Environmental Considerations in Federal Procurement: An Overview of the Legal Authorities and Their Implementation

Kate M. Manuel
Legislative Attorney

L. Elaine Halchin
Specialist in American National Government

June 21, 2010
Summary

Coupled with increasing concerns about the environment, the magnitude of federal spending on contracts has prompted numerous questions from Members of Congress and the public about the role of environmental considerations in federal procurement. These include: to what extent do agencies consider environmental factors when procuring goods or services? What legal authorities presently require or allow agencies to take environmental factors into account when acquiring goods or services? How are existing provisions authorizing agencies to consider environmental factors implemented? This report provides an overview, answering these and related questions.

The federal procurement system is designed “to deliver on a timely basis the best value product or service to the customer, while maintaining the public’s trust and fulfilling public policy objectives.” Environmental objectives can generally be among the public policy objectives that factor into federal procurement. However, they are not necessarily the most significant objectives overall or in any specific procurement. There are numerous other objectives (e.g., obtaining high quality goods and services at low prices, promoting American manufacturing, protecting small businesses, fostering affirmative action) that can also factor into procurement decisions. The relationship and prioritization among these different objectives is presently unclear.

Various legal authorities currently require or allow contracting officers to take environmental considerations into account when procuring goods or, less commonly, services. These authorities can be broadly divided into three categories: (1) “attribute-focused” authorities, generally requiring agencies to avoid or acquire products based on their environmental attributes (e.g., ozone-depleting substances, recovered content); (2) general contracting authorities, allowing agencies to purchase goods with certain environmental attributes when they have bona fide requirements for such goods; and (3) responsibility-related authorities, which require agencies to avoid certain dealings with contractors that have been debarred for violations of the Clean Air or Clean Water Acts. “Attribute-focused” authorities arguably do not deprive vendors of ineligible products of due process or equal protection in violation of the U.S. Constitution. However, certain preferences for products with desired environmental attributes, or vendors of such products, could violate procurement integrity regulations and the Competition in Contracting Act if not based in statute. Use of evaluation factors based on environmental considerations is possible in negotiated procurements, but subject to certain conditions, and the reportedly lower lifecycle costs of “green” products do not, per se, mean their acquisition is justified on a “best value” basis.

Agencies generally implement existing authorities by relying on third-party designations of products with specific environmental attributes and by using standard purchasing methods, including bilateral contracts, the Federal Supply Schedules, and government-wide commercial purchase cards.

The 111th Congress has held hearings on the environmental and related effects of federal procurement practices, and Members have introduced legislation that could expand the preferences given to “sustainable” products in certain federal procurements (H.R. 5136, § 833; H.R. 5280) and assist the “green” procurement efforts of state and local governments (H.R. 1766, S. 1830). President Obama has also issued an executive order (E.O. 13514) calling for the federal government to “leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials,” among other things.
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Introduction

Coupled with increasing concerns about the environment, the magnitude of federal spending on contracts has prompted numerous questions from Members of Congress and the public about the role of environmental considerations in federal procurement. These include: to what extent do agencies consider environmental factors when procuring goods or services? What legal authorities presently require or allow agencies to take environmental factors into account when acquiring goods or services? How are existing provisions authorizing agencies to consider environmental factors implemented? This report provides an overview, answering these and related questions. It does not address green building initiatives, energy-savings performance contracts, policy documents, agency-specific laws, or environmental laws of general applicability that effectively shape the products available for purchase.

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4 Energy-savings performance contracts (ESPCs) are unlike other federal contracts in that they have substantially longer terms (up to 25 years) and the agency pays the contractor a percentage of the savings realized from energy-savings measures it proposes and implements for the agency. Agencies were first given special authority to contract “for the purpose of achieving energy savings” in 1986. However, even after such contracts were designated ESPCs in 1992, agencies’ authority to enter into them was temporary until 2007, when it was made permanent. See Energy Independence and Security Act of 2007, P.L. 110-140, § 514, 121 Stat. 1659 (Dec. 19, 2007) (codified at 42 U.S.C. § 8287) (permanent authority to enter ESPCs); Energy Policy Act of 1992, P.L. 102-486, § 155, 106 Stat. 2852-55 (Oct. 24, 1992) (designating contracts as ESPCs and extending authority to enter such contracts); Consolidated Omnibus Budget Reconciliation Act of 1985, P.L. 99-272, § 7201, 100 Stat. 142-43 (Apr. 7, 1986) (authorizing “contracts ... for the purpose of achieving energy savings”). Presently, the Federal Acquisition Regulation (FAR) requires agencies to “make maximum use of ... energy-savings performance contracts, when life-cycle cost-effective, to reduce energy use and cost in the agency’s facilities and operations.” 48 C.F.R. § 23.205(a)-(c). Although the FAR attributes the requirement that agencies “make maximum use” of ESPCs to Executive Order 13123, this order was revoked in 2007, and the FAR is now the sole authority for this requirement. See 72 Fed. Reg. 3919, 3923 (Jan. 26, 2007).


6 See, e.g., 10 U.S.C. § 2922d (procurement of “nonconventional fuels” by the Department of Defense).

7 Section 112 of the Clean Air Act, for example, requires the Environmental Protection Agency to set emission or release standards for pollutants (i.e., the National Emission Standards for Hazardous Air Pollutants (NESHAP)). However, although the General Services Administration provides a listing of NESHAP-compliant products, the purchase of such products is not a matter of procurement law in the same way that the purchase of biobased products is because these standards apply to all goods available for purchase.

governments to use the Federal Supply Schedules to acquire “environmentally preferable ‘green’” products (H.R. 1766, S. 1830); “favor” or give “preference” to “sustainable” goods in certain federal procurements (H.R. 5136, § 833; H.R. 5280); and require certain contractors operating federal facilities to comply with requirements regarding renewable energy and energy efficiency (H.R. 5280). President Obama has also issued an executive order on “Federal Leadership in Environmental, Energy, and Economic Performance,” calling for the federal government to

... increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; [and] design, construct, maintain, and operate high performance sustainable buildings in sustainable locations.9

Place of Environmental Considerations in Federal Procurement

Fundamentally, federal procurement involves agencies acquiring10 the goods and services they need to carry out their missions. The vision for federal acquisition, as presented in the Federal Acquisition Regulation (FAR),11 is “to deliver on a timely basis the best value product or services to the customer, while maintaining the public’s trust and fulfilling public policy objectives.”12 Although “best value” is not defined in this context,13 the FAR further provides that

(...continued)


10 As defined in the FAR, an “acquisition” involves “the acquiring by contract with appropriated funds of supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated.” 48 C.F.R. § 2.101.

11 The FAR, which comprises Parts 1-53 of Title 48 of the Code of Federal Regulations (CFR), is “the primary regulation for use by all Federal Executive agencies in their acquisition of supplies and services with appropriated funds.” FAR, “Foreword.”

12 48 C.F.R. § 1.102(a) (emphasis added). Similarly, but more specifically, the FAR also provides that the federal acquisition system is intended to

(1) Satisfy the customer in terms of cost, quality, and timeliness of the delivered product or service by, for example—

(i) Maximizing the use of commercial products and services;

(ii) Using contractors who have a track record of successful past performance or who demonstrate a current superior ability to perform; and

(iii) Promoting competition;

(continued...)
All participants in the [Federal Acquisition] System are responsible for making acquisition decisions that deliver the best value product or service to the customer. Best value must be viewed from a broad perspective and is achieved by balancing the many competing interests in the System. The result is a system which works better and costs less.\textsuperscript{14}

Environmental objectives can constitute one of the “public policy objectives” to be furthered by federal procurement, and environmental interests can be among the “competing interests” in the federal procurement system.\textsuperscript{15} There are, however, numerous other policy objectives and interests implicated in federal procurement. These include, but are not limited to, obtaining high quality goods at low prices through competition;\textsuperscript{16} protecting American manufacturing from foreign competition;\textsuperscript{17} ensuring opportunities for small businesses;\textsuperscript{18} protecting employees or prospective employees of government contractors from discrimination and promoting affirmative action;\textsuperscript{19} ensuring that workers on certain federal construction and manufacturing contracts are adequately paid and have adequate working conditions;\textsuperscript{20} ensuring that the government does not purchase the

(...continued)

(2) Minimize administrative operating costs;
(3) Conduct business with integrity, fairness, and openness; and
(4) Fulfill public policy objectives.

48 C.F.R. § 1.102(b).

\textsuperscript{13} The term “best value” is also used in federal procurement statutes and the FAR to refer to source selection methods used in negotiated contracting, including lowest price technically acceptable source selection and tradeoff source selection. See 48 C.F.R. § 15.101. The possible role of environmental considerations in determining “best value,” as used in this sense, is discussed in more detail later in this report. See infra notes 75-76 and accompanying text.

\textsuperscript{14} 48 C.F.R. § 1.102-1(b). “Competing interests”—for which the FAR provides neither a definition nor an explanation—could potentially include a variety of participants and stakeholders, requirements, values, programs, and policies. Viewing the notion of “competing interests” broadly might also permit inclusion of Steven L. Schooner’s nine objectives for government procurement: transparency, integrity, competition, efficiency, best value, customer satisfaction, wealth distribution, risk avoidance, and uniformity. See Steven L. Schooner, Desiderata: Objectives for a System of Government Contract Law, Pub. L. & Legal Theory Working Paper No. 37 (2002). Schooner is Co-Director of the Government Procurement Law Program, George Washington University Law School, Washington, D.C.

\textsuperscript{15} The federal government has a long history of using its procurement system to promote socioeconomic goals and even the adoption of particular technologies. See, e.g., James F. Nagle, A History of Government Contracting 57-58 (2d ed., 1999) (describing how the Continental Congress instructed the postmaster general to give stagecoaches “preference” over postriders in transporting the mail, in part because it hoped that promoting this nascent industry would “make the intercourse between the different parts of the Union less difficult and expensive than formerly”).


\textsuperscript{18} See, e.g., The Small Business Act of 1958, P.L. 85-536, § 2(a), 72 Stat. 384 (July 18, 1958) (codified at 15 U.S.C. § 631(a)) (“It is] the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small-business concerns.”).

\textsuperscript{19} See, e.g., Exec. Order 8802, 6 Fed. Reg. 3109 (June 25, 1941) (prohibiting defense contractors from discriminating on the basis of race, creed, color, or national origin); Exec. Order 11246, 30 Fed. Reg. 12319 (Sept. 28, 1965) (requiring certain contractors to develop and implement affirmative action plans).

\textsuperscript{20} See, e.g., 41 U.S.C. §§ 35-45 (maximum working hours, safe and sanitary working conditions); 41 U.S.C. §§ 351-357 (prevailing wages).
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products of child labor;\(^{21}\) and assuring that government contractors are not also doing business with regimes whose interests are adverse to those of the United States.\(^{22}\)

Currently, the relationship between these various objectives and interests is not always clear from a policy or legal perspective. From a policy perspective, “balancing … competing interests” in the procurement system, as called for in the FAR, can have unintended consequences or lead to conflicts with other procurement objectives, as the following excerpt from Steven L. Schooner’s discussion of balancing “best value” with “customer satisfaction” illustrates:

We … have increased our emphasis upon the concept of best value, or what some call value for money. In other words, we aspire to focus upon getting the best deal—or the best bargain—for the public’s money. Such an emphasis seems logical. Unfortunately, the pursuit of best value requires greater buyer resources, from market research to negotiation. Similarly, obtaining best value may not also please the customer (for example, if the customer requires premium quality regardless of price).

… [I]n the 1990’s, the U.S. procurement system increased its emphasis on obtaining customer satisfaction for end users. It makes sense for buyers to try to please those for whom they serve. Unfortunately, pleasing end users, especially if the end user favors specific suppliers or demands that goods be provided quickly, frequently results in less competition and higher prices, or simply embarrassing policy decisions.\(^{23}\)

Much like “best value” can be difficult to balance with “customer satisfaction,” environmental considerations could prove difficult to balance with other objectives or values that are part of the federal procurement system. Similarly, from a legal perspective, the existence of multiple requirements can pose questions as to which requirement takes “precedence” when the requirements cannot be implemented simultaneously. One notable example of this involves set-aside programs for small businesses. Failure to articulate the relationship between the various set-aside programs—only one of which can be used in any procurement—has resulted in extensive litigation over which set-aside program should be used when.\(^{24}\) Similar questions could arise if two different products, each of which agencies “must” purchase because of its environmental attributes, could meet a requirement,\(^{25}\) or if preferences for products with particular environmental attributes were seen as thwarting or thwarted by other legal requirements (e.g., Buy American, preferences for small businesses).

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\(^{22}\) See, e.g., CRS Report RS20871, Iran Sanctions, by Kenneth Katzman.

\(^{23}\) Schooner, supra note 14, at 11 (emphasis in original).


Legal Authority to Consider Environmental Factors

Various legal authorities currently require or allow contracting officers to take environmental considerations into account when procuring goods or, less commonly, services. These authorities can be broadly divided into three categories: (1) “attribute-focused” authorities, generally requiring agencies to avoid or acquire products based on their environmental attributes (e.g., ozone-depleting substances, recovered content); (2) general contracting authorities, allowing agencies to purchase goods with certain environmental attributes when they have bona fide requirements for such goods; and (3) responsibility-related authorities, which require agencies to avoid certain dealings with contractors that have been debarred from government contracting for violations of the Clean Air Act or Clean Water Act.

Attribute-Focused Authorities

Numerous statutes, regulations, and executive orders enacted or issued since the mid-1970s authorize agencies to “prefer” certain products because of their environmental attributes. This generally means that agencies must purchase products with these attributes instead of competing products that lack them. However, the exact nature of the preference varies by product, as discussed below and illustrated in Table 1 and Table A-1. Because the attribute-focused authorities developed over time and through the actions of different branches of the federal government, they arguably do not represent a holistic framework for or ensure consistency in agencies’ treatment of products or vendors on environmental grounds.

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26 See infra note 53 and accompanying text for a discussion of why existing preferences seldom apply to service contracts. The type of legal authority (i.e., statute, regulation, or executive order) determines, among other things, the ease with which particular preferences may be modified or revoked. Statutory requirements can only be changed by Congress, while those in executive orders can be changed by the President at any time. See, e.g., Exec. Order 12375, 47 Fed. Reg. 34105 (Aug. 6, 1982) (revoking President Carter’s preference program for fuel efficient passenger vehicles); Exec. Order 12437, 48 Fed. Reg. 36801 (Aug. 15, 1983) (revoking President Carter’s preference program for fuel efficient non-passenger vehicles).

27 Although widely used in reference to categories of goods or services procured because of their environmental attributes, the terms “prefer” and “preference” are often undefined, or defined in specific ways for specific goods or services. See, e.g., H.R. 5136, § 833 (requiring DOD to “favor” certain products based on their environmental attributes); H.R. 5280 (requiring agencies to give “preference” to “sustainable” goods in certain preferences). When statutes do not state the form that a “preference” should take, agencies generally have “broad discretion” to craft an appropriate preference in their regulations or individual solicitations. See, e.g., HAP Constr., Inc., Comp. Gen. Dec. B-280044.2 (Sept. 21, 1998) (“Where a statute requires that a preference be given to a class of potential contractors, but does not specify a particular evaluation formula, agency acquisition officials have broad discretion in selecting evaluation factors that should apply to an acquisition to effectuate the statutory mandate, and the relative importance of those factors.”) (quoting US Defense Sys., Inc., Comp. Gen. Dec. B-251544; B-251938; B-251940 (Mar. 30, 1993) (finding that the agency did not violate a statutory requirement to give U.S. contractors preference in the award of “local guard contracts” under 22 U.S.C. § 4864 when it changed the weight given to technical proficiency relative to price in evaluating offers)). “Price preference,” in particular, is a term that could have various meanings depending on its context, covering everything from a presumption that prices within a certain percentage of the lowest price are not unreasonable; price differentials for products; and price evaluation adjustments based on vendors’ identity. See, e.g., 48 C.F.R. § 25.105 (price differentials under the Buy American Act); 15 U.S.C. § 657ar(b)(3) (allowing agencies to apply a 10% price evaluation adjustment to bids or offers submitted by certified HUBZone small businesses in unrestricted competitions).

28 Less commonly, agencies are required to avoid or minimize purchases of products with certain environmental attributes. See infra note 39 and accompanying text.
Categories of Preferred Products

A number of products are eligible for various preferences in federal procurement, discussed below, because of their environmental attributes. In some cases, the products and their attributes are defined fairly narrowly (e.g., plastic ring carriers, electric motors of 1 to 500 horsepower, solar hot water heaters), although generally not so narrowly as to be identified by brand name. These preferences are typically not incorporated in the Federal Acquisition Regulation (FAR), which thus serves as only a partial guide to the products preferred because of their environmental attributes. In other cases, products and attributes are defined more broadly (e.g., biobased products, recovered-content products, etc.). These broader preferences are generally incorporated in Part 23 of the FAR.

Many of these preferred products have their own definitions for purposes of federal procurement, as illustrated in the Glossary below. These definitions do not necessarily correspond to everyday or environmentalists’ usage of these terms. Moreover, certain attributes which are currently widely discussed in environmental contexts (i.e., “green” and “sustainable”) are not defined for purposes of federal procurement and are not among the attributes in terms of which current preferences are stated. Some commentators have suggested that “green” products could be preferred under the existing authorities pertaining to “environmentally preferable products,” which is probably the case in most circumstances. However, it is important to be clear that, absent changes in the law, any preferences given to such products are based on their being “environmentally preferable products,” not “green products.”

30 References to brand names are arguably discouraged under federal procurement law and policy. See, e.g., 48 C.F.R. § 6.302-1(c) (“[A]ny acquisition that uses a brand name description or other purchase description to specify a particular brand name, product, or feature of a product, peculiar to one manufacturer does not provide for full and open competition regardless of the number of sources solicited.”).
31 The preferences for alternative fuels and alternative fuel vehicles are not, however, incorporated into the FAR.
32 Different authorities governing the purchase of particular products sometimes contain different definitions. Compare Exec. Order 13514, 74 Fed. Reg. 52117, 52125-26 (Oct. 8, 2009) (“[A]lternative fuel vehicle’ means vehicles defined by section 301 of the Energy Policy Act of 1992, as amended (42 U.S.C. 13211), and otherwise includes electric fueled vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, dedicated alternative fuel vehicles, dual fueled alternative fuel vehicles, qualified fuel cell motor vehicles, advanced lean burn technology motor vehicles, self-propelled vehicles such as bicycles and any other alternative fuel vehicles that are defined by statute) with 42 U.S.C. § 13211(3) (“[A]lternative fueled vehicle’ means a dedicated vehicle or a dual fueled vehicle.”). The definitions in the Glossary are taken from the FAR whenever possible, but otherwise come from the statutes or executive orders under which the FAR was promulgated.
33 For more on “green procurement,” including a discussion of the various ways in which “green” could be defined for purposes of federal procurement, see CRS Report R41197, Green Procurement: Overview and Issues for Congress, by Eric A. Fischer.
34 See, e.g., id. at 7 n.21.
### Glossary

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative fuel vehicles</strong></td>
<td>Vehicles that operate solely on alternative fuel or are capable of operating either on alternative fuel or on gasoline or diesel fuel. (42 U.S.C. § 13211(3))</td>
</tr>
<tr>
<td><strong>Alternative fuels</strong></td>
<td>Methanol, denatured ethanol, and other alcohols; mixtures generally containing 85% or more, by volume, of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas, including liquid fuels domestically produced from natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); or other fuel the Secretary determines is substantially not petroleum and would yield substantial energy security and environmental benefits. (42 U.S.C. § 13211(2))</td>
</tr>
<tr>
<td><strong>Biobased products</strong></td>
<td>Commercial or industrial products other than food or feed, as determined by the U.S. Department of Agriculture, that are composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials. (48 C.F.R. § 2.101)</td>
</tr>
<tr>
<td><strong>Energy-efficient products</strong></td>
<td>Products that meet Environmental Protection Agency (EPA) and Department of Energy (DOE) criteria for the use of the Energy Star® label or are in the upper 25 percent of efficiency for similar products as designated by FEMP. (48 C.F.R. § 2.101)</td>
</tr>
<tr>
<td><strong>Environmentally preferable products</strong></td>
<td>Products having a lesser or reduced effect on human health and the environment when compared with competing products that serve the same purpose. (48 C.F.R. § 2.101)</td>
</tr>
<tr>
<td><strong>FEMP-designated products</strong></td>
<td>Products designated under the Federal Energy Management Program (FEMP) of the DOE as being among the highest 25% of equivalent products for energy efficiency. (42 U.S.C. § 8259b(a)(4))</td>
</tr>
<tr>
<td><strong>Ozone-depleting substances</strong></td>
<td>Any substances the EPA designates in 40 C.F.R. Part 82 as Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or Class II, including, but not limited to, hydrochlorofluorocarbons. (48 C.F.R. § 2.101)</td>
</tr>
<tr>
<td><strong>Priority chemicals</strong></td>
<td>Chemicals identified by the Interagency Environmental Leadership Workgroup or by an agency pursuant to Section 503 of Executive Order 13148. (48 C.F.R. § 52.223-5(a))</td>
</tr>
<tr>
<td><strong>Recovered-content products</strong></td>
<td>Products made from waste materials and by-products recovered or diverted from solid waste, not including those materials and by-products generated from and commonly used within an original manufacturing process. (48 C.F.R. § 2.101)</td>
</tr>
<tr>
<td><strong>Toxic chemicals</strong></td>
<td>Chemicals or chemical categories listed in 40 C.F.R. § 372.65. (48 C.F.R. § 52.223-5(a))</td>
</tr>
</tbody>
</table>

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35 The Glossary includes those categories of products mentioned in Part 23 of the FAR and Executive Order 13514. Another category, consisting of “water-efficient products,” appears in some sources. See, e.g., 48 C.F.R. § 23.200(a)(1) (“This subpart prescribes polices and procedures for ... [a]cquiring energy- and water-efficient products and services.”). The Environmental Protection Agency’s (EPA’s) WaterSense program labels water-efficient products. See WaterSense®, available at http://www.epa.gov/watersense. However, no legal authority articulates a preference for water-efficient products with the same level of detail that exists for the other products listed in the Glossary.

36 When used in reference to energy-efficient products, the term “product” does not include energy-consuming products or systems designed or procured for combat or combat-related missions. See 42 U.S.C. § 8259b(a)(5). Executive Order 13514 effectively adopts this definition of “products” for all categories of goods preferred on environmental grounds for purposes of its requirements. See 74 Fed. Reg. at 52119 (excluding weapons systems from the categories of products to which purchasing preferences under Executive Order 13514 apply).

37 Executive Order 13148 has since been revoked, but agencies continue to designate such chemicals under other authority.
Types of Preferences

The exact nature of the preference(s) given to products based upon their environmental attributes varies by product, but agencies could be required or encouraged to

- purchase products with the desired environmental attributes instead of competing products that lack these attributes;³⁸
- avoid or minimize purchases of products with certain attributes;³⁹
- draft specifications for goods or services so as to maximize the purchase and use of products with certain environmental attributes;⁴⁰
- develop “affirmative procurement plans” to maximize the acquisition of products with certain environmental attributes;⁴¹
- insert clauses regarding the provision or use of designated products into certain service or construction contracts;⁴²

³⁸ 48 C.F.R. § 23.404(b)(1) (requiring that 100% of purchases of USDA-designated items contain biobased content).
³⁹ See, e.g., 48 C.F.R. § 23.803(a)(1) (requiring federal agencies to “[i]mplement cost-effective programs to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone”); 48 C.F.R. § 11.302(a) (“Agencies must not require virgin material or supplies composed of or manufactured using virgin material unless compelled by law or regulation or unless virgin material is vital for safety or meeting performance requirements of the contract.”). More commonly, however, agencies are instructed to purchase alternatives to products with undesirable attributes. See, e.g., 48 C.F.R. § 23.803(b)(2) (requiring agencies to “[s]ubstitute safe alternatives to ozone-depleting substances”).
⁴⁰ See, e.g., 48 C.F.R. § 23.404(c) (“Agencies may use their own specifications or commercial product descriptions when procuring products containing recovered materials or biobased products. When using either, the contract should specify (1) [f]or products containing recovered materials, that the product is composed of the (i) [h]ighest percent of recovered materials practicable; or (ii) [m]inimum content standards in accordance with EPA’s Recovered Materials Advisory Notices; and (2) [f]or biobased products, that the product is composed of (i) [t]he highest percentage of biobased material practicable; or (ii) USDA’s recommended minimum contents standards.”).
⁴¹ See, e.g., 48 C.F.R. § 23.404(a)-(e). For recovered-content and biobased products, an affirmative procurement plan must include
(i) A recovered materials and biobased products preference program;
(ii) An agency promotion program;
   (iii) For Environmental Protection Agency (EPA)-designated items only, a program for requiring reasonable estimates, certification, and verification of recovered material content used in the performance of contracts. ...
(iv) Annual review and monitoring of the effectiveness of the program.
⁴² See, e.g., 48 C.F.R. § 23.704 (“Executive Order 13101, Section 701, requires that contracts for contractor operation (continued...)
use certain environmental considerations as evaluation factors when considering bids or offers;  
meet goals for the procurement of certain types of products; or  
report agencies’ performance in acquiring preferred products to executive branch authorities, Congress or congressional committees, or the public.

In a few cases, agencies are also required to use contract terms that obligate contractors to certify that they have provided designated products, or disclose information about certain environmental impacts of designated products. Table 1 illustrates which preferences generally apply to the major categories of preferred products included in the Glossary.

(...continued)

of a Government-owned or -leased facility and contracts for support services at a Government-owned or -operated facility include provisions that obligate the contractor to comply with the requirements of the order.”). Exec. Order 13101 has been revoked, and the FAR now constitutes the sole authority for this requirement. See Executive Order 13423, 72 Fed. Reg. at 3923 (revoking Executive Order 13101). Agency officials do not always insert clauses when required, and a legal doctrine—known as the “Christian doctrine” because of the case from which it derived—has developed to guide courts in determining whether required, but missing, clauses will be read into government contracts. Under the Christian doctrine, courts will read into government contracts only those clauses that represent a “deeply ingrained strand of public procurement policy.” G.L. Christian v. United States, 312 F.2d 418, 426-27 (Ct. Cl. 1963) (reading the required clause allowing contracts to be terminated for the convenience of the government into a contract from which it was lacking). No court appears to have addressed the question of whether the clauses pertaining to the purchase of preferred products contained in Part 23 of the FAR are “deeply ingrained strand[s] of public procurement policy” such that they would be read into contracts from which they are lacking, although some commentators have suggested that the trend is for “required” clauses to be found such. See, e.g., Stanton G. Kunzi, Losing Sight of Christian Values: The Evolution and (Disturbing) Implications of the Christian Doctrine, 1992 Army Law. 11 (1992).

See, e.g., 42 U.S.C. § 8259b(b)(3) (“The head of an agency shall incorporate ... into the factors for the evaluation of offers ... criteria for energy efficiency that are consistent with the criteria used for rating Energy Star products and for rating FEMP designated products.”).  
See, e.g., Executive Order 13514, 74 Fed. Reg. at 52119-20 (requiring agencies to “advance sustainable acquisition to ensure that 95 percent of new contract actions including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements.”).  
See, e.g., Energy Independence and Security Act of 2007, P.L. 110-140, §§ 527-528, 121 Stat. 1663-64 (Dec. 19, 2007) (requiring annual reports to the Director of the Office of Management and Budget on agency progress in meeting requirements regarding energy-efficiency and alternative fuel, as well as reports to the House Committee on Oversight and Government Reform and the Senate Committee on Governmental Affairs).  
See, e.g., 48 C.F.R. § 52.223-1 (“As required by the Farm Security and Rural Investment Act of 2002 and the Energy Policy Act of 2005 (7 U.S.C. 8102(c)(3)), the offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture in 7 CFR part 2902, subpart B) to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.”).

See, e.g., 48 C.F.R. § 52.223-9 (“The Contractor, on completion of this contract, shall (1) [e]stimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and (2) [s]ubmit this estimate to _________________.”);  
48 C.F.R. § 52.223-14(a) (“Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.”).
### Table 1. Legal Preferences for Major Types of Preferred Products

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<td>Alternative fuel; alternative fuel vehicles</td>
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<td>48 C.F.R. §§ 23.803—23.804; 48 C.F.R. §§ 52.223-1—52.223-12; Exec. Order 13514</td>
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<td>Biobased products</td>
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<td>EPEAT-registered products</td>
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<td>48 C.F.R. § 23.705; Exec. Order 13423</td>
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<td>42 U.S.C. § 6962(c), (d), (g) &amp; (l); 48 C.F.R. §§ 23.404 &amp; 23.406; 48 C.F.R. §§ 52.223-4 &amp; 52.223-17; Exec. Order 13514</td>
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**Source:** Congressional Research Service, based on various sources cited in Table 1.

**Notes:** Table 1 includes only those preferences based in law. It does not include any additional preferences that may have been created under various government-wide or agency-specific policy documents.

a. Even when agencies are “required” to purchase products with certain attributes, these requirements are generally conditional or subject to exemptions which allow them to purchase products without these attributes in certain circumstances, as is discussed below.

b. Such plans are distinct from the “environmental management systems” that agencies are required to implement under Executive Order 13423.
These preferences are seldom absolute, however, not even when agencies are “required” to purchase products with certain attributes. There are several reasons for this. First, the requirements themselves are generally either conditional or subject to exemptions that allow agencies to purchase products without the desired attributes in certain circumstances. Any preferences that agencies give to alternatives to ozone-depleting substances must be “cost-effective,” for example, while there are exemptions allowing agencies to purchase products that do not contain biobased content if biobased products cannot be acquired competitively within a reasonable time frame or do not meet reasonable performance standards. There are also exemptions for products used for certain intelligence, law enforcement, or national security purposes. Second, certain preferences apply only to procurements conducted in particular places, or whose price exceeds certain thresholds. Third, many preferences apply only to contracts for goods. Such preferences generally apply to service contracts only when the contract involves the supply of goods or the contractor operates government-owned facilities. Similarly, the requirements generally “flow down” to subcontractors only in cases involving supply contracts or contractor-operated government-owned facilities.

49 48 C.F.R. § 23.404(b)(1)-(2); 48 C.F.R. § 23.405(b)(1)-(2). Reliance on such exemptions generally requires a written determination that certain circumstances exist. See 48 C.F.R. § 23.205(c)(1) (authorizing agencies to purchase alternatives to energy Star® and Federal Energy Management Program (FEMP)-designated products if the agency head determines in writing that no eligible products are available that meet the agency’s functional requirements or are cost-effective over the life of the product taking energy cost savings into account).
50 See, e.g., Executive Order 13514, § 18(a)-(d), 74 Fed. Reg. at 52125.
51 See, e.g., 48 C.F.R. § 23.200(b) (preference for Energy Star® and FEMP-designated energy-efficient products applies only to “acquisitions in the United States and its outlying areas”). As used in the FAR, “outlying areas” include only commonwealths (i.e., Puerto Rico and the Northern Mariana Islands); territories (i.e., American Samoa, Guam, and the U.S. Virgin Islands); and minor outlying islands (e.g., Baker Island, Howard Island, Jarvis Island, etc.). 48 C.F.R. § 2.101. The “United States” generally denotes the 50 states and the District of Columbia, although it could have other meanings in specific circumstances. Id.
52 Compare 48 C.F.R. § 23.202 (preference Energy Star® and FEMP-designated energy-efficient products applicable to all acquisitions) with 48 C.F.R. § 23.400(a) (preference for USDA-designated biobased products applicable only in acquisitions where the costs of the goods exceeds $10,000 per item or in the aggregate).
53 See, e.g., 48 C.F.R. § 23.203(a)(2) (requiring contractors to supply Energy Star® and FEMP-designated energy-efficient products when agencies “contract[] for services or construction that will include the provision of energy-consuming products”); 48 C.F.R. § 23.704 (requiring contractors that operate government-owned or -leased facilities, or provide support services at such facilities, have affirmative procurement programs for environmentally preferable products). There have recently been attempts to expand these preferences to additional service contracts. See, e.g., H.R. 5280; Exec. Order 13514, 74 Fed. Reg. at 52117 et seq. One provision of President Obama’s Executive Order, in particular, could potentially be construed to reach service contracts other than those already covered under existing statutes, regulations and executive orders. 74 Fed. Reg. at 52119-20 (requiring agencies to “advance sustainable acquisition to ensure that 95 percent of new contract actions including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements.”). Two other provisions could similarly give agencies greater incentive to require or encourage contractors to use “green” products in their own operations. 74 Fed. Reg. at 52118 (allowing reductions in greenhouse gas emissions resulting from changes in contractors’ manufacturing processes, utility or delivery services, modes of transportation, or supply chain activities to count toward agencies’ goals for reducing such emissions); 74 Fed. Reg. at 52124 (requesting recommendations on the feasibility of using “using Federal Government purchasing preferences or other incentives for products manufactured using processes that minimize greenhouse gas emissions”).
54 Although the FAR in places suggests that such “flow down” occurs as a matter of course, it does not require agencies’ prime contractors to include terms corresponding to the product preferences in their contracts with any (continued...)
Table A-1 in the Appendix of this report provides an overview of the purchase requirements pertaining to the categories of products listed in Table 1, including any conditions or limitations on these requirements or product-specific exemptions thereto.

Constitutionality and Legality of Such Preferences

Such attribute-focused authorities generally would not unconstitutionally deprive vendors of competing products of due process or equal protection in violation of the U.S. Constitution. Because contractors lack property rights in prospective government contracts, they generally are not deprived of due process when the government opts to buy goods and services other than those they provide. Similarly, because distinctions between vendors based on the environmental attributes of their products do not involve “suspect classifications,” such as race or sex, or the exercise of fundamental rights, a court would probably not find that vendors whose products lack the desired environmental attributes are denied equal protection. Absent a suspect classification or fundamental right, a party challenging a government program on equal protection grounds must show that the program is not rationally related to a legitimate government objective by “negativ[e]ing every conceivable basis which might support” the program. Such challenges frequently fail because rational basis review is a deferential standard of review and “serves to invalidate only ‘wholly arbitrary acts.’”

Regulations or executive orders that mandate certain forms of preferential treatment for products or vendors based on environmental considerations could, however, potentially violate both procurement integrity regulations and the Competition in Contracting Act (CICA) of 1984. Subpart 3.1 of the FAR requires that “Government business shall be conducted in a manner above reproach and, except as authorized by statute or regulation, with complete impartiality and with preferential treatment for none.”

CICA is arguably even more stringent, requiring that contracts be awarded through “full and open competition” unless (1) a small business set-aside is used; (2) one of seven circumstances exist that permit other than full and open competition (e.g., sole-source, urgent and compelling need); (...continued)

subcontractors. See, e.g., 48 C.F.R. § 52.223-15(c)( “The requirements of paragraph (b) apply to the Contractor (including any subcontractor) unless ...”). Because parties to a contract can generally bind only themselves, such requirements are often necessary when the government wants certain terms to be binding on subcontractors.

55 See, e.g., Perkins v. Lukens Steel Co., 310 U.S. 113, 127 (1940) (holding that the federal government “enjoys the unrestricted power ... to determine those with whom it will deal[ ] and fix the terms and conditions upon which it will make needed purchases.”); Chamber of Commerce of the United States of Am. v. Napolitano, 648 F. Supp. 2d 726, 736 (S.D. Md. 2009) (“[T]he decision to be a government contractor is voluntary and ... no one has a right to be a government contractor.”).


58 48 C.F.R. § 3.101-1 (emphasis added).
(3) the simplified procedures for “small purchases” ($100,000 or less) are used; or (4) agencies use procedures “otherwise expressly authorized by statute.”59 Thus, while Subpart 3.1 of the FAR would permit “preferential treatment” under the authority of a regulation, CICA would generally prohibit such treatment if it resulted in other than “full and open competition.” These two provisions, taken together, could effectively require that certain proposed “preferences” for products or vendors based on environmental considerations originate in statute (e.g., set-asides and, potentially, price evaluation preferences).60 Among the major attribute-based preferences, the only one not currently based in statute is that for environmentally preferable products. However, where such products are involved, agencies must “[e]mploy acquisition strategies that … maximize the utilization of environmentally preferable products and services (based on EPA-issued guidance)”61 and require contractors operating or providing support services at government-owned facilities to establish “program[s] to promote cost-effective waste reduction in all operations and facilities covered by the contract.”62 These types of preferences are unlikely to violate Subpart 3.1 or CICA because they do not favor certain products or vendors in the source selection process and, thereby, impermissibly restrict competition.

General Contracting Authorities

In addition to the attribute-specific authorities, there are also general contracting authorities that would allow agencies to purchase products based on environmental considerations in certain circumstances. While CICA would arguably not allow agencies to prefer certain products or vendors across the board without statutory authority,63 it provides such explicit statutory authority for agencies to define their requirements64 based on their needs.65 Thus, if there were a situation where an agency required a product with specific environmental attributes, the agency could generally draft its solicitation so as to obtain that product because CICA provides them with explicit statutory authority to do so.66 Agencies’ specifications articulate their requirements to

61 48 C.F.R. § 23.703(b)(1).
62 48 C.F.R. § 52.223-10(b).
63 See supra notes 58-59 and accompanying text.
64 Agencies’ “requirements” are the goods or services that they need. They generally have wide discretion in defining their requirements based upon their needs, and prospective contractors generally cannot protest if an agency that needs wall-mounted writing surfaces opts to purchase or lease dry-erase boards instead of chalk boards, for example. Many attribute-focused authorities target agencies’ requirements. For example, agencies that have determined they need printer paper are generally required to buy paper made with at least 30% recovered content, as opposed to paper with less or no recovered content. See 48 C.F.R. § 11.303(b) (“For high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock, the minimum content standard must be no less than 30 percent postconsumer materials. If paper containing 30 percent postconsumer material is not reasonably available, does not meet reasonable performance requirements, or is only available at an unreasonable price, then the agency must purchase paper containing no less than 20 percent postconsumer material.”).
65 10 U.S.C. § 2305(a)(1)(A)(iii) (agencies to “develop specifications in such a manner as is necessary to obtain full and open competition with due regard to the nature of the property or services to be acquired”); 41 U.S.C. § 253a(a)(1)(C) (same).
prospective contractors and form the basis upon which agencies select contractors. Only bids or offers that conform to agency specifications or statements of work are deemed “responsive” and could form the basis for the award of a government contract.

Although requirements tied to environmental attributes could potentially be used in procurements conducted by sealed bidding or negotiated procurement, there are other aspects of negotiated procurement that some commentators have suggested could be more congenial to consideration of environmental attributes. While agencies using sealed bidding award contracts on the basis of price alone (i.e., to the lowest-priced qualified responsible bidder), agencies conducting negotiated procurements use agency-determined evaluation factors in selecting the contractor.

Certain uses of evaluation factors based on environmental considerations have been upheld by the Government Accountability Office (GAO) in bid protests. In *Sunshine Kids Service Supply Company*, for example, the GAO upheld an agency’s award of a contract based, in part, on consideration of the vendors’ “environmental stewardship,” while in *Future Solutions, Inc.*, it upheld a similar award based, in part, on consideration of the vendors’ recycling programs for toners and cartridges; use of green delivery vehicles; and implementation of environmental management systems. However, although agencies’ use of evaluation factors tied to environmental considerations has been generally upheld, agencies are subject to certain limitations in the use of such factors, the most significant of which is arguably that evaluation factors must “represent [a] key [area] of importance and emphasis … and [s]upport meaningful comparison and discrimination between and among competing proposals.” In other words, any evaluation factors based on environmental considerations would have to be related to the goods or services being acquired. Additionally, agencies must also generally consider price or cost, past performance, and the quality of the product or service as evaluation factors in every procurement. This means that any environmental factors would be one among many—possibly competing—factors on the basis of which the award is made.

Similarly, while some commentators have suggested that the focus on “best value” in negotiated procurements would result in *de facto* preferences for products with desirable environmental attributes, such commentators may confuse “best value” as the goal of all federal procurements

(...continued)

initial step of any procurement. That initial step is simply the identification of the minimum requirements or needs that will satisfy the Government’s desires.”

67 See, e.g., *Green Procurement*, supra note 33, at 23.


69 48 C.F.R. Subpart 15.


72 See also *King Constr. Co.*, Inc., Comp. Gen. Dec. B-298276 (July 17, 2006) (“Agency acquisition officials have broad discretion in selecting evaluation factors that will be used in an acquisition, and we will not object to the absence or presence of particular evaluation factors or an evaluation scheme so long as the factors used reasonably relate to the agency’s needs in choosing a contractor that will best serve the government’s interests.”).

73 48 C.F.R. § 15.304(b). Agencies must also state in the solicitation whether the non-cost or non-price factors, when combined, are “(1) [s]ignificantly more important than cost or price; (2) [a]proximately equal to cost or price; or (3) [s]ignificantly less important than cost or price.” 48 C.F.R. § 15.304(e).

74 48 C.F.R. § 15.304(c)(1)-(3). Past performance, however, need not be considered if the contracting officer documents the reasons for omitting it. *Id*. Examples of non-cost factors used in determining the quality of the product or service include “past performance, compliance with solicitation requirements, technical excellence, management capability, personnel qualifications and prior experience.” 48 C.F.R. § 15.304(c)(2).
and “best value” as a synonym for the cost/technical tradeoff process involved in negotiated procurements.75 “Best value” is the goal of all federal procurements, but there is no special legal authority for implementing this goal independent of existing statutes and regulations, of which only the attribute-focused statutes would authorize agencies to prefer products or vendors based on environmental considerations. “Best value” is also the desired result of the cost-technical tradeoff process in negotiated procurements, but the use of this process is subject to all the limitations discussed above (e.g., evaluation factors must represent a key area of importance and emphasis). This makes it unlikely that the reportedly lower life cycle costs of environmentally sound products would necessarily result in the selection of such products in all or even most procurements.76

Responsibility-Related Authorities

While agencies do not have authority to prefer certain contractors over others based on environmental considerations, they are required to avoid dealings with environmentally irresponsible contractors in certain circumstances. Agencies are prohibited by statute from contracting with vendors who have been debarred from federal contracts by the Administrator of the Environmental Protection Agency (EPA) for certain violations of the Clean Air and Clean Water Acts.77 Such debarments are mandatory for specified violations; last until the EPA Administrator certifies the condition is corrected; and can be waived only if the President determines that doing so is in the “paramount interests of the United States” and notifies Congress.78 However, these debarments apply only to the vendors’ operations at the facility at which the violations occurred.79 This means that vendors with multiple facilities are not excluded from all federal contracts.

There could also potentially be circumstances in which a particular contractor who is not debarred from federal contracting is found to be nonresponsible for purposes of the award of a federal contract because of environmental considerations. Federal law requires that agencies determine that prospective contractors are “responsible” before awarding any contract.80 This determination is based on a number of factors, including the contractors having the necessary technical skills and facilities to perform the contract, or the ability to obtain them.81 Certain contractors could conceivably be found nonresponsible for certain contracts because of environmental considerations under these factors. However, because responsibility determinations must be made

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75 See supra note 13.
76 The same is also true of the “extra points” that agencies can give vendors for exceeding the technical requirements in negotiated procurements. See, e.g., The Moreland Corporation, Comp. Gen. Dec. B-283685 (Dec. 17, 1999) (denying a protest of an award that the agency made based, in part, on extra points given to offers who exceeded a certain technical requirement). Agencies arguably can award such points to “green” products or services only when the attributes of such products exceed the technical requirements specified in the solicitation. If the solicitation included no such requirements, the “extra points” arguably could not be awarded.
77 For more on debarment, see CRS Report RL34753, Debarment and Suspension of Government Contractors: An Overview of the Law Including Recently Enacted and Proposed Amendments, by Kate M. Manuel.
79 Id.
80 48 C.F.R. § 9.103(b) (“No purchase or award shall be made unless the contracting officer makes an affirmative determination of responsibility.”). For more on responsibility determinations, see CRS Report R40633, Responsibility Determinations Under the Federal Acquisition Regulation: Legal Standards and Procedures, by Kate M. Manuel.
81 48 C.F.R. § 9.104-1(a)-(g).
on the basis of the most recent information available, vendors who have remedied previous environmental problems could not repeatedly be found nonresponsible on the basis of these problems.\(^8\)

### Implementation of Existing Authorities

Implementation of the attribute-specific and general authorities that could allow agencies to prefer certain products or vendors based on environmental considerations involves two components: identification of prospective products and contractors and implementation of various purchasing methods.

### Identification of Products and Contractors

In the case of the attribute-specific authorities, contracting officers generally rely on third-party designations of eligible (or ineligible) products, rather than making their own determinations of which products qualify on a case-by-case basis. In fact, the statutes and executive orders providing such authority often require both that (1) one agency, with appropriate technical expertise, designate eligible products\(^8\) and (2) other agencies purchase these products.\(^8\) Where recovered-content products are involved, for example, the EPA designates eligible products, while the U.S. Department of Agriculture designates biobased products. When relying on the general contracting authorities, program managers or other program personnel identify their requirements and communicate these requirements to the contracting officer, who incorporates them into a solicitation.

Parties excluded from government contracting because of violations of the Clean Air and Clean Water Acts, among other things, are listed in the Excluded Parties List System (EPLS).\(^5\) Responsibility determinations are made on a case-by-case basis by contracting officers considering information included in the Federal Awardee Performance and Integrity Information

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\(^8\) In the case of Electronic Product Environment Assessment Tool (EPEAT)-registered products, however, the government relies on designations made by a nongovernmental entity, the Green Electronics Council.

\(^5\) See, e.g., Resource Conservation and Recovery Act (RCRA) of 1976, P.L. 94-580, § 6002(e), 90 Stat. 2823 (codified, as amended at 42 U.S.C. § 6962(e)(1)) (requiring the EPA to designate eligible products). As originally enacted, RCRA required only that the EPA, in consultation with the Administrator of General Services, the Secretary of Commerce, and the Public Printer, issue guidelines “setting forth recommended practices with respect to the procurement of recovered materials and items containing such materials” and provide information as to “the availability, sources of supply, and potential use of such materials and items.” Id. A subsequent Executive Order required the EPA to issue Comprehensive Procurement Guidelines (CPGs) and Recovered Materials Advisory Notices (RMANs) as a way of providing this guidance and information. See Executive Order 12873, 58 Fed. Reg. 54911 (Oct. 22, 1993). This executive order has since been revoked, but the EPA continues to issue CPGs and RMANs under other authority.

Environmental Considerations in Federal Procurement: An Overview

Purchasing Methods

When purchasing products or services under either the attribute-focused or general contracting authorities, agencies rely on the same vehicles or methods generally available for their use in purchasing goods or services. This includes (1) bilateral contracts; (2) the Federal Supply Schedules; and (3) government-wide commercial purchase cards. When determining which of these options to use, contracting officers consider various factors, such as the nature or type of the agency’s requirements (i.e., goods or services, or both); the anticipated cost (or price); and the complexity of the procurement.

Contract

Probably the best-known procurement vehicle is the bilateral contract, which “means a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them.” Contracts are the end result of a process that begins when agencies identify their requirements and craft solicitations to procure goods or services meeting these requirements. Solicitations identify, or describe, what agencies want to buy and also include applicable information, instructions, or guidance related to, for example, packaging and marking, inspection and acceptance, contract administration, special contract requirements, applicable contract clauses, representations and certifications, and evaluation factors for award. As discussed earlier, these factors may include ones that addresses environmental considerations and attributes. For example, an agency that uses the tradeoff source selection method for a specific procurement could include environmental considerations as a non-cost, or non-price, evaluation factor provided that they have a bona fide need for goods or services with specific environmental attributes.

Federal Supply Schedules

Another option available to agencies procuring goods or services with desirable environmental attributes involves the General Services Administration’s (GSA’s) Federal Supply Schedules.

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87 See 48 C.F.R. § 9.105-1(c). A contractor’s failure to provide necessary information could result in a nonresponsibility determination because contracting officers must determine that contractors are nonresponsible when they lack information “clearly indicating that the prospective contractor is responsible.” 48 C.F.R. § 9.103(b); Sec. Assistance Forces & Equip. Int’l, Inc., Comp. Gen. Dec. B-194876 (Nov. 19, 1980).
88 The “Acquisition” Web page found at FedCenter.gov, which is the Federal Facilities Environmental Stewardship and Compliance Assistance Center, is a potentially useful resource for agencies. It includes links to regulations, guidance, and policy, including Executive Order 13423; databases and software tools, such as a compilation of green products; directories, catalogs, and newsletters, which includes a link to GSA’s environmental products Web page; Websites that purport to contain contract or procurement “language”; and training, presentations, and briefings. The “Acquisition” Web page can be found at http://www.fedcenter.gov/programs/buygreen/.
89 48 C.F.R. § 2.101.
90 Agencies are required to post solicitations for contract actions expected to exceed $25,000 on the federal government’s Federal Business Opportunities (FedBizOpps) Website, at https://www.fbo.gov. 48 C.F.R. § 5.101.
91 GSA appears to use the following terms interchangeably when referring to products with desirable environmental (continued...)
A schedule is an online “catalogue” that contains goods or services offered by multiple vendors.\textsuperscript{93} Each schedule focuses on a particular category of goods and services, and GSA has established and maintains over 40 schedules, covering things such as “advertising and integrated marketing solutions” (Schedule 541) and “professional engineering services” (Schedule 871).\textsuperscript{94}

Federal agencies can use GSA’s online shopping and ordering system, GSA Advantage!, to procure goods and services off the Schedules.\textsuperscript{95} Several special buying programs are listed on this Web page, including “Environmental,” which leads to a separate Web page (“Go Environmental with GSA Advantage!”).\textsuperscript{96} This Web page enables prospective buyers to identify the type of product or service they plan to purchase and then select one or more environmentally-based criteria or filters. Among the 14 criteria listed are biobased, Energy Star® compliant, and EPEAT. However, GSA leaves it up to vendors to determine and identify, as applicable, the environmental attributes of the products or services they provide. GSA notes that, for some products, “vendors denote whether the product meets the specifications and determine which symbols

\textit{(continued)}

attributes: “environmental oriented products,” “green products,” and “environmentally friendly products.” See GSA Advantage! Welcome, available at https://www.gsaadvantage.gov/advgsa/advantage/main/elib.do?pg=home&src=elib; GSA Global Supply Environmental Products Catalog v (2009). The latter publication is available through GSA’s centralized mailing list service (CMLS), at http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASIC&contentId=14842. GSA Global Supply … is a federal program administered by the General Services Administration. While Global Supply does work with commercial suppliers to develop its product line, it is a governmental program. It is \textit{not} a mandatory source. Customer base: GSA Global Supply provides common-use items such as office supplies, tools, computer products, and safety equipment to federal customers, civilian and military, around the world.

GSA Global Supply FAQ, available at http://www.gsa.gov/Portal/ep/contentView.do?contentType=GSA_BASIC&contentId=28827&noc=T (emphasis in original). GSA does not define or describe what is meant by “environmental oriented products.”

\textsuperscript{92} The Federal Supply Schedules are also known as the “multiple award schedules.” A multiple award schedule (MAS) “means contracts awarded by GSA or the Department of Veterans Affairs (VA) for similar or comparable supplies, or services, established with more than one supplier, at varying prices.” 48 C.F.R. § 8.401.

\textsuperscript{93} Under the Schedules program, “GSA enters into contracts with commercial firms to provide supplies (products) and services at stated prices for given periods of time. Orders are placed directly with the Schedule contractor [by the buying agency], and deliveries are made directly to the customer [buying agency].” GSA Schedules Background, available at http://www.gsa.gov/Portal/ep/contentView.do?programId=15820&channelId=24731&cooid=8106&contentId=8105&pageTypeId=17112&contentType=GSA_BASIC&programPage=%2Fep%2Fprogram%2FgsaBasic.jsp&P=FX7.)


\textsuperscript{95} GSA Advantage! is available at http://www.gsaadvantage.gov. While the “Go Environmental with GSA Advantage!” Web page, which is mentioned above, provides buying agencies with a means for finding “environmental oriented” products or services from among the 44 supply schedules, Schedule 899 provides environmental services. Services offered through this schedule include environmental consulting services; environmental training services; materials and waste, recycling and disposal services; and remediation and reclamation services. See Schedule 899 – Environmental Services, available at http://www.gsa.gov/environmentalServices. Another schedule, Schedule 03 FAC, Energy Management Services, provides, among other things, energy management training, water conservation and management services, and assistant with green building certification. See GSA Global Supply Environmental Products Catalog v (2009).

\textsuperscript{96} Other “special programs,” as identified by GSA and listed on the GSA! Advantage Website include the American Recovery and Reinvestment Act of 2009, strategic sourcing, disaster relief, and homeland security.
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[environmental criteria] to display."97 Elsewhere on its website, GSA offers the following caveat regarding vendors’ claims about environmental attributes:

To assist customers’ [agencies’] efforts in complying with the requirements of environmental laws and Executive Orders (considering price, availability, and performance requirements), Schedule contractors have been requested (where possible and/or feasible) to identify items that: Have recycled content (e.g., EPA-designated items with specific content requirements); Are energy and/or water saving (e.g., Energy Star); [or] Have reduced pollutants (e.g., low volatile organic compounds (VOCs) and chromate-free).

Note: Customers should review contractor literature and contact the contractor directly to obtain complete information regarding environmental claims.98

Moreover, recent court decisions have held that vendors’ misrepresentation of their products on GSA Advantage! is not sufficient for liability under the False Claims Act absent government purchases of the misrepresented products through the site.99

Governmentwide Commercial Purchase Cards

Agency personnel authorized to make “micro-purchases” can also use government purchase cards, which are similar to credit cards, to purchase so-called green products or services.100 A micro-purchase is “an acquisition of supplies or services using simplified acquisition procedures [e.g., a purchase card], the amount of which does not exceed the micro-purchase threshold,”101 which is generally $3,000.102

When using a government-wide commercial purchase card, agency personnel may “buy any commercially available supply or service not prohibited by either federal or agency-specific procurement regulations.”103 While users of these cards are required to use certain mandatory sources of goods and services (e.g., Federal Prison Industries, nonprofit agencies employing people who are blind or severely disabled)104 and ideally should carry out market research to identify the goods or services that best satisfy the agency requirements,105 they otherwise have

97 Go Environmental with GSA Advantage!, available at https://www.gsaadvantage.gov/advgsa/advantage/search/specialCategory.do?BV_UseBVCookie=Yes&cat=ADV.EN.
100 48 C.F.R. §§ 1.603-3(b) & 13.301(a).
102 Id. The threshold is $2,000 for construction acquisitions related to the David-Bacon Act, and $2,500 for services acquisitions subject to the Service Contract Act. Other, higher thresholds apply to acquisitions made in “support [of] a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack.” For any such purchase made, or any contract awarded and performed, inside the United States, the threshold is $15,000. Outside the United States, the threshold for this type of purchase is $25,000. Id.
substantial discretion in determining what to purchase. Personnel could thus generally select goods or services based on their environment attributes, and GSA’s online training for using purchase cards includes a segment encouraging agencies to buy “green.”106 However, such actions would generally be entirely within the agencies’ discretion because micropurchases are generally exempted under the attribute-focused authorities discussed previously.107

106 GSA SmartPay 2 Purchase Card, Buy Green, available at http://apps.fas.gsa.gov/webtraining/trainingdocs/smartpaytraining/green.cfm. Generally, this training segment encourages agencies to buy “green” products and identifies the following six components of federal “green purchasing programs”: recycled content products, Energy Star™ and FEMP-designated energy efficient products, biobased products, alternative fuels and alternative fuel vehicles, environmentally preferable products and services, and non-ozone depleting substances. Id.

107 See, e.g., 42 U.S.C. § 6962(f) (only purchases of goods valued at over $10,000, per item or in the aggregate, are subject to the preferences under the Resource Conservation and Recovery Act).
Appendix.

Table A-1. Environmentally Related Purchase Requirements, Conditions and Limitations, and Exemptions for Major Types of Preferred Products

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Preference</th>
<th>Conditions/Limitations</th>
<th>Type-Specific Exemptions*</th>
</tr>
</thead>
</table>
| Alternative fuels; alternative fuel vehicles     | Agencies to ensure that “the maximum number of vehicles acquired annually” for federal government use are alternative fuel vehicles and meet certain goals regarding the percentage of alternative fuel vehicles acquired annually. (42 U.S.C. § 6374(a); 42 U.S.C. § 13257(a))  

Agencies shall obtain clean fuel vehicles from original equipment manufacturers “to the extent practicable.” (42 U.S.C. § 7588(f))  

All light duty motor vehicles or medium duty passenger vehicles must be low greenhouse gas emitting vehicles. (42 U.S.C. § 13212)  

Not later than October 1, 2015, agencies shall achieve at least a 20% reduction in annual petroleum consumption and a 10% increase in annual alternative fuel consumption, as well as use plug-in hybrid vehicles where such vehicles are reasonably available at reasonable cost. (42 U.S.C. § 6374e; Exec. Order 13423)  

Agencies operating federal fleet refueling centers shall install at least one renewable fuel pump at each center by Jan. 1, 2010. (42 U.S.C. § 17053)  

Agencies may not procure alternative or synthetic fuel for mobility-related uses unless the lifecycle greenhouse gas emissions associated with production and combustion of that fuel are less than or equal to emissions from equivalent conventional fuel (42 U.S.C. § 17142) | Requirements for alternative fuel vehicles generally apply only to agencies with “fleets” of 20 or more vehicles. (42 U.S.C. § 6374 note; 42 U.S.C. § 13212(a)(3))                                                                                      |
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Alternatives to ozone-depleting substances</td>
<td>Agencies to “give preference” to the procurement of alternative chemicals, products and manufacturing processes that reduce overall risks to human health and the environment by lessening the depletion of ozone in the upper atmosphere. (48 C.F.R. § 23.803(a))</td>
<td>Any preference program must be cost-effective (48 C.F.R. § 23.803(a)(1))</td>
<td>none</td>
</tr>
<tr>
<td>Alternatives to toxic and priority chemicals</td>
<td>Government policy is to purchase supplies and services that have been produced with minimum adverse impact on community health and the environment. (48 C.F.R. § 23.904(a))</td>
<td>Companies need only report toxic chemical releases “to the greatest extent practicable” to be eligible for federal contracts (48 C.F.R. § 23.904(b))</td>
<td>none</td>
</tr>
<tr>
<td>Biobased products</td>
<td>Agencies must give preference to those items that are composed of the highest percentage of biobased products practicable or comply with USDA regulations (7 U.S.C. § 8102(a)(2)(A)(i)(II))</td>
<td>100% of purchases of USDA-designated items must contain biobased content (48 C.F.R. § 23.404(b)(1))</td>
<td>Contracting officer places a written justification in the contract file indicating that the item cannot be acquired (1) competitively within a reasonable time frame; (2) meeting reasonable performance standards; or (3) at a reasonable price, or the USDA provides a categorical exemption for certain items procured for specific purposes. (48 C.F.R. § 23.404(b)(1)-(2); 48 C.F.R. § 23.405(b)(1)-(2))</td>
</tr>
<tr>
<td>Energy Star and energy-efficient products (including Federal Energy Management Program (FEMP)-designated products)</td>
<td>When acquiring energy-consuming products listed in the Energy Star Program or FEMP, agencies must (1) purchase Energy Star or FEMP-designated products and (2) for products that consume power in a standby mode and are listed on FEMP’s Low Standby Power Devices product listing, either (A) purchase items that meet FEMP’s standby power wattage recommendation or document the reason for not purchasing such items or (B) purchase items that use no more than one watt in their standby power consuming mode if FEMP has listed a product without a corresponding wattage recommendation. (48 C.F.R. § 23.203(a)(1)(i)-(ii))</td>
<td>Preference only mandatory for acquisitions in the “United States and its outlying areas;” in acquisitions outside these areas, agencies must make their “best efforts to comply.” (48 C.F.R. § 23.200(b))</td>
<td>Agency head determines in writing that no Energy Star or FEMP-designated product is (1) reasonably available that meets the functional requirements of the agency or (2) is cost-effective over the life of the product taking energy cost savings into account. (48 C.F.R. § 23.204(a)-(b))</td>
</tr>
<tr>
<td>Product Type</td>
<td>Preference</td>
<td>Conditions/Limitations</td>
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<tr>
<td>Environmentally preferable products</td>
<td>Maximize the utilization of environmentally preferable products and services based on EPA-issued guidance (48 C.F.R. § 23.703(b)(1))</td>
<td>Preference for environmentally preferable products must be cost-effective. (48 C.F.R. § 23.703(a))</td>
<td>None</td>
</tr>
<tr>
<td>Electronic Product Environmental Assessment Tool (EPEAT)-registered products</td>
<td>Meet at least 95% of their annual acquisition requirement for electronic products with EPEAT-registered electronic products unless there is no EPEAT standard for such products. (48 C.F.R. § 23.705(a))</td>
<td>EPEAT-registered products preferred only in contracts performed in the United States, unless the agency provides otherwise. (48 C.F.R. § 705(a))</td>
<td>With EPEAT-registered products, agencies may establish their own procedures for granting exceptions to the purchase requirements, with the goal that the dollar value of exceptions granted will not exceed 5% of the total value of electronic products acquired by the agency for which EPEAT-registered products are available. (48 C.F.R. § 23.705(c))</td>
</tr>
<tr>
<td>Recovered-content products</td>
<td>Agencies must give preference to those items that are composed of the highest percentage of recovered material practicable consistent with maintaining a satisfactory level of competition, subject to EPA guidelines. (42 U.S.C. § 6962(c)(1))</td>
<td>Agencies must prefer products to the “maximum extent practicable without jeopardizing the intended use of the product while maintaining a satisfactory level of competition at a reasonable price.” Products must meet reasonable performance standards and be acquired competitively, in a cost-effective manner. (48 C.F.R. § 23.403)</td>
<td>Contracting officer places a written justification in the contract file indicating that the item cannot be acquired (1) competitively within a reasonable time frame; (2) meeting reasonable performance standards; or (3) at a reasonable price, or the EPA provides a categorical exemption for designated items procured for certain purposes. (48 C.F.R. § 23.404(b)(1)-(2); 48 C.F.R. § 23.405(b)(1)-(2))</td>
</tr>
</tbody>
</table>

**Source:** Congressional Research Service, based on various sources cited in Table A-1.

a. For all types of products, there are exemptions for certain uses for intelligence, law enforcement, or national security purposes. See supra note 50.

b. The FAR does not specify who makes the written determination that grounds for an exemption exist, but it would appear to be the contracting officer.

c. The “required” contract clause pertaining to Energy Star and FEMP-designated energy-efficient products may indicate another possible ground for exemption in certain situations. See 48 C.F.R. § 52.223-15(c)(2) (allowing contractors to supply other than Energy Star and FEMP-designated products when the contracting officer approves this in writing). Required contract clauses are discussed in more detail supra note 42 and accompanying text.

d. Agency heads would appear to be able to delegate their authority to make such written determinations. This means that contracting officers may, in practice, make these determinations, as they do with biobased and recovered-content products.
Author Contact Information

Kate M. Manuel  
Legislative Attorney  
kmanuel@crs.loc.gov, 7-4477

L. Elaine Halchin  
Specialist in American National Government  
ehalchin@crs.loc.gov, 7-0646