

CEE Case Study

University of Washington

I. Background and Perspective

A. Organization, Staffing Levels, and Primary Function

The University of Washington (UW – “U-dub”) is the state’s largest university and research center with a student body of 35,000 and faculty and staff of 25,000. The UW operates a central campus in Seattle, WA and branch campuses in Bothell, WA and Tacoma, WA. Central campus facilities include administrative offices, classrooms, auditoriums, undergraduate and graduate libraries, student housing, food service facilities, sports facilities, gymnasium and football field, two medical centers (UW Hospital and Harborview Medical Center), science laboratories, a performing arts center, and two museums. The university houses 22,500 students on campus.

In interviews with UW procurement staff, we heard the university is “exceeding the energy code in lighting and HVAC,” and with its significant buying power, is “making changes in the efficient lighting market.” We also learned that procurement staff are customer driven, but that “customers aren’t asking for energy efficient products.” The story of how this institution makes its purchasing decisions is one of both achievement and opportunity.

B. Annual Capital and O&M Budgets

The most recent biennium capital and O&M budgets at UW were in the range of \$900 million, with an estimated \$150 million/year dedicated to new construction projects, and \$46 million/year for operations and maintenance. The university has four new buildings under construction adding 530,000 square feet to a 13 million square foot campus.

C. Highlights of the Procurement Function

The University makes purchases for two types of activities: Capital Projects, which includes new construction and major remodels, and Operations and Maintenance, which includes existing facilities campus wide. Purchases of substantial quantity are made for most of the product categories identified in the Energy Star Purchasing Tool Kit: office equipment, non-residential lighting and HVAC, electric motors, residential appliances (for student housing facilities), and consumer electronics (for UW Hospital patient rooms).

The procurement function at UW is decentralized between six primary groups on campus, and organized according to product type:

1. Computers & Communications – purchases computer equipment and software for approximately 1,000 desktops. Academic departments, of which there are 430, specify their own equipment. Specification writers are assigned to other groups on campus

including a facility services group (350 desktops), the medical center, arts and sciences, and administrative offices.

2. Publications Services – uses the State of Washington contract to purchase copiers, and other office equipment exceeding a \$2,500 threshold. Office equipment under \$2,500, may be purchased directly by individual departments.

3. Facility Services – provides standard specifications that are incorporated into Capital Projects and are typically used for maintenance related purchases of lighting products, HVAC equipment, and motors for all buildings on campus.

4. Housing and Food Services – specifies and purchases lighting products and residential appliances such as clothes washers, dryers, and refrigerators.

5. UW Hospital – specifies and purchases consumer electronics products such as TV's and VCR's for patient rooms, and refrigerators.

6. Capital Projects Group -- purchases equipment and services for new and remodel projects installed by contractors.

We met with specifiers and buyers in three of these groups as part of our research. They included the following:

- ← Computers and Communications: Paul Reed-Smith, Sr. Consultant; Brad Greer, Computing; David McCone, Sr. Buyer
- ← Facility Services: Don Rainey, Sr. Facilities Engineer; Ron Floyd, Sr. Buyer; and Jim Turner, Electrician Lead
- ← Housing and Food Services: Claudia Christensen, Buyer; Carrie MacNeil, Project Coordinator

The procurement function involves four key parties: user/customer, buyer, specifier, and vendor. The user initiates the request. The buyer may use the requester's specification, or one provided by Facility Services, and contacts vendors identified by the specifier or ones already known to the buyer. The buyer is responsible for placing orders in accordance with product specs, existing contracts, or pre-approved lists of products from which users can select (e.g., lighting). The specifier drafts standards which products must meet. Specifiers work in close consultation with users and product vendors to develop specifications that meet the needs of the user, serve the goals of institution, and reflect the realities of the product market. The vendor is a key source of information for the specifier. They must be knowledgeable about their product, able to deliver on time, and able to correct problems with the product and resolve disputes pertaining to performance.

D. Importance of Energy Related Products to the Organization's Function

Products such as lighting, HVAC equipment, office equipment, and residential appliances are essential to the UW's function as an educational institution. Although the UW does not have a mandate to purchase energy efficient products, several individuals within Facilities Services have promoted the use of more efficient and cost effective products and system designs. Major efficiency improvements have resulted, campus wide, in lighting and HVAC systems. These improvements are detailed in the following section.

In another area of campus, the Housing and Food Services group responds to student interest in an environmentally sound lifestyle by actively purchases energy efficient

products such as clothes washers and hallway and room lights for student housing. They expect major renovations in the food services area in the next five years and are very interested in buying energy efficient lighting and kitchen equipment.

The Computer and Communications Group is the least knowledgeable and active in energy efficiency, however they are receptive to learning more about it. While most computer equipment purchases are Energy Star-labeled, they do not specify energy efficiency as a purchasing criteria, nor do they routinely enable the ES function when equipment is installed. They are undergoing replacement of 500-1,000 X-terminals with PC's. Five hundred PC's were purchased in 1998 and another five hundred in 1999.

E. Profile of Past Years' Energy Related Purchases

The UW is undergoing a campus wide lighting and HVAC retrofit project which is expected to save over 38 million kWh/year. The lighting retrofit covers 12 million sq. ft, and is expected to put the UW beyond the Seattle Energy Code for lighting. In preparing for this undertaking the University established an energy management group in the early nineties which has since been reorganized and integrated back into existing departmental functions. The project will reduce electric consumption in existing buildings by more than 20%. Due to concurrent new construction projects on campus, the energy bills have not gone down but at least have remained stable.

UW Housing and Food Services recently purchased 180 horizontal axis clothes washers and expects to buy another 200 in 1999. They also purchased and installed compact fluorescent lights (26 watt), and 2D fluorescent in dormitory hallways and 22,500 student rooms. The university owns 600 dorm room refrigerators and 40 standard refrigerators which were purchased last year, without attention to energy efficiency criteria. However this will be a consideration when replacing existing units.

II. Findings - Procurement Process

A. Guiding Regulations

The UW must follow state guidelines for doing business as a public sector organization in Washington State. This is the primary guiding regulation governing the UW's procurement function.

The public bid process requires the UW to issue an RFP with specifications for the products desired for purchases above \$35,000. Vendors bid on the RFP and from the bid a winner is selected. Selection criteria include "best value" described to us as a combination of factors including low bid, and vendor responsiveness and responsibility to product reliability and maintenance. In some cases, a vendor's WMBE status is also a factor.

Another regulation on the books in Washington State is the energy life-cycle cost analysis (ELCCA). Unique to the state of Washington, it is a potentially powerful tool for encouraging energy efficient purchases. The requirement was enacted into law in 1975 by the Washington State Legislature as "Energy Conservation in Design of Public

Facilities." The intent is to ensure energy conservation practices are incorporated into the design of major public facilities--both new construction and extensive renovations. The law requires preparation of a life cycle cost analysis of the facility's energy systems. It applies to state agencies, including colleges and universities, and other entities such as cities, counties, school districts, and other special taxing districts. The completed ELCCA report recommends alternatives that make the most economic sense while providing for the comfort, health, and productivity of the building occupants. The ELCCA reporting process is most actively used in K-12 and state agency construction projects.

B. Other Internally Required Analyses/Procedures

Internally, the UW has a powerful tool in its hands for encouraging energy efficient purchases with Facility Design Instructions (FDI). This is a multi-volume tome containing standards and procedures for selection and installation of products in university facilities. It is developed and maintained by UW Engineering Services and written for use by architects and designers working on new construction and major remodel projects on campus. While the FDI is an integral part of the architect's contract with the UW, policing is not absolute. Engineering Services is seeking opportunities to work with architects early on in the design process to facilitate compliance with the FDI. Sample FDI documents for lighting and adjustable speed drives (ASD's) are attached to this document.

The FDI is a living document, requiring continuous updating to stay abreast of product and technology changes. Engineering Services is committed to incorporating energy efficiency into the FDI and has made numerous strides in this area. The section on LIGHTING (Vol. 4, Section 16A07), for example, provides general design criteria, guide specifications, and approved product lists which encourage lighting designers to not simply meet, but exceed, the Seattle Energy Code through use of energy efficient fluorescent lighting products. Compliance with EPA Energy Star specifications are mandated for illuminated exit signs.

While the FDI was originally intended for application to new construction and renovations only, it has value for improving the energy efficiency of university operations and maintenance functions. These are being addressed in recent revisions of the FDI.

C. Final Criteria/Basis for Product Selection

The final criteria for product selection at UW is somewhat variable across the purchasing groups. While "low cost" was an overarching criteria for all, this was often balanced by other factors such as reliability, customer satisfaction, and maintenance requirements. For example, a low cost product with poor reliability might lose out to a higher cost equivalent product with a strong reliability track record. The latter would be considered the "best value" choice, a term which several buyers used to describe the balance they seek between cost, customer, reliability and service.

Energy efficiency was not on the list of priority criteria but could be justified to the extent it supported lower cost, lower maintenance and other primary criteria. Customer

satisfaction criteria emerged as a particularly important criteria in decisions for student housing products and faculty computers. Academic departments, for example, have full discretion to specify their own computer equipment based on faculty needs.

D. Planning Cycle/Timing of Decisions

The energy efficient lighting and HVAC retrofit projects discussed earlier were not part of a routine planning cycle, but came about as a result of a one-time incentive program offering by Seattle City Light and the Bonneville Power Administration. For computer equipment, the replacement cycle for CPU's is every three years, and four to five years for monitors.

E. Standard Inputs/Information Sources

Within the procurement function, the specifier plays the most active role soliciting product information. In some instances, the user is also very active as in the case of academic department purchases of computers and office equipment. For the specifiers we spoke with, vendors were cited as a primary source of information across the three purchasing groups. In the case of energy efficient products, utility representatives were often cited as a source of information. Seattle City Light staff were helpful with decisions about clothes washer products, and Lighting Design Lab staff were helpful with decisions about lighting. After that, web-based resources such as Buyer Laboratory, a subscription service focused on copier products; product fairs; technical seminars; and membership associations serve as information sources. Sometimes existing specifications prepared by other institutions are reviewed and customized for use by UW.

For some products such as copiers, UW uses an existing state of Washington contract to make purchases rather than researching and specifying their own equipment.

Vendors are far and away the greatest source of product specific information for UW. Specification writers visit vendor web pages to identify products and make selections. They often consult with vendors during the specification writing process for RFP's to ensure the product performances desired can be achieved by the technology in the marketplace. A poorly written specification is subject to challenge in an RFP process, and if challenged, can result in the low bidder winning the contract with an inferior product. Specifiers may also invite vendors to visit and provide product demonstrations, or attend vendor-conducted technical seminars.

This process of dialogue between the buyer and seller can drive changes in the market and make its offerings more energy efficient. Don Rainey, for example, believes UW's work with their lighting vendor led to changes in the lighting products market because of the specifications they jointly developed combined with the buying power of UW. One of the specifications Don wrote was modified by the lighting field lead, Jim Turner, who worked with the vendor to customize the product. The vendor now includes "JT" in the model number as a nod to Jim Turner.

F. Sign-off Responsibility and Thresholds and Financial Parameters

As discussed earlier, the public bid regulation requires UW to issue RFP's for purchases exceeding \$35,000. Other thresholds are detailed below.

Purchase Amount (\$)	Process	Approve/Sign Off
\$2,500 or less (\$10K or less if computers)	Direct purchase. By-pass purchasing	Department heads
>\$2,500 to \$35,000	Informal faxed quote from three vendors	Buyer
>\$35,000 to <\$1 million	RFP process	Buyer
> \$1 million	RFP process	UW Regents

H. Potential Efficiency Gains

As discussed earlier, UW is already exceeding the energy code in the areas of lighting and HVAC systems. Recent retrofits are expected to save 38 million kWh annually. Major new construction projects adding 500,000 sq. ft. to campus are expected to meet or exceed energy codes largely as a result of UW Engineering Services' Facility Design Information for lighting and HVAC which is being used by capital project consultants and designers. The areas where there appears to be greatest opportunities for efficiency gains are in computers, office equipment and food services.

There are an estimated 7,000 computers and 2,300 copiers in use campus wide. While the computers purchased are compliant with Energy Star specifications, the energy savings functions are not routinely enabled at the time of installation. The same is true for copiers which are purchased using the State of Washington contract. The state's contract does not stipulate Energy Star compliance, however many of the copiers purchased are compliant.

Another area of opportunity is in food services where major renovations will occur in the next five years. Housing and Food Services procurement officials are very interested in buying energy efficient lighting and kitchen equipment such as refrigerators, freezers, dishwashers, and cooking appliances.

We met with one procurement official associated with the UW Hospital, but did not meet with one for the science labs. There are large efficiency opportunities in this area, particularly in purchases of consumer electronics products such as TV's and VCR's for patient rooms, residential appliances such as hospital and laboratory refrigerators and freezers, laundry dryers and washers, food service refrigerators, ice machines, dishwashers, and cooking equipment.

I. Comments/Suggestions Regarding the Energy Star Purchasing Toolkit

Don Rainey's comments: The material is dated. It should provide more detail about product application. It fails to address ASD's, an important area. He suggests a training component and guide specification language a la FDI. His written comments are attached.

Carrie McNeil's comments: The level of information is average. The relevance to her division and its readability are excellent. Ease of use and flexibility is good. Everything they buy is included, and the LCC analysis is useful. She would recommend the kit to her division. Product updates every six months would be helpful. Comparing ES and non-ES product performance is not important.

1. Product Vendor Interviews

As discussed above, UW procurement officials rely heavily on both product vendors and product users in development of specifications. Vendors contribute essential product capability information while users provide input on product effectiveness in meeting their needs. We explored the vendor role further by meeting with a small group of vendors to discuss their experiences with state and local government procurement. Highlights are provided below. We also explored the user role by asking questions in interviews about the user feedback loop. Opportunities emerged for increasing energy efficient procurement and decreasing energy consumption by working with these key groups.

Vendor Meeting

Dennis Heller, F/M HVAC Sales, Seattle, WA

Pete Lemman, North Coast Electric, Bellevue, WA

Steve Leinweber, Lighting Design Lab, Seattle, WA

We met with two manufacturers reps of lighting, HVAC and motor products. They identified several challenges selling energy efficient products to state agencies and UW.

The first challenge is difficulty reaching key decision makers, such as the engineering specification writers, because they tend to be shielded by the buyers. Some vendors find their way in the door by making calls on the maintenance staff and winning their interest in the product. Another way in the door is to re-direct their marketing to focus on contractors bidding on state construction projects. General and mechanical contractors would be a potential buyer of energy efficient equipment such as lighting and HVAC.

The second challenge, specific to energy efficient product sales, is the often higher up-front cost of the product. Even if the numbers pencil out to show better life cycle costs, procurement staff may not believe the numbers. Finally, state procurement officials are sensitive to perceptions of showing favoritism to vendors, so they are cautious about seeking advice from individual vendors.

Users/Customers

The Northwest is renowned for its environmental ethic, yet energy efficiency is a low priority for the user/customer of UW procurement. With the exception of the Housing and Food Services group, energy efficiency purchases were made for reasons other than the customer. Once made however, procurement officials identified a need for educating the users. In the case of new horizontal-axis clothes washers purchased for dorm use, Housing and Food Services undertook an education campaign to teach students about the need to use less soap. For computers and copiers, users need education about enabling the Energy Star function, and turning off computers at the end of the day. Hundreds of computers are left running all night in empty rooms.

State of Washington

We met with staff from the State of Washington's Office of State Procurement (OSP) and Engineering and Architectural Services to explore the state's influence and relationship with purchasing practices at the University of Washington.

Contact names:

Stuart Simpson, Energy Engineer, Department of General Administration; Julie DeRuwe, CPM and Robert Paulson, Jr., CPM, State Procurement Officers with the Department of General Administration.

The State, like the University, is a significant buyer of energy using office equipment and commercial building products. For copier purchases alone, state agencies spend \$30 million annually. There is also a significant commitment to foster an environment of information exchange between procurement staff in different agencies of state government and between procurement officers and vendors. This commitment is exemplified in a number of educational events and could serve as an information resource for UW procurement staff. Events include an annual trade show featuring exhibits by state contract suppliers and an 18-session educational program; a suppliers meeting for vendors who wish to do business with the state; a monthly forum for agency IS staff to discuss issues (energy efficiency has been covered in the past); an educational guidebook on energy life cycle costing for public agencies (guidebook attached); and, the recent development of a model ESPC contracting process for state and local governments and school districts to use in developing energy efficiency projects.

While the two organizations – State of Washington and University of Washington -- function autonomously in most areas of procurement, we were also able to identify opportunities for information exchange and coordination which offer possibilities for enhancing energy efficiency purchases and save money for the state.

- 1) State lighting contract. GA has a lighting contract that offers 87% discounts off the list price. It is considered one of the best in the nation. It is available for use by all public agencies in the state, including UW.
- 2) I/S monthly forums. These meetings are organized by the Department of Information Services for agency I/S staff. They have discussed energy efficiency issues in the past, and may be further along in their thinking and practice than UW. Exploring this further and putting the two groups together holds some promise.
- 3) Energy LLCA mandate. The Energy LCCA requirement is not actively policed by GA at large institutions like UW, yet UW Engineering Services is seeking compliance by working with designers and architects early on in the process to encourage use of the FDI. The exchange of information between the two organizations – e.g., GA's guidebook and UW's FDI – might provide opportunities for augmenting each others' efforts.
4. POS Group. GA operates a Plant Operations Support (POS) group which offers a forum for facility managers of schools, universities, cities, and state buildings to share information and resources. POS offers newsletters, quarterly video conferences on technical topics, a web site, and an email listserv for electronic dialogue. While UW is not currently member, they would have much to contribute to this group.

III. Recommendations

A. Host Organization – Prioritize Recommendations Considering Cost vs. Benefit

1. Rebuild America Program

We recommend that UW join the Department of Energy’s Rebuild America program, to take advantage of the resources available through the DOE, the National Labs, through other Rebuild partnership, and other resources. This will help UW develop and implement an action plan for its energy efficiency programs, including those associated with energy efficiency procurement.

2. Vendors

Vendors were consistently identified as a primary and important source of product information by the specifiers with whom we spoke. Vendors who are well informed about the benefits of their energy efficiency product lines can be an influential force in selling the value of efficiency to their customers. More research is needed to understand the barriers vendors face in selling energy efficiency to state and local governments. This could take the form of EDUCATIONAL forums and facilitated exchanges between vendors and procurement officials.

- a) Create educational forums for procurement officials and vendors to exchange information in a non-sales environment. These could be organized by utilities and energy efficiency business associations.
- b) Workshop on energy efficient lighting fundamentals for specifiers and buyers at the Seattle Lighting Design Lab. Invite vendors to participate and share their experiences selling to state and local governments.
- c) Tour of energy efficient office building. Led by facility manager and related product reps for procurement officials.
- d) Generic technical training for vendors on energy efficiency product lines in Lighting, HVAC, office equipment and more.

Don Rainey, Sr. Facilities Engineer and a primary Energy Efficient Product specifier for the UW, feels that there is a general lack of confidence and/or knowledge among specifiers and consultants serving large facilities. Since there is seldom any reward for specifying the most cost effective product, and there is plenty of risk in purchasing something new and “unproved”, many specifiers will drag out the old tried and true and outdated specification as the safe thing to do. Other specifiers overestimate their knowledge and create real problems for the users. Don suggests the following:

- a) Conduct a training session for specifiers in which successful and progressive specifiers present their experiences, techniques and specifications, where everyone has a chance to address their own issues and where vendors have an opportunity to participate (at least during part of the session).
- b) Conduct a training session for vendors in which specifiers, buyers and end users tell the vendors how they can better serve their customers. This session could also include fundamental training in how the energy efficient products benefit or offend the owners.
- c) Perhaps some sort of certification could result from these sessions.

d) Perhaps some periodic meetings could result from these sessions.

3. Office Equipment

The University operates an estimated 7,000 desktop computers campus wide, with a replacement cycle of every three years. While new computers meet Energy Star standards, the features are NOT routinely enabled. We recommend increasing support for enabling Energy Star features on campus computers and copiers by identifying concerns associated with use of the feature and recommending solutions.

- a) Meet with the LAN Managers Group to discuss opportunities for increasing computer efficiency.
- b) Meet with Computer Instructors and Computer Lab operators.
- c) Hold educational workshop at UW Computer Fair (annual event).

4. Working with Associations

Professional associations of procurement officials offer several opportunities to raise awareness of Energy Star products in all categories. A primary function of professional associations is to help members keep abreast of changes in their field, and to provide networking opportunities for exchanging information and sharing experiences. We found several large, active local chapters of the National Association of Purchasing Managers, the National Contract Management Association, and the National Association of State Purchasing Officials in Washington State.

- a) Present Energy Star product procurement information at local chapter meetings.
- b) Participate in local chapter educational events.

5. Tool Kit

- a) Provide more detailed product-specific information.
- b) Set up Tool Kit as a web-based subscription service, much like existing services used by procurement officials such as Buyers Lab and Data Quest (www.dataquest.com). Offer a free subscription to users.
- c) Offer an Energy Efficient Product Procurement email listserv as part of Tool Kit subscription (or tap into existing procurement listserv services). Listserv would provide procurement officials with email notices of energy efficient product updates and provide a forum for email exchange of experience.
- d) Offer a training component with the Toolkit.

B. Other Similar Organizations - Prioritize Recommendations Considering Cost vs. Benefit on a Large Scale.

We believe that many of the above recommendations would work well in similar organizations. Joining the Rebuild America program is a recommendation we can make to any state or local government organization. The organization receives a variety of assistance, both through the Department of Energy, and through other sources such as National Labs and other Rebuild partnerships.

An interactive conference, especially one that would include interaction between vendors and users is an effective way to educate both parties, and start to overcome barriers. Other low cost recommendations include linking to EPA's website, and using a listserv to

provide information including “green tips” that could be used for organization-wide newsletters.

Working with professional organizations would overcome barriers for a broad number of similar organizations, as you would be able to target multiple organizations.

C. Purchasing Initiative - Necessary Procurement Tools and Aids (with estimates of developmental costs) with Broad Application and Benefit

Case studies

Case studies can be built out of each of the pilot studies, plus additional case studies used from other similar programs (EPA or DOE programs), to share with organization wishing to do similar work. The information in these reports could be condensed and presented in a format that is easier to read. Development costs would be minimal.

Green tips

Green tips could be developed on a monthly or other periodic basis, for inclusion in organization newsletter, or as general tips to be sent to a listserv. These tips could be taken from existing sources (again, EPA or DOE programs among others), and could focus on equipment and service related issues, as well as resources that exist to assist people in overcoming challenges. Again, development costs should be minimal for this effort.

Drop in policy language

Several of the organizations we spoke with were interested in other policies, city-wide, state-wide, or by department, that had been written and used by other organization. They were also interested in the processes used to get these policies in place; information on such could be included as a precursor to the language. Again, development costs should be minimal for this effort.

Toolkit more product focused

Several individuals were interested in product specific information about energy efficiency products, and a comparison between energy efficient and less efficient products. This could be done in conjunction with Consumer’s Reports, which in the past has issued reports with energy efficiency information for products; including that information, as it is available would partially satisfy the requests. In general, however, this type of information can be difficult to provide, as product information can become very quickly outdated. We felt that having more specific information than just “Efficiency recommendation depends on type and wattage of the lamp” would be useful for the lighting section. Even some information on general wattage and efficiencies by product type would be useful, e.g. T12 vs. T8 vs. T5 lamps, or comparing CFLs to incandescents. The development cost of such an effort can be more extensive than the other measures mentioned above, but also could be minimal depending on the effort involved.

IV. Implementation Plan

The implementation plan for improving energy efficiency procurement at UW would focus on bringing to action several priority recommendations proposed above. We would propose this happen in several phases.

Phase I: Identify Champions and Resources

In the pilot phase of the project, we were able to identify several champions of energy efficient procurement at UW who expressed interest in doing more. These included Don Rainey, Stuart Simpson (State of WA), Paul Reed Smith, and two vendors – Pete Lemman, North Coast Electric and Corey Judson, G-Controls. Each of these individuals identified actions they would like to undertake in support of energy efficiency procurement. We would propose meeting with them to solicit their support and introduce them to resources of value such as the Rebuild America Program, the State of Washington’s Plant Operations Support Group and Resource Conservation Manager Program, the Northwest Energy Efficiency Council, and the Lighting Design Lab.

Phase II: Develop Action Plans

In this phase, we would work with champions to create their own “short lists” of immediate actions they would like to undertake. These could include follow up on resources of interest such as joining the Rebuild America Program or participating in a Plant Operations Support Group meeting. It might also involve setting up meetings with the LAN Managers Group and computer instructors to discuss Energy Star features; presentations on the Toolkit at professional association chapter meetings; vendor’s sales staff meetings at the Lighting Design Lab; and a meeting with UW specifiers to determine interest in attending information exchange meetings with peers and vendors.

Phase III: Implement “Short List” Actions and Review/Assessment

We would support champions in implementation of “short list” activities by providing resources such as the Toolkit, presenters, and offering our participation as meeting facilitators to ensure interactivity and lively discussion. We would also encourage a review and assessment of champions’ experiences with “short list” actions to determine the focus and nature of next step actions. Next steps might focus on more development-intensive efforts such as technical sessions for specifiers, vendor workshops, email listservs, certifications, and more.

V. Results

The design and focus of implementation plan activities should be on these results:

- ← Engagement of energy efficient procurement champions in finding solutions to procurement barriers,
- ← Greater awareness among computer specifiers and LAN managers of how ES features can be effectively enabled within networked systems,
- ← Understanding of the resources vendors can bring to the procurement process and improved specifier-vendor relationships,

← Increased opportunities for purchasing professionals to learn about energy efficient procurement from peers in the profession.

ATTACHMENTS

Two FDI samples: ASD's and Lighting