

Integrating Green into Procurement Roles and Processes

What you'll find in Section 2

This section is all about putting green procurement into practice. It starts off by describing how everyone needs to work together to make buying green successful. Then it describes the basic steps to help you incorporate green considerations into your purchasing decisions.

Getting Everyone Involved in the City of Edmonton

The City of Edmonton has recently created a new Sustainable Purchasing Strategy that specifically calls on stakeholders across the corporation to get involved in making their policy successful. This call to action asks that General Managers, Branch Managers, end-users, spec writers, Office of Environment staff, Materials Management staff, administrative staff, and even corporate communications staff come together as a team to scale up the impact and opportunities associated with sustainable purchasing.

Source: City of Edmonton

2.1 Who Needs to be Involved for Green Procurement to be Successful?

Everyone has a role to play in making sustainable purchasing successful; it's not just one group or person.

Like the old saying that it takes a village to raise a child, buying green takes a team to deliver reduced environmental impacts and reduced costs. Successful green procurement involves:

Executives: who have the responsibility to build a culture that values total cost over cheapest price and who are involved in setting budgets and making approvals.

End-users: who have information and insight into the need for a product or service, the potential options, the quantities and the performance of previous products or suppliers.

Specification Writers: who will help define the technical requirements for a product or service and set criteria that will be used to evaluate bids.

Administrative Staff: who place orders and make low dollar value purchases and have the opportunity to make day-to-day choices that are greener and showcase new products or services.

Directors and Senior Managers: who sign-off on specifications, set budgets and need to ensure that green risks and opportunities are considered within tenders and RFPs.

Purchasing Staff: who can help assess opportunities in the marketplace for green products and services and help end-users and specification writers identify possible green criteria or total cost measures that can result in better purchasing decisions.

Environmental and Sustainability Staff: who can help with research of best practices, identifying green impacts, informing specifications and participating in reviewing bids to help validate green claims or recommendations.

Vendors: who can provide current information on the state of the marketplace and which green products or services are readily available at a reasonable cost.

Project Consultants: who need to be informed of the impacts of their decisions on operating costs while they are considering options in the design phase of capital projects.

2.2 A Basic Framework for Buying Green

Let's start off by identifying four basic steps in the procurement process and identifying how green can fit into each of them.

- » **Defining the need for a Product, Service or Purchase:** whereby one determines exactly what needs to be purchased, what the options are and in what quantity the product or service should be purchased.
- » **Identifying the Potential Green Impacts and Setting Specifications:** whereby one considers what the likely green impacts are for a given product or service and then determines which of these are priorities and translates them into specifications, evaluation criteria or information to inform low dollar value purchasing.
- » **Selecting Between Product Choices or Vendors:** whereby one reviews bids, proposals or product options and makes a best value selection based on total cost, tenders or low dollar value purchases, or multiple criteria in the case of RFPs.
- » **Communicating Results and Successes:** whereby one communicates the results of a purchase to interested stakeholders and describes some of the key outputs or successes that may have come from making a more environmentally preferable selection.

Now let's look at each of these steps in a bit more detail.

2.3 Defining the Need for a Product or a Purchase

Often, the greenest purchase is the one you don't make at all! Think about the need for a product or service before creating an order or requisition—and if you think it's absolutely necessary, then ensure you 'right-size' the order to reduce waste and the consumption of unnecessary resources. Here's some more guidance on this step.

Questions and Tips for Assessing the Need for a Product or a Purchase

It is important (and useful!) to assess the actual need for a new purchase or an upcoming contract renewal because going out and buying something new might not always be the best choice. So, before making a purchase, consider the following six questions:

1. **Do you really need this product or service, or can you fulfil the desired need without purchasing a new product or service?**

For example: Switching from bottled water to drinking water fountains or tap water could significantly reduce the consumption of natural resources (oil, energy, etc.) and arguably reduce the number of recycling containers and the energy used in reprocessing plastic bottles.

2. **Can you purchase a service or labour rather than a product?**

For example: Rather than purchasing a snow-blower, which requires large inputs of metals, plastics and fossil fuels, you might want to hire a snow removal service where shared equipment is used. This can also support local employment.

3. **Can you rent, lease, borrow or share the product rather than buying it? If this is not reasonable, could you buy it second-hand?**

For example: Rather than buying and installing new wall-to-wall carpet in your office, consider carpet tile leasing where the customer pays an annual fee for flooring services while the contractor retains ownership of the carpet tiles and replaces and recycles worn or damaged carpet tiles.

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An Example of Green Procurement in Action: Memorial's Office Furniture Redistribution Initiative

The [Memorial University Furniture Finder](#) is a new online system for the responsible redistribution of used office furniture on the St. John's campus. The goal of this initiative is to provide the university community with the opportunity to obtain quality used furniture thereby reducing the need to purchase new items. This project will also decrease the amount of used furniture being declared surplus and leaving the university.

Source: [Memorial University Furniture Finder](#)

Did you know? The Government Purchasing Agency has a Surplus Asset and Auctioneering Service

For over 20 years the Government Purchasing Agency has provided warehousing facilities and auctioneering for the disposal and repositioning of government assets. GPA assists departments with the removal of surplus material by transferring an item to another department where a need has been identified. Assets that no longer have a life within government are either sold to the public through a tender process or auctioned to the highest bidder. The combination of these services assists in decreasing the need for destroying or disposing of materials that are no longer suited for the original need or purpose.

Source: Newfoundland and Labrador Government Purchasing Agency (GPA)

4. Can you upgrade or refurbish an existing asset rather than buy a new product?

For example: Rather than buying a new PC when only one part is broken or the storage capacity is no longer sufficient, benefit from the modular structure of IT and replace the damaged part or add a storage device where possible.

Tips for Forecasting the Demand and 'Rightsizing' Orders

When you are planning to make a purchase, take the time to carefully estimate the right size of your order by checking what is in stock and consider upcoming events or programs that will require specific materials and supplies. This is especially important when ordering printed materials. Larger orders are usually discounted – the more you order, the steeper the discount – which often results in increased waste. Reviewing the need for a product can save money and avoid unnecessary environmental impacts.

5. If it is essential, can you reduce the amount of the order to ensure you don't over-consume and order more than you need?

For example: Food waste from catered meetings is all too common. When ordering for a meeting, make sure that you match the amount of food ordered with the demand from each meeting participant. Set up a review and learning process to be able to modify the amount of food you order the next time.

6. Can you 'rightsize' the purchase to ensure your product is sufficient for its intended use, without being too large, powerful or wasteful?

For example: Let's assume a department needs to purchase ten new vehicles this year that are exclusively used for passenger transportation within a city environment. Help reverse the trend to ever larger vehicles, by purchasing vehicles with the passenger space and horsepower suitable for the job.

Halifax Regional Municipality — 'Rightsizing' a Vehicle Fleet

To support their green fleet sustainable purchasing initiative, Halifax has developed a Vehicle Right-Sizing Filter and Life Cycle Evaluation Methodology that are formally applied to annual budgeting and business planning processes. Implementation of these tools required the development of standardized collaborative processes between Fleet Services, Clients and Financial Services, and thus enabled continued improvement in green procurement initiatives that help achieve targets for greenhouse gas emissions reduction.

Source: Clean Air Partnership, Green Procurement Scan October 2011.

Did you know? Green Contributes to Improving Worker Productivity

A case study by the Rocky Mountain Institute demonstrated how high indoor environmental quality through improved in-house lighting, cooling and heating systems increased worker productivity by 16 percent providing a rapid payback on the increased capital investment. Likewise, a study by office furniture manufacturer Herman-Miller showcased a 7 percent increase in worker productivity after moving to a green, day lit facility. A study by Kats (2003) examined a sample of 33 green building projects. It found that the increased worker productivity and decreased sick time in these buildings created a benefit of \$37 to \$55 U.S. dollars per square foot.

Source: Green-Buildings.com

2.4 Identifying the Significant Green Impacts of a Product or Service

Once you have reviewed and confirmed the need for a purchase, it's time to identify the potential green impacts of a particular product or service.

All products and services have environmental impacts, some more than others. It's really important to remember that there is rarely a 'single right' green procurement choice.

There are almost always trade-offs that occur when deciding which environmental issues are most significant, such as recycled content, energy efficiency, water consumption or air pollution. For example, the choice between concrete versus wood for the framing and walls of buildings isn't necessarily clear cut. Concrete can be much more durable than wood and may have other potential benefits, such as fire safety, but the high amount of energy used to produce concrete can potentially offset such benefits. These considerations need to be looked at on a case by case basis. You'll benefit from research and input from end-users, specification writers, approvers or your internal green experts as you work towards the best decision for your organization.

The starting point is to focus on the green impacts and issues that have already been deemed important by government or your particular department and organization. For example, the Government of Newfoundland and Labrador has already set priorities around climate change adaptation, energy efficiency, reduced GHG emissions to tackle climate change and reducing waste going to landfills, as directed in government strategies, such as the Climate Change Action Plan 2011, the Energy Efficiency Action Plan 2011 and the Provincial Waste Management Strategy. This sets a natural starting point for considering which green issues should be given most importance if it comes to trade-offs.

Let's look at the main purchasing processes and how you can go about identifying impacts and setting requirements in each of the following cases:

- i. **Low dollar value purchases:** such as smaller scale purchases or routine orders, such as office supplies, catering or small equipment.
- ii. **Tenders:** where detailed specifications are used when requesting suppliers to provide competitive bids on products or services and where evaluation focuses on lowest costs (ideally lowest total cost).
- iii. **Request for Proposals (RFPs):** which can be used for strategic and larger scale purchases where it is helpful to evaluate options or vendors on multiple criteria and seek a 'best overall value' solution.

Did you know? Lowest Total Costs for Tenders

Applying a lowest total cost approach to evaluating tenders is permitted under the current legislation in Newfoundland and Labrador.

Source: Government Purchasing Agency



I. Identifying Environmental Impacts for Low Dollar Value Purchases

To keep things simple for identifying the environmental impacts of low dollar value purchases, start by focusing on the following key green issues (listed in general order of importance) that may be relevant to your purchase:

- » **Packaging:** means the amount of packaging that is used to transport and contain products and the type of packaging, e.g. cardboard, plastic, pallets, shrink wrap, Styrofoam, some of which can be difficult or costly to recycle.
- » **End of Life Disposal:** means what happens with a product when its useful life has finished and whether it will end up in a landfill or if it can be recycled or refurbished.
- » **Energy Efficiency:** means using less energy to provide the same service.
- » **Recycled Content:** means that a product is made from materials that have already been used and collected in a recycling program, thereby saving natural resources.
- » **Non-toxic Ingredients:** means products that are made without poisonous or harmful chemicals or ingredients.
- » **Greenhouse Gas Emissions (GHGs):** means the amount of heat-trapping gases that accumulate in the Earth's atmosphere. GHG emissions are causing climate change; the most significant GHGs are carbon dioxide (CO₂), methane, and nitrogen oxides.
- » **Sustainably Harvested Resources:** means raw materials that are harvested or extracted in a way that doesn't deplete or endanger their ongoing and future availability.

For more information on these terms, please see Section 3 for the Reference Sheet ['Defining Green Procurement Terms'](#).

To prioritize which of these key green issues is more significant than the others, keep your analysis simple and don't complicate things. A proven approach is to start by focusing on the environmental priorities of your department or organization. For instance, the Multi-Materials Stewardship Board (MMSB) may be more interested in packaging and recycling than in energy efficiency, while Nalcor Energy may be more concerned with energy efficiency and conservation.

Did you know?

There are now over 447 different ecolabels being used to certify the environmental attributes of products and services in 197 countries across 25 industry sectors. Learn more by visiting www.ecolabelindex.com

Source: www.Ecolabelindex.com

The City of Edmonton Engages End-Users to Reduce Transport Packaging

When the City of Edmonton wanted to use green purchasing to reduce waste and the costs related to waste disposal, they talked to the end-users in warehousing operations to identify where it would be possible to replace cardboard packaging with reusable tote containers. End-users identified that cardboard boxes cluttered loading docks, were bulky and difficult to handle, and cost money to recycle. The Materials Management Branch worked with the concerns of end-users to develop a specification for their supplier of safety equipment and replacement parts to move to plastic reusable containers which saved natural resources and took up less space in the loading bays, as they are removed for reuse immediately after the delivery has been made rather than being left for disposal by the City.

Source: Municipal Collaboration for Sustainable Purchasing (MCSP)

II. Identifying Environmental Impacts for a Good or Service that will be Purchased through Tenders and RFPs

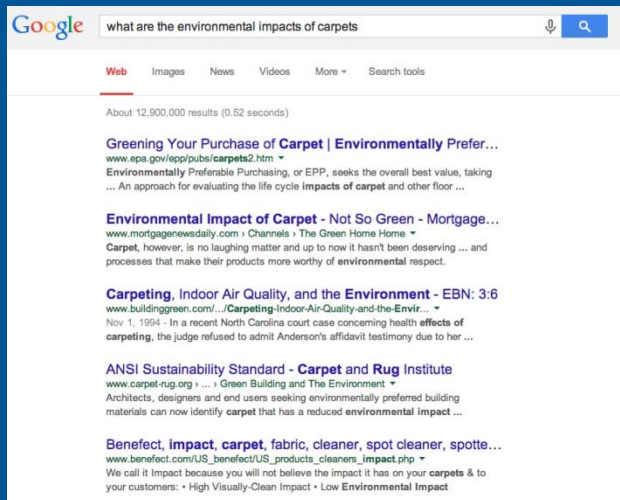
Identifying the environmental impacts of purchases conducted through tenders and RFPs is similar to that for low dollar value purchases. Start by considering that green impacts are possible—and then shortlist those, which are likely to be from both a positive (e.g. improving energy efficiency) and negative (e.g. using toxins) perspective. The following is a basic process that can be used to identify the potential and/or significant green impacts for a given procurement.

- 1. Engage with the End User:** When developing requirements for tenders and RFPs, involve the end user, who often influences or holds the budget, from the beginning of the process. Help them find solutions to THEIR challenges through using greener products and services. Ask them about targets for reduced costs or whether they spend lots of time dealing with excess packaging. Help them find green options, such as reduced packaging, to address their challenges. Consider how piloting these options will help develop the end user's confidence or comfort that they will work.
- 2. Conduct Basic Internet Research and Consult the Product Factsheets:** Use a search engine to look for the environmental impacts of your desired product. For example, a simple search for “environmental impacts of catering” resulted in a list of useful links to pages with good introductory information about the specific green issues of catering services, such as waste (food, disposable service ware, napkins, plastic bottles), food produced with synthetic pesticides and hormones, or transported from afar. You can also consult the product factsheets in [Appendix B](#) of this guide for detailed information on 15 commonly procured products and use the recommendations provided to support your purchasing decisions.
- 3. Consult an Internal Expert:** If your organization has an environment or sustainability group or a green team, consult these internal experts to get help thinking through the possible impacts of a product or service. Remember to also see what specifications have been successfully used before. You can also contact the Government Purchasing Agency or the Office of Climate Change and Energy Efficiency for examples of good practice from other government departments or government funded bodies.

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Did you know? Google Can Help with Green Information More than you Might Think

If you are interested in knowing about the environmental impacts of carpeting, try a simple Google Search on the following phrase: “What are the Environmental Impacts of Carpets?” and check out all the helpful information you’ll have access to within seconds. Click on this hyperlink to see the results!



4. **Ask Questions of Suppliers:** Talk to vendors or reach out to industry associations such as the Newfoundland and Labrador Environmental Industry Association or the Canadian Manufacturers and Exporters Newfoundland and Labrador, to access their knowledge of green product impacts and which green features the marketplace can deliver.
5. **Use the ‘Identifying Potential Green Impacts’ Worksheet in Section 3:** In collaboration with the stakeholders involved in your purchase, use the worksheet in [Section 3](#) to identify the three most significant green issues or impacts as identified through these steps and your research. For each impact area listed in the worksheet, identify whether your product has a high, medium or low impact. Those with a high or medium impact are the ones you likely want to set green specifications for in your tender or set criteria for your RFP.

Remember, green procurement isn’t about buying the greenest possible product on the market. Instead, it’s about ensuring that the relevant green issues are sufficiently considered as part of the overall procurement decision. Therefore, always keep your organization’s priorities in mind when trying to decide on which green issues to address.

Green Procurement in Action

Green Cleaning Pilot Project at Memorial University (MUN), St. John’s

Goal: The purpose of the pilot project was to examine whether conventional cleaning chemicals could be replaced with products that were more environmentally friendly, more effective in cleaning than conventional cleaners and thus improve the health and safety of the university community. For two years, Facilities Management at MUN tested green cleaners that were certified by Green Seal or Environmental Choice and also met stringent environmental and occupational safety standards. Tested cleaners included floor finishes, floor strippers, carpet shampoos, bathroom cleaners and microfibre cloths.

Results: The green cleaners outperformed the conventional cleaners by far; less cleaning product was used as green cleaners were more effective and had efficient dispensing systems. Air quality was improved as green cleaners contained only low volatile organic compounds. Green cleaners are now used in all university buildings as a result.

Source: Memorial University, [The Gazette](#)

Use the Green Product Factsheets in Appendix B

Remember that guidance on how to green your procurement decisions for the products listed below is contained in Appendix B to this guide:

1. [Appliances](#)
2. [IT Equipment](#)
3. [Copy Paper](#)
4. [Interior Lighting](#)
5. [Janitorial and Cleaning Supplies](#)
6. [Light Duty Fleet Vehicles](#)
7. [Office Furniture](#)
8. [Waste Hauling & Recycling Services](#)
9. [Wood for Construction](#)
10. [Flooring](#)
11. [Architectural Paint](#)
12. [Office Supplies](#)
13. [Drinking Water](#)
14. [Food and Catering Services](#)
15. [Vehicle Consumables](#)

Developing Requirements for Greener Products or Services and Getting Approvals

Developing product requirements is about scanning the marketplace and doing your homework to determine the green specifications to use for a low dollar value purchase, tender or RFP.

Once you know what the important issues are to consider, then start assembling some requirements or specifications for your purchase.

I. Identifying Environmental Requirements for Low Dollar Value Purchases

When developing specifications for low dollar value items, look for eco-certifications such as ECOLOGO, ENERGY STAR and Greenguard.

Labeling and certification programs set criteria for superior environmental performance, compared to most conventional alternatives. The Ecolabel Index tracks ecolabels and environmental certification schemes around the world. Please see Section 3 for the [‘The World of Ecolabels and Third Party Certifications—Reference Sheet’](#) to get an overview of the most common examples and which ones to look for when making a particular product purchase.

Remember when making low dollar value purchases to ask your vendor how they can show greener behaviour when they are delivering their products and services. For example, you could ask your food or catering supplier to use reusable plates, compostable cups and cutlery, and to ‘right-size’ an order to avoid waste. Or you could ask a meeting space provider whether they use recycling bins or if local food can be included on the menu.

If you see an opportunity to purchase a significantly ‘greener’ product or service and you think that there are costs or other implications, then it may be important to get approval for your recommendation from your supervisor. Similarly, if there are green options available, but you don’t believe that they are the right fit for your requirements, then you may want to advise your supervisor in advance to keep him or her in the loop.

Did you know? It’s not just the initial purchase!

Green procurement helps select more environmentally preferable products. But that’s not the end of the story. Greener behaviour such as regular maintenance can also reduce environmental impacts. For instance, did you know that regular vehicle maintenance may improve fuel efficiency by up to 1.5 percent?

Source: Natural Resources Canada (NRCAN)

Dalhousie University Tender Specifications for Grounds Vehicles (Trucks)

- Electric Vehicle or Fuel Efficient Vehicle with Combined Fuel Combustion Rating of a minimum of 6.5 L/100 km (36.2 mpg) or less
- Capable of carrying up to ½ tonne
- Open back with dumping capability
- Legal on Nova Scotia highways and HRM roads (for Dalhousie Halifax Campuses)
- 4 by 4 capability
- Used or new. New requires a 12-month warranty; used a three-month warranty and less than 80,000 km
- At least two seats
- Normal functions such as cab heat, defrost, radio, wipers, horn, daytime running lamp
- Up-to-date MV safety inspection sticker
- Local service locations maintenance experience
- Automatic transmission
- Will require a road test and optional mechanical assessment

Source: [Highlighting Best Practices—Sustainable Procurement Resources for Municipal, Academic, Schools and Health & Social Service \(MASH\) Organizations](#), Dalhousie University, 2012

II. Developing Green Specifications for a Good or Service that will be Purchased through a Tender

The time to integrate green into the tender process is while specifications are being developed and written.

End-users, specification writers and purchasing staff need time to work together to ensure that the green impacts identified in the prior step are adequately considered, and that the appropriate specifications are developed to address potential environmental risks or capitalize on green innovation opportunities. Your first step is to check and see if the product or service you are buying is already profiled in one of the Green Product Factsheets in [Appendix B](#). If so, you'll already have a head start on creating your requirements and specifications.

The key issues and impacts that you identified in the '[Selecting the Green Issues for your Tender or RFP](#)' (Section 3) can be used to inform the green requirements you will want to include in your tender document. For example, Dalhousie University has developed a set of specifications for Grounds Vehicles to procure more environmentally preferable vehicles that include a number of green specifications (see the sidebar textbox for their specifications). Similarly, when developing specifications for paint, the Newfoundland and Labrador Housing Corporation specifies only E2 or E3 paints approved by the Master

Did you know? Newfoundland and Labrador Hydro is incorporating Green into Engineering and Construction Specifications

Nalcor Energy is striving to continuously incorporate green considerations into its engineering and construction specifications, including the use of high efficiency, variable speed electric motors, LED lighting, improved energy management systems, etc. Many of these acquisitions are conducted as energy conservation projects. For example, in 2013, Newfoundland and Labrador Hydro purchased new LED lighting for the Hydro Place (Nalcor Head Office) parking lot, and building exterior, which will be installed as soon as weather permits. The crown corporation also upgraded its timers to more effectively manage the lighting system.

Source: Nalcor Energy

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Newfoundland and Labrador Housing Corporation Paint Specifications

Extract from Paint Specifications:

1. Exterior Ferrous Metal Paint:

- Shall be Amercoat, #5450 (Pearl Grey Finish Coat), or approved equal

2. Exterior Flat Latex Paint:

- Material must be listed as an approved product on the Master Painters Institute (MPI) #10 (latex, exterior, flat-MPI gloss level 1-2)
- Minimum MPI “Environmental/Performance Rating” (E-Range of E2 or E3)

3. Exterior Semi-Gloss Latex Paint:

- Material must be listed as an approved product on the Master Painters Institute (MPI) #11 (latex, exterior, semi-gloss-MPI gloss level 5)
- Minimum MPI “Environmental/Performance Rating” (E-Range of E2 or E3)

4. Interior Semi-Gloss Latex Paint:

- Material must be listed as an approved product on the Master Painters Institute (MPI) #54 (latex, interior, semi-gloss-MPI Gloss level 5)
- Minimum MPI “Environmental/Performance Rating” (E-Range of E2 or E3)

5. Interior Flat Ceiling Paint:

- Material must be listed as an approved product on the Master Painters Institute (MPI) #53 (latex, interior, flat-MPI gloss level 1)
- Minimum MPI “Environmental/Performance Rating” (E-Range of E2 or E3)

Source: Newfoundland and Labrador Housing Corporation

Painters Institute (MPI)—E3 standing for the lowest volatile organic compounds (VOCs) range, and E2 the next lowest.

To get approval for your specification, present the specification for tender to your supervisor or the person who is accountable for signing-off on a specification. Consider using your completed [‘Selecting the Green Issues for your Tender or RFP’](#) Worksheet (Section 3) to help you explain your decision-making.

III. Developing Green Specifications for a Good or Service that will be Purchased through a Request for Proposal (RFP)

The nature of a Request for Proposal (RFP) process is that you have more flexibility in asking for criteria beyond the minimum specifications that might be used in a tender.

This is the perfect opportunity to integrate green considerations into the specifications or scope of services and test what the market has to offer. Within RFPs you have the flexibility to ask for information related to the value added green features and benefits of a product that might be desirable but not mandatory.

The significant product impacts that you identified in the [‘Selecting the Green Issues for your Tender or RFP’](#) Worksheet (Section 3) that match your organization’s priorities should be the mandatory specifications in your RFP. These will need to be developed based on your research and discussions with internal and external stakeholders. If there are green impacts that may not be your top priority, then include these as desirable specifications and evaluate them separately.

For example, you may wish to specify that your IT equipment vendor ensures that all PCs and Laptops come with an Electronic Product Environmental Assessment Tool (EPEAT) Gold rating as a mandatory requirement. In addition, you may want to see which vendors can provide a packaging take-back option as a desirable criteria and give this some weighting in your evaluation.

As already mentioned, the OCIO requires that all desktops and laptops are EPEAT Gold Certified and Energy Star 5.0 approved.

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Acadia University: Using an RFP to Look for Local Food

In an RFP directed at foodservice companies to deliver campus food services, Acadia University placed an emphasis on sustainability and local food procurement. The wording in the RFP and the contract was carefully crafted to ensure that local food would be procured where possible, but the foodservice management company could propose its own plan for meeting these requirements. Here's how it read:

Proponents will submit a copy of company policies, which demonstrates evidence of a commitment to environmentally friendly products and sustainable practices. Proponents are encouraged to include a promotional plan to achieve improvements in dining services during the full duration of a contract. Acadia is very interested in the sustainability plan for food service on our campus. How will the proponent contribute to this mission? The proponent should also include existing or potential targets it will set in conjunction with its frontline and supervisory employees.

Source: [Growing Demand—Local Food Procurement at Publicly Funded Institutions in Nova Scotia](#)

In addition, you can also inquire about the green practices of the vendor themselves. For example, are they implementing waste reduction and recycling in their operations? Or are they actively promoting energy conservation? It's appropriate in an RFP to look above and beyond just the features of the product or service that a vendor may be providing. See Worksheet 3 '[Measuring Vendor Leadership—Example Questionnaire](#)' for a list of questions that can be adapted to collect information on the green leadership practices of a vendor.

Don't forget that green procurement also applies to services. Consider the interesting initiatives that Nalcor Energy is considering to help green its service contracts (see below). Note how it is focusing on initiatives that promote energy conservation and efficiency, and lead by example in its own operations.

To get approval for your green specifications and evaluation criteria, present your recommended mandatory and desirable specifications for the RFP and show the weighting of each criteria. Remember, if you are omitting a green impact area from consideration then you may be asked to justify your decision.

Nalcor Energy: Finding Ways to Green Contracting Cleaning Services


In its specifications for security and cleaning services at its head office at Hydro Place, Newfoundland and Labrador Hydro included the requirement for continuously monitoring lighting to ensure it is switched off in unoccupied areas. Cleaning personnel now have to go from floor to floor as a group, turning off all lights behind them. Nalcor Energy is considering changes to the schedule for its next cleaning contract to reduce the occupancy requirements.

Source: Nalcor Energy

2.5 Evaluating Options and Selecting your Product or Vendor

I. Selecting Products and Services or Vendors for Low Dollar Value Purchases

When it comes to selecting products and services or vendors for **Low Dollar Value** purchases, look for items that have an identifiable ecolabel (see [‘The World Of Environmental Performance Labels—Reference Sheet’](#) for a reference sheet on the most common ecolabels). These logos give assurance that a product has the green features and benefits. Choose the product that represents the best combination of features from the **CHOOSE** column, and avoid as many as possible from the **AVOID** column. Remember, you can use the Green Product Factsheets in [Appendix B](#) to help you identify ecolabels and other requirements for 15 common items that are purchased within government.

CHOOSE	AVOID
<p>Certified products:</p> 	<p>Not certified, if a certified alternative is available. Please consult the reference sheet The World of Environmental Performance Labels in Section 3</p>
Sustainably harvested renewable natural resource (e.g. wood, glass, cotton, plant material, etc.)	Un-renewable, persistent (i.e. non-biodegradable), synthetic, toxic (e.g. hydrocarbon/petroleum based)
100 percent recycled content	Virgin content
100 percent recyclable, where all materials can be captured in a technical cycle (e.g. no emissions leading to poor air quality, soil or water pollution)	Not 100 percent recyclable, where metals, minerals and manufactured compounds leak into the natural environment (e.g. packaging where materials cannot be separated, carpets that release gases)
Organically grown, untreated	Chemically grown/treated
Efficiently powered by renewable energy, energy efficient and low-level carbon emissions (e.g. hydro, solar, wind, wave, alternative fuels)	Powered by fossil fuels, energy inefficient and high carbon emissions (e.g. gas, diesel, natural gas, propane, etc.)
Durable and reusable	Disposable
Locally grown (predominantly for food, where possible), starts in the community, 80 km radius, province wide	Grown in other provinces, abroad (predominantly for food)

Example:

Imagine a scenario where you organize the catering for a meeting, and you have to decide between reusable plates and cups or compostable ones. If your office has a dishwasher, or your caterer can provide reusable dishes, that might be your best option. If your building complex has a composting facility, you might opt for compostable plates and cups.

Again, remember this is not a right or wrong decision. Often, there will be trade-offs across the green attributes of products and services and you need to decide on which ones are the most important to you. How you decide depends ultimately on what will best fulfil your need and foster green purchasing.

II. Selecting Products and Services or Vendors Procured through Tenders

Since all vendors will bid on the same specifications, ultimately the vendor who meets the specifications and offers the lowest total cost or lifecycle cost will be selected.

In the example below for washing machines, both suppliers meet the mandatory specification of an ENERGY STAR certification. However, one machine has a significantly higher energy use but a lower purchasing price, whereas the other is more energy efficient and uses less water but is also more expensive to acquire. The total cost table below reveals the preferable option.

	Washing Machine A	Washing Machine B
Initial Cost	\$500	\$700
Energy costs/year	\$91	\$54
Water costs/year	\$90	\$57
Total annual operating costs	\$181	\$111
Energy costs (lifetime – 7 years)	\$637	\$378
Water costs (lifetime – 7 years)	\$630	\$399
Total lifecycle costs	\$1,767	\$1,477

Data Source: Natural Resources Canada ENERGY STAR Savings Calculator

So, despite the substantial price premium of \$200 for washing machine B compared to machine A, the total lifecycle cost of machine B is lower. It is also worth noting how substantive operating costs are as compared to the initial price. Not factoring these costs into an evaluation can sometimes be a significant oversight.

There is sometimes a misconception that when using a tender the evaluation can only be based on the lowest initial or first cost of a product or service that meets the specification, and that incorporating the total cost or lifecycle cost isn't permissible. This simply isn't true. So long as the methodology used to calculate total cost is transparent to bidders, objective and defensible, then it can be used as the basis for awarding tenders. Nalcor Energy offers an interesting example of using a tender to purchase vehicles—and incorporating the costs of fuel consumption into their evaluation.

What is Total Cost/LifeCycle Costing?

A financial estimate intended to help buyers and owners determine the direct and indirect costs of a product or service, including the total cost of acquisition, operations, maintenance and disposal.



Incorporating Total Cost or Lifecycle Cost Into Tenders — It Can Be Done!

Nalcor Energy Tender Evaluation for Vehicles uses Lowest Total Cost by Considering Fuel Consumption

Nalcor Energy (Buyer) is an environmental leader, and is ISO 14001 certified. One of the key elements of this certification is to continuously improve their environmental performance. In keeping with their commitments, all vehicle tenders will be evaluated based upon the lowest Total Tendered Price for the vehicle meeting all conditions of the specification. The Total Tendered Price includes the tendered cost of the vehicle, PLUS the total cost of fuel consumption for a three year period.

Fuel costs per vehicle are based on 25,000 km driven per year for a total of 75,000 km (3 year period); with a ratio of 55 percent highway and 45 percent city driving. The cost per litre of fuel used in the calculation will be the Bloomberg Oil Buyer's Guide posted price for St. John's as published on the Friday previous to tender closing. The total fuel costs will be added to the tendered price for the vehicle, by the Buyer to determine the total bid price for the submission.

The bidder shall include the original equipment manufacturer's published fuel consumption information for the vehicle (litres per 100 km) with the bid submission. Both highway and city rates shall be included. The stated consumption will be validated against the results published in the Natural Resources Canada—Energide.

Where discrepancies exist, the [Natural Resources—Energide](#) ratings will be used to calculate the fuel costs. The total fuel costs are determined by the Buyer using the following formulas:

Highway Formula: $(75,000 \text{ km} \times 55\% \times \text{hwy fuel consumption rate (L)}) / 100 = \text{Total Hwy Litres}$

City Formula: $(75,000 \text{ km} \times 45\% \times \text{city fuel consumption rate (L)}) / 100 = \text{Total City Litres}$

Total Fuel Cost = (Total Hwy Litres + Total city Litres) x Cost/L

Notes: The vendor is not required to add the fuel cost into the bid price quoted. The cost of the fuel will be included in the evaluation process by the Buyer as a separate item. In instances where the make/model of a vehicle which is indicated in the bid by any supplier is not listed in the [Natural Resources—Energide](#), the tender item will be evaluated using the vehicle cost submissions only. Fuel consumption rates will not be used to evaluate that specific item.

Source: Nalcor Energy

III. Selecting Products and Services or Vendors through RFPs

Within RFPs you have the flexibility to include both mandatory and desirable specifications. Like a tender, mandatory specifications are features that you know you want within a product or a service, such as an ENERGY STAR rated appliance or copy paper with 30 percent post-consumer recycled content. Desirable evaluation criteria can be used to reward additional performance or features above and beyond your minimum requirements. The more of these desirable criteria a vendor addresses, the higher their overall RFP score will be. Within RFPs it's important that green is given a meaningful weighting along with other criteria; 5 points out of 100 for green doesn't usually make a difference in a competitive bid process.

For example, the University of British Columbia has a substantive commitment to driving environmental benefits within the purchasing for Student Housing and Hospitality Services and will typically use at least 10 and often 15-20 points to evaluate environmental criteria. In some cases where green impacts are considered to be significant, or where prices are expected to be competitive, and thus not a significant differentiator, environmental performance is given an even higher weighting such as 30 or 40 points out of 100. Remember, in an RFP you have the flexibility to evaluate the features of a product—but also the green operating practices of a vendor (as distinct from their product attributes).

The example below illustrates a typical evaluation matrix for a Request for Proposal. In this example the typical evaluation criteria of cost, quality, performance or solution are included. However, also included are criteria for the green features of a product, as well as criteria for the vendor's green leadership regarding operating practices.

Criteria	Vendor A	Vendor B	Vendor C
Total Cost (35 points)	25	22	27
Quality (25 points)	18	20	15
Performance/Functionality (20 points)	16	18	20
Product Environmental Performance (e.g. percentage of recycled content, take back of packaging) (10 points)	5	8	3
Vendor Environmental Leadership (10 points)	6	5	7
Total Score	70	73	72

In this example a range of evaluation criteria have been scored for each of the three vendors—A, B and C. Each one has scored well in different categories, and their overall scores are quite close. A blended overall approach has been used to evaluate the successful vendor (Vendor B), who happened to score lowest on total costs and green leadership, but who got the highest overall score based on scoring well on other criteria, including the environmental features of their product. Green criteria didn't trump other criteria (e.g. Vendor B's quality score was the highest of all three vendors); but it did play a role in Vendor B having best overall value. Again, it is not necessarily about choosing the greenest option but about the best blended score of your selected criteria.

Using RFP's to Evaluate Cost and Environmental Criteria to Achieve Best Value

The Multi Materials Stewardship Board (MMSB) is responsible for implementing the used beverage container recycling program (UBCRP) in Newfoundland and Labrador.

To fulfill this mandate, it has historically used a network of independently owned/operated Green Depots throughout the Province, augmented by transportation contractors who move the beverage containers from the Green Depots to a number of primary processing facilities. Primary processing contractors (one in Labrador and one on the Island) are responsible for compacting and crushing the used containers for shipment to end markets and transportation service providers deliver processed product to end markets. Transportation and processing services have been historically procured through a public tender process where interested parties meeting minimum qualifications and lowest price were awarded the contract.

Unlike MMSB's approach to tendering for collection and processing services, other jurisdictions in Canada have contracted for collection and processing services through the use of a Request for Proposals (RFP) process. These RFP processes have evaluated proponents on not only the bid price, but also on their ability to deliver the best value per dollar spent by taking into consideration environmental and social factors, and the delivery and servicing capacity of proponents. In doing so, innovative collection and compaction technologies have been introduced into those jurisdictions which have resulted in increased quality of service delivery and decreased operating costs, while decreasing the volume of transportation services needed to service beverage container recycling programs. These decreases in transportation services have lowered the volume of heavy vehicle traffic on public roads and decreased the greenhouse gas emissions.

MMSB has long recognized that utilising a transportation and processing service delivery model that employs innovations such as on-site or on-board compaction could significantly reduce the number of trips needed to collect and transport beverage containers and would likely result in improvements in service delivery. In addition, reducing the number of trips would likely result in cost savings and decreased greenhouse gas emissions.

In the winter of 2013, with the existing contracts set to expire in the summer of 2014, there were no local service providers employing these innovations in compaction technology. MMSB realized that were it to undertake a traditional public tender process to secure transportation and collection services, it was likely that the successful bidder would operate the beverage program utilizing a traditional service delivery model that may have delivered lowest cost, but may not have delivered best value. Thus, MMSB sought and received permission to employ an RFP process for the procurement of transportation and processing services.

In 2013, utilizing the RFP process to evaluate potential transportation and processing service providers on their ability to deliver the best value service, MMSB was able to include environmental impacts such as greenhouse gas emissions under greater consideration. As a result, MMSB secured a service provider for the used beverage container recycling program that utilises on-board compaction and preprocessing technologies that will decrease the greenhouse gases associated with these activities by 50 percent, reduce heavy truck traffic on public roads by 267,000 km per year and reduce the annual operating cost of the UBCRP by approximately 20 percent.

SECTION 2: STEP 3

Did you know? Xerox Canada's process for recycling and remanufacturing used supply items

Some manufacturers are redesigning products to be more easily disassembled for recycling and take back for reconditioning, remanufacturing and resale. Through the Green World Alliance collection/reuse/recycling program for spent imaging supplies, Xerox customers return more than 2.5 million cartridges and toner containers annually. Over the last 20 years, Xerox supplies recycling programs have kept more than 145 million pounds of waste out of landfills. Xerox Canada has recently launched Eco Box, a new simplified return and recycling program that allows returning 5 to 30 used supply items all at once.

In terms of price, as discussed before, to define best value you should calculate the total cost. List all activities associated with owning the product or receiving the service (storage, maintenance, buying additional equipment, energy use, waste disposal, administration). Estimate the costs of these activities then calculate and compare the 'total cost' for each option.

So, choosing your preferred supplier and green product or service from a best value perspective comes down to who generated the best score on the basis of weighted meaningful criteria. Remember these tips:

- » **When evaluating RFPs**, choose those vendors who have met your minimum specification and who have addressed most of your desirable criteria and thus scored the highest.
- » **From a best value perspective**, the buyer will want to look for willingness from the vendor to work on green issues. For example, if one group scored overall highest but didn't score well on green, then one possibility is to engage them to improve their performance over the life of the contract.
- » **Seek out a supplier who shows a commitment to green values**, for example, by showcasing an environmental or sustainability policy on its website or publishing a sustainability or Corporate Social Responsibility (CSR) report.
- » **You may have a long-standing relationship with a supplier** and would rather work with them to find a sustainable product than switching to a different supplier. With longer-term suppliers, you can talk about green issues as part of your typical visit or meetings, along with planning or adjusting the cost and quality of the product or service you are getting.

2.6 Communicating Results and Telling the Green Procurement Story

Making the voluntary choice to communicate the results of your green procurement activities will help you measure financial and environmental benefits and make green purchasing meaningful for everyone involved, including employees, management and suppliers.

Telling the Green Procurement Story

Regularly communicate successes internally and to suppliers, whether by email, newsletters, on your website or in meetings. Sharing these wins will help get buy-in for green procurement.

Tracking Data to tell a Deeper Story

As your work evolves you may wish to begin to monitor and track data related to implementing your buying green efforts. Start by considering some simple key performance indicators (KPIs). There are two types that are recommended:

1. Activity Indicators: measure whether procedures, resources, and knowledge are being used to foster green procurement; whether you are using green criteria to impact procurement decisions.

Example: Number, percentage or total dollar value of contracts, tenders or RFPs with green specifications. Number, percentage or total dollar value of RFPs where green criteria are given a value of 10 points or higher.

2. Outcome Indicators: measure the environmental or social impacts that result from incorporating green considerations into purchasing; how do decisions impact packaging, energy efficiency and GHG emissions in the supply chain. Often you need information from the supplier to be able to accurately measure things like reduced resource consumption, trees saved, energy saved, etc. Outcome Indicators are sometimes more difficult to track.

Example: The amount of waste reduced by using eco-efficient packaging solutions or the amount of fuel saved and greenhouse gas emissions avoided by consolidating delivery schedules.



SECTION 2: STEP 4

The following table offers some examples of possible KPIs that you might voluntarily select to help track progress on your green procurement efforts.

Key Performance Indicator Details	
ACTIVITY INDICATORS	
✓ Number, value and percentage of vendor agreements with mandatory specifications related to green criteria	This indicator will measure how many bid documents included mandatory environmental specifications (e.g. ecolabels) and can be compared with the total number of bids issued for that year.
✓ Number, value and percentage of vendor agreements with custom environmental specifications	This indicator will measure how many bid documents included desirable environmental specifications and can be compared with the total number of bids issued for that year.
OUTCOME INDICATORS*	
✓ Amount of solid waste reduced or avoided as a result of packaging	This indicator will measure the amount of waste reduced via custom specifications or supplier innovation.
✓ Amount of GHG emissions reduced or avoided	This indicator will measure the amount of GHG emissions reduced via custom specifications or supplier innovation.
✓ Amount and types of toxins removed from direct and indirect procurement	This indicator will identify which toxins have been removed from products, services and construction and estimate the total volume of toxins that have been avoided, e.g. the amount of volatile organic compounds.
✓ Volume of water conserved	This indicator will examine the amount of water being conserved by suppliers with water conservation programs (directly related to your water footprint).**

* For some products, e.g. for copy paper, there are online calculators that help you calculate the number of trees saved when a certain amount of post consumer recycled copy paper. Outcome indicators often rely on data provided by suppliers to estimate environmental impact reductions. Best practices acknowledge that these figures are best estimates.

** The water footprint is equal to the water required to produce the goods and services purchased and consumed by you.

Remember, start with something simple and build your reporting or storytelling program over time. See [‘What to Report when Buying Green—Worksheet Template’](#) for a template that can be adapted to help you tell your story.