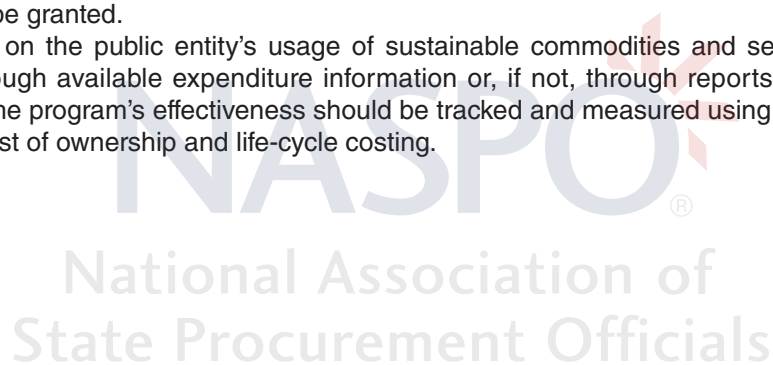


CHAPTER 15: SUSTAINABLE PROCUREMENT

RECOMMENDATIONS AND CONSIDERATIONS

- For long-term viability, sustainability initiatives should be established and/or supported by an exercise of authority, such as a governor’s executive order, legislation, or administrative rule or regulation.
- Sustainable procurement programs and training should be developed with the cooperation and input from a wide range of stakeholders, including agency customers, organizations that certify commodities and services as sustainable, and suppliers.
- Foundational to a program is a policy that clearly outlines its purpose, the legal authority establishing that policy, the commodities and services covered, and the external verification tools used to make it credible. The policy should also identify the roles and responsibilities of the staff responsible for implementing it and the conditions under which waivers from the program will be granted.
- Reporting on the public entity’s usage of sustainable commodities and services is critical, either through available expenditure information or, if not, through reports that contractors provide. The program’s effectiveness should be tracked and measured using techniques such as total cost of ownership and life-cycle costing.



For many states, sustainable procurement’s role in its operations continues to evolve due to federal, state, and local initiatives. This chapter offers insights and guidance on implementing state and local government sustainability programs in public procurement. This chapter also provides tools and resources to assist public procurement officials in carrying out sustainability mandates.

NASPO’s 2022 State Practices Survey measured the prevalence of states that have implemented green purchasing programs or initiatives, as seen in Figure 15.1.¹ Well over half the states implement some form of sustainable purchasing initiative.

This chapter focuses on commodities and services rather than construction projects, discussed in Chapter 16 (*Procurement of Construction and Related Services*). To explain sustainable purchasing for commodities and services, this chapter introduces foundational concepts and public policy support for sustainable procurement. The chapter then considers

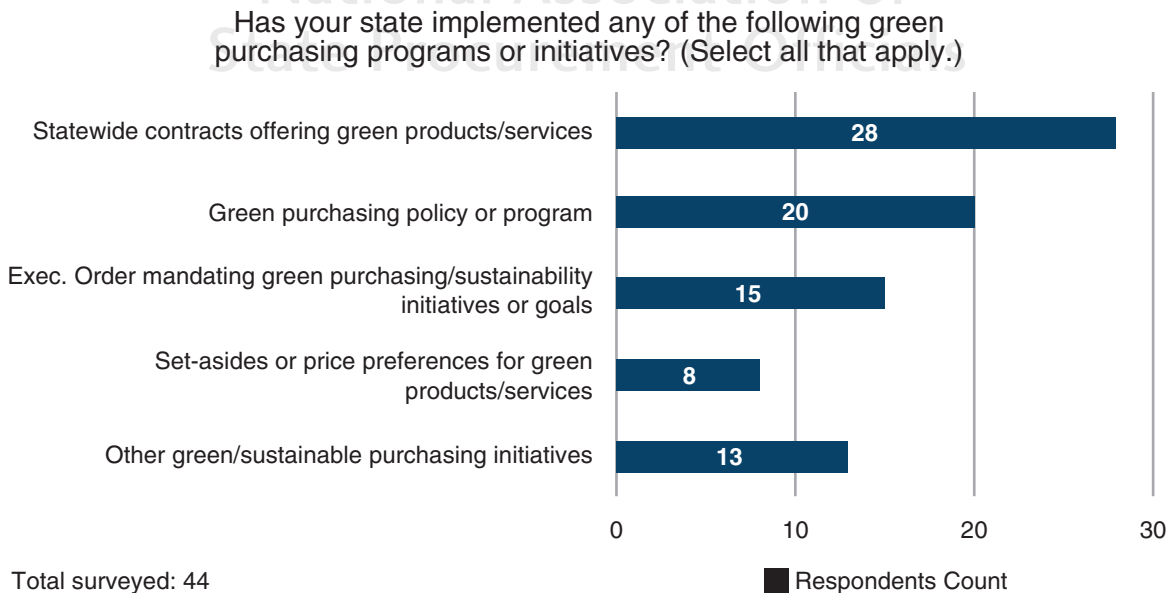
creating, drafting, and implementing sustainable procurement programs. It concludes by discussing the importance of measuring and maintaining a sustainable procurement program. Additionally, the NASPO website² contains several helpful resources for sustainable procurement:

- A sustainable purchasing resources page with examples of state policies and links to program information
- Procurement Pulse articles on sustainable procurement topics
- Procurement U courses on sustainability

KEY TERMS AND CONCEPTS

To begin this chapter’s discussion, it is essential to define critical terms. Over recent decades, environmentally preferable procurement has evolved to become part of what is known as sustainable procurement. The term *sustainable procurement* is broader than the term *environmentally preferable procurement* and the

FIGURE 15.1 | STATES IMPLEMENTING GREEN PURCHASING PROGRAMS



Total surveyed: 44
 Respondents: 34
 Non-respondents: 10

commonly used term *green purchasing*. Sustainable procurement is generally defined as purchasing products or services with a lesser or reduced negative effect or increased positive impact on human health and the ecological environment compared to competing products that serve the same purpose.

Sustainable procurement includes environmentally-preferable procurement along with social and economic factors that protect human health and minimize environmental impact throughout the life cycle of the product or service, ranging from the extraction of raw materials to end-of-life disposal. The minimal harmful effects of these products and services suggest they can be created, used, and safely disposed of in perpetuity. For this chapter, the broader term *sustainable procurement* will be used.

Sustainability Frameworks

Two popular frameworks for examining and understanding sustainability concepts and practices are the *triple-bottom-line* and *environmental, social, and governance* (ESG).

The triple-bottom-line refers to three separate but interdependent *bottom-line* measurements for organizations, commonly described as *people, planet, and profit* or as *equity, ecology, and economy*.³ The first line refers to the impact an organization's practices have on its various stakeholders, community, or society. The second line refers to its effects on the natural environment. The third line refers to its local, national, or global economic impact. This includes job creation, industry innovation, employee compensation, and the payment of taxes. This framework requires the measurement of social and environmental impacts beyond fiscal performance.

ESG represents a sustainability metric considering an organization's environmental impact, social responsibility (diversity, human rights, consumer protections, etc.), and governance practices (business ethics, accounting, transparency, etc.).⁴ Beginning as a U.N. initiative, it adds the

concept of corporate responsibility alongside ecological and societal considerations. Beyond sourcing, it is also commonly used in capital investment and community development.

The language of the authorizing statute or state or local government mandate that establishes a dedicated purchasing program (executive order, rule, regulation, etc.) should determine whether the program is strictly environmentally focused or is focused on the broader tent of sustainability.

Sustainable Commodities and Services

State and local governments that mandate the purchase of sustainable commodities and services have determined that doing so provides environmental, social, and economic benefits. That determination also recognizes that sustainability programs protect human health and the environment over the course of the commodity or service life cycle, ranging from the extraction of raw materials to end-of-life disposal of a commodity. A sustainable service or commodity has a lesser or reduced negative effect on human health and the environment than competing commodities or services. Examples include commodities or services that:

- Conserve energy or water
- Contain recycled or reused materials
- Minimize waste
- Consist of fewer toxic substances
- Reduce the number of toxic substances disposed of or consumed
- Lessen the impact on public health
- Protect open space
- Are socially responsible
- Lower greenhouse gas and/or CO₂ emissions

Sustainability Criteria Focused on Social Considerations

Public and private entities are increasingly procuring commodities that are not only environmentally preferable but have also been produced

in a socially responsible manner. In a global supply chain, the public procurement official's sourcing decisions can affect individual lives and communities locally and far from the point of purchase. Social sustainability describes the production, use, and disposal of commodities and services in a manner that considers equity and justice for the people impacted in the life cycle. Socially sustainable commodities and services are generally free of forced labor, human rights violations, and economic and social exploitation.

Transparency throughout supply chains is still an aspiration rather than a reality. Pressure is being applied to supply chains by stakeholders, such as investors, customers, employees, and citizens, who are increasingly expecting that public and private entities take steps to ensure that their procurement decisions do not enable human rights abuses.

Resources are available to assist public purchasers with questions to ask suppliers regarding how they address harmful labor and human rights impacts and to determine what constitutes credible supporting documentation from a supplier. State and local governments interested in learning more about addressing these issues can look to several sustainability-focused organizations. An example is the Global Electronics Council's *Purchaser Guide for Addressing Labor and Human Rights Impacts in Technology Procurements*.⁵ Several other resources that highlight the application of socially responsible procurement tools are available on the websites of the Sustainable Purchasing Leadership Council,⁶ the International Labour Organization,⁷ and the Responsible Business Alliance.⁸

PUBLIC POLICY SUPPORTING THE PROCUREMENT OF SUSTAINABLE COMMODITIES AND SERVICES

Laws and executive orders may mandate sustainable procurement goals and guide all state

agencies and political subdivisions. In many cases, procurement of sustainable services and commodities is a good practice with various potential short- and long-term benefits and can be encouraged throughout all government entities. Purchasing sustainable commodities and services:

- Saves money or reduces costs
- Promotes the more efficient use of government resources
- Protects the health and well-being of populations who work in or visit government (or government contractor) facilities
- Creates new opportunities for partnerships with suppliers
- Influences the growth of the market with high-volume purchasing

The buying power of governments can convince manufacturers and service providers to produce or offer reasonably priced sustainable commodities or services that do less harm to public health and the environment. Leadership from state executive offices and state procurement officials can set an example for other government entities, localities, nonprofits, and private-sector organizations.

Some critics of sustainable procurement assert that sustainable commodities are more expensive than their non-sustainable counterparts. While this is true sometimes, many sustainable commodities have reached price parity with their traditional counterparts. They are either cost neutral or save money when considering the total cost of using or owning them.

Total cost of ownership (TCO) is the comprehensive accounting of the full costs of a commodity over the course of its life cycle. TCO includes initial costs, energy and operational costs, longevity and efficacy of service, and disposal costs. TCO may also include a life-cycle assessment or analysis for environmental impact. Through this lens, sustainable commodities may have a short payback period, after which they provide significant ongoing cost savings in the form of

reduced maintenance, operation, and disposal expenses. A simple example is a durable good, such as an LED lightbulb, that may be more expensive. Still, it lasts significantly longer and consumes less electricity than a lower-priced traditional bulb.

Sustainable commodities are increasingly competitive and widely available in high-volume markets such as:

- Information technology
- Janitorial supplies
- Personal care products
- Paints
- Lighting
- Appliances

Beyond the initial purchase cost, savings can be realized through reductions in the purchase of protective equipment used with hazardous materials, energy use, and nonrecyclable waste. Sustainable commodities also offer the added value of reducing toxins introduced into the environment through manufacturing, use, or both.

Some examples of direct and indirect cost-saving opportunities that the purchase of sustainable commodities offers include reductions in the following:

- Material and energy consumption
- Operational costs through energy savings from more efficient equipment

- Disposal costs of hazardous and solid waste
- Repair and replacement costs when using more durable and repairable equipment
- Employee safety and health concerns
- Hazardous materials management costs through the use of less toxic commodities

The Commonwealth of Massachusetts provides a great example of an environmentally preferable purchasing program that reports the benefits of purchasing sustainable commodities and services. Table 15.1 from Massachusetts's *Environmentally Preferable Products (EPP) Procurement Program Annual Report 2021*⁹ demonstrates the measured savings derived from sustainable purchasing. The report and many other sustainable purchasing resources can be found on their website.

CREATING A SUSTAINABLE PROCUREMENT PROGRAM

When developing a sustainable procurement program, the public entity should engage stakeholders in critical positions, create benchmarks, and formulate reporting practices that make user agencies and suppliers accountable for sustainable procurement goals. This section outlines core questions, considerations, and steps that public entities take when laying the foundation for a procurement program focused on sustainability.

Table 15.1 Massachusetts Sustainable Purchasing Savings

Savings From . . .	Resources Saved . . .	FY 2021 \$ Savings	Lifetime Cost Savings (includes FY21 savings)
Energy efficient lighting (LEDs)	Energy and maintenance labor	\$433,942	\$5,207,304
EPEAT registered equipment	Energy and packaging	\$1,767,478	\$8,130,398
Remanufactured toner cartridges	Plastic, ink		\$469,655
Fuel efficient vehicles (executive fleet only)	Fuel	\$35,000	\$280,000
Total estimated savings		\$2,236,420	\$14,087,357

Participation of Key Stakeholders

Like all purchases, procuring sustainable commodities and services also relies upon cooperation and input from internal and external stakeholders. Key participants to consider are:

- **Public procurement officials:** play a prominent role in developing a sustainable procurement program. Procurement officials should coordinate procurements among various user agencies within a state or local government to optimize supply chain performance and cost efficiency. Procurement officials frequently work with user agency personnel to build sustainable specifications. Finally, they can encourage current or new suppliers to improve the sustainable performance of their operations, commodities, or services.
- **Public entity program managers and other user agency personnel:** largely determine the specifications for commodities and services they need. They frequently manage the budget that will pay for those commodities and services. These individuals look to public procurement officials for critical information and education regarding sustainable commodities and services.
- **Manufacturers, suppliers, and contractors:** can be encouraged to change the design, manufacturing processes, and supply chain of current commodities or services to minimize environmental impacts. They can provide labeling to identify the sustainable goods and services available or be encouraged to seek certification from an outside organization (see *Understanding External Sustainability Standards* later in this chapter). Suppliers may provide feedback regarding new and innovative approaches to sustainable commodities and services. Contractors that provide required reporting on the types of sustainable commodities and services purchased by a public entity, the volumes purchased, and the dollars spent offer significant data for

measuring the program's success and future planning.

- **Environmental or sustainable subject matter experts (SMEs):** within state and local governments are also SMEs on priorities and strategies. They may advise on environmental laws that should be followed throughout the procurement process. They may assist user agencies in identifying and assessing more sustainable alternatives to currently used commodities and services.
- **External organization certifiers and standard setters:** play a role in the process since they provide product specifications, standards, and certifications. *Eco-labels* (nongovernmental organizations or government labeling programs) show that a commodity is manufactured according to recognized environmental and/or social standards as determined by an unbiased accrediting authority.

It is also essential that there be a person designated as the sustainable procurement program advocate to lead the effort—most likely from the stakeholder group. The law establishing the program may specify the user agency tapped to lead the program, which will narrow the search for the right person to be that advocate; whether the law provides guidance or not, the person designated as the advocate should have effective leadership skills as well as the backing of the entities' executives.

Building Stakeholder and Executive Buy-In

When enlisting the support of the stakeholders, the program advocate should recognize that sustainability is one of a multitude of topics vying for stakeholders' attention. To launch the program successfully, they should educate and advocate to the stakeholders about why they should invest their time and energy into establishing and incorporating sustainable procurement considerations into their procurement process. This knowledge can be institutionalized

by creating sustainable purchasing leadership positions or green teams that contribute to each governmental entity's purchasing group.

Some tips for preparing to engage with sustainable procurement stakeholders include:

- Consider how sustainability requirements for a commodity or service might overlap with existing laws, regulations, policies, and strategic goals of the public entity's internal programs and users. If none exist, create a plan detailing the resources needed to implement the program and a business case demonstrating the potential value added.
- Quantify benefits whenever possible. Use benefit calculation tools highlighting program effects, such as reduced or eliminated environmental impact, enhanced benefits to human health, and realization of cost savings. Benefit calculation tools are discussed later in this chapter.
- Emphasize the value a sustainable procurement program can add to the public entity's image, character, and reputation in the community.

Educating versus Mandating

Sustainable procurement programs effect change through a combination of laws and efforts that encourage state and local government personnel to implement sustainability directives.

While legislation mandating the procurement of a specific sustainable service or commodity may be the most effective way of jumpstarting or growing sustainable procurement programs, enacting a law can be a long process and difficult to achieve. At the state and local government level, the issuance of executive orders by governors, mayors, and others is likely to be a more rapid method to guide all government entities, establish clear goals, and keep them current. Executive orders do not have the same legal weight as law, but they provide high-level

directives, guidance, and support that serve as a foundation for initiating action. In the absence of a law, executive orders can be implemented into policies and procedures for consistent practices throughout the state.

The success of a sustainable procurement program can be attributed in part to comprehensive education and outreach to public procurement officials within the state or local government. That effort should include information about the sustainability issues associated with specific commodities and services, detailing both economic and sustainability benefits that can be achieved and providing readily available tools for measuring and quantifying impacts. While educating and reaching out may take more time than imposing a mandate, the program may do a better job of engaging both the user agencies and the suppliers in the process by providing them with a sense of ownership. Once the benefits are clearly understood and the performance of the sustainable commodity or service is demonstrated, sustainable procurement becomes the preferable choice.

For example, New Mexico has implemented a training program for public procurement officials. New Mexico has a network of approximately 600 certified state and local chief procurement officers.¹⁰ A foundational educational program must be completed with a renewal requirement every two years to certify as a chief procurement officer. The curriculum includes a sustainability class that illustrates the value of purchasing sustainable goods and services at all levels within the state.

Drafting a Policy for a Sustainable Procurement Program

Any sustainable procurement program should be outlined and available in a single document that lays out all authorizing statutes, rules, and mandates. Many state and local governments maintain sustainable procurement policies included in procurement manuals and available online.

For example, see Oregon's sustainable purchasing policy outlined in its website manual.¹¹

Environmental Factors and Other Sustainable Considerations

A helpful step in establishing a sustainable procurement program policy is identifying the environmental or societal issues that the program seeks to address in preparing and using specifications for sustainable commodities and services. Though public entities may choose to emphasize or focus on specific sustainability impacts, policies often address some or all of the following sustainable considerations:

- Pollutant releases
- Toxicity (especially the use of or release of persistent bio-accumulative toxic chemicals, carcinogens, and reproductive and developmental toxins)
- Waste generation and waste minimization
- Disposal considerations (such as reusability, recyclability, or compostability)
- Greenhouse gas emissions
- Energy consumption, energy efficiency, and the use of renewable energy
- Water consumption
- Depletion of natural resources
- Impacts on biodiversity
- Environmental practices that manufacturers and suppliers have incorporated into their production processes or operations
- Minimized packaging
- Social responsibility (including efforts to address labor rights, human rights, and community engagement across the life cycle of the commodity)

Writing a Sustainable Procurement Policy

The following points identify and describe important elements that should be included in most sustainable procurement policies. For examples of sustainable purchasing policies, including structure and language, see the sample policy templates from the Sustainable Purchasing Leadership Council¹² and the sample policy

template for cities/local governments from the Responsible Purchasing Network.¹³

- **Clear statement of purpose:** Most policies begin with stating why the state or local government is developing a sustainable procurement policy, a brief statement establishing program principles, and identifying the internal stakeholders that the policy will involve and affect. This statement should always address environmental and sustainability considerations as previously described, which may include social factors such as sweatshop labor or local sourcing options.
- **Defined goals using the SMART method:** Specific, measurable, attainable, relevant, and time-based (SMART) goals inform procurement decisions and provide the basis to monitor and measure impacts.
- **Performance metrics:** Measuring performance and progress toward goals is essential. Metrics can demonstrate when initiatives are working, or adjustments need to be made. They can be compiled and distributed both at the agency level to acknowledge effort in a positive way (or to shame nonperformers) and at the state level. Spot-lighting high-performing agencies through publications or directly by the executive can motivate and encourage participants. For more information on measuring performance, refer to Chapter 2 (*Procurement Leadership, Organization, and Value*).
- **Legal authority and relevant laws, regulations, and policies:** A policy will have added weight and authority if it is supported by existing laws, executive orders, rules/regulations, and mandates already in effect in a state and local government. References in the policy to relevant laws and rules/regulations will provide an important context and stimulate the user agencies' efforts to comply with the policy's directives.
- **External standards, certifications, and ecolabels for commodities and services:** External standards, certifications,

and ecolabels are a key element of any sustainable procurement policy. They are discussed later in this chapter. Using these tools allows a state and local government to easily identify the important sustainable attributes of a commodity or service, then substantiate and verify them. Additional information about the importance of external sustainability standards appears later in this chapter in the *Understanding External Sustainability Standards* section. Policies should reference specific external standards or certifications that a state or local government recognizes.

- **Identifying the types of commodities and services to target:** Although the goal should be a policy that establishes sustainable criteria for almost every type of commodity or service, prioritizing those routinely used or representing large expenditures is important at the outset of the program. Examples of common high-volume commodity categories might include:
 - Appliances
 - Automobiles
 - Cleaning products
 - Computers
 - Copier/multifunctional devices
 - Food products
 - Furniture
 - Industrial supplies
 - Landscaping
 - Lighting
 - Mobile phones
 - Office supplies
 - Paper and paper products
 - Playground equipment
 - Printing services
 - Transportation and fleet maintenance products
 - Servers
- **A description of roles and responsibilities:** The policy should define the roles and responsibilities of all program stakeholders. This facilitates the implementation of the policy and avoids confusion as the policy is implemented. Depending on how a procurement office is structured

and its relationship to the sustainability program stakeholders, it is important to spell out the process by which sustainable specifications are developed and enforced, the scope of the application of sustainable specifications, available training or other tools, and how implementation and benchmarking, including cost savings, will be tracked.

- **Price preferences and waivers:** A state or local government may wish to use price preferences and waivers in its sustainable procurement program. The conditions for the use of those should be spelled out in the policy.

A NOTE ON ECOLABELS

Due to the wide range of the use of ecolabels and the ongoing proliferation of *green* marketing claims, policies should also include general guidelines and common criteria that standards, certifications, and ecolabels should meet to be deemed credible. The United States Federal Trade Commission publishes *Green Guides* to provide guidance on *green* claims.¹⁴ Similarly, many policies require that credible standards, certifications, and ecolabels be developed in accordance with resources such as the United States Environmental Protection Agency's *Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing*¹⁵ or the ISEAL Alliance, *Credible Sustainability Standards*.¹⁶

Price Preferences

Public entities may employ the use of a price preference to give sustainable commodities and services leeway to be purchased at a higher cost than their non-sustainable competitors but still be the commodity or service selected to be bought. Public entities may employ the use of a preference to give sustainable commodities and services leeway to cost more to purchase than

their non-sustainable competitors but still be the commodity or service selected to be bought. This is often applied in *low-bid* situations. A percentage preference allows a business offering sustainable solutions to bid a higher price than the bid of another business but still be considered the lowest bid if their bid is no more than a certain percentage higher (such as 5 or 10%) than the actual low bid. State preferences differ in their language and application. Due to the disparate nature of commodities and services, only some commodities or services to be purchased based on low price require the application of a price preference. Therefore, in instances where the law authorizes preferences, policies should provide a procurement office with the flexibility to apply preferences on a commodity- or service category-specific basis.

A request for proposal's (RFP) process where price is not the only or most important contract award factor permits the public procurement official to establish evaluation criteria that favor sustainable commodities or services. In those situations, the solicitation establishes a minimum specification favoring sustainable commodities or services along with evaluation criteria offering the greatest number of points for sustainable commodities or services, corporate practices, and solutions proposed by the supplier. For entities that require awards to be based on the lowest bid, the requirement of sustainable products in the request provides the ability to accept the lowest bid containing a sustainable option.

Waivers

Due to the dynamic nature of the sustainable commodity and service marketplace and the unique needs of user agencies, sustainable procurement program policies should outline scenarios in which the purchase of a sustainable commodity or service is not necessary. Waivers should be documented and incorporated into purchase expenditure reports and future programmatic decisions.

Policy language tends to identify the following as viable justification for a waiver from the sustainable procurement policy:

- The sustainable commodity does not meet the required form, functionality, or utility.
- The sustainable commodity is prohibitively expensive or cannot be competitively priced.
- An emergency or compelling public health or safety reason requires purchasing a specific non-sustainable commodity.

For additional examples of state approaches for creating a sustainable procurement policy, see the Minnesota Department of Administration and Minnesota Pollution Control Agency's *Sustainable Procurement Charter*¹⁷ and Chapter 6 (*Environmentally Preferred Purchasing*) of California's Public Contract Code.¹⁸

USING THE POWER OF THE PROCUREMENT PROCESS AND THE CONTRACT

Sustainability considerations should be an essential part of the early stages of a procurement process. State or local governments can use that process to encourage or require competing suppliers to offer sustainable commodities or services or to follow sustainability practices.

The following list describes some potential strategies for utilizing the power of the procurement process and the contract to support a sustainable procurement program:

- **Incorporate sustainable specifications and utilize ecolabels:** In addition to mandating minimum sustainable specifications for commodities or services, as already discussed, explore other options, such as specifying in the solicitation that suppliers should provide a sustainable alternative along with a conventional commodity or service. Consider stating a scoring preference in the evaluation criteria under an RFP, which may increase the number of sustainable options available to the public entity. Also consider packaging requirements, including cardboard containing

recycled content or bar polystyrene foam use.

- **Require reporting on sustainable purchases and practices:** Require suppliers seeking contract awards to offer reporting on the volumes and types purchased and dollars spent by the public entity for sustainable commodities or services. Provide additional points in evaluating suppliers' proposals to see if they can supply those types of reports.
- **Allow suppliers to recommend alternative solutions:** Encourage suppliers to submit information identifying all environmental attributes of the requested commodity or service, even when such attributes have not been required. Public entities may use this information to develop specifications in the future that incorporate sustainability criteria. Ask suppliers to provide a sustainable alternative (or replacement) for their conventional commodity wherever possible. Such requests serve to reveal new sustainable commodities in the marketplace.
- **Evaluate suppliers' sustainability programs:** Include a supplier sustainability questionnaire in solicitations, allowing suppliers to describe their sustainable operations. Consider providing additional evaluation points for suppliers' proposals that can prove they have programs in place. Doing this sends a clear message to the suppliers that the public entity considers sustainability when awarding contracts.
- **Write contract language to allow the substitution or addition of sustainable commodities in an existing contract:** Include language in solicitations that permits the public entities to negotiate with the contractor during the contract term to substitute and add sustainable commodities when such commodities become available at a competitive price, are readily available, and satisfy the buying entity's performance needs.
- **Green the market basket:** A *market basket* is a representative sample of routinely

purchased generally high-volume commodities for which the formal solicitation asks competing suppliers to provide discounted pricing. This market-basket pricing is used to evaluate suppliers' pricing in their bids or proposals. To obtain discounts for sustainable commodities, ensure they are among the commodities listed in the market basket on the pricing sheet that suppliers should submit during a formal competition for a contract. Online catalog systems require that sustainable items be identified and properly labeled. Automatically including sustainable options without requiring the purchaser to search for them can simplify the process and encourage more frequent selection.

- **Write the contract to permit sustainable planning:** Incorporate language that requires potential contractors competing under a formal solicitation to agree to work with the public entity to explore the feasibility of implementing a sustainability plan. This requirement encourages suppliers to incorporate sustainable practices in their business operations and market them. It also allows the public entity to motivate contractors to expand their sustainability initiatives or add new initiatives during the contract term, depending on the interests of the public entity.

IMPLEMENTING A SUSTAINABLE PROCUREMENT PROGRAM

Specification Development and Use

As discussed earlier in this chapter, employing a collaborative process for creating a sustainable procurement program, including developing specifications, is important. Successful sustainable procurement programs start with broad input to develop specifications that can be effectively measured and communicated for a core group of commodities and services.

The following are suggestions to consider when developing and using sustainable specifications:

- Review what the public entity is already buying. Often, sustainable commodities or services are already being purchased, but the data has not been centrally collected and reported. Take credit for good work that is already being done.
- Compare what other state and local governments do, particularly the sustainable specifications used. Federal agencies, such as the Environmental Protection Agency (EPA), nonprofits, and sustainability certification organizations, also offer specification examples.
- Solicit input from the supplier community but do not show a preference. Create an open and neutral mechanism to gather information about available sustainable commodities and services on the market. Hold *sustainable product fairs* or focused public meetings on sustainability.
- Trust and value input. Be prepared to waive the use of specifications for sustainable commodities or services if, following investigation, a sustainable commodity or service will not perform adequately or cost too much.

Selecting Targeted Commodities and Services

When building a sustainable procurement program, it is important to be strategic about the commodities or services that the program stakeholders choose to concentrate on first. Procuring commodities easily found in the marketplace, credibly addressing environmental issues, and saving money at the point of purchase, are cost neutral. These commodities and services represent the most significant opportunities for early success. Some commodities that are ideal as the focus of a sustainability program are:

- **Energy efficient commodities and appliances:** Two United States government entities, the EPA and the Department of Energy, sponsor the Energy Star program.

It is a common and credible means of verifying a commodity's energy efficiency. The Energy Star program covers numerous commodity categories, including office equipment, computers and IT equipment, lighting (including traffic), air conditioners and heating, ventilation equipment, and significant electronic appliances. Public procurement officials commonly reference the EnergyStar™ standard in their solicitations, which reduces electricity consumption.¹⁹ This, in turn, reduces the pollution related to energy and could provide significant cost savings.

- **Computers, IT, and imaging equipment:** Procuring technology products that are energy efficient, less toxic, pollute less, protect human and labor rights, and can be disposed of responsibly can reduce the overall environmental impact of an organization's day-to-day activities. Public procurement officials frequently use the EPEAT, Electronic Product Environmental Assessment Tool²⁰ ecolabel of the Global Electronics Council, to ensure they obtain sustainable commodities. The free online EPEAT registry lists thousands of commonly purchased information technology products from many manufacturers. EPEAT-registered commodities conform to criteria that examine the entire life cycle of products to ensure they address environmental and social issues. Another popular internationally recognized ecolabel for IT is TCO Certified.²¹
- **Environmentally preferable paper:** Although many governments have switched to primarily paperless options using electronic communication and records storage, paper continues to be used. Paper production substantially impacts forests, water, and energy consumption. The EPA has established the Comprehensive Procurement Guideline program, which set recycled content requirements for various paper types.²² Many state and local governments seek paper with even higher levels of recycled content. Third-party commodity certifications are available to assist in creating

specifications for these commodities, such as those offered through the Forest Stewardship Council.²³ Depending on the volume of paper purchased and the region of the country, many public procurement officials can procure environmentally preferable paper without increasing costs. Many public entities have implemented source-reduction activities that reduce the need for paper, such as switching to electronic communications and storage or double-sided printing, to name a few. Another sustainable procurement best practice requires suppliers of contracts that print publications and other items to use chlorine-free, recycled content paper to the maximum extent possible.

- **Sustainable cleaning products:** Many common cleaning chemicals contain hazardous, corrosive, flammable, and/or toxic properties, which pose health considerations when used. There also may be safety, health, and cost concerns in the handling, storage, and disposal of these chemicals. Some chemicals may not cause immediate injury but are associated with cancer, reproductive disorders, respiratory problems, skin damage, and other health conditions.²⁴ As a result, many public entities, including schools, require less toxic but equally performing cleaning products. Some tools for locating these commodities are available through third-party organizations such as Green Seal, EPA's Safer Choice, and UL's ECOLOGO Product Certification (UL is global safety science company headquartered in Northbrook, Illinois, that is composed of three organizations: UL Research Institutes, UL Standards & Engagement, and UL Solutions).
- **Post-consumer recycled content commodities:** Requiring post-consumer recycled content in specifications for commodities strengthens markets for recyclable materials, reduces waste disposal, and works to create economic development opportunities within emerging industries. Usable post-consumer content includes paper, plastics, metals, and petroleum-based

products. Commodities using these materials include:

- Office papers and envelopes
- Packaging
- Plastic
- Lumber
- Traffic cones
- Re-refined motor oil
- Antifreeze
- Toner cartridges
- **Services suppliers:** Public procurement officials may establish sustainability requirements in service contracts by specifying that the materials the contractors use to perform the contract meet established sustainability standards. The contracts may also mandate using processes or methods less harmful to the environment. Some examples of services that can use sustainable practices include landscaping, custodial, pest control, and printing. To illustrate, printing contracts may require water- or vegetable-based lithographic ink to the maximum extent practicable, which will reduce the amount of volatile organic compounds released into the environment.
- **Green building and construction components:** Efficient HVAC, lighting, water controls, and building materials, such as reflective glass, can contribute to sustainability goals and provide long-term financial savings for permanent construction projects. Sustainable versions of most building materials are now available and should be automatically specified as options in all plans for construction and renovation upgrades.

Selecting Contractors Using Total Cost of Ownership or Life-Cycle Cost Factors

In evaluating suppliers' submissions to a solicitation, public procurement officials increasingly use methods focused on selecting commodities and services through source selection methods that allow for considering factors other than the low purchase price. Chapter 7 (*Proposal Evaluation and Award*) discusses these methods,

including the idea of *best value*. Some non-price factors are often taken into consideration when evaluating the sustainability of a commodity or service, including:

- Quality
- Risk
- Performance
- Durability
- Local production
- Environmental impacts

Pertaining to sustainability, the best value is closely tied to the TCO, and the aforementioned factors are included in a life-cycle cost assessment or analysis. The Sustainable Purchasing Leadership Council defines life-cycle assessment as:

*A method for assessing environmental (or other) impacts associated with all the stages of a product's life, from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling.*²⁵

The life-cycle assessment results describe a product's actual life-cycle cost, including financial expenses and environmental and/or social impacts.

With the rising costs of fuel and electricity, maintenance and repairs, handling of toxic substances, pollution remediation, and insurance claims, some state and local governments require contractors to take responsibility for the safe operation and end-of-life management of their commodities. Therefore, a slightly higher purchase price may easily represent the best value when it provides an opportunity for significant cost avoidance throughout the entire life of the commodity.

Even if a public entity's laws require a contract award to a low bidder, sustainable requirements within the specifications founded on a TCO mean that the responsive bidder submitting the lowest price will meet those requirements. Depending on the language of the public entity's law, an invitation for bids seeking the lowest price

commodity may include factors such as a supplier's healthy work environment and resource conservation. Public entities should consider using the TCO of sustainable commodities over the life of the commodity to determine their true cost. For more information on the total cost of ownership, refer to Chapter 4 (*Procurement Planning*).

Purchasing Sustainable Commodities and Services Through Cooperative Agreements

Cooperative agreements and cooperative purchasing are essential and valuable tools for public procurement officials. Chapter 17 (*Cooperative Purchasing*) discusses this topic in more detail. Cooperatives encourage competitive pricing on a wide range of commodities and services due to the promise of large business volumes for suppliers awarded contracts.

To encourage the procurement of sustainable commodities and services, public procurement officials should ask cooperatives to make information easily available about the sustainable commodities and services offered through their contracts. Some questions to ask include:

- Are third-party certifications required or desired in this contract?
- Are suppliers required to label products that include third-party certifications, post-consumer recycled content, and/or are free of chemicals of concern?
- Are suppliers able to provide spend reports for sustainable or environmentally preferable products?

USING CREDIBLE STANDARDS, THIRD-PARTY CERTIFICATIONS, AND ECOLABELS

Understanding External Sustainability Standards

As noted earlier in this chapter, under the heading *Writing a Sustainable Procurement Policy*,

external standards, ecolabels, and certifications can assist public procurement officials in locating commodities and services that have met rigid testing requirements along with the specifications for those commodities. Using third-party certifications is one way to outsource environmental reviews of products and services and simplify specification development to ease the burden on limited procurement staff and finite resources.

The most credible, respected standards and certifications have been developed in a balanced, open, transparent process by organizations that do not have a vested interest in the outcome. They may focus on a single attribute of a product or process or on a balance of multiple sustainability attributes or considerations throughout a commodity's or service's life cycle.

Some standards and certifications require comprehensive third-party audits, while others may simply permit manufacturers to determine or self-certify whether they comply with a standard. Both can be valuable and effective, but public entities must recognize the distinction and perform the appropriate research to ensure that criteria and claims match their needs. The following are resources for research on this topic:

- International Organization for Standards (ISO) Standard 14024:2018, *Environmental labels and declarations—Type 1 environmental labelling—Principles and procedures*²⁶
- United States Office of Management and Budget Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*²⁷
- ISEAL Alliance, *Defining credible practice*²⁸
- The EPA and the Department of Energy sponsor the Energy Star program, a common and credible means of verifying a commodity's energy efficiency. The Energy Star program covers numerous electronic commodity categories.

Avoid Greenwashing

Sustainable commodities are a rapidly growing market, and suppliers have responded with *green* marketing, touting the environmental benefits of what they are selling. But sometimes, what companies think their sustainable claims mean and what consumers understand are different. This practice is commonly referred to as *greenwashing*.

Characteristics of modern greenwashing are:

- **Fibbing:** false claims that a commodity meets a specific standard
- **Unsubstantiated claims:** commonly known as *just trust us*, occur when manufacturers are unable to prove their environmental claims
- **Irrelevance:** making factually correct environmental statements that are no longer current
- **Hidden trade-off:** making claims about a single environmental attribute, leading consumers to think that this single attribute is the only environmental one of concern associated with the use of the commodity or service
- **Vagueness:** broad environmental claims such as *100% natural*, *earth smart*, and *ozone safe*
- **Relativism:** a commodity, as compared to other commodities of the same type, may be environmentally friendly, but still a poor choice

Incorporating requirements such as the following into solicitations and contracts can clarify how suppliers label commodities, which in turn, can assist in the consistency of and benefits from the sustainability reports that contractors should supply:

- Environmental benefit claims concerning commodities or services should be consistent with the United States Federal Trade Commission's *Green Guides*.²⁹

- Contractors providing sustainable commodities or services should explicitly identify the industry standard, certification, or ecolabel that those commodities or services meet in the paper and online catalog descriptions available to public entity agencies and departments purchasing from those catalogs. For example, all Energy Star commodities should be labeled with the Energy Star logo and the words *Energy Star*.
- The solicitation and contract should include language that authorizes public entities to remove *green* labels and claims that constitute greenwashing or are determined to be weaker than the standard, such as vague claims that something is recyclable or biodegradable.
- Solicitations and contracts should require the suppliers to provide copies of the certifications they claim upon request if the public procurement official cannot otherwise verify them.

EPA Recommendations for Standards and Ecolabels

The EPA maintains guidance to assist federal government purchasers in sorting through hundreds of ecolabels and identifying credible and effective standards and ecolabels that best fit their needs. That guidance is titled *Recommendations of Standards and Ecolabels for Use in Federal Procurement*,³⁰ and it covers six broad categories of commodities with many subcategories. The EPA assesses ecolabels against the guidelines.

MEASURING AND MARKETING EFFECTIVENESS

Establishing strong metrics is not unique to sustainability or environmentally preferable purchasing programs, but it is good business practice with all contracts. Earlier, this chapter discussed the need for SMART goals that account for how a program will define success and

measure impact. Measuring success highlights both the environmental and cost-saving benefits of sustainable procurement efforts. It starts with getting reliable purchasing data directly from suppliers, agency reports, or through internal means, such as an eProcurement system. Credible data creates opportunities to recognize and reward outstanding achievers, identify problem areas that may need correction, and meet reporting and recordkeeping requirements.

State and local governments should consider sharing and documenting achievements and challenges by issuing annual reports and distributing them to other public entities. This also allows for discussing progress and potential barriers to specific commodities and services.

When drafting an annual report or an assessment of a program, the following are considerations for tracking, measuring, and communicating results:

1. **Identify key metrics:** Metrics may include an annual increase in purchase volumes or in dollars spent involving sustainable commodities or services, the number of contracts and items involving them, costs and savings, energy reduction, and other environmental benefits. Performance measures for contractor services (such as timely delivery or response time for complaints) may also contribute to how public procurement officials assess high- and low-performing contractors.
2. **Establish a current baseline on which to measure future progress:** The information to be used in calculating the baselines will depend to some degree upon the metrics established for the sustainable procurement program. The baseline generally will include such data as the type and number of commodities or services currently purchased, the cost of those commodities or services, the total spend or percentage of overall spend on qualifying purchases, and environmental data and impacts associated with those

purchases. Environmental data used in a baseline may include the percentage of recycled content, the current process and cost to dispose of or recycle a commodity, and the commodity's energy and water requirements. Baselines can also include contractor performance.

3. **Establish goals based on those metrics:** Goals for the future can be defined based on the desired metrics. Remember, these goals should be SMART. Examples include an increase in new sustainable commodities and services available on statewide contracts, energy use or waste reduction, fiscal savings, or expenditure targets on sustainable purchases.
4. **Determine the means of recordkeeping used to document measurements:** State and local governments that maintain a central single accounting system through which all transactions are processed offer a reliable means of collecting expenditure data. In those cases, the central procurement office should identify the sustainable commodities or services within that system to break the information out for reporting purposes. Many state and local governments have eProcurement systems or B2G software solutions that may include the means of tracking expenditures on sustainable commodities and services. Many state and local governments rely upon supplier reports if this reporting is unavailable. However, since not all contractors are as timely in submitting their reports as others, it is helpful to have assistance in following up with the contractors. To ensure that contractors provide complete and comprehensive information in a user-friendly format for analysis, states may want to provide a template for contractors to use when submitting this data.
5. **Publicize and reward achievers:** When data are available and show good results, reward internal participants and publicize success. Recognition can be as simple as a thank you letter, credit toward an

employee's performance review, or more publicly via a special awards program. Piggybacking on the annual meetings of various organizations (such as school business managers and public procurement officials) and offering a *sustainable procurement award* at annual events can be one way to increase visibility. In addition, featuring the success story of an agency or department in a case study can be an excellent peer-to-peer example of how to implement sustainable procurement.

A great example of measuring, marketing, and reporting can be found in the *Annual Report* of the Maryland Green Purchasing Committee, which is available online.³¹ For more information on measuring and communicating the performance of the procurement officials, refer to Chapter 2 (*Procurement Leadership, Organization, and Value*).

Benefits Calculators

Benefits calculation tools may be used to build the case for pursuing sustainable commodities and demonstrating project success to management, coworkers, and stakeholders outside of the public entity. Benefits calculators are most valuable when they are credible and easy to use. Some calculators can convert hard-to-understand metrics, such as kilowatt hours or greenhouse gas emissions, into vivid equivalents like the number of cars removed from the road or energy consumption for a given number of households.

Some examples of benefits calculators include:

- **EPEAT Benefits Calculator, Global Electronics Council:** uses metrics such as energy use, greenhouse gas emissions, water consumption, and fiscal costs to determine and demonstrate the impact, benefits, and savings of certified electronics purchases.³²
- **COOL Climate Calculator, University of California at Berkeley:** an online decision-making tool that helps public entities

estimate greenhouse gas emissions or carbon footprints from purchases of home or business commodities.³³

- **EPA Waste Reduction Model (WARM):** tracks greenhouse gas (GHG) emission reductions from several waste management practices and calculates and totals GHG emissions from baseline and alternative waste management practices, including source reduction, recycling, anaerobic digestion, combustion, composting, and landfilling.³⁴
- **Energy Star website:** contains several calculators created to estimate potential savings and payback of energy-efficient commodities.³⁵

For detailed information on the metrics and methods used by these calculators, visit their websites as listed in the endnotes of this chapter.

MAINTAINING YOUR SUSTAINABLE PROCUREMENT PROGRAM

Sustainable procurement programs are successful in the long term when proper resources are dedicated to them and steps are taken to promote and highlight their successes. Successful and effective programs result from the work of dedicated staff.

Some specific examples of steps that individual states can take to maximize the success of a sustainable procurement program include the following:

- Create a dedicated sustainable procurement resource that features statutory language, publicizes sustainable specifications, demonstrates the benefits of purchasing sustainable commodities and services, and provides other appropriate

guidance for purchasers and suppliers. Massachusetts' EPP Program website is an example of an effective resource hub.³⁶

- Ensure that procurement training tools and curricula include core competencies relating to the sustainable procurement program and sustainable commodities and services, such as lessons on drafting specifications for those sustainable items.
- Highlight the achievements of public entity individuals, agencies, departments, or divisions who embrace sustainable procurement efforts through newsletters, press releases, and other forms of recognition. Use benefits calculators to convert sustainable procurement activities into understandable environmental or human health impacts—and publicly share the results.
- Incorporate sustainability considerations into the regular solicitation and evaluation process.
- Empower a designated sustainable purchasing leader or office to assist procurement officials with incorporating sustainability into their purchasing and meeting established goals. They should be up-to-date with state or local requirements, executive orders, and national industry trends.
- Tie sustainable procurement efforts to individual and organizational performance metrics and key performance indicators.

CONCLUSION

Taking steps to ensure that sustainable purchasing considerations are a part of the procurement process is an increasing priority among procurement divisions across the states and public entities. Understanding sustainable procurement concepts and utilizing the tactics and tools described in this chapter can increase a procurement office's ability to be a responsible member of the local and global community.

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