

Public Procurement and Energy Efficiency in the Pacific Northwest

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Executive Summary

State and local governments in the United States spend tens of billions of dollars each year to purchase energy consuming products.¹ Where governments do not currently “buy efficient,” there may be viable opportunities to influence them toward greater efficiency.

The current research, conducted on behalf of the Northwest Energy Efficiency Alliance (Alliance), set out to:

- Better understand those who buy or influence the purchase of energy related goods and services for public agencies in the Northwest.
- Identify strategies to encourage public agencies to buy higher efficiency products and services.

This executive summary focuses upon key findings and our suggested intervention strategies. To better understand how purchasing occurs, and where energy is considered, please see the body of the report.

Methods

Staff from the Washington State University Energy Program led a team of researchers who used qualitative research methods to collect and analyze data on public purchasing. From December 1998 to April 1999, we conducted 77 in-depth interviews with buyers, end-users, and policy-makers in 17 federal, state, and local governments in the Northwest. We asked respondents how their purchasing systems worked; the role of competitive requirements; how products and services are specified; how they engage in “green” buying and buy energy consuming products; and what important trends are likely to affect purchasing.

Key Insights from the Research

These findings underlie the intervention strategies presented in the next section, and are crucial to understanding the public purchasing arena.

- **Public sector buying patterns are variable, complex, and somewhat unpredictable. Many actors are involved in a variety of roles.** Although detailed purchasing rules and competitive requirements existed in most agencies, much buying is neither rigidly structured nor highly competitive. Thus, just changing *the rules* will not necessarily change procurement practices.

Most agencies combine centralized purchasing processes (for higher cost items) with decentralized purchasing by end-users (for less costly items). These variations in purchasing approaches are illustrated in Table A.

¹ Purchases by local and state governments of durable and non-durable goods and investment in equipment/structures was \$262 billion in 1997, according to the U.S. Bureau of the Census, 1998.

Table A: General Parameters for Purchasing

Type of Purchase	Dollar Limit Range and Exclusions	Procedures/Authorities/Requirements	Other Purchase Methods
Petty Cash	Generally below \$100, often combined with Direct Buy level	Employee choice, no competition required, decentralized in department	<ul style="list-style-type: none"> ➤ Use of master contracts developed by other jurisdictions, most often states ➤ Developing in-house master or annual supply contracts, which may be mandatory for departments ➤ Use of cooperative purchasing groups to increase buying power ➤ Emergency buying procedures
Direct Buy	From \$0 - \$5,000, with the top limit varying from \$800 to \$5,000. Professional services and construction might be excluded. State universities might have different limits than other state agencies.	Employee choice, decentralized in departments. May require department approval. Little bidding, although 3 quotes may be technically required. Must comply with relevant policies/laws. Use purchase orders (LPO), purchasing cards. May account for bulk of buying. Master contracts may supercede direct buying.	
Informal Competition	From \$800 - \$100,000, with many variations.	Up to 3 informal written or telephone bids/quotes. Usually central purchasing involved, although department may lead.	
Formal Competition	From \$25,000 up.	Formal IFB/RFP, sealed bid, competitive process, often with a central purchasing authority leading the process although specifications usually developed with end-users.	

- **Energy costs and efficiency are not widely or consistently considered in purchasing energy consuming products.** Other factors, such as performance, price, and convenience, drive buying decisions. Energy efficiency information, without reference to the other buying criteria that are salient to buyers, may receive limited use.
- **Energy efficient buying can be leveraged by piggybacking on these three major purchasing trends:**
 1. *Best value buying* – an approach that considers the overall costs and benefits of products and services rather than just first costs and benefits.
 2. *Electronic commerce* – a mechanism that serves as a source of information, a tool for improving purchasing processes, and a way to buy.
 3. *Green purchasing* – buying that goes beyond recycled content products and “safe” products to consider broader environmental concerns.
- **In the organizations we profiled, we observed nine factors that are related to higher levels of energy efficient buying. These factors, listed below, are also entry or leverage points for transforming public purchasing.**
 1. *Political or citizen support for green buying or energy efficiency;*

2. *Specific budget for energy efficiency or environmentally protective approaches;*
3. *Active energy efficiency resources (e.g., energy efficiency staff);*
4. *Active "green" resources (e.g., agency sponsored recycling);*
5. *Active Resource Conservation Managers or Resource Efficiency Managers (RMs);*
6. *Influential efficiency champions;*
7. *Vendors promoting use of energy efficient or green products;*
8. *Strong user/buyer education about buying energy efficient; and*
9. *Experience with energy efficient buying.*

➤ **Finally, organization theory suggests that three processes are important for changing organizational behavior:**

1. *Regulatory and policy effects* – changes in formal rules and requirements (e.g., to using life cycle costing) can institutionalize efficient buying practices.
2. *Normative and professional influences* – changes in purchasing standards within professional organizations can shape purchasing practices.
3. *Imitative (mimetic) processes* – changes in approach, or successes, at one agency can influence other agencies to adopt similar practices

Our recommended intervention strategies, which result from our organizational observations, interviews, and literature review, make use of these three interrelated processes. Thus our recommendations should be viewed collectively, rather than as independent, standalone strategies.

Recommendations for Transforming Public Sector Purchasing

Given the variability in government purchasing, the many purchasers, and the many markets, we are not advocating strategies to transform a specific market for a particular product. Rather, we are recommending strategies to encourage agencies to change how they buy – that is, to buy higher efficiency products. Such change likely requires a long-term commitment, multi-faceted approaches, flexibility, and leveraging of existing resources. Such change also moves organizational behavior or practices toward being self-sustaining, so that the commitment to efficiency is institutionalized.

Our goal in these recommendations is to help purchasers – designers, project managers, users, and professional buyers – get the best products **and** the most energy efficient ones. We introduce each set of recommendations by describing how they fit with the factors and trends that encourage energy efficient buying.

Stimulating Regulatory and Policy Effects

Policy level support is essential if public organizations are to institutionalize the buying of energy efficient products. But our research shows that energy efficiency is **not relevant** for political leaders or policy makers. Therefore, energy efficiency needs to be joined with issues that are more relevant to these leaders and to their constituents, such as best value buying and green purchasing trends.

The three strategies listed below suggest how energy efficiency can be tied to issues of interest to policy makers. These actions will help develop political and citizen support which, in turn, will encourage agencies to devote specific resources to energy efficient buying (i.e., for staff, training, support materials, or policy changes).

- **Link energy efficient buying with existing environmental initiatives and policies in public organizations (e.g., buy recycled).**
- **Connect energy efficient products to political and policy priorities such as clean air, clean water, sustainability, cost-savings, and good government.**
- **Work with environmentally oriented agencies and with networks targeted to policy makers to identify existing environmental policies, demonstrate that energy efficiency policies can be incorporated within those existing environmental policies, and disseminate these examples through appropriate networks and media.**

Enhancing Normative and Professional Influences

Most government purchasers, whether Resource Managers, end-users, or professional buyers, belong to and rely upon professional organizations for new ideas and dependable advice. Often these organizations are looking for meeting and conference presentations, as well as training opportunities on topics relevant to their members. While energy efficiency per se may not be perceived as a “hot” topic, it can be linked to topics that are. For instance, “best value” buying and E-commerce topics are of great interest within professional purchasing groups – a natural place for energy efficiency to fit in.

- **Use mechanisms within existing professional networks – web pages, list servs, newsletters, training programs, conferences, chapter meetings, users' groups, and trusted “energy champions” – to inform members about the relevance of energy efficiency and how to include it in purchasing specifications, the availability of products, and the presence of existing energy purchasing initiatives (e.g. Energy Star).**
- **Work with purchasing groups to conduct joint competitive bids for specific energy efficient products, so that individual organizations can obtain competitive prices and better access to particular energy efficient products. Get energy efficient products on master contracts that many organizations can access.**

- **Leverage the resources of other initiatives that support energy efficient practices in public organizations, including energy managers, resource managers, energy efficient new construction programs, and utility, non-profit, and Federal programs.**
- **Identify and work with major vendors to public agencies to offer energy efficient products.**

Encouraging and Facilitating “Imitation”

The processes of imitation work on two levels. First, the approaches and benefits of buying efficient can be made visible through successful demonstrations. Second, an infrastructure of reliable, accessible information about products must be built. This includes developing awareness among purchasers and policy makers of how to specify, identify, and buy efficient products. Electronic media (E-commerce) is likely to become a popular route for conveying information, experience and advice about efficient purchasing.

- **Conduct targeted pilot projects at specific high profile organizations to develop and demonstrate organizational models for purchasing energy efficient products. Disseminate results.**
- **Help key actors develop networks of energy efficiency champions (such as RMs) within their organizations.**
- **Support development of organizational models that demonstrate the value of energy efficient purchasing to public organizations.**
- **Make information on energy efficient products and their performance readily available from trusted sources**
- **Make buyers and organizations aware of existing suppliers of energy efficient products so that they can access them through existing purchasing procedures.**
- **Make energy efficient products easy to identify (i.e. using labeling) and show how they compare to similar products along a number of key product characteristics (i.e., not just energy efficiency).**
- **Work with existing groups and, if warranted, support new groups – including users, manufacturers, and suppliers – to develop comprehensive product specifications and contract language that include energy efficiency. Make these available through existing networks and sources.**

Conclusions

We believe that public purchasing in the Northwest can incorporate energy efficiency considerations to a much greater extent. Attention to energy costs and energy related environmental impacts is already taking place in some government agencies, and there is considerable potential for greater penetration of high efficiency products. Success will require that a variety of efforts be coordinated to reach all organizational levels.

The strategies we recommend are intended to encourage long-term organizational change towards more energy efficient buying. They provide guidance to individuals and organizations planning and developing programmatic initiatives to encourage energy efficient buying. We have identified trends, leverage points, and strategies that should be incorporated into program conceptualization and development efforts. The process of program development needs to include actors within professional networks and at leading public organizations. Developing initiatives within this framework will result in efforts that are well targeted and that best take advantage of existing resources and leveraging opportunities.

Several trends, such as interest in "good government" (best value purchasing), concern for the environment, and the development of pro-environmental public policies, offer important opportunities to associate energy efficiency in purchasing with politically potent issues. Policies that support these trends, along with professional acceptance of energy efficiency as an important purchasing criterion, are required for the desired organizational changes to take place.

However, other trends (e.g., E-commerce) suggest that strategies will also need to be targeted at end users and mass-market vendors—those actors involved in the bulk of routine purchases of energy-using goods. Since energy does not concern most end-users or vendors, strong emphasis on the quality, safety, and reliability attributes of energy consuming goods will be needed. Manufacturers and vendors must also have an adequate supply of high efficiency products readily available at comparable prices and quality.

We believe encouraging energy efficient purchasing will foster efficiency in other parts of public organizations and outside of them as well. For instance, adherence to energy efficiency in purchasing could lead to a wider "standard practice" of energy efficiency in building design. Changes in how public agencies purchase can also help induce changes in the types of products that manufacturers develop and vendors offer, since vendors and manufacturers will notice the preferences of these large buyers. In this way, the impacts of organizational changes in buying habits extend beyond public purchasing.