

Food and Catering Services

What are the key green issues?

» Resource Use and Greenhouse Gas Emissions:

Food service operations are among the most energy and water intensive of all the commercial sectors.

- **Food:** The industrial agriculture system contributes between 17 percent and 32 percent of all human induced greenhouse gas emissions. The livestock sector generates 14.5 percent of the world's GHG emissions. A quarter of the world's agricultural land is required for the production of animal feed.
- **Food Service Ware:** A large portion of conventional single serve food ware materials are made from expanded polystyrene (EPS) foam, which is derived from petroleum, a limited (and often imported) natural resource.

» Pollutants and Toxins:

- **Food:** One-crop monoculture reduces soil productivity and requires massive irrigation and application of fertilizers. Excessive uses of pesticides in industrial farming have polluted waterways and affected wildlife and have resulted in many negative human health effects.
- **Disposable Food Service Ware:** 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.

» Waste:

- **Food Waste:** About 40 percent of all the food produced in Canada goes to waste, amounting to about \$27 billion a year—more than the value of all the food purchased by Canadians in restaurants in 2009.
- **Food Service Ware Waste:** Because food service ware is usually heavily contaminated with food residue after it is used, it is difficult to recycle.

Food and catering services are food related services provided outside the home, e.g. for meetings, events or functions in office environments or meals provided in schools, universities or hospitals. Catering services can range from lunch drop-off to full food service catering, including reusable and un-reusable service ware.



How do sustainable food and green food ware advance Government's strategic priorities?

✓ Reducing Energy, Resource Use and Toxins

Food: Purchasing food produced through sustainable farming methods which protects the soil and keeps the land fertile for an extended period of time, ensures adequate diversity and resistance to pests and diseases, and reduces water use through the capturing and conservation of rainwater. Procurement of sustainable food contributes to achievement of existing building certifications such as LEED Canada for Existing Buildings: Operations and Maintenance (EBOM). [LEED EBOM](#) includes requirements for the sustainable purchasing food and beverages by catering services hired or controlled by building management.

✓ Reducing Unnecessary Waste

Food service ware: The best way to reduce waste is to avoid generating it in the first place. Thus, buying and using durable service ware is the best way to achieve this. If that is not possible, replacing conventional disposable service ware with compostable service ware will reduce landfill waste and chemicals leaching into the environment.

Improving Health: Recent studies show increased mineral content in organic foods significantly increased levels of Vitamin C, iron, magnesium and phosphorous.

Myth Buster

While there may not be huge differences in the nutrients found in organic compared to conventional vegetables, according to a report by the American Academy of Pediatrics (AAP) there are major health advantages to eating food produced with fewer pesticides, especially for young children who are especially vulnerable to chemical exposures.

Recommended	Why is it important?	How do I know I am getting it?
FOOD AND BEVERAGES		
<p>✓ Seek food and beverages provided in catering services that are Canada Organic or US Certified Organic</p>	<p>An organic agriculture system only uses methods to produce food and beverages that preserve the environment and avoid most synthetic materials, such as pesticides and antibiotics, thus improving soil and water quality and reducing GHG emissions.</p>	<p>Food products (crops, livestock, processed products, wild products) must be certified by:</p> <p>The Canada Organic Regime, which gives assurance on the production of high quality food using sustainable management practices, which avoid damage to the environment, and ensure the ethical treatment of livestock.</p> <p>The USDA Organic Seal, which gives assurance that food was grown and produced while:</p> <ul style="list-style-type: none"> • Preserving natural resources and biodiversity • Supporting animal health and welfare • Only using approved materials • Not using genetically modified ingredients
<p>✓ Seek fish/seafood that is certified by the Marine Stewardship Council Blue Ecolabels</p>	<p>MSC certified fisheries show improvements that deliver benefits to the marine environment, including increased stocks; improved management of stocks; reduced by-catch; expansion of environmentally protected areas; and increased knowledge about ecosystem impacts amongst fishers.</p>	<p>The Marine Stewardship Council gives assurance that fish and seafood products come from a fishery that meets the MSC Environmental Standard for Sustainable Fishing, and reduces the environmental impacts of fishing, including ensuring sustainable fish stocks and limiting bycatch.</p>
<p>✓ Seek out food that is procured locally (local degrees: 300 miles radius, Newfoundland and Labrador, Maritime region)</p>	<p>On average, conventionally produced food is estimated to travel 1,500 miles. Buying local food can have environmental benefits, such as reduced greenhouse gas emissions from transportation. The definition of “local” varies among institutions, but generally means food sourced within a province, region, or radius of up to 300 miles.</p>	<p>Direct farm-to-institution programs and purchasing from farmer cooperatives allow for direct communication between farmers and food buyers.</p> <p>Facilities that contract out their food service operations can use their contracts to build in requirements for local and sustainable food, and initiate dialogue with contractors regarding ways they might be able to partner in identifying their more sustainable goods and services.</p> <p>Some food service distributors work with multiple local farmers in order to supply diverse local foods.</p>

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FOOD SERVICE WARE		
<p>✓ Choose reusable food service ware where appropriate</p>	<p>Durables, such as metal forks, plates, cups and glassware can reduce long term cost and landfill waste but must be washed and stored.</p>	<p>Depends on whether the location allows for reusable food service ware, e.g. because of sufficient storage space and dishwashing capacity.</p>
<p>✓ Where reusable food service ware is not practical, choose compostable food service ware certified by ECOLOGO, or the Biodegradable Products Institute (BPI). Products made of 100 percent 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</p>	<p>Food ware that can be commercially composted can significantly reduce waste. Many of the certifications for compostable food service ware apply only to products that contain biobased plastics. For compostable food service ware that is made of paper or wood, or other fibre without the use of any biobased plastic, see below.</p>	<div data-bbox="1150 483 1276 618" data-label="Image"> </div> <p>ECOLOGO™ gives assurance on 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. Check with the supplier whether the food ware product is “commercially compostable” and verify that ECOLOGO products are accepted as commercially compostable by your facility,</p> <div data-bbox="1129 727 1304 800" data-label="Image"> </div> <p>The Compostable logo by the Biodegradable Products Institute (BPI) gives assurance that food service products biodegrade quickly, completely and safely, when composted in well-run municipal and commercial facilities without any plastic residues.</p>
<p>✓ Food service ware made of uncoated wood or paper (paper plates, wood sticks) are certified totally chlorine Free by the chlorine Free Products Association and have at least 10 percent post consumer or 25 percent post-industrial recycled content</p>	<p>Chlorine bleaching creates a by-product called dioxin, which has extremely harmful effects on the environment and has been linked to ill health. Dioxin is a known carcinogen and will leave detectable residuals in any product that has been bleached with any type of chlorine bleach.</p>	<div data-bbox="1123 906 1304 1068" data-label="Image"> </div> <p>The totally Chlorine Free label by The Chlorine Free Products Association label gives assurance that products were bleached using a totally chlorine free process, one which uses an oxygen process, normally hydrogen peroxide.</p>

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FOOD SERVICE WARE		
<p><input checked="" type="checkbox"/> Biobased content</p>	<p>By requiring a minimum percentage of biobased (plant based) content (Biobased carbon content is typically measured as a percentage of total carbon content), purchasers can avoid inadvertently purchasing compostable food service ware made largely of petroleum-based material.</p>	<div data-bbox="1108 354 1285 440" data-label="Image"> </div> <p>The USDA Biobased Certified label by the USDA assures that:</p> <ul style="list-style-type: none"> • Disposable tableware (e.g., plates, bowls, cups, etc.) has 72 percent minimum biobased content • Disposable containers (e.g., disposable clamshells, boxes and soup containers) have 72 percent minimum biobased content • Disposable cutlery (e.g., spoons, forks, knives, “sporks”, etc.) have 48 percent minimum biobased content
<p><input checked="" type="checkbox"/> Product may not contain perfluorinated grease barrier compounds</p>	<p>They are likely to be carcinogenic.</p>	<p>Bidders shall provide affidavits from manufacturer, guaranteeing that perfluorinated compounds were not used or added as the product was made.</p>

What else could I look for?

In addition to the minimum recommended criteria outlined above, there are stronger green attributes you can look for when making your purchasing decision.

Recommended	Why is it important?	How do I know I am getting it?
<p>Increase energy efficiency in food service operations by:</p> <ul style="list-style-type: none"> • Avoiding purchasing frozen food to reduce energy used for refrigeration • Conducting regular maintenance procedures for all kitchen appliances, HVAC systems and lighting fixtures • Purchasing ENERGY STAR rated appliances and lighting 	<p>Food service operations are the most intensive energy users in the commercial sector in terms of British thermal units (BTUs) per square foot, mostly due to inefficient appliances and wasteful habits.</p>	 <p>Verify with your food service providers that frozen food is kept to a minimum. The ENERGY STAR ecolabel is the most common third-party standard for energy efficient appliances in Canada. The ENERGY STAR Most Efficient designation identifies and advances products in the marketplace in a number of categories and recognizes the most efficient products among those that qualify for the ENERGY STAR symbol.</p>
<p>Reduce the amount of meat served</p>	<p>Meat consumption is a major contributor to GHG emissions and environmental degradation. Cows, for example, emit between 2.5 and 4.7 ounces of methane for each pound of beef they produce. As methane has roughly 23 times the global-warming potential of CO₂, those emissions are the equivalent of releasing between 3.6 and 6.8 pounds of CO₂ into the atmosphere for each pound of beef produced. Serving less meat can significantly reduce environmental impacts. Serving only vegetarian options once per week can spare about 170 kg CO₂ emissions per person per year.</p>	<p>Verify with your food service providers that a range of vegetarian options are offered besides meat. Encourage the introduction of a meat free day, e.g. on Fridays.</p>
<p>Compost (on/or offsite)</p>	<p>Food and other organic materials can be diverted from the waste stream by establishing a composting program that provides organic materials for farms or landscaping operations.</p>	<p>Verify with your food service provider that they have an organics collection system in place and organic materials collected are delivered to a composting facility and used to create compost in accordance with all requirements set out by provincial legislation.</p>

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Expand compostable items beyond food service ware	Consider adding compostable napkins, gloves, wraps, hairnets, and other related products to contract to reduce waste and resource use. Strive to make as many items in the food service areas compostable.	Verify with your compostable food service ware provider if they can deliver additional related products. For contracted food service operators, specify in the contract that they use compostable napkins, wraps, gloves etc.
Offer trayless dining	According to a study of 25 food service institutions conducted by Aramark, eliminating serving trays reduces per person waste by 25-30 percent per tray per meal.	Verify with your supplier trayless dining options.
Product packaging will contain post-consumer recycled content	Will reduce waste and use of virgin materials.	Verify with your supplier that product packaging contains post-consumer recycled content.

Resources

- Responsible Purchasing Network, Responsible Purchasing Guide Food Services
- Responsible Purchasing Network, [Green Purchasing Opportunities: Compostable Food Service Ware](#)
- Edmonton Journal, [Canadians Trash \\$27 Billion Worth of Food a Year](#)
- Tackling climate change through livestock – a global assessment of emissions and mitigation opportunities, Food and Agriculture Organization of the United Nations
- Scientific American, [How Meat Contributes to Global Warming](#)