Green Purchasing Opportunities: Compostable Food Service Ware

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and

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Green Purchasing Opportunities: Compostable Food Service Ware

HIGHLIGHTS

- Compostable food service ware, which will degrade rapidly and safely into valuable soil-like material, can be a meaningful step toward reducing harmful impacts from the use of conventional food ware.
- Compostables must be sent to a commercial compost facility to maximize environmental benefits.
- Product claims such as "biodegradable" can be misleading - all "green" claims should be verified.
- The most important environmental attributes of this product category are commercial compostability and biobased content, both of which are covered by reliable third party certifications.
- Additional sustainability attributes are detailed in the **SBC's BioSpecs for Purchasers**.
- States should consider separate contract awards for compostable food ware to increase competition.

WHY BUY COMPOSTABLE FOOD SERVICE WARE? (Page 1)

- Compostables replace food ware items made of polystyrene foam and plastic, reducing landfill mass and chemicals leaching into the environment.
- Conventional food ware materials are often derived from petroleum, which is associated with negative environmental impacts at extraction, use and disposal.
- Styrene, which is found in many foam food ware products, is a potential human carcinogen and neurotoxin that can leach into food and be consumed by food ware users.
- Composting food waste costs less than disposing of it in a landfill, which can reduce the overall cost of a compostable product from purchase to disposal. Food waste is also a major contributor to methane releases from landfills. Methane is a potent greenhouse gas.

For more, see Appendix A – Harmful Materials List and FAQ Fact Sheet

BEFORE BIDDING…

Which Products Are Needed? (Page 5)

- First, states decide whether disposable or durable ware is appropriate. Durables, such as metal forks, can reduce long-term cost and landfill waste but must be washed and stored.
- If needed, cutlery, clamshell containers, and food service ware such as plates, bowls, cups and straws can all be found in a wide array of compostable varieties.
- Food ware can be found on contracts for food service, building maintenance or office supplies.
- Looking at what is already being purchased is essential. Users can help find this information.
- Any agency that buys food ware, including those operating hospitals, prisons, or cafeterias should be included on the contract development team.
- Identify design or performance requirements for each item (such as temperature tolerance, size, etc.)

What Products Are Out There? (Page 3)

- Compostables are typically available from "green" vendors, who are plentiful but may not have an array of comparable conventional products.
- Performance varies, but there are many high-quality products on the market.
- Compostables are more expensive, but costs can be offset by reduced disposal fees.

Are There Useful Cooperative Purchasing Contracts?

- Certified compostable food ware is available on existing cooperative purchasing agreements (e.g., **U.S. Communities'** contract with **Independent Stationers**, and **WSCA**'s contract with Grainger). These may meet your needs. Be sure to confirm compliance with minimum requirements.

GREEN CERTIFICATIONS AND STANDARDS FOR COMPOSTABLE FOOD WARE (Page 7)

- EcoLogo is a multi-attribute label with standards for compostability, materials origins and absence of harmful chemicals. Many EcoLogo-certified food ware products are available in the US marketplace.
- Biodegradable Products Institute (BPI) indicates compliance with ASTM D6400 and/or D6868 standards for commercial compostability. The USDA Biobased label indicates compliance with the ASTM D6866 standard for biobased content. These are both credible single-attribute certifications.
- Additional certifications and standards are detailed **in the body of this report**, and in the Sustainable Biomaterials Collaborative (SBC)'s BioSpecs for Purchasers.

For more, see **Appendix B – Definitions and Certifications**, **SBC BioSpecs**, **SBC Bid Evaluation Sheet**

BID SPECIFICATIONS (Page 11)

Other states' bid specifications can be used as a model, such as **the state of Connecticut's 2012 bid**.

Minimum Requirements (Specifications)

- The two most important environmental attributes of "bioplastics" are commercial compostability (BPI-certified or equivalent) and high biobased content (USDA Biobased-certified or equivalent).
- Products made of 100% paper or wood can be considered compliant if they are **Cedar Grove Accepted Items**. When possible, items should use **recycled** or **sustainably harvested** content.
- To ensure that products are compostable in your area, check with composting facilities in your state. Products on the **Cedar Grove Accepted Items** list are likely to comply with local guidelines.
- Products free of fluorinated compounds and bleaching chemicals will avoid health risks.

For more, see Appendix C – Model Specifications

Develop a Green Bid List

- Provide "green" alternatives for each product in a full bid list or a limited market basket list, and negotiate deep discounts for these items. Base green bid lists on past usage, if available.

For more, see Sample Bid Sheet

ONCE THE BIDS ARE IN… (Page 19)

Best Ways to Award

Because "green" vendors of food ware products seldom carry conventional items, consider multiple awards for food ware bids, or craft a separate award for green products.

Verifying Compliance

- Verify products are certified biobased and compostable using online lists from certifying bodies.

Evaluating Performance

Agencies can test environmentally compliant products to ensure that:

- Clamshell closures and cup lids are secure.
- Products do not warp when wet or heated.
- Knives cut food; forks spear food.
- Cutlery cannot be weaponized when broken (for use in correctional facilities).

Evaluating Price

- Accurate cost comparison should use heavily discounted market basket or core lists for green and conventional food ware. Bid separately to avoid vendor overcharging for compostables.
- Lifecycle costs can be evaluated using analysis of current and compostable purchase and disposal costs. Products should be compared only on this basis.

For more, see Performance Evaluation Sheets

VENDOR EVALUATION (Page 21)

If your bid evaluation process includes a "Green Point Weighting System," you can give points to vendors that offer the widest variety of "green" products, have a user-friendly labeling system, can provide a "Green Spend" report, use compostable packaging, etc.

For more, see Appendix D – Vendor Questionnaire

MAXIMIZE GREEN IMPACT (Page 25)

- To find out which products are most easily composted, speak with nearby composting facilities.
- Ask vendors to help you track green purchases.
- Guard against greenwashing by using only verified certifications listed in this Guide.
- Examine both the composting and recycling systems for food-related waste such as cups and bottles, and consider new systems to ensure that users dispose of products in the correct bins.
- Consider adding durable food service ware, such as metal forks, to your contract, to save money and resources over time.
- Consider requiring additional environmental criteria, such as recycled content or Green Seal/EcoLogo certification, for products beyond food ware: napkins, paper towels, etc.

WHAT'S ON THE HORIZON?

- Sustainable Biomaterials Collaborative is developing a one-stop product rating system by 2014.
- New certifications are being developed to ensure that biobased materials are produced sustainably, and to evaluate additional ways to promote sustainability along the supply chain.

WHY BUY COMPOSTABLE FOOD SERVICE WARE?

The best method to reduce food and food-related waste is to employ the use of reusable food service ware (aka "durables") in cafeterias and facilities serving food. This reduces landfill waste, and the cost of products when measured over their lifetime. However, the use of durables isn't always feasible, due to lack of washing areas, storage space, or other convenience-related factors, making the use of disposable food service ware necessary. When this is the case, the most sustainable option is to use compostables.

What is Compostable Food Service Ware?

Compostable food service ware is a category of single-use disposable food service ware items such as cups, bowls, plates, trays, clamshells, forks, spoons, knives, and straws that are manufactured from materials that degrade rapidly and safety into a valuable soil-like material when these items are sent to a commercial or municipal composting facility along with other compostable materials such as food scraps and yard waste.

What Are the Benefits of Using Compostable Service Ware?

Compostables help reduce food waste going to landfills and incinerators.

Using compostable food service ware, and then sending it to be composted at a commercial composting facility, enables food service operations to easily compost their food waste. Since food waste is one of the single largest components of the U.S. waste stream, this can significantly reduce the amount of waste going to landfills and incinerators. When food waste is landfilled, it can create methane, a hazardous air pollutant that is considered a potent greenhouse gas. Incinerators also release toxic air emissions.

The U.S. Environmental Protection Agency reports that food waste is the single largest component of municipal solid waste that reaches landfills and incinerators. Switching to compostable, biobased food service ware presents a significant opportunity to advance sustainability in your facilities by enabling easier, more streamlined food waste composting. Using compostable food service ware makes it easy for a food service operation to divert its leftovers away from landfills into compost, because users don't need to sort items into different bins.

For this reason, using compostable food ware can leave to greater waste diversion than using recyclable food ware. Recyclable cups or plates must be put in their own bin, separate from food waste – but compostables can be disposed of along with food, or with food residue on them. Both recycling and composting reduce landfill waste, but composting also facilitates non-landfill disposal of both food ware and food waste.

In addition, the cost of disposing of polystyrene foam and other plastic food service ware can be high, especially if users pay by volume, such as by the cubic yard or by each full dumpster. While food service ware weighs less than 10 pounds per cubic yard, it can take up 10 times more space per pound than cardboard. System-wide use of compostable food ware can therefore lead to reductions in trash hauling and tipping fees.

Compostables eliminate the use of petroleum-based food service ware products.

A large portion of the conventional single-serve food service ware used today is made from expanded polystyrene (EPS) foam, which is derived from petroleum, a limited (and often imported) natural resource. Because food service ware is usually heavily contaminated with food residue after it is used, it is difficult to recycle.

Food service polystyrene, by its nature, has a useful life that can be measured in minutes or hours. Yet, it takes several decades to hundreds of years to deteriorate in the environment or a landfill. (California Integrated Waste Management Board)

Finally, polystyrene packaging can leach molecules of styrene into food. In 2011, styrene was added to the federal government's list of chemicals that are "reasonably anticipated to cause cancer."[1]

The U.S. Agency for Toxic Substances Disease Registry (ATSDR) similarly reported that "the presence of styrene exposure in packaged foods is due primarily to leaching of the monomer from polystyrene containers."[2]

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[1] U. S. Department of Health and Human Services, National Toxicology Program, report on Carcinogens, 12th Edition, "Styrene." 2-11, **http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/styrene.pdf**.

[2] ATSDR. 2010. *Toxicological Profile for Styrene.* Agency for Toxic Substances and Disease Registry. **http://www.atsdr.cdc.gov/toxprofiles/tp53.pdf**.

WHAT PRODUCTS ARE OUT THERE?

What Types of Compostable Food Service Ware Products Are Readily Available?

Compostable service ware products can be made from paper or other plant-based fibers such as sugar cane (bagasse), wheat straw, bamboo or palm fiber, wood, or compostable plastic resins. Compostable plastic resins are most commonly biobased; this means they are made from plant-based materials such as corn or potato starch, soybean protein, or cellulose. These materials are converted into plastic polymers such as polylactic acid (PLA) that have similar properties to petroleum-based plastics.

It is important to note, however, that not all compostable plastics are made of plant-based materials. Some are derived from petroleum, which is a finite, nonrenewable resource. These products should be avoided.

Biobased, compostable food service products typically fall into four categories:

- *Cutlery* (e.g., knives, forks, spoons, and "sporks")
- *Food service ware* (e.g., plates, bowls, cups, etc.)
- *Take-out containers* (e.g., boxes, clamshells, and other types of containers and lids)
- *Other items* (e.g., straws, food service gloves, bags, etc.)

What Types of Vendors Offer Compostable Food Service Ware?

Suitable, well-performing, competitively-priced compostable food ware is available from a variety of manufacturers, typically through vendors that offer a wide array of food service products. These products are also sometimes purchased on contracts for office, janitorial (break-room), or building maintenance supplies. Conventional food service suppliers may not carry many certified biobased and commercially compostable products. Conversely, many companies that specialize in compostable products do not offer conventional food service ware products, and therefore would be discouraged from bidding on a complete food service contract list that also includes a large number of conventional food service products (e.g., foam cups and plates, ovenable trays, plastic wrap, aprons, etc.), which they could not provide. Consequently, it may be most effective to solicit compostable products separately, or at least award the green products separately – either based on lots or on a line-item basis. This allows for greater competition by smaller vendors who may have greater variety, and purchasers can choose the best and lowest cost option.

The most direct way to locate vendors for compostables is to identify the manufacturers that are listed on certification websites such as BPI's, then contact them to ask which vendors supply their products to your local area. You are likely to find a mix of several types of suppliers, including manufacturers who sell directly without a distributor, or "green" vendors who specialize in a single or small number of manufacturers' products.

How Does the Cost of Compostable Food Service Ware Compare to Conventional Products?

The cost of compostable food service ware is expected to be higher than conventional disposable food service ware, especially polystyrene products. Some compostable products are less costly than others. Because many compostable products are new to the market, their costs may well fall when their sales and production volumes increase. While there are ways to drive costs down through centralized and cooperative purchasing methods, the biggest opportunity for cost savings is related to avoided waste disposal costs, which are realized when composting services cost less than landfill disposal. At the Rose Garden Arena in Portland, Oregon, composting cost less than half of landfill disposal costs. Because purchasers may be removed from disposal and compost arrangements, determining the savings may require collaboration with other agencies or a state sustainability department.

WHICH PRODUCTS ARE NEEDED?

Before developing a bid solicitation for compostable food service ware, it is important to answer two important questions:

- What types of compostable food service ware items do my contract users need?
- What types of compostable food service ware products are likely to be accepted in the composting facilities in my state?

This section focuses on assessing the needs of your users, to facilitate purchase of the most appropriate compostable food ware.

What Types of Products Do My Contract Users Need?

Identifying the conventional and compostable food service ware products that have been purchased most – based on the highest number of units or the most dollars spent – will help you identify the most important items to include on your green product bid list. Also, if you are using a "core" or "market basket" list, you can add these high-volume green alternatives there to secure higher vendor discounts for these items.

If you don't have this information in your procurement records, you can ask contract users that have large food service operations (or your existing vendors) to provide historical contract usage reports. By reviewing your current contract offerings and past usage data, you can gain a sense of how "green" your purchasing already is. This process can also provide you an opportunity to ensure that all products offered on your contracts meet the minimum environmental specifications outlined in this guide. This may help you determine if a new contract is needed or whether you can simply promote the compostable food service ware products that are on your existing contract(s).

Do My Contract Users Have Specific Design or Performance Requirements?

Your large-volume contract users (such as correctional or health care facilities that operate food service operations) can help you identify important design and performance requirements that should be included in your bid specifications. Design requirements may relate to the size or shape of food service ware items as well as temperature tolerance, weight capacity, etc. Some food service operations may also have very specific design or performance requirements. For example, correctional facilities may need to avoid products that can create sharp edges or splinters when they are broken because these items can be used as a weapon.

What Disposal Needs Should I Be Aware Of?

Large-volume contract users may also have needs related to the way food ware users will dispose of the products on-site. For example, correctional facilities will want to avoid the need for inmates to gather around waste bins sorting food and ware into different bins – a program of 100% compostables will work well in this case, as both food and food ware can go into compostable bins.

Additionally, it may not make sense to expect users to sort recyclable items from compostable ones, unless there is extensive labeling and signage. Compostable bioplastic cups look very similar to typical recyclable plastic cups, but they can contaminate recycling processes. It's best to have a 100% compostables program when possible, and to limit waste sorting by users.

What Types of Compostable Food Service Ware Will the Composting Facilities in My State Accept?

It is important to know what types of materials are accepted at the composting facility or facilities in your state. Some operations may only accept paper- or wood-based compostable service ware, for example. This would be an important factor to consider before putting biobased plastic cups (which come at a price premium), on contract. Some facilities will accept all your food waste but send material incompatible with their system to the landfill, which defeats the purpose of composting. Communication with your composting facility is key.

In addition to knowing the types of materials composting facilities in your state are willing to accept, it is important to know what standard of compostability the facilities require. Many facilities will only accept products that are certified commercially compostable; others may prefer to test the compostability of products in their facilities before they are accepted.

It may be useful for purchasers to reference an established guide to products already approved by a commercial composter, the Cedar Grove Composting Facility's Approved List of Accepted Items. Knowing which products are accepted prior to going out to bid will help maximize the environmental and economic benefits of state agencies that end up using the compostable food service ware.

If the composting facilities in your state want to test the products before you add them to your contracts, you may need to clarify how they will do that, how many samples they will need, how they will be able to identify which products composted and which did not, and how long a lead time they need to complete the testing. The lead time, in particular, may be several months, which will need to be incorporated into your bid solicitation planning timeline.

Are There Any Products I Should Exclude From My Contracts?

In addition to developing a list of qualified compostable and "green" items to include in your bid solicitation, you can consider blocking from your bid list (or at least your core or market basket list) items that have especially poor environmental performance, high associated health risks, and/or easy substitutions, such as polystyrene cups. These items can be referred to as a "brown" list.

It is particularly important to ensure that products on your bid list exclude items that fail to meet your specifications such as compostable paper plates that have a per fluorinated grease barrier. It will be very confusing to bidders if your specifications prohibit these items but they are included on your bid or market basket list. Your brown list can help you identify those items. It can also be provided to your food service providers. The state should reserve the right to exclude any product from its contracts for which it has an environmental or health concern.

See **Appendix A** for a discussion of the types of products to put on your service ware "brown" list.

GREEN CERTIFICATIONS AND STANDARDS

Which Green Certifications, Standards, and Definitions are Most Relevant and Credible for this Product Category?

There is a significant amount of confusion surrounding the environmental claims made by manufacturers and distributors of compostable food service ware. Many products are advertised with unverified claims that they are "biodegradable," "degradable," or otherwise beneficial for the environment. It is important for purchasing agents and other product specifiers to require all vendors of compostable food service ware products to verify their environmental claims along with their product bids. This guidance document provides an overview of the environmental certifications and standards that are credible and relevant to this product category as well as recommendations about how they can be reliably incorporated into bid solicitation and evaluation processes.

Multi-Attribute vs. Single-Attribute Certifications for Compostable Food Service Ware

Truly sustainable food service ware offers environmental benefits at all stages of its life cycle. Single-attribute certifications can verify individual environmental benefits, such as the biobased content of the product or its compostability. However, multi-attribute labels are preferable to single-attribute certifications because they evaluate the environmental attributes of compostable food service ware starting from production of the feedstocks used to make the product, to the product manufacture itself, and including the ability to safely manage it at the end of its useful life. Consequently, multi-attribute certifications provide a more complete assessment of a product's overall environmental and health impacts, thereby preventing tradeoffs.

EcoLogo's Multi-Attribute Certification

EcoLogo is a well-respected third party green product certification organization based in Canada, which has a multi-attribute certification for compostable food service ware. EcoLogo has a significant number of products certified to meet its standard (CCD-145), which covers food containers that are made of agricultural waste, are devoid of chemicals of concern (such as heavy metals and fluorinated compounds), and are verified to be readily biodegradable. Because an older biodegradability standard is used, it may be important to verify that EcoLogo products are accepted as commercially compostable by your facility, but they are likely to be.

Relevant and Credible Single-Attribute Certifications

Because as of September 2012 there were not many multi-attribute certified products under EcoLogo, purchasing agents should consider, as an alternative, requiring vendors of compostable food service ware to certify that their products meet standards for biobased content and commercial compostability. Below are descriptions of the primary single-attribute certifications that address these environmental attributes.

Biobased Content

One of the most important environmental attributes to look for when developing specifications for compostable food service ware is the presence of a high amount of plant-based material. (Biobased carbon content is typically measured as a percentage of total carbon content.) By requiring a minimum percentage of biobased content, procurement agents can avoid inadvertently purchasing compostable food service ware made largely of petroleum-based material. Two primary certifications exist to verify the amount of biobased content in a food service ware product.

- ***USDA Biobased Certified***

  The United States Department of Agriculture (USDA), as part of its effort to support U.S. farmers through its **BioPreferred Program**, has developed minimum biobased content standards for a wide range of products used by states and other institutional consumers. In this category of products, USDA's biobased standards include:

  - Disposable tableware (e.g., plates, bowls, cups, etc.): 72% minimum biobased content
  - Disposable containers (e.g., disposable clamshells, boxes, and soup containers): 72% minimum biobased content
  - Disposable cutlery (e.g., spoons, forks, knives, "sporks", etc.): 48% minimum biobased content

  Purchasers can require vendors to offer products that are certified by USDA as meeting the above minimum biobased content levels. The USDA maintains a list of products that are certified under each of these standards based on ASTM Test Method D6866, which purchasers can use during the bid evaluation process to verify vendor compliance with this criteria if it is included in their specification (recommended).

- ***OK Biobased Certified***

  Another organization that certifies the biobased content of food service ware is called **Vinçotte**, which is based in Belgium. Like USDA, Vinçotte verifies and reports the biobased content of products based on ASTM Test Method D6868. But unlike USDA, it does not set any minimum standards for specific types of products. Instead, it has established a reporting system for all products that awards a certain number of stars based on the percentage of biobased content the product contains. For example:

  - Products listed with four stars under the Vinçotte label (as pictured above) contain >80% biobased content
  - Three stars indicate 60-80% biobased content.
  - Two stars indicate 40-60% biobased content
  - 1 star indicates 20-40% biobased content

Purchasing agents can allow vendors to offer products that are OK Biobased Certified as long as they meet equivalent biobased content levels. For example, as an alternative to being USDA Biobased Certified, disposable tableware and cutlery with the OK Biobased Label and at least three

stars would be acceptable. Disposable cutlery with an OK Biobased Label and at least two stars would also be acceptable.

Also like USDA, Vinçotte maintains a list of products it has certified, which displays the number of stars each product has been awarded.

Commercial Compostability

Since a major benefit of compostable food service ware is that it can be used to facilitate food waste composting, it is critically important that the products added to state contracts are independently certified to be "commercially compostable." This means that it passed a scientific test designed to confirm that it would break down fully and safely into compost in a typical composting facility (i.e., within 180 days or less).

Because some composting facilities have experienced problems breaking down compostable food service ware that contains biodegradable plastics, in particular, the certifications have been developed around two ASTM Test Methods related to the compostability of products containing biodegradable plastics:

- ASTM Test Method D6400: Standard Specification for Compostable Plastics
- ASTM Test Method D6868: Standard Specification for Biodegradable Plastics Used as Coatings on Paper and Other Compostable Substrates

Several organizations in the United States and elsewhere in the world certify a wide variety of food service ware items that are determined to be commercially compostable based on these or equivalent (or more stringent) test methods. The following certifications verifying commercial compostability can be referenced in bid solicitation and evaluation processes:

- ***Biodegradable Products Institute (BPI)***
  BPI has developed a certification program that tests food service ware and other products and labels those products that are certified as commercially compostable. Companies that have their finished products certified by BPI as meeting ASTM D6400 and/or ASTM D6868 tests can use the BPI logo to label and market their products, and are featured in their **online listing**. This is by far the most widely available third-party certification in the U.S.

- ***DIN CERTCO (DIN)***
  DIN is the German national organization for standardization and that country's International Standardization Organization (ISO) member body. DIN CERTCO operates a certification program for compostable products made of biodegradable materials and licenses the use of the corresponding mark developed by European Bioplastics. Products are considered certified commercially compostable if they adhere to the following standard: DIN EN 13432: Packaging – "Requirements for packaging recoverable through composting and biodegradation." This standard is more stringent than ASTM D6400 and D6868 because it requires products to fully biodegrade in a commercial composting facility within only 90 days.

- ***Vinçotte OK Compost Certification***
  In addition to certifying biobased content, Vinçotte also certifies the compostability of a product. Packaging or products displaying the OK compost label are certified to be biodegradable in an industrial composting plant. This applies to all components, inks, and additives. The sole reference point for the certification program is the harmonized EN 13432: 2000 standard.

- Similar commercial compostability certifications have been developed by organizations in other countries such as the Australian Environmental Labeling Association (based on the Australian Compostability Standard AS 4736: *Biodegradable Plastics Suitable for Composting and Other Microbial Treatment)* and the Japan Bioplastics Association.

Cedar Grove Approved Products List

While BPI and the other certifications for commercial compostability ensure that food service ware is technically compostable in a typical facility, it does not guarantee that it is compostable in every composting facility. In an effort to determine which products are compostable (and which are not) in a real composting facility, the Cedar Grove Composting Site (located outside of Seattle, Washington), embarked on a several year process to test a wide array of service ware products to determine whether they break down in 180 days in its site. Products that pass its testing protocol are included on a **Cedar Grove Approved List**.

Other Relevant and Credible Environmental Certifications

In addition to certifications relating to the biobased-content and compostability of a food service ware product, other certifications can be used to identify food service ware products that have additional environmental attributes. These include certification by the Forest Stewardship Council that the product contains paper or wood that has been sustainably managed and harvested, and certification by the Chlorine-Free Products Association that the product contains fiber that has not been bleached with chlorinated compounds.

For a listing of these other certifications and standards, see **Appendix B**.

BID SPECIFICATIONS

To ensure you are purchasing the greenest compostable service ware, there are certain minimum specifications and requirements products should meet and additional desirable attributes you should consider when developing your bid specifications.

Depending on your agencies' priorities, the set of minimum requirements needed to be met for a product to be considered may vary. By establishing clear specifications and including additional "desirable" criteria in your bid solicitation, you can evaluate the sustainability of a product beyond the minimum requirements.

In instances where two or more certifications are determined to be equivalent, then the specification can allow suppliers to offer products with either certification. This increases the number of products that can meet your green specifications, thereby increasing the likelihood that you will receive a competitive bid. A sample specification could read: *Hinged Fiber container 9'' x 9'' x 3'', White – certified commercially compostable by BPI, Vinçotte or equivalent.*

In some cases, it may make sense to require products to have two different green certifications (or meet two different standards). This approach is generally used when the certifications or standards cover completely different criteria. For example, if a product is commercially compostable, it isn't necessarily made from recycled materials or from biobased materials. Requiring USDA BioPreferred status and/or FSC sustainably managed paper certification alongside compostability requirements keeps companies from trading off one environmental benefit for another.

Minimum Requirements (Specifications)

At the very minimum, compostable food service ware should meet the following requirements, which were adapted from the *BioSpecs for Food Service Ware* – a set of purchasing specifications for compostable biobased food service ware created by The Sustainable Biomaterials Collaborative (SBC), in partnership with the Green Purchasing Institute.[3] An example of model specifications can be found in **Appendix C**.

Note: Many of the certifications for compostable food service ware apply only to products that contain biobased plastics. But some compostable food service ware is made of paper or wood, or other fiber without the use of any biobased plastic. An example of this is an uncoated paper plate. Compostability and biobased labels assume these products are compliant, so they will not carry a logo or seal. It's important to structure bid specifications so that these uncoated paper and wood products are not excluded simply because they are not covered by certification programs.

Under the Minimum Requirements, products must be:

1. **Commercially compostable (must meet one or more criteria):**

[3] ***BioSpecs for Food Service Ware***.*9*

A. Products must be certified by one or more acceptable certification organization or program, including:

- **Biodegradable Products Institute** (U.S.)
- **AIB Vinçotte Inter: OK Compost** (Belgium)
- **Australian Environmental Labeling Association**
- **Japan BioPlastics Association**
- **DIN CERTCO** (European Union)

B. Products made of 100% paper or wood, that are uncoated, unlined, or clay-coated (such as wooden stir sticks or uncoated paper plates) are considered commercially compostable without a certification. These products are acceptable if they appear on the **Cedar Grove Accepted Items** list for commercial compostability.

2. Minimum Biobased Content (must meet one or more criteria):

A. **USDA Certified Biobased Product**

B. **Vinçotte OK Biobased** (3 stars or more for disposable table ware and containers; 2 stars or more for cutlery)

C. Products made of unlined, uncoated wood, bamboo, paper, or another obviously fiber-based material automatically meet this criteria.

3. Product may not contain perfluorinated grease barrier compounds. Bidders shall provide affadavits from manufacturer, guaranteeing that perfluorinated compounds were not used or added as the product was made.

Perfluorinated compounds (PFCs), most well-known for their use in non-stick cookware, are also added to grease-, water-, and stain-resistant coatings for some paper- and other fiber-based food service tableware and containers. One type of PFC has been classified by the US Environmental Protection Agency (EPA) as "likely to be carcinogenic to humans." A 2010 Washington Department of Ecology study, "Perfluorinated Compounds in Washington Rivers and Lakes," detected these persistent compounds widely in fish tissue, Osprey eggs, water bodies, and municipal wastewater treatment plant discharges throughout the state[4]. More information is available in **Appendix A**.

[4] Washington Department of Ecology, News Release: Study Affirms State's Aim to Reduce Perfluorinated Compounds, August 10, 2010; **http://www.ecy.wa.gov/news/2010news/2010-198.html**

Additional Desirable Attributes

In addition to the above listed minimum criteria, there are other factors you may wish to consider to gain additional life cycle environmental benefits from your compostable service ware purchase.

1. **Production of the biobased material used to make the product protects workers and the environment through sustainable farming and forestry practices.**
   For example, require products be certified by the **Forest Stewardship Council**.
2. **a. The product contains biobased material that was grown without genetically modified organisms (GMOs).**
   Consider products that are GMO-free or that the use of genetically engineered (GE) feedstock is offset through purchase of non-GE feedstock: Certified GMO-free, Identity Preserve, GMO-offsets, and Working Landscape Certificates.

   b. Paper and other fiber-based products are certified by the Chlorine-Free Products Association because they are not bleached with chlorinated compounds.

   c. Recycled content was used to make wood- and paper-based food service product.
   Consider giving preference to food service ware items such as paper plates and trays that have at least 10% postconsumer or 25% post-industrial recycled content.

   d. Labor laws and protections were respected during manufacturing of the finished products.

   Consider accepting multi-attribute certifications that take into account protections for workers and the environment.
3. **The product is clearly labeled "compostable."**
   Products that can easily be confused with conventional plastics should be clearly labeled as "compostable" to help users identify and properly sort these products along with food waste and help the composting facility properly identify these products as acceptable in their process. The word "compostable" should be clearly visible against the background of the product.
4. **Product (and feedstock used to make the product) was manufactured in the United States.**
   This will reduce the number of miles it traveled and resulting environmental impacts.
5. **Product packaging adheres to environmental criteria.**

   Compostable packaging can contribute to overall sustainability and ease of disposal. The most sustainable will contain post-consumer recycled content over virgin forest materials.

DEVELOPING A GREEN BID LIST

The first question you may want to ask is whether compostable food service ware is needed in your state. If there is no food waste composting capacity in your state, it may not be worthwhile to add these products to your contracts, unless you see a benefit to offering non-plastic alternatives (such as paper plates) for use in parks or other state facilities. Another question you may want to ask early on in the process is whether you can access these products at a reasonable price on a cooperative purchasing agreement you can use.

If you decide to develop your own bid solicitation, you will need to decide the best way to structure it to encourage vendors to offer a wide variety of compostable food service ware products with attractive pricing.

How Should I Structure a Bid Solicitation for this Product Category?

You can consider developing a stand-alone contract (or a multiple award) just for compostable food service ware or adding these items to a larger solicitation for conventional and environmentally preferable food service items. You can also consider adding environmental specifications for food service ware to contracts for office or janitorial supplies or hardware/MRO (maintenance, repair, and operations) products as well as for service agreements where these products many be used, notably concessions and other food service operations.

Developing a Bid Solicitation for "Green" Food Service Ware Products Only

There may be a compelling reason to issue a separate bid solicitation for food service ware items that are considered environmentally preferable (i.e., they are compostable, reusable, contain recycled content, or offer other environment benefits). For example, this may be a good option if the state already has a long-term contract in place for conventional food service products that is not set to expire for several years – especially if it does not offer compostable or other environmentally preferable items or these items are offered with only minimal discounts. It also may be the best option when the contract is for a specific agency that is interested only in compostable food service ware items for their operations such as an environmental department or a state park.

A separate green food service supplies contract may be able to attract more vendors that specialize in this area. Within the product category of food service ware, compostable or other "green" products are often distributed by smaller companies that may have a narrow offering and may not also offer conventional food service products (particularly those made of polystyrene foam) at all. Conversely, conventional food service ware suppliers may not carry many certified biobased and commercially compostable products. Instead, they may have limited green product lines that don't meet rigorous environmental or performance standards.

Consequently, if you limit competition only to vendors that can offer both conventional and green food service ware items, you may end up with only a few bids and relatively high prices. In this product category, you are likely to attract more bids and be offered more diverse and innovative products at more competitive prices if your bid allows vendors to bid separately on green products.

Finally, it may be easier to monitor the "green" spending on a separate contract because everything on that contract would count.

On the flipside, if a separate green-only contract is developed, it may be ignored if it isn't sufficiently promoted, especially if the primary contract users are not familiar with the vendor or the products it is offering. Ordering conventional and green products from two separate vendors may be confusing or too time-consuming for some agencies.

Alternatively, you can develop a single solicitation that asks for bids on both conventional and green products. This approach may save you time by avoiding the need to go through the bid solicitation and evaluation process twice. If a single, combined bid solicitation for conventional and green products is used, you can still increase competition for compostable food service ware items by designing the solicitation so that contracts will be awarded to the vendor(s) offering the best pricing on the "green" items (that meet minimum specifications). Contracts can be awarded either as a group or on a line-item basis. This procurement strategy gives green-only vendors a way in without having to issue a separate bid solicitation. Surveying contract users is a good way to find out their preference for separate contracts or a combined award.

In your bid solicitation document, you should ask for samples of high-volume products used by your major contract users and reserve the right to disqualify any products that don't meet your performance requirements.

How Do I Develop a Compostable Food Service Ware Bid List?

Whether you are developing a separate bid solicitation for compostable food service ware products or adding them to a bid solicitation for conventional food service ware items (or to other types of contracts on which these products are typically offered), you can follow these steps. First, review each item on your current bid list (including historical usage information, if available) and add an equivalent green alternative to the list. There may be some instances where you may want to replace each conventional item with a compostable/green alternative and others where you want both green and conventional options to be offered. Include any products that are already green on your list.

The most important compostable food service items to include on your list are likely to be:

- Hot and cold cups (including their lids)
- Plates and bowls
- Clamshells and other food service containers
- Cutlery
- Straws and any ancillary items that are frequently used in your facility

Vendors can often help identify green alternatives in their product offering that can be added to the bid list. If you reference an existing vendor's product, it is best to allow vendors to offer equivalent products from other manufacturers that meet your design and environmental specifications. For example, if the current bid list includes a 9" polystyrene foam plate, you can ask for a paper plate that is made from 25% recycled content (or 10% postconsumer content) OR is certified by the

Forest Stewardship Council (FSC). Similarly, if you are currently using a large number of clear plastic 8-ounce cold cups, you can ask for bids for a similar product that is certified as "biobased" by the USDA and as "commercially compostable" by the Biodegradable Products Institute or an equivalent organization based on your specifications. Below is a sample bid sheet excerpt demonstrating how that can be done. For a more complete sample green products list that was developed for the State of Connecticut, see RPN's **Sample Bid Sheet**.

Product Description (including green criteria)	Environmental Certifications of Product Offered	Unit of Measure	Price
Conventional Product			
Foam plates, 9'', white	VENDOR INPUT	500/case	VENDOR INPUT
Green Product			
9" paper plates (no plastic liner), made from 25% recycled content (or 10% postconsumer) or FSC-certified	VENDOR INPUT	500/case	VENDOR INPUT
Conventional Product			
Clear plastic drinking cup, 8 ounces	VENDOR INPUT	500/case	VENDOR INPUT
Green Product			
Clear drinking cup, 8 ounces USDA Certified Biobased Product (or OK Biobased with 3 stars or more) AND certified commercially compostable (by BPI or equivalent organization) per specifications Labeled "compostable" preferred	VENDOR INPUT	500/case	VENDOR INPUT

What Steps Can I Take During the Bid Solicitation Process to Try to Secure Lower Prices (Higher Discounts) on Compostable Food Service Ware Products?

Develop a Green Core or Market Basket List

One effective way to encourage vendors to offer higher discounts on compostable food service ware items is to construct a green core or market basket list to include in your solicitation. A contract may be designed to include both green and conventional food service ware products, but if the conventional products are on the list of items that qualifies for the highest price discounts and the compostable products are not, then the environmentally preferable products will be put at a serious, unfair disadvantage. Instead, the compostable products should be eligible to receive the

highest discounts available on the contract, which will make them more affordable. This can be accomplished by adding compostable food service ware products to the core/market basket list (and removing the equivalent non-green options such as polystyrene cups and plates). This is an important way to demonstrate to vendors that the state is serious about transitioning to the use of green products.

For states to "green" their core/market basket list, they will need to identify high-volume compostable products from their bid list to include in their market basket (or include all of their green products). At the same time, you can consider removing some or all of the non-green products from your core or market basket list even if you keep these conventional products on your contract. This will further demonstrate your State's preference for environmentally preferable products. Products to target for elimination from your core or market basket list can include polystyrene food service ware as well as green products that do not meet your specifications.

Consolidate or Centralize Purchasing

In states where purchasing has been decentralized, small contracts may be being negotiated by individual agencies such as correctional departments or health care facilities. Larger price breaks may be able to be secured from vendors if you can demonstrate to them a higher contract spend estimate. This can sometimes be accomplished by centralizing product orders among multiple agencies and, if possible, among other likely contract users such as school districts or universities. The procurement of compostable food service ware on individual purchase orders or through purchase cards, is likely to result in smaller price breaks than if these products were purchased on a statewide contract. Aggregating demand can also save staff time by eliminating the need for individual agencies to go out to bid on your own. A critical first step in centralizing purchasing of compostable food service ware is to assemble a user group to determine if a statewide contract for these products makes sense. As mentioned above, considering existing cooperative purchasing opportunities for compostable food service ware is another way to potentially save time and money.

Increase the Number of Responsive Bids

Consider holding a pre-bid meeting, preferably early on in the contract development process. This will enable you to collect market availability and performance information from vendors in the state and give potential bidders time to become a state-approved vendor or set up an arrangement to subcontract with a vendor that is already pre-qualified to sell to the state. You may also want to hold a meeting immediately after the bid solicitation has been issued to make sure bidders understand your specifications and bid evaluation procedures. Publicizing the bid solicitation once it has been issued will help attract more bidders. This is particularly important when trying to increase competition for green products since many small vendors of these products may not be following your online bid solicitations the way larger vendors of conventional products are doing.

If you only use specifications (i.e., mandatory requirements) you may limit the products to only those that can meet every criteria and offer no additional credit to vendors that offer products with additional environmental benefits.

What Other Information Should Bidders Provide to Make the Bid Evaluation Process Easy and Fair?

For each compostable food service ware item being offered (or at least those on bid or market basket list), bidders should provide the following:

- Manufacturer name
- Product description and SKU
- Biobased content certification (e.g., USDA or Vinçotte)
- Commercial compostability certification (e.g., BPI, DIN Certco, etc.)
- List of other environmental certifications or attributes (e.g., % of recycled content)
- Number of items per case
- Price per case
- Samples (when requested)

ONCE THE BIDS ARE IN…

Once the bid submission deadline has passed and the resulting bids are opened, the purchaser or bid evaluation team must evaluate each one. The goal should be to find the products that represent the "best value": an optimum balance between performance, price, and environmental benefits. Depending on the product and its market complexity, this may take more diligence than conventional options.

The bid evaluation process typically consists of several steps:

- Finalizing your contract award goals and procedures;
- Evaluating the products offered by each vendor for compliance with minimum design/performance requirements and environmental/health specifications;
- Assigning points to products that have additional desirable attributes;
- Evaluating whether the vendors offer additional environmental services in conjunction with the contract;
- Determining which vendor's (or vendors') products and services offer the best overall value to the State; and
- Finalizing the list of green products that are added to state contracts.

Finalizing Contract Award Goals and Procedures

The first step is to reassemble your bid evaluation team to discuss your contract goals and procedures. If the primary goal of your contracting process is to increase the availability of compostable food service ware items on your contract(s) and attract attractive pricing, then you may want to consider awarding contracts for these products separately from conventional products in order to increase the number of bids that you deem responsive. Eliminating vendors that cannot satisfy all of the state's needs for food service ware – or even compostable food service ware items – may significantly limit competition. To save time, you should determine whether any vendors are likely to be disqualified so you don't have to spend time evaluating the environmental attributes and performance of their products.

How Can I Verify Compliance with the State's Minimum Technical Requirements?

When evaluating offers, you can eliminate early on compostable products that do not meet the State's design requirements, if any have been established. For example, if the products offered are not the right size or shape, if they need to be clear or have the word "compostable" written on them but don't, or if they are not made of the type of material that is acceptable to composting facilities in the state (and that requirement was articulated in the specification), these products can be eliminated from consideration during the bid evaluation process. If you are planning to offer only a single award, you may want to eliminate vendors that fail to offer a sufficient variety of products, particularly those that are included on your bid list or core/market basket list.

How Can I Verify Compliance with our Minimum Environmental Requirements?

Products that meet your design criteria must next be evaluated to ensure that they meet your minimum environmental specifications. It helps to ask vendors to answer in writing whether their products are certified as "biobased" or "commercially compostable," but if you (or your environmental agency) have the time, it is best to verify vendors' claims. Certification status can often be verified on the certifier's website, where most list the companies and/or the specific products that are certified. Call to talk to them if necessary; do not accept applications or incomplete documents as verification. For example, you can check whether the cutlery offered on your contract is listed on the **USDA's BioPreferred Program website**. Certified Biobased Products are listed by category in its Product Catalog and have its Certified Biobased Product logo next to the product name. The same can be done with products vendors claim are BPI certified – procurers can check their **online listing** to be sure.

How Can I Ensure Product Performance?

Just as with conventional food ware, there is a range of performance among compostables. This aspect of the market is the most quickly changing, and great strides are being made with newly introduced products. It may make sense to conduct a performance test of the products that meet your minimum environmental requirements. You may want to pilot test products:

- Test cups, bowls, and take-out containers, for example, to make sure they do not become soggy or too hot to hold when they are filled with hot liquids.
- Test that compostable knives can effectively cut and forks can successfully spear a wide range of food items.
- Test the closures on clamshells to ensure that they stay shut.
- Test cup lids to make sure that they fit tightly and do not easily pop off.

Make sure bidders provided samples of high-volume products used by your major contract users as requested in your bid solicitation. **Performance Evaluation Sheets** are available on the RPN website to guide your assessment of each product type. After testing, disqualify any products that don't meet your performance requirements.

As mentioned earlier, some government agency uses of disposable food service ware require specific performance requirements. Correctional facilities often need cutlery that won't break into sharp pieces that can become weaponized by inmates. If the major users of food service ware in your state have special performance needs, those should be articulated in design performance requirements.

.Awarding Point to Products With Additional Desirable Attributes

You can use a point system to compare the additional sustainability criteria of products offered by different vendors beyond your minimum environmental requirements (i.e., certified biobased content and compostability). Vendors that offer high-volume products with recycled content,

certification by the Forest Stewardship Council, the Chlorine-Free Products Association, or organizations that verify products were manufactured without genetically modified organisms can earn extra points. The basis for awarding these points should be agreed upon by the bid evaluation team in advance and should be systematic, not arbitrary, and verifiable. The awarding of points during the bid evaluation process to vendors that offer particularly green products – or a particularly large selection of compliant products – enable them to qualify for an award even when they may have slightly higher prices.

How Can I Evaluate the Additional Environmental Benefits Each Vendor Offers on this Contract?

Governments can extend the influence of their direct purchases by encouraging vendors to go beyond simply carrying some sustainable products to developing more sustainable business footprints themselves. Their influence can even extend to their own supply chains, as well. The attached Vendor Sustainability Questionnaire [**Appendix D**] is designed to help purchasing agents evaluate whether their vendors conduct their business in such as way as to result in environmental and health benefits to the state. It can be adapted to specific bid solicitations. Purchasers may choose questions that are most relevant to food ware and that will provide the most appropriate vendor and product profile for their government's interests.

All vendors should be required to fill out the Product Details table at the end of the questionnaire for the products they intend to bid. For bid solicitations that involve large numbers of different products (for example, food ware and kitchen items) bidders can instead be requested to fill out the table for the green products on the core or market basket list (for representative green examples in each product category) or list all green products offered in the state's bid sheet, to ensure that there are strong green options for all the targeted types of products.

The state may want to require vendors to provide answers to some questions on the Vendor Sustainability Questionnaire, especially if there is a requirement in the contract's terms and conditions that the vendor offer, for example, online ordering, training, or green spend reporting. (Note: some contract awards may only be based on specifications. If so, the vendor questionnaire can be used to determine whether vendors comply with any environmental requirements in the contract that go beyond the specifications of the products themselves.)

This bid evaluation process recognizes that environmental services (such as proper labeling and green spend reporting) can result in valuable environmental contributions to the State that often are not calculated into the price of the product.

Evaluating Price

First and foremost, for compostable food service ware to be cost effective, composting for the materials must be available. Otherwise, state agencies may be spending more on green products but not reaping a substantial benefit from that additional expenditure.

The initial cost of compostable food service ware is expected to be higher than comparable conventional disposable alternatives, especially polystyrene foam products. This higher initial price can be offset by avoided disposal costs. Some jurisdictions have found their disposal costs cut in half when less waste goes to the landfill and more is composted at a lower rate. These figures should make it into the cost assessment for compostables, as they can offset any higher up-front costs for the food ware.

Additionally, cost is yet another reason why it may make sense to award separate bids for compostables and conventional food ware, or to allow multiple bids on any food ware contract. Smaller vendors committed to sustainability will have the greatest variety of food ware and knowledge of how to best meet your environmental and performance specifications, but they may not have the capacity to bid on the full contract. Considering multiple awards increases competition, allowing purchasers to find the best price for products in a diverse field of vendors.

Life-Cycle Cost Analysis

A life cycle cost analysis (LCCA) can determine the total cost of ownership of a given product by taking into account the cost of acquiring, using and disposing of the product. Performing an LCCA is especially useful when comparing two or more products that meet purchasing specifications, but vary in their initial, operating, and/or disposal costs, or length of expected life.

In most cases, state procurement offices are likely to be adding compostable food service ware products to contracts that also offer conventional products. Alternatively, they may negotiate a green only contract that is separately awarded from its conventional food service ware contract. Either way, it will generally be the end-users that decide whether to choose compostable or conventional food service ware products. This decision is likely to be driven largely by their access to commercial composting facility to handle their food service waste.

Cost Calculator

State agencies can calculate the costs and savings that can be achieved by switching to compostable products by first calculating the total lifecycle cost for traditional products and then calculating the lifecycle costs for compostable products. To make this calculation, you will need to know: initial product costs, amount of waste currently sent to landfill from food service operations, the cost of waste disposal, and the cost of compost disposal.

First calculate your current total lifecycle cost:

Annual spend on foodservice products ($)	Amount of food waste disposal per year (tons)	Cost per ton in waste disposal ($)	Total disposal cost (tons x cost/ton) ($)	Total annual spend (annual spend on products + total disposal cost) ($)

Next calculate the total life cycle cost of switching to compostable products:

Annual cost of compostable products ($)	Amount of food waste disposal per year (tons)	Cost per ton for compost disposal ($)	Total disposal cost (tons x cost/ton) ($)	Total annual spend (annual spend on products + total disposal cost) ($)

Assessing Best Value

There are other benefits from purchasing compostable products that can be considered such as avoiding the use of products made of polystyrene, which has documented health risks. Although consumers at every level are burdened by the pressure of striving to get the best product they can for the lowest possible price, defining "best" has become a little more complex than it was a decade ago. Determining the best product may involve considerations for performance, durability, affirmative market participation, local production, social responsibility issues, and more. The concept is often referred to as "best value analysis" and incorporates "total cost of ownership" and other factors.

PROMOTING COMPOSTABLE SERVICE WARE ON STATE CONTRACTS

Once compostable service ware is on contract, the state should promote their use among its employees and educate staff about the importance of choosing compostables over conventional products, which will boost compliance with sustainability goals and create more acceptance of additional green products when they are added to the state's procurement contracts.

Promoting compostable products can take many forms, including:

- Highlighting successful use and environmental benefits of the product in internal communications such as a newsletter or email updates.
- Distributing samples of the product to end-users, along with a flyer about its quality, environmental benefits, and price, if relevant.
- Hosting a vendor demonstration of the product for end-users.
- Holding competitions for most complete conversion to using the green products.
- Conducting feedback surveys from end-users on their experiences with the compostable product.
- Publicizing the environmental savings that are achieved by using a particular green product. Several calculators exist that can help purchasers and sustainability managers calculate the environmental benefits of green purchasing decisions. A list of relevant calculators is in the **Tools and Resources** section of this guide.

The Sustainable Biomaterials Collaborative, a project of the Institute for Local Self-Reliance, has prepared a helpful **Frequently Asked Questions (FAQs) fact sheet** that can be shared during outreach efforts.

MAXIMIZE GREEN IMPACT

In addition to developing specifications and minimum criteria for purchasing compostable food service ware, there are other practices that can make your programs more effective, and take them to the next level.

Track Your Purchases of Compostable Food Service Products

Tracking the purchases of compostable food service ware over the life of a contract will not only help identify the environmental benefits and cost savings of these purchases, but it will also help identify areas where green purchases could better be promoted.

Unless your purchasing system can accurately capture all the contract purchasing data across all agencies for the life of the contract that covers food ware, and possibly even if it can, build into the bid solicitation and contract the requirement that vendors must be able to provide detailed tracking reports on a timely basis.

Educate Users

In order for your compostable service ware to have the biggest impact, you need to ensure it actually gets composted. The easiest way to do that is to educate the users of the compostable service ware of the proper way to dispose of it.

Set up separate waste bins – one for recycling, one for composting, and one for landfill. Ensure proper labeling of each bin and utilize pictures to demonstrate which wastes go in which bin.

Add Green Specifications to Service Agreements

Besides buying compostable service ware, you can require or reward contractors that are providing food or disposal services for including certified green products on their contracts, or for helping manage the process of composting food waste. This is one of the easiest ways to increase the use of green products in the state. Below is some sample language that can be inserted into food service agreements:

> *Sample Language*
>
> *The State of [ ] is committed to purchasing environmentally preferable products. Contractors should use environmentally preferable materials that meet food service ware performance requirements wherever practical in the fulfillment of this agreement. Environmentally preferable products and services have characteristics that include, but are not limited to, the following:*
>
> - *Reusable*
> - *Compostable*
> - *Made from biomaterials*
> - *Contain postconsumer recycled materials*

- *Do not contain chlorinated bleaching chemicals or fluorinated compounds*
- *Produce fewer polluting byproducts and/or safety hazards during manufacture, use, or disposal*
- *Are certified by an independent, third-party organization (e.g., BPI, FSC, Green Seal, EcoLogo, etc.)*

Identify Additional Opportunities to Reduce Waste

Beyond just buying compostable food service ware and encouraging its use, there are other practices that can further reduce food and food related waste from your operations including:

- ***Expanding compostable items beyond food service ware.*** Consider adding compostable gloves, wraps, hairnets, napkins, and other related products to contract. Strive to make as many items in the food service areas compostable.

- ***Offer trayless dining.*** Customers may find serving trays to be convenient, but trays dramatically increase food waste. A study of 25 food service institutions conducted by Aramark reports that eliminating serving trays reduces per person waste by 25-30% per tray per meal (Aramark 2008).

- ***Consider the use of durables.*** Though the focus of this guide is procurement of compostable food service ware, the best way to reduce waste is to avoid generating it in the first place. The best way to achieve this with regards to food service ware is to buy and use durables.

RELEVANT PURCHASING TOOLS AND OTHER RESOURCES

Biodegradable Products Institute's List if Certified Compostable Food Service Items (based on ASTM 6400 or D6868); **http://www.bpiworld.org/Certified-Bioedgradable-Foodservice-Items-Plates-Cups-Utinsels**

Environmental Paper Network's Paper Calculator, which enables users to easily calculate environmental benefits (such as water and energy savings, reduction in wood consumption, and avoidance of hazardous air pollutant emissions) of using paper products containing recycled content. See **http://www.okcompost.be/data/pdf-document/okr-mate.pdf**

Health Care Without Harm, "Choosing Environmentally Preferable Food Service Ware: Reusable and Sustainable Biobased Products," Undated Fact Sheet; **http://www.noharm.org/lib/downloads/food/EPP_Food_Svc_Ware.pdf**

Sustainable Biomaterials Collaborative's website featuring the Purchasing Specifications for biobased compostable food service ware: **http://www.sustainablebiomaterials.org/criteria.purchasing.php**

SBC's BioSpecs for Purchasers: **http://www.sustainablebiomaterials.org/documents/PurchasingBioSpecs_FINAL_2011.pdf**

SBC's BioSpecs for Purchasers Bid Sheet: **http://www.sustainablebiomaterials.org/documents/PurchasingBioSpecs_BidSheet_FINAL_2011.pdf**

Vinçotte List of Certified OK Biobased Products; **http://www.okcompost.be/data/pdf-document/okr-mate.pdf**

USDA's BioPreferred Catalog, which you can search for USDA Certified Biobased Products (those with ecolabel only); **http://www.biopreferred.gov/bioPreferredCatalog/faces/jsp/catalogLanding.jsp**

Appendix A:
Harmful Materials List

Some chemicals and materials routinely found in food service ware have been found to be harmful by the U.S. Environmental Protection Agency, the Department of Health and Human Services, and other trusted institutions. The most commonly found materials are listed below, to underscore the need for products free from these contaminants.

This list can also serve as a model "brown" list of items states can consider blocking from their service ware contracts with a rationale for each, such as their poor environmental performance and availability of environmentally preferable alternatives.

Polystyrene: Wasteful and Harmful

Polystyrene and expanded polystyrene (EPS), are common materials used in inexpensive food service ware production.

Polystyrene and materials derived from it contribute to waste, and to harmful contamination of the environment.

Solid Waste:

- Petroleum-based plastics like EPS degrade or decompose very slowly, potentially remaining intact for hundreds of years, affecting surrounding ecosystems and occupying scarce land.
- The California Department of Transportation found that polystyrene represented 15 percent of the total volume of litter recovered from storm drains.
- Floating and sub-surface plastic trash affects wildlife all along the food chain. Patches of floating debris can inhibit the growth of aquatic plants, in turn degrading spawning areas and habitats for fish and other aquatic animals.

Contamination:

- Polystyrene can break down into its styrene building blocks in the manufacture, use, and disposal of styrene-based products. A possible human carcinogen and neurotoxin, styrene has been found in food packaged in polystyrene.
- Persons chronically exposed to styrene are at increased risk for depression, headache, fatigue, weakness, kidney dysfunction and cancer.
- When incinerated, these products contribute to emissions such as sulfur dioxide (SO_2), dioxins, particulates, carbon dioxide (CO_2) and nitrogen dioxide (NO_2).

Polystyrene alternatives: There are dozens of vendors of food container alternatives. Bagasse, paper, and polylactic acid (PLA) products are now available through most mainstream dining services contractors and food packaging suppliers. Institutions can also purchase these products directly through smaller regional manufacturers and distributors. Ask current dining service

contractors and food container vendors about products certified by Biodegradable Products Institute (BPI), and EcoLogo.

Perfluorinated Compounds: Hidden Contaminants

Purchasers may already be specifying and buying paper food service ware, which seems by its nature to be biobased and commercially compostable. However, products that appear to be 100% paper may have treatments, coatings or linings that will not compost, and may house contaminants. Perfluorinated compounds (PFCs) are a family of compounds (including Perfluorooctane sulfate (PFOS), Polytetrafluorethylene (PTFE) and PFOA) that have been used to produce or line paper ware and provide grease, oil and water resistance. In a study conducted by the Oregon Center for Environmental Health, molded fiber products were found to use fluorinated compounds, such as PFOS and PFOA, as a grease barrier. These PFCs are also used to coat Teflon pans and microwave popcorn bags.

- The U.S. Environmental Protection Agency has been investigating PFOA, because it causes developmental and other adverse effects in laboratory animals.
- The European Food Safety Authority has said that PFCs show "moderate acute toxicity," and "can cause developmental and reproductive toxic effects at relatively low dose levels in experimental animals." In animal studies, PFOS is linked to bladder cancer, liver cancer, and developmental and reproductive toxicity (including neonatal mortality).
- The Environmental Working Group, a nonprofit organization, references several well-regarded studies to demonstrate that PFOA has been linked to developmental toxicity, immunotoxicity, alterations in hormonal levels, metabolic disturbances and an elevated risk of cancer.

PFOS/PFOA alternatives: Lined or coated paper food ware products can maintain resistance to leakage or temperature sensitivity through the use of bioplastics. Polylactic acid (PLA)-lined paper service ware is already widely available for products such as hot cups and bowls, which require more resilience than paper alone may provide.

Chlorine: Food Chain Pollutant

Paper-based food ware and attendant products such as napkins and paper towels can sometimes be treated with chemicals, such as chlorine or chlorine derivatives, for bleaching material white. Though products that are 100% paper may be considered fully compostable, chlorine can still pose problems for people using the product, and remains when the product is composted.

- Bleaching of paper using chlorine or chlorine compounds generates dioxins, a group of chemicals known to bioaccumulate in humans and persistent in the environment thus contributing to pollution of the food chain.
- The U.S. EPA considers dioxin the most potent human carcinogen.
- Bleaching is not necessary to produce a functional product and safer alternatives exist.

Chlorine alternatives: All types of paper products are offered in chlorine-free varieties. The

Chlorine-Free Products Association certifies products as either “Totally Chlorine-Free” (for virgin paper) or "Processed Chlorine-Free" (PCF) (for recycled paper in which the fibers have not been re-bleached with chlorine-containing compounds. In the case of recycled paper that also includes virgin fiber, "PCF" means that all the paper is totally free of chlorine. Green Seal’s GS-35 certification means that products were manufactured without the use of chlorine bleaching. Be aware that many paper products are offered as "elemental chlorine free" (ECF), but this means the products were bleached with a chlorine derivative. Look for the PCF and TCF designations instead.

Sources:

California Integrated Waste Management Board (CIWMB). “Use and Disposal of Polystyrene in California: A Report to the California Legislature.” December 2004.

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Appendix B:
Bid Specifications Development:
Definitions and Additional Certifications

DEFINITIONS:

Compostable vs. Biodegradable

According to the U.S. Federal Trade Commission (FTC) *Green Guide*, for products to qualify as compostable, "all the materials in the product or package will break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner in an appropriate composting program or facility, or in a home compost pile or device."

In contrast, the term "biodegradable" is much less restrictive – it has been used to indicate that products will break down when exposed to water and oxygen, atypical for U.S. landfill disposal, which typically cuts off air and water circulation. The FTC has begun to crack down on misuse of the term in recent years, saying biodegradable products must "decompose into elements found in nature in a short period of time." However, there is no provision in this definition for the safety of leftover materials. The standards developers at ASTM International specify that compostable products must leave "no toxic residue," which is an essential requirement for sustainable disposal.

For these reasons, products labeled simply as "biodegradable," often in an attempt by manufacturers to mislead consumers, are likely to degrade slowly or leave toxins behind, and should be avoided.

Standards vs. Certifications

Another important distinction for evaluating compostable food ware is the difference between standards and certifications. Standards are the background framework on which a certification is based. Typically, a certification will verify compliance with a standard, which may consist of one or more tests. Relevant standards may appear in manufacturers' product descriptions, so it is useful to be familiar with them. It is also important to know what standards are used as the basis for each certification since they may differ.

"Biobased"

Biobased products dominate the field of compostable food ware. Though the term is somewhat new in this industry, the most plentiful products are not – paper plates and cups are often 100% paper products, and therefore biobased. However, the resurgence of biobased plastics has meant that plastic spoons, lined hot cups and clear clamshells can also be biobased – made in whole or in part from renewable materials such as potato, corn, sugar cane waste (Bagasse), or perennial grasses.

While the renewability of the materials may suggest compostability, it's important to check. Biobased materials aren't always commercially compostable, and some petroleum-based products can be made compostable. For jurisdictions interested in sustainability throughout a product

lifecycle, it's important to specify that product should be both compostable and biobased: both renewable and made from renewable materials.

Currently, the Sustainable Biomaterials Collaborative has found that food containers are available with 90% or greater biobased content, but biobased utensils may still employ up to 30% non-biobased materials. Helpfully, certifications such as USDA BioPreferred and Vinçotte OK Biobased indicate biobased content on their labels with percentages or stars, and products can be tested against the ASTM International 6866 standard.

ADDITIONAL CERTIFICATIONS

Certifications and Standards for Paper-based Products

Many of the certifications for compostable food service ware apply only to products that contain biobased plastics. But some compostable food service ware items contain only paper, wood or another type of material that is not considered a biobased plastic. For these products, there are some standards and certifications that can be used to help identify products that offer additional benefits beyond being inherently biobased or certified compostable. (Also, it is important to structure bid specifications so that these products are not excluded simply because they are not covered by certification programs for biobased or commercially compostable products.) Below is a list of relevant and credible certifications, and standards and resources purchasing agents can use to specify environmentally preferable paper and wooden food service ware items:

- **Recycled Content:** Finding products with recycled content is one way to increase the sustainability impact of your purchases throughout the product life cycle. Post-consumer waste is the highest standard, and can often be found in molded paper products.
- **Cedar Grove Approved:** Products that appear on the **Approved List for the Cedar Grove composting facility** in Washington have been tested by the facility in their commercial composting process. Because paper- and other fiber-based products appear on the list, this is a good way to indicate that they will most likely properly break down in any similar facility.
- **Processed Chlorine-free:** The **Chlorine Free Products Association (CFPA)** is an independent not-for-profit accreditation and standard setting organization focused on promoting practices free of chlorine chemistry. Two certifications are offered for products, Totally Chlorine Free (TCF) and Processed Chlorine Free (PCF). The PCF label is used for products with recycled content.
- **Forest Stewardship Council (FSC):** **FSC (Forest Stewardship Council)** certification is a voluntary, market-based tool that supports responsible forest management worldwide. FSC certified forest products are verified from the forest of origin through the supply chain. The FSC label ensures that the forest products used are from responsibly harvested and verified sources. FSC is the certification program regarded by most environmental organizations as having the most independent, rigorous and comprehensive criteria. In this case, the FSC Recycled or Mixed Sources labels are desirable.

LEED Credits for Purchasing Green Products in this Category

US Green Building Council LEED credits (under its LEED for Existing Buildings Standard) can be earned when facilities purchase compostable food service ware, which are classified as an "ongoing consumable".

Procurement of food service ware with 10% postconsumer recycled content, 20% postindustrial content, Forest Stewardship Council (FSC) certification, and/or 50% rapidly renewable materials such as compostable materials can contribute to an existing building's overall sustainable purchasing of ongoing consumables. If such purchasing constitutes at least 60% of total purchases by cost, 1 point under LEED's Materials and Resources (MR) Credit 1 may be earned.

In addition, a facility that is composting its food waste may earn 1 point under MR Credit 6 for sustainable management of solid waste. Recyclable, reusable and compostable food service ware can contribute to the 50% of ongoing consumables that must be diverted from the conventional waste stream that must be documented to qualify for this credit.

Appendix C:
Model Specifications

Purchasing Specifications for Compostable Biobased Food Service Ware
(Suggested Mandatory Requirements and Additional Voluntary Criteria based on the BioSpecs of the Sustainable Biomaterials Collaborative)

The Green Purchasing Institute and Sustainable Biomaterials Collaborative developed the BioSpecs – purchasing specifications for compostable biobased food service ware (BioSpecs). The following specifications are a simplified version of these BioSpecs, streamlined for ease of adoption by states.

SCOPE: These specifications can be applied, but are not limited, to the following types of products:

- Cutlery (i.e., forks, spoons, and knives, including both individually wrapped and bulk utensils);
- Plates, bowls and cups (for both hot and cold applications);
- Take-out packaging (such as clamshells, boxes, or containers with separate lids); and
- Ancillary items such as lids, straws, trays, and gloves.

These specifications DO NOT apply to those ancillary food service items made primarily of paper products such as napkins or paper towels.

APPROACH: These recommended requirements are based on the BioSpecs specifications prepared for the Sustainable Biomaterials Collaborative by the Green Purchasing Institute. Use of the full BioSpecs approach is encouraged, particularly for those jurisdictions that can award based on additional criteria through a point system.

A. MANDATORY SUSTAINABILITY REQUIREMENTS

1. Products are certified as commercially compostable.

The products must be 3rd-party certified to at least one of the following standards:

- ASTM D6400: Standard Specification for Compostable Plastics (*www.astm.org/Standards/D6400.htm*)
- ASTM D6868: Standard Specification for Biodegradable Plastics Used as Coatings on Paper and Other Compostable Substrates (www.astm.org/Standards/D6868.htm)
- DIN EN 13432: Requirements for Packaging Recoverable Through Composting and Biodegradation – Test Scheme and Evaluation Criteria for Final Acceptance of Packaging (*http://www.dincertco.de/en/products_made_of_compostable_materials.html*)

- AS 4736: Biodegradable plastics - Biodegradable plastics suitable for composting and other microbial treatment (*http://infostore.saiglobal.com/store2/Details.aspx?ProductID=317882*)
- International Organization for Standardization (ISO) 17088: *Specification for* Compostable *Plastics* (*http://www.iso.org/iso/catalogue_detail.htm?csnumber=43373*)

Documentation Required: The bidder must provide documentation demonstrating that products are certified as compostable in a commercial facility.

- The bidder must provide a sample or unopened package of the product showing that it contains the logo of one or more of the certification agencies listed below on the product itself:
  - Biodegradable Products Institute (North America)
  - Green Seal GS-35 (USA)
  - AIB Vinçotte Inter (Belgium)
  - Din Certo (European Union)
  - Australian Bioplastics Association (Australia)
  - Japan Bioplastics Association (Japan)

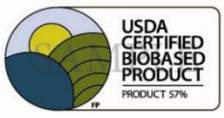
Exception:

- If a product is made of uncoated, unlined wood or paper, or clay-coated wood or paper, it need not carry one of the above certifications, but must appear on the Cedar Grove Accepted Items list. For these products, the bidder must disclose the material type of the product it is offering and confirm the absence of linings and coatings.

2. **All products (other than cutlery) offered on this contract contain at least 90% biobased carbon content. All cutlery products offered on this contract contain at least 70% biobased carbon content.** Biobased carbon content is the amount of *biobased* carbon as a percent weight of the total amount of carbon in the product. Biobased carbon content is determined by testing compostable products using the ASTM Method D6866.

   Documentation Required: The bidder must provide documentation demonstration that its biobased carbon content meets the above specifications for cutlery and non-cutlery products by including at least one of the following with its offer:

   - ASTM Standard D6866: independent laboratory analysis verifying that the product meets the minimum biobased carbon content required.
   - USDA's BioPreferred Program – Biobased Label certification: (see its Biobased Label Program at *www.biopreferred.gov/LabelPurpose.aspx*) product's biobased content is listed on the label.



- Vinçotte's OK Biobased Program: (see ***http://www.okcompost.be***) non-cutlery products should have a 4-star label and cutlery products should have a 3- or 4-star label.

Exception: Food service ware products made of 100% UNCOATED wood, bamboo, paper or other obviously fiber-based material will automatically meet these biobased content requirements.

3. Fiber-based plates and bowls may not contain fluorine or fluorinated compounds.

   Documentation Required: The bidder must submit a formal affadavit or declaration for each plate or bowl made of fiber-based material stating that no intentionally added fluorine or fluorinated compounds were added to the product. The declaration must be written, signed, and dated on the manufacturer's letterhead by the manufacturer. If the product is lined, bidder must identify the type of grease barrier or coating used on the product.[5]

B. ADDITIONAL SUSTAINABILITY CRITERIA (DESIRABLE)

The following criteria are designed to reward bidders that go beyond specifications to further show commitment to sustainability. Up to 10 points are available in the below point system.

1. **Production of the biobased material used to make the product protects workers and the environment through sustainable farming and forestry practices.**

   a. **The product contains biobased material that was sustainably produced.** Bidders are encouraged to offer products containing biobased materials that protect the environment and/or workers when they are grown and harvested. Bidders will get **1 point** if they can document that at least 20% of products listed are certified by one or more of the following organizations because all of the biobased material the product contains was sustainably produced:

   - Forest Stewardship Council (FSC)
   - Rainforest Alliance
   - USDA Organic
   - Protected Harvest

   Documentation Required: To receive this point, the Bidder must provide documentation certifying that the biobased material used to make the product was sustainably grown and harvested. Documentation may include logos on products or packaging, products listed on a certifying organization's website or letterhead, or documentation provided by a third party verifying organization.

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[5] In a study conducted by the Oregon Center for Environmental Health, molded fiber products were found to use fluorinated compounds, such as PFOS and PFOA, as a grease barrier.

b. The product contains biobased material that was grown without genetically modified organisms (GMOs). Bidders are strongly encouraged to offer food service ware products that contain plant-based material for which no GMOs were intentionally added in the field.

Documentation Required: Bidders will receive **1 point** if they provide documentation showing that the plants used to make the biobased content of at least 20% of products listed were derived from seeds or plant stock that was not intentionally genetically modified. Acceptable documentation includes any of the following:

- Submit a sample of the product packaging that displays an ecolabel from an organization certifying that the product is GMO-free. Acceptable certification organizations include Non-GMO Project Verified (***www.nongmoproject.org***), CERT ID Non-GMO (www.cert-id.com/Non-GMO-Certification.aspx) or ProTerra (***www.genetic-id.com/services/certification***).
- Submit a letter, or a current website printout, from a certification organization indicating that the product is certified as GMO-free. Acceptable certification organizations include Non-GMO Project Verified (***www.nongmoproject.org***), CERT ID Non-GMO (www.cert-id.com/Non-GMO-Certification.aspx) or ProTerra (***www.genetic-id.com/services/certification***).
- Submit test data from an ISO 17025-accredited laboratory verifying that the product offered does not contain GMOs.[6]
- Submit test data from GeneScan, Inc. (***www.gmotesting.com***) verifying that the product offered does not contain GMOs.

2. The product was made using a sustainable manufacturing process.

a. Chemicals of high concern were avoided.

Bidders are strongly encouraged to offer products that are devoid of chemicals of high concern due to their toxicity, persistence in the environment, and ability to accumulate in living things. Bidders will receive **1 point** if they can document that all products they are offering meet any of the following criteria:

- The product is devoid of intentionally added Proposition 65 chemicals (***http://oehha.ca.gov/prop65/prop65_list/Newlist.html***).

  Documentation Required: The bidder must submit a formal declaration stating that no intentionally added Proposition 65 chemicals were added to the product it is offering. The declaration must be written, signed, and dated on the manufacturer's letterhead by the manufacturer.

[6] A list of approved ISO 17025-accredited labs can be found at www.nongmoproject.org/industry/about-gmo-testing/accredited-labs-and-resources/.

- The sum of the concentration levels of lead, cadmium, mercury, arsenic, and hexavalent chromium present do not exceed 100 ppm by weight.

Documentation Required: The bidder must submit XRF test results of the product showing the concentration levels of the different elements in the product or Green Seal certification.

- The product has less than 100 ppm by weight of intentionally added halogens or organohalogens, which are carbon-based compounds that contain chlorine, bromine, or iodine.

Documentation Required: The bidder must submit XRF test results of the product showing the concentration levels of the different elements in the product.

- Chlorine or chlorine compounds were not used in producing or bleaching the product.

Documentation Required: The bidder must submit Chlorine-Free Products Association or Green Seal certification.

- The product is devoid of bis-phenol A and harmful phthalates.

Documentation Required: The bidder must supply laboratory analysis showing that that the product is BPA-free and has less than 0.1% by weight of the following phthalates: Diisononyl phthalate (DINP), Di-2-ethylhexyl phthalate (DEHP, sometimes called DOP), di-n-octyl phthalate (DnOP), Di-isodecyl phthalate (DIDP), butylbenzyl phthalate (BBP), and dibutyl phthalate (DBP).

b. Recycled content was used to make wood- and paper-based food service product. Bidders are encouraged to offer products that contain recycled-content. Bidders will receive:

1 point if all wood- and paper-based products offered are made with 100% pre- or post-consumer recycled content. *Documentation Required:* To receive these points, the bidder must submit documentation from an independent laboratory or a third-party organization verifying the amount and type of recycled content in the product. The following certifications are acceptable:

- FSC Recycled or FSC Mixed through the Forest Stewardship Council (***http://www.fsc.org/accreditation.html***)
- SCS Recycled Content through Scientific Certification Systems (***http://www.scscertified.com/gbc/material_content.php***)
- UL Environment Verification Mark (***http://www.ulenvironment.com/ulenvironment/eng/documents/sellsheets/EnvironmentalClaimsValidation.pdf***)

Environmental Claims Validated Mark

- GS-35: Green Seal Environmental Standard for Food Service Packaging, (*http://www.greenseal.org/Portals/0/Documents/Standards/GS-35/GS-35_Foodservice_Packaging_Standard.pdf*)

c. **Workers and the environment were protected during manufacturing of the finished products.** Bidders are encouraged to offer products manufactured in a factory that meets one or more of the following standards:
   - ISO14001 Environmental Management System through the International Organization for Standardization (ISO) (*http://www.iso.org*)
   - Social Accountability 8000 (SA8000) Standard through Social Accountability International (SAI) (*http://sai-intl.org*)
   - Occupational Health and Safety Assessment Series 18001, Health and Safety Management Specification (*www.ohsas-18001-occupational-health-and-safety.com*)
   - International Labour Organization (ILO) Standards (*www.ilo.org*)
   - International Certification Services 13 Standards (Environment, Health Protection, Safety) through the International Organization for Standardization (*www.iso.org*)

   Documentation Required: The bidder will receive **1 point if, for at least 20% of products listed,** bidders submit documentation demonstrating that the factory where the product was manufactured meets one of the above standards.

3. **The product is clearly labeled "compostable".**
   The Bidder must offer products that are clearly labeled as "compostable" to facilitate users to properly sort these products with food residuals and help the composting facility properly identify these products as acceptable in their process. The word, "compostable," should be clearly visible against the background of the product.

   Documentation Required: Bidders must send a sample of each product and will receive **1 point** if the purchasing agent finds the word, "compostable," to be clearly visible on all products.

4. **Transportation impacts were avoided.** Bidders are encouraged to reduce transportation impacts by offering products for which both the finished products and the biobased feedstock used to make the product were produced in North America.

   Documentation Required: The bidder will receive 1 point for documentation that shows that, for at least 20% of products listed, the finished product was made in North America, the resin producer/converter is located in North America, OR the feedstock is sourced from North America.

To receive this point, the Bidder must identify where the feedstock, resin, and product was produced by providing a letter from the resin or product manufacturer that is written, signed, and dated on the manufacturer's letterhead by the manufacturer.

5. **Packaging impacts were avoided.**

The Bidder is encouraged to offer biobased food service ware products in environmentally sound packaging.[7] The Bidder will receive **1 point** if they demonstrate that the primary packing material used by products on the contract is "commercially compostable" OR made of at least 25% post-consumer recycled content.

a. **Any primary packaging is compostable in a commercial composting facility.**

Documentation required: The Bidder must provide a sample of the packaging showing that it contains the logo of one or more of the certification agencies listed below on the packaging itself. The sample may be the packaging that delivers the product samples.

- Biodegradable Products Institute (North America)
- Green Seal GS-35 (USA)
- AIB Vinçotte Inter (Belgium)
- Din Certo (European Union)
- Australian Bioplastics Association (Australia)
- Japan Bioplastics Association (Japan)

b. **Packaging materials contain post-consumer recycled content.** Bidders are encouraged to offer biobased food service ware products packaged in material that contains *post-consumer recycled content*. Bidder must submit a sample of the product's primary packaging with a statement of its minimum amount of PCR content.

[7] Primary packaging is the packaging that immediately surrounds the product.

Appendix D:
Vendor Sustainability Questionnaire

For firms providing Goods and Services
Please check and complete relevant items in this survey questionnaire
Return with Bid/Proposal

VENDOR NAME _____ Date _____

Website

_____

Address

_____

_____

Contact Name _____ Title _____

Contact Phone _____ Email _____

Supply Category _____

Please check off applicable items and provide supporting documentation, as appropriate.

Internal Operations and Policies

❑ 1. Has your company implemented any of the following environmental policy initiatives for your facilities? (Please attach relevant policies or links)

- ❑ Environmental or Sustainability Policy
- ❑ Climate Action Plan
- ❑ Zero Waste Policy or Plan
- ❑ Toxics Reduction Strategy or Policy

- ❑ Water Reduction Strategy or Policy
- ❑ Green Transportation Plan for employees
- ❑ Sustainable Purchasing Policy - Please describe representative products bought for your facilities and list sustainability attributes - e.g., recycled materials, recyclable, reusable, non-toxic, biodegradable, EPEAT.

_____
_____
_____
_____
_____

❑ 2. Does your company meet an environmental management standard (e.g., ISO 14001, EMAS)? (Please describe and document)

_____

❑ 3. Does your company have a recycling and/or composting collection program? (Please describe)

_____
_____
_____

❑ 4. Has your company received any environmental and/or sustainability awards in the past five years? (Please describe)

_____

❑ 5. Is your company certified as a Green Business? (Please list certifying agency and provide documentation)

_____

❑ 6. Does it hold other environmental certifications? (Please list and document)

_____
_____

❑ 7. Does your company require sustainability principles in managing its supply chain? (Please describe)

_____
_____

_____

_____

❑ 8. Has your company ever been cited for non-compliance of an environmental or safety issue (please describe date, reason, outcome)

_____

_____

_____

Facilities

❑ 1. Have any buildings that you own or lease been LEED certified by the U.S. Green Building Council?

Describe:_____

_____

_____

❑ 2. Does your company create or purchase renewable energy in its operations?

❑On-site ❑Off-site ❑ Holds Green-E certification

_____ Percentage of overall energy derived from renewable sources

Purchases renewable energy credits (RECs)
(Please provide documentation)

Packaging

❑ 1. Does your company provide reusable shipping containers?

❑Always ❑On request

❑ 2. Do the shipping boxes used for order deliveries meet or exceed the U.S. EPA minimum of 25% postconsumer recycled content?

❑ 3. Does your company employ shipping-container take-back services or carton return? (Please describe)

_____

_____

_____

❑ 4. Are the shipping containers and/or packaging used compostable? Is it certified commercially compostable? (Please describe)

_____

_____

_____

Shipping

❑ 1. Is your company an EPA SmartWay Partner or are products shipped via any EPA SmartWay Partners? _____

❑ 2. Are any of your company's passenger vehicles and light-duty trucks EPA SmartWay certified? _____
Percentage _____

❑ 3. Do your fleet vehicles utilize alternative fuels (e.g., Ethanol, E85, Biodiesel, Natural Gas)

_____

_____

_____

❑ 4. Does your company minimize shipping energy and environmental impacts in other ways? (Please describe)

_____

_____

_____

Reporting

❑ 1. Does your company produce a public sustainability or environmental report about its policies and operations? Please provide a copy or link and indicate compliance with any international standards (e.g., Global Reporting Initiative, Carbon Disclosure Project, ISO 14000)

_____

_____

_____

❑ 2. Does your company label environmental products listed in its catalog, website or brochures? If the products are generically labeled as "green," what criteria are used to determine which products qualify?

_____

_____

_____

❑ 3. Can you produce purchase reports for customers that identify and sort by the products' individual sustainability attributes (e.g., recycled, EPEAT, not just "green" designation)?

_____

_____

_____

❑ Other environmental achievements: Please specify

_____

_____

_____

Please complete the Product Details Table on the next page.

Product Information and Supply Chain

- List each product individually (duplicate sheet as needed)
- Respond to applicable questions

PRODUCT DETAILS						
		Product 1	Product 2	Product 3	Product 4	Product 5
Product Description						
SKU #						
Factory of Origin, Location						
Certifications						
Life Cycle Assessment? (LCA, LCIA) (Y/N, attach)						
Product Waste Reduction (Y/N, describe)						
Product Recycled Content	% Post-consumer (0-100)					
	% Total Recycled (0-100)					
Toxic Chemicals in product (Y/N, describe)						
Sustainability Attributes Labeled (Y/N)						
PACKAGING	Reusable (Y/N)					
	Take-back (Y/N)					
	% Total Recycled content (0-100)					
	% Postconsumer content (0-100)					
	Compostable (Y/N)					
	Certified Commercially Compostable (Y/N)					

This questionnaire can also provide the basis for awarding non-cost Best Value points. Following are suggested point ranges.

Suggested Best Value Weighting and Point Ranges for Vendor Questionnaire			
Potential Weighting Percentage	**Questionnaire Category**	**Relevant Questions**	**Points for Documented Yes Answers**
5	Internal Operations and Policies	Policies listed in Question 1	0 for no Yes answers +1 for 1 Yes answer +2 for 2 or more Yes answers
10		Questions 2-7	+2 for 3 or more Yes answers + 1 for 2 Yes answers 0 for 1 Yes answer -1 for zero yes answers
10		Question 8 - Unresolved environmental or safety issue	-1 for 1 issue -2 for more than 1 issue
20	Facilities	Questions 1-2	+1 for each Yes answer
15	Packaging	Questions 1-6	+2 for 3-6 Yes answers +1 for 2 Yes answers 0 for 1 Yes answer -1 for zero Yes answers
15	Shipping	Questions 1-3	+2 for 1 or more Yes answers
5		Question 4	+1 for substantive documented answer
20	Reporting		+2 for 2-3 Yes answers +1 for 1 Yes answer -2 for no purchase reports sorted by attribute