issues for your organization to consider as it develops an energy efficiency purchasing program.

1. **Identify likely or potential products.** EPA’s ENERGY STAR Purchasing Tool Kit provides descriptions and specifications on the products purchased by state and local governments. EPA’s web site has additional information to assist your organization in getting started.
2. **Involve members from user agencies to identify and promote energy efficiency.** Host periodic meetings among user agencies so vendors and purchasing staff could jointly present the benefits of ENERGY STAR products, and share information and experiences that will further build support for this program.
3. **Enlist vendor support in both identifying potential products and providing ongoing training and support.** Vendors are on the “front lines” in terms monitoring new product trends and responding to customer needs. They are often the best information source for identifying new products that could be included in an ENERGY STAR Purchasing initiative. Moreover, as computer and copier technologies evolve and converge, new types of multi-function products are emerging. Often, vendors have the best information regarding emerging technologies, and new product niches that may be appropriate to include in future ENERGY STAR purchasing contracts. Just as vendors rely on the procurement team for information and guidance, so too can purchasing staffs look to vendors to provide them with the most up-to-date information regarding industry and user trends. Periodic meetings are an excellent way to facilitate this information exchange.
4. **Monitor and evaluate program implementation to ensure compliance and to address problems as they arise.** Effective program evaluation begins when the product is **first purchased**. Therefore, it is important to make sure that vendors are gathering the relevant user information at the time the product is delivered and installed. Then, this information needs to be forwarded to the central procurement office. Vendors need to be told from the beginning that product tracking is an important element of their overall vendor rating. Moreover, the purchasing staff needs to actually follow through with the user information, once it has been gathered, by conducting both spot checks on

equipment, as well as informally talking to users periodically about the vendors, the products, and their overall impressions.

5. **Publicize and promote energy efficiency and savings in tangible and meaningful ways.** Demonstrating the savings achieved through state purchases of ENERGY STAR equipment, such as copiers or computers, is critical to make energy savings relevant to the end user. Vendors play an important role in documenting estimated savings, by gathering tracking data on equipment installations and by providing realistic energy savings estimates based on typical equipment use when configured to ENERGY STAR standards. Examples of translating energy savings estimates into meaningful measurements are presented below:

Computers: Purchasing and using just 50 ENERGY STAR compliant computers saves our department more than \$6,100 in energy costs over the next five years.*

Copiers: Using just five ENERGY STAR -compliant copiers saves taxpayers more than \$1,000*

*Information from EPA's ENERGY STAR Purchasing Tool Kit

6. **Share the results among peers, vendors and staff.** This will ensure a continuing dialogue regarding the benefits of this program, and provide additional guidance on new strategies for long-term success.

VI. For More Information

For more information about Massachusetts' activities emphasizing both ENERGY STAR purchasing and environmentally preferable products, visit the Commonwealth's home page at www.magnet.state.ma.us/osd or contact:

<p>Eric Friedman Environmental Purchasing Coordinator Operational Services Division One Ashburton Place, 10th Floor Boston, MA 02108-1552 Phone: 617-720-3351 Fax: 617-727-4527 Email: efriedman@osd.state.ma.us</p>	<p>Marcia Deegler Environmental Purchasing Trainer Operational Services Division One Ashburton Place, 10th Floor Boston, MA 02108-1552 Phone: 617- 720-3356 Fax: 617-727-4527 Email: Marcia.Deegler@osd.state.ma.us</p>
--	--

Appendix A: Implementation Strategies

Launching an ENERGY STAR Purchasing Initiative requires some advance planning and consideration. Steps for getting started are listed next:

1. Identify equipment categories that have ENERGY STAR-compliant products. The EPA has identified more than 55 separate product categories of ENERGY STAR-compliant products including some of the most commonly used products in commercial and government organizations, such as office equipment, heating and cooling, lighting, and appliances. The EPA website can provide more detailed guidance, and is an excellent place to start.
2. Identify vendors that currently sell or supply this type of equipment and inquire about the availability of ENERGY STAR-labeled equipment. Some vendors may already be providing your organization with these types of products, such as copiers, computers, and appliances.
3. Invite vendors to an informational exchange meeting. In this meeting, discuss your organizations interest in purchasing ENERGY STAR-labeled equipment. Gauge vendor enthusiasm to determine if this requirement should be either *voluntary* or *mandatory*. Educate vendors about their responsibilities, including providing information or training sessions to end users about ENERGY STAR-labeled products. Set clear expectations regarding vendor performance in providing relevant and positive information about these products to their customers.
4. Develop a program tracking procedure including evaluating vendor performance on:
 - Overall Equipment Satisfaction
 - Equipment Training
 - Educational Training
 - Follow Up Service
 - Product Sales Tracking

Besides capturing satisfaction ratings, it is also important to track equipment purchases at individual user agencies. Therefore, vendors should provide the following information to the central procurement agency for each product purchased:

Sample Product Tracking Card

User Agency: _____

Item Purchased/Leased: _____ **Model** _____

Number Purchased _____

New **Used** **Remanufactured**

Purchaser Name _____

Telephone Number _____

Date Installed _____

Was the equipment ENERGY STAR-compliant? Yes ___ No ___

Did the agency/end user receive ENERGY STAR training and educational materials?
Training: Yes ___ No ___ **Educational materials:** Yes ___ No ___

Were the ENERGY STAR features enabled? Yes ___ No ___

The information collected on the product tracking card could then be entered into a spreadsheet for future analysis. This spreadsheet would track purchases by both equipment type and by user agencies. It would allow for more complex analysis such as estimating the annual energy savings achieved through this program, by individual user agencies as well as on statewide basis.

By using the EPA's Energy Savings Calculator, annual savings can be estimated for each user agency as well as for the organization as a whole. Moreover, the Savings Calculator can be tailored to reflect individual electric and gas rates, thereby providing a fairly accurate estimate of energy savings.

5. Provide ongoing feedback to both vendors and end users. With the help of the EPA's ENERGY STAR Purchasing Tool Kit, your organization can develop, promote, and evaluate this energy efficient purchasing program. This continued information exchange will ensure that energy efficient purchases achieve both long-term savings and user satisfaction.

Appendix B: ENERGY STAR Procurement Resources

Sample EPA ENERGY STAR Model Specifications

Computers*

1.24.1 ENERGY STAR Technology Equipment and Guidelines

It is **mandatory** that Bidders offer IT Equipment which meet the U.S. Environmental Protection Agency's and Department of Energy's ENERGY STAR guidelines and have the ENERGY STAR label or substitute for the following categories:

- PCs
- Printers
- Video Monitors

All Energy Star features **must** be fully activated upon delivery.

“**Energy Star**” - is a Federal standard applied to office equipment for the purpose of rating the energy efficiency of the equipment. Energy Star computers, monitors, and printers save energy by powering down and going to “sleep” when not in use, resulting in a reduction in electrical bills and pollution levels.

* OSD Computer Bid- #ITC05

Sample Procurement Language for ENERGY STAR-Compliant Computers and Monitors

The Vendor Must:

Provide ENERGY STAR-compliant computers that are configured so that they automatically enter a low-power mode after a period of inactivity.

Provide integrated systems, where the computer and the monitor are combined in a single unit, that will enter a low-power mode of no more than 60 Watts after a specified period of inactivity.

Provide computers in low-power mode that will automatically return to active mode upon resumption of system activity or receipt of external input (e.g., mouse movement, keyboard activity, typing of a password, modem interrupts, etc.)

Ship computers with the power management feature enabled.

Provide computers that will include one or more mechanisms through which they can activate the low-power modes of ENERGY STAR-compliant monitors.

*Information from EPA's ENERGY STAR Purchasing Tool Kit

Additional Computer Guidelines:

Power management features must be activated before shipping with initial preset default times.

Computers must include one or more mechanisms to power down an ENERGY STAR-compliant monitor.

Computers must be able to “sleep” in any operating system pre-installed before shipping, unless clearly stated in the product literature.

It is preferred that computers intended for use on a network will not be inadvertently disconnected when in sleep mode. Manufacturer shall attempt to provide general guidelines to consumers regarding network compatibility. If a specific ENERGY STAR-complaint model is not designed for use on a network, the manufacturer shall clarify this in user’s manuals and datasheets.¹

Copiers

As part of the Commonwealth’s comprehensive program to procure environmentally preferable products, vendors must agree to:

- Provide copiers that meet the EPA Energy Star guidelines for energy efficiency
 - This means that low, mid-range, and high volume copiers **must** be able to shut off after a specified period of inactivity, and
 - That mid-range and high volume copiers (20 copies per minute or greater) **must** be preset with the duplex mode as a default (optional on equipment with a range of 19 CPM or less)
 - That vendors must ship all products with Energy Star low-power feature activated or enabled
 - That models introduced by manufacturers after July 1, 1997 must be compliant with Energy Star Tier 2 specifications
- Recommend its usage and educate Commonwealth customers on the benefits of this feature in all their equipment training sessions
- Provide data prior to purchase on the following equipment functions so that customers can consider these aspects in their purchasing decisions
 - Data on the time it takes for a copier to warm up from the off-mode
 - Comparison of double sided and singled sided speeds, as well as an example of anticipated paper savings from using the duplex mode
- Incorporate into their new equipment designs any increases or amendments to the Energy Star guidelines during the course of the copier contract period.

¹ OSD Copier Bid -#OFF02

Additional Copier Guidelines:

¹ OSD Computer Bid-#ITC05

Training and Technical Support Services: “Any education and training conducted by the contractor must include information on all environmental features of each item, including but not limited to: energy efficiency modes and their operation, double sided copying operations and double sided default programming . . . and the environmental and economic benefits of these features.

Training/Education for Commonwealth Customers

Contractors must provide a detailed description of the ENERGY STAR and source reduction educational component to be included in the training provided to customers upon delivery of any copier equipment.

It is important that examples of direct customer cost savings that result from using ENERGY STAR and source reduction techniques be included and passed onto customers.

All recycled paper on State Contract are acid free, have a high level of brightness and opacity, have been specified to perform equal to virgin paper products and should not be faulted for any problems that may occur with the copier equipment.²

² OSD Copier Bid- #OFF02

Insert ENERGY STAR Fact Sheet #1

Insert **ENERGY STAR** Fact Sheet #2