



Green Purchasing Guide

Table of Contents

About this Guide	3
What is Green Purchasing?	4
Developing and Implementing a Green Purchasing Plan	5
BEFORE YOU START	6
STEP 1 - DEVELOP A GREEN PURCHASING TEAM	7
STEP 2 - DO AN INVENTORY	8
STEP 3 - IDENTIFY PRIORITIES	10
STEP 4 - MEASURE PERFORMANCE AND SET TARGETS	12
STEP 5 - DEVELOP AN IMPLEMENTATION SCHEDULE	14
STEP 6 - IMPLEMENT YOUR PLAN	16
STEP 7 - COMMUNICATE RESULTS	17
WHAT'S NEXT?	19
Purchasing Toolkit	20
TIPS FOR BUYING LESS	21
PURCHASING RECYCLED PRODUCTS	23
GREEN PURCHASING SELF ASSESSMENT ACTION SURVEY	25
THIRD PARTY CERTIFICATIONS	27
SUPPLIER LEADERSHIP QUESTIONNAIRE	33
PURCHASING NETWORKS	35
TRAINING AND COMMUNICATION ACTIVITIES	37
Top Green Purchasing Products Factsheets	42
GREEN CHAIRS FACTSHEET	43
GREEN COMPUTERS FACTSHEET	49
GREEN MULTIFUNCTION DEVICE FACTSHEET	55
GREEN COPY PAPER FACTSHEET	61
GREEN WRITING INSTRUMENT FACTSHEET	67
GREEN CLEANING SUPPLIES FACTSHEET	73
GREEN LETTERHEAD & BUSINESS CARD FACTSHEET	79
GREEN PAINT FACTSHEET	85
GREEN MOTOR VEHICLE FACTSHEET	91



Green Purchasing Plan Worksheets	97
0A – GAINING SENIOR LEVEL APPROVAL TEMPLATE	98
0B - DEVELOPING GREEN PURCHASING POLICY	102
1A - SELECTING YOUR GREEN PURCHASING TEAM MEMBERS	103
1B – GREEN PURCHASING TEAM MEMBERS	104
1C – GREEN PURCHASING PLANNING AND IMPLEMENTATION PROCESS AND TIMELINE	105
3 - PRIORITY GREEN PRODUCTS AND SERVICES EXAMPLE	106
3 - PRIORITY GREEN PRODUCTS AND SERVICES	107
4A - FOUR METHODS OF MEASURING BASELINES AND PERFORMANCE	108
4B - MEASURING PERFORMANCE AND SETTING TARGETS FOR GREEN PURCHASING	110
5A – GREEN PURCHASING COMMUNICATION, EDUCATION AND TRAINING SCHEDULE	111
5B – GREEN PURCHASING SCHEDULE FOR SETTING UP GREEN STANDING OFFERS, INFRASTRUCTURE AND CONTRACTOR EVALUATION	112
6 - MEMORANDUM	114
7 – GREEN PURCHASING ANNUAL REPORTING TEMPLATE*	115



About this Guide

This guide presents One Simple Act's seven steps to creating a *Green Purchasing Plan*. It also includes details on the [Top Green Purchasing Products](#), which will assist you in choosing products for your Plan. Lastly, the [Purchasing Toolkit](#) section contains additional tools, tips and resources to assist your organization with green purchasing.

Each of the seven steps outlines the actions your group will need to complete and provides directions to help you fill in the associated worksheets (found at the end of this manual in the [Green Purchasing Plan Worksheets](#) section). When completed, these worksheets will serve as sections of your own *Green Purchasing Plan*. This Plan will then become a working document to guide your organization's purchasing decisions.



What is Green Purchasing?

Green purchasing means carefully considering the necessity of a product or service before purchasing it and placing priority on the environment as well as price, quality and service. In general, these decisions can reduce waste, conserve water and/or save energy. Green purchasing can also improve workplace health and, over their life cycle, may save your organization money through energy savings and reduced disposal costs. It is also important to note that buying green does not mean accepting an inferior product. Green purchasing should meet or exceed your organization's business needs.

A *Green Purchasing Plan* should examine the raw materials, production, manufacturing, packaging, distribution, operation, maintenance, reuse potential, and disposal. Making informed decisions to reduce waste before purchasing products is much easier than taking action later to dispose of waste. Developing a *Green Purchasing Plan* ensures that an organization's purchasing is done in an environmentally responsible manner and/or will minimize environmental impacts.

Are Green Goods and Services Really More Expensive?

People often think that green goods and services are less affordable than their conventional counterparts. But considering total lifecycle cost of ownership, a green product can, in fact, be considerably less expensive. Lifecycle costs include: operational costs (e.g., water and energy consumption) maintenance costs, durability of the product (its service life) and the costs to dispose of not only the product (including hazardous materials) at the end of its lifecycle, but also its packaging.

The seven steps are guided by a set of **best practices**¹ which are vital for the successful implementation of your organization's *Green Purchasing Plan*. These components include:

- a) A policy statement or green purchasing guideline
- b) An implementation plan
- c) Tools and procedures (e.g., worksheets and purchasing toolkit)
- d) Performance metrics, targets and reporting
- e) Training and communications
- f) Stakeholder engagement
- g) Assessing total cost of ownership

¹ Best practice research conducted by Reeve Consulting for the Government of Alberta examined 12 leading organizations including various levels of government, networks and institutions from across North America.



Developing and Implementing a Green Purchasing Plan

Depending upon the needs of your organization, a *Green Purchasing Plan* may be developed independently, or as part of a broader plan to green your organization. The seven steps to developing a *Green Purchasing Plan* can be completed as a stand-alone process, or used to supplement the steps outlined in the One Simple Act *Greening Your Organization Guide* www.onesimpleact.alberta.ca/docs/greenorg.pdf. If you have an existing process for developing a *Green Purchasing Plan* or you are currently proceeding in a less formal manner, review these steps for tips, tools and ideas.

The seven steps to green purchasing include:

- Step 1** – Develop a green purchasing team
- Step 2** – Develop a baseline
- Step 3** – Identify priorities
- Step 4** – Measure performance and set targets
- Step 5** – Develop an implementation schedule
- Step 6** – Implement your plan
- Step 7** – Communicate results

Keep in mind that your plan should be a “living document” designed to be built upon and expanded in years to come. As demonstrated in figure 1 below, the process of planning and implementation is cyclical to ensure constant feedback, communication and improvements.

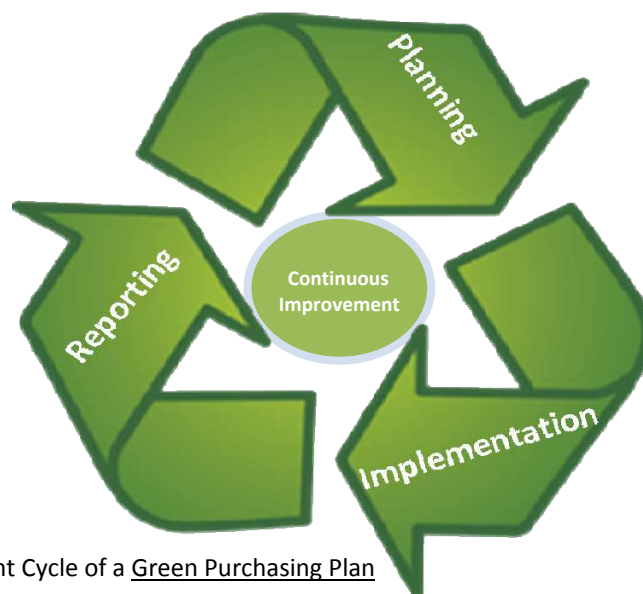


Figure 1: Continuous Improvement Cycle of a Green Purchasing Plan



Before You Start

Before starting, it is important to give some thought to the level of organizational support you have for this initiative. Ideal organizational support includes a green policy statement or guideline, a team lead assigned to the green purchasing initiative and an executive team project champion. Obtaining this support may be facilitated by briefing your organization's executive on the One Simple Act seven step process.

Having a policy statement, that has been endorsed by the executive will demonstrate senior management's commitment to the initiative and will be a useful reference for getting cooperation, support and participation throughout your organization.

Ask your organization's executive to designate a team lead and to identify an executive member project champion. The green purchasing team lead should report either to the project champion directly or through your organization's broader greening initiative, if one exists. In either case, a regular reporting schedule should be established. Complete and submit [Worksheet 0A](#) to your organization's senior leadership to help gain initial approval for your green purchasing initiative.

A green policy or guideline can be developed to guide the process either at this point or after a green purchasing team has been formed. See the [Worksheet 0B](#) for tips and examples to help with creating a policy. Once this is in place, move to Step 1.

Example Policy Statement

Our Organization is committed to green purchasing by using services, processes, practices and products that:

- Reduces waste;
- Saves energy;
- Conserves water.

Don't have adequate support from your organization's senior leadership?

Are you just looking to lead change more informally?

Self-organizing groups can still incorporate many of the steps and tools provided in this resource to help lead green changes in your workplace. ***Refer to the bracketed sections in this document for actions that self-organized groups can accomplish.***



Step 1 - Develop a Green Purchasing Team

As an organization, you will need to assemble a team to help develop and implement your *Green Purchasing Plan*. This team will work to carry out the seven steps listed in this document. Members should include a representative responsible for purchasing or purchasing decisions for your organization. Your organization may also wish to include senior staff, specialized staff and local leaders.

Use [Worksheet 1A](#) to help identify ideal green purchasing team members, and [Worksheet 1B](#) to record confirmed team members for inclusion in your Green Purchasing Plan.

Things to communicate to your organization:

- 1 - Your Green team is assembled and you have begun the process of developing your *Green Purchasing Plan*.
- 2 - There will be opportunities for staff to suggest green initiatives for the organization or their team, and to choose green initiatives on their own.

Affirming your Process and Timeline

Once you have assembled your team, it will be important to ensure that all members are on the same page in terms of the planning and implementation steps. Complete [Worksheet 1C](#) to establish the timelines for your organization's planning and implementation steps. The exercise of confirming your process and timelines will help to identify opportunities and challenges related to developing and implementing your plan. It will also identify where adjustments to approach or timing may be necessary.

Tools

[Worksheet 1A - Selecting Your Green Purchasing Team Members](#)

[Worksheet 1B - Green Purchasing Team Members](#)

[Worksheet 1C - Green Purchasing Planning and Implementation Process and Timeline](#)

Self-Organized Groups:

While your group may not include the senior members of your organization mentioned above, be sure to have well defined roles for those within your green team and never underestimate the influence your group has to bring about change!



Step 2 – Do an Inventory

Before you determine where you want to be, you need to assess where you are. Inventory items that your organization is already purchasing, along with gathering information that will help you to determine green purchasing priorities in the following steps.

Current Purchasing Practices

Begin by creating a list of items commonly purchased by your organization, using the expertise in your green purchasing team. Identify opportunities where these initiatives can be improved upon.

You may wish to expand the inventory to incorporate green services that your organization purchases, such as waste reduction measures that a renovation contractor is taking. A focus on products vs. services may be easier to implement in the first year of planning.

Brainstorm Opportunities

Have your team brainstorm additional green purchasing initiatives. See the Top Green Purchasing Products in the text box to the right for suggestions of commonly purchased items that may have a high eco benefit¹ for your organization.

Top Green Purchasing Products:

- Copy paper
- Computers (desktops and laptops)
- Vehicle fleet
- Letterhead and business cards
- Writing instruments
- Multi-function devices (printers, photocopiers, fax machines and scanners)
- Paints
- Cleaning Supplies
- Chairs

See the [*Top Green Purchasing Products factsheets*](#) for product details

Key Questions to Answer

Providing answers to the following questions will help identify some target areas for green purchasing. For example, the products you buy in high volume will likely have larger impacts than those you buy little of. Perhaps in the past you procured a green alternative and therefore it is now easier for you to source that green alternative again.

¹ These top green purchasing products were determined by an independent consultant (using best practices research) to have the highest value for a large organization. See selection criteria highlighted in step 3.



- Who leads the purchasing of these products for your organization?
- Who are the leading suppliers of these products?
- How are these products currently being purchased (e.g., standing offer)?
- How many units of this product does your organization purchase per year?
- How much money does your organization spend on these products per year?
- When is your organization planning to procure these products next? If they are on standing offer, when will the existing contract expire and need to be renewed?
- Have any green considerations been given to these products already?
- Is your organization soliciting and evaluating green initiatives from contractors and service providers.
- Which third-party certification standards exist for these products (see the [Top Green Purchasing Products Factsheets](#) for examples)?
- Which suppliers have electronic purchasing systems that have the potential to track purchases of green products?

Choosing Green

Environmentally friendly goods and services are most easily identified as those certified by accredited third party environmental [certification programs](#). Not all green products and services will have third party certification. Here are some additional things to consider:

- Can it be re-used, refilled or recharged to extend its life?
- Can it be easily upgraded by adding or replacing a part?
- Is it made of recycled content?
- Can the product and its packaging be reused or recycled easily?
- Can it be purchased second hand?
- Is it more energy efficient than comparable products?
- Does the product have excess packaging?
- Is the product made from recycled material?
- Can you lease or rent the equipment instead of purchasing?
- Does the product have ingredients hazardous to the environment?
- Do you understand the health and safety implications of using and disposing of this product?
- Is the product manufactured or supplied locally?
- Does the supplier reports on its environmental performance?



Step 3 - Identify Priorities

Once you know more about what your organization is purchasing, it is time to begin focusing on where to improve. In this step your team will select a small bundle of products (e.g., three to five) to focus on in the first year. This will allow you to use your organization's resources strategically and ensure success. Early success will generate momentum for your green purchasing program that can be harnessed in subsequent years as you expand to other products.

Create a shortlist

Have your green purchasing team identify a shortlist of realistic and impactful priority initiatives. These should align with the scope of your purchasing policy or guideline. Consider using the selection measures that follow to develop your shortlist. You may wish to develop your own selection criteria.

Involving Your Colleagues in the Selection Process

It is considered a best practice to consult with other staff in your organization to ensure that they support green products and policies that your organization chooses. Input from staff about which products they feel may have the biggest green impact could help determine the products you wish to gather baseline information about. By involving your colleagues in the selection process, they will be engaged early on and more likely to participate in implementing these initiatives. One way of engaging your colleagues, is by creating space for green purchasing discussions at team meetings or by running an online survey.

Involve staff

Using your shortlist, gain feedback from staff in your organization about which priorities that they feel will be the most achievable and impactful.

Choose priorities

Using information from your staff survey and selection criteria assessment, choose 3-5 priority initiatives.



Example Selection criteria

- *High Volume* – Product is purchased in significant quantities across the organization.
- *Environmental Risk/Opportunity* – Product poses a significant environmental risk or can contribute significantly to a reduced environmental footprint
 - Eco Benefits:*
 - *Reduces waste*
 - *Saves energy*
 - *Conserves water*
 - *Reduces greenhouse gas emissions*
 - *Conserves natural resources*
- *High Symbolic Value* – Initiatives which have high symbolic value promote a sense of satisfaction and accomplishment with staff while building momentum. They may be highly visible and/or widespread within the organization, easy to implement and/or quickly adopted.
- *Mature Market* – A green product of proven quality and availability within the marketplace.
- *Third-party Certification* – Recognized independent certification exists for the product.
- *Total Cost of Ownership* – total cost of owning a product, such as cost, energy consumption cost and disposal costs.

Recording Areas of Priority

When you have chosen the criteria that are most important and applicable to your organization, complete [Worksheet 3](#) with the 3-5 products your team has as priorities. Be sure to refer to [Top Green Purchasing Products Factsheets](#) as they provide examples of selection criteria assessments.

Tools

[Top Green Purchasing Products Factsheets](#)
[Worksheet 3 - Priority Green Products](#)



Step 4 – Measure Performance and Set Targets

In this step you will gather baseline information and determine key performance indicators (KPIs) and Performance Targets (see the box to the right) related to your priority green products.

Collect Baseline Information

When you have chosen your priority initiatives, you will need to gather baseline information for each. [Worksheet 4A](#) outlines four options for gathering baseline information. Capture your baseline information on [Worksheet 4B](#).

Determining your KPI's and Targets

It is important to outline KPIs and targets for each of your priority green products. If your priority products are on the Top Green Products list, you may simply transfer the pre-determined KPI's from [Top Green Purchasing Products Factsheets](#) into [Worksheet 4B](#). If your organization has chosen products that aren't on the Top Products list, it will be up to your team to determine KPIs and performance targets (however the factsheets should provide relevant examples to build from).

What are KPI's

Key performance indicators (KPIs) are quantifiable measurements that reflect the critical success factors of an organization. They will differ depending on the organization and the business at hand and should be determined in the planning phase. An example KPI related to green purchasing is the percentage of computers with third-party environmental certifications (e.g., EPATTM or Energy StarTM).

What are performance targets?

Targets are the numerical values you aim to achieve for a given KPI and against which you measure your progress. If your KPI is a percentage of computers with third-party certifications, your target may be 100 per cent of new computers purchased will have a minimum EPATTM or Energy StarTM certification.

Be Realistic in Measuring Your KPIs

Be realistic on what you can get data on. This will be an ongoing, evolving process – so start small (e.g., things you are already gathering) with the intent to enhance your data collection over time. Examine data sets on a product-by-product basis and assess how critical it is to obtain in depth data. Where it is not critical, do not get bogged down in the details. You may find the targets you set earlier are too difficult to achieve, or you may find you want to set higher targets. Adjust them accordingly.



Tracking Results Annually

Tracking results achieved each year will validate efforts, quantify progress, align goals and priorities as well as build momentum. Tracking allows you to compare your year-end results with your baseline information and targets. There are various ways you can track performance. The baseline tracking option that you select can also be used to determine your year-end performance. Track your results achieved in the far right column of [Worksheet 4B](#).

Self-Organized Groups:

While your green group may decide that assessing key performance indicators (KPIs) is beyond the scope of your green purchasing approach, it is still worthwhile for your group to track the results and benefits associated with the purchases you've made. As mentioned above, this will validate and build momentum for your initiative.

Tools

[Top Green Purchasing Products Factsheets](#)

[Worksheet 4A - Four Methods of Measuring Baselines and Performance](#)

[Worksheet 4B – Measuring Performance and Setting Targets for Green Purchasing](#)



Step 5 - Develop an Implementation Schedule

Creating an implementation schedule will help you determine what tasks need to be done, by whom, when, and what resources are needed for each. A schedule will provide a written strategy for rolling out your plan. This step guides you through the development of a communication, education and training schedule, and a schedule for putting infrastructure in place to support the implementation of your *Green Purchasing Plan*.

Communication, Education and Training Schedule

You may be asking all staff to participate in implementation of your *Green Purchasing Plan*. As a result, you will need to educate them about the plan as well as seek their support for making behaviour changes. A solid strategy for communication, education and training will ensure you are providing the knowledge, skills and resources needed to successfully implement your plan. For example, you will need to communicate to your colleagues how to identify green products that are on your priority green products list, and encourage them to buy less where possible. Also, specific training must be provided to purchasing staff on purchasing and reporting procedures. Where green products cost more, it may also be important to communicate permission to spend more for these goods (make sure you have permission or course!).

Job Description Updates

To ensure that the plan is adhered to, it is essential that implementing green purchasing actions is assigned to an employee and that the employee is given the time to do the work. The employee should be assigned the tasks of providing support to the green purchasing initiative and reporting on the policy implementation.

If your *Green Purchasing Plan* is a sub-element of a broader *Greening your Organization Plan*, consider developing the education and training schedule for the broader initiative. Complete [Worksheet 5A](#) to develop this schedule. See the [Training and Communication Activities](#) section of the Purchasing Toolkit for suggested examples of activities to include in your plan.

Your team may also want to consult One Simple Act's *Getting People Involved Manual* www.onesimpleact.alberta.ca/docs/involved.pdf for additional ideas on how to engage staff. The [Top Green Purchasing Products Factsheets](#) will also help you to understand what type of information you need to convey to those who purchase your green products.



Schedule for Setting up Standing Offers, Supportive Infrastructure and Contractor Evaluation

To support the uptake of green purchasing, you will need to ensure that there are green products available on standing offers, where relevant, and that the proper systems and technology to support green purchasing (e.g., setting up electronic purchasing systems, tracking green purchases from standing offers) are in place. Developing a process to evaluate green initiatives taken by contractors and service providers may also be required.

New standing offers are key opportunities to embed green requirements into the purchasing process to ensure that your organization has access to priority green products. Evaluating the green performance of contractors and service providers will provide a mechanism to select service providers with similar environmental values as your organization. Use [Worksheet 5B](#) to develop this schedule. Review the example [solicitation clauses](#) for examples about how to green services.

Tools

[5A – Green Purchasing Communication, Education and Training Schedule Getting People Involved](#) - www.onesimpleact.alberta.ca/docs/involved.pdf

[Top Green Purchasing Products Factsheets](#)

[5B – Green Purchasing Schedule for Setting up Green Standing Offers, Infrastructure and Contractor Evaluation.](#)

Self-Organized Groups:

Though purchasing green products is the key priority of this manual, behaviour change is equally important. Your green group should consider integrating educational messages related to reducing waste, conserving water, and decreasing energy consumption into your strategy. (For example, buying an energy efficient printer is fantastic. However, if your group also encouraged double sided printing, the green impact is multiplied!



Step 6 – Implement your Plan

Now that you have completed steps 1-5 of your organization's *Green Purchasing Plan*, your team can compile the planning documents you've created, and present them for senior approval. When approval is granted, your team can begin to carry out the plan.

Compile Plan and Get Approval

The final stage of the planning process is to gain approval of the executive project champion for your plan. It is important to have high-level support to ensure that the implementation of your plan is a success. The project champion should be asked to ensure that resources are made available for implementing your plan, to promote green purchasing, and to help motivate staff members to take action. Your plan can be created by compiling all of the purchasing worksheets developed through Steps 1-5. Your team may want to use the [6 - Memorandum](#) in the worksheets section as a memo template that can be used to submit your plan.

Getting approval for your Plan is a significant milestone and it is an important time to engage your colleagues. You should celebrate this milestone and communicate that it is time to take action.

Implement Plan

The schedules you developed in Step 5 will guide you through a suggested 12-month implementation process. In addition, be sure to refer to [Top Green Purchasing Products Factsheets](#) and resources found in this manual's [Purchasing Toolkit](#). They include:

- [Tips for Buying Less](#)
- [Purchasing Recycled Products](#)
- [Green Purchasing Self Assessment Action Survey](#)
- [Third Party Certifications](#)
- [Solicitation Clauses](#)
- [Supplier Leadership Questionnaire](#)
- [Purchasing Networks](#)
- [Training and Communication Activities](#)

Out with the old and in with the new!

A [Green Purchasing Plan](#) is intended to reduce waste. As such it is essential that previous products not meeting new standards be kept and used until they run out. If this will not meet your organization's needs adequately, consider donating the item so it can be reused by others. If a product is no longer functioning and needs to be disposed of, look into companies that can salvage and reuse portions of it. Be sure to dispose of electronics and other environmentally hazardous items at your local eco station.



Measure Performance

Throughout the implementation period, ensure that your team understands the requirements for measuring performance outlined in your plan in [Worksheet 4B](#). Prepare to gather information related to your KPIs and related targets throughout the first year of implementation. Once gathered, a summary of this information should be noted in [Worksheet 4](#), so that it can be easily compared to your baseline information, KPIs and targets. This information will be critical for reporting.

Tools

[6 - Memorandum](#)

[Top Green Purchasing Products Factsheets](#)

[Purchasing Toolkit](#)

[Worksheet 4B – Measuring Performance and Setting Targets for Green Purchasing](#)

Self-Organized Groups:

Refer to the [Purchasing Toolkit](#) section of this document for some helpful resources to begin green purchasing. This may be as simple as seeking out recycled products for purchase, or as complex as encouraging suppliers to offer green purchasing opportunities to your organization.



Step 7 – Communicate Results

Towards the end of year one of implementation you should report on progress. Reporting will allow you to analyze the first year of implementation and examine ways to improve. Demonstrating success in implementing your plan will motivate you and your colleagues to continue.

Annual Reporting

Organizing these key findings into a report will help communicate your achievements to your executive project champion, you may also wish to demonstrate your success to the whole organization, the public and/or stakeholders. You have likely been gathering performance information throughout the year in [Worksheet 4B](#). This will allow you to compare your baseline performance with the results achieved at the end of year one. Using this information, complete [Worksheet 7](#) to summarize your annual performance. Submit [Worksheet 7](#), along with [Worksheet 4B](#) to your senior project champion.

Advertise your success

You have developed your first annual report and now it is time to celebrate your achievements. Creating and implementing a *Green Purchasing Plan* is not a simple task. The effort and resources that your organization puts towards green purchasing can significantly reduce the environmental impact of your day to day business. By keeping staff, clients and the public informed, your hard work and success can be recognized. Be sure to congratulate and thank those who participated, reward leaders, present key results, hold a celebration event and/or publicize on your website. Submit a success story to One Simple Act that they can display on their webpage, helping inspire others to take action www.onesimpleact.alberta.ca/get-involved/work.asp. See the Getting People Involved Manual www.onesimpleact.alberta.ca/docs/involved.pdf for ideas on how to engage staff.

Tools

[Worksheet 4B – Measuring Performance and Setting Targets for Green Purchasing](#)
[Worksheet 7 – Green Purchasing Annual Reporting Template](#)
[Getting People Involved](#) - www.onesimpleact.alberta.ca/docs/involved.pdf



What's Next?

As you enter your second year of implementation, you should challenge your organization to procuring additional green products and increase the targets related to existing green purchasing. Also, aim to enhance your methods for tracking and measuring your progress in order to help refine your reporting data and information. Communication, education and training must also remain integral to enhancing your green purchasing performance.

Can the green momentum gained through your green purchasing program be used to broaden the green initiatives your organization is taking? Review One Simple Act's Greening your Organization Guide www.onesimpleact.alberta.ca/docs/greenorg.pdf for ideas. Consider opportunities for encouraging staff to green their behaviours at home. Explore www.onesimpleact.alberta.ca/get-involved/homes.asp for tools, ideas and activities.



Purchasing Toolkit



Tips for Buying Less

The number one rule of green purchasing is “don’t buy what you don’t need.” The following is a list of helpful tips on how to buy less and buy smarter as you begin to implement your *Green Purchasing Plan*. Buying less should be integrated into your green purchasing program from the start. That your organization intends to focus on buying less whenever possible should be one of your key messages during the campaign kick-off. In addition, individual staff should be challenged to rethink their purchasing behaviour in order to decrease excessive purchasing.

Buy less, by not buying at all

Before you purchase something, the first question to ask yourself is, “Do we really need to buy this?” To answer that question you will need to consider the circumstances under which you are making the purchase. In some cases, purchasing the item may be unavoidable in which case, you can look for other opportunities to buy smaller, greener or smarter. There may be, however, some cases where you can avoid the purchase altogether. So, before you buy ask yourself the following key questions:

- Why do I actually need to purchase this item?
- What purpose will it serve?
- Is there an alternative approach to addressing this need?

Some alternative approaches may include:

- ☐ Rent or lease it
One alternative to buying is renting or leasing. As an example, you may need a particular piece of equipment for a special occasion. You may therefore explore opportunities to rent instead of buying as you will only need that piece of equipment for a finite period of time.
- ☐ Get used goods
Another alternative to purchasing is to get used products. Second hand retailers and surplus supply stores carry a large variety of used goods. So why buy something new that you can get at a significantly reduced charge? As an example, next time you need a new piece of office furniture, look at second hand options.



Buy Smarter

When purchasing is unavoidable there are techniques you can use to buy smarter.

Buying smarter means buying only what you need and nothing more.

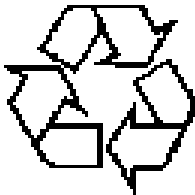
- ☐ Right-size your order
Spend some time assessing what you need. Before purchasing, take the time to carefully estimate the right size of your order by checking what is in stock and consider upcoming events or programs that will require specific materials and supplies. Also, talk to the people who use the good(s) you are ordering and ask if they need more or less than usual.
- ☐ Buy less by reducing consumption
Sometimes a simple shift in your behaviour can help you buy less. As an example, printing double-sided can cut your need for office paper in half. There are several behaviour changes that alone will reduce your need to buy.



Purchasing Recycled Products

Closing the Loop

Look for products made from recycled materials or post-consumer materials. When purchasing environmentally friendly products, you are helping close the recycling loop. The circle of arrows or the recycling symbol is called the **Mobius Loop**. The three arrows represent the three main components of recycling: *collection* (separating items out for recycling), *remanufacturing* (when businesses use the material collected to manufacture new products), and *sales* of recycled products (buying products made from recycled materials). This process or loop, when repeated over and over again, creates true recycling. It is easy to find products made with recycled or post-consumer materials; all you have to do is read the label. These are what the labels mean:



The three white or black arrows mean that the product is recyclable, but not necessarily made from recycled material. Recyclable means that it can be recycled.



You can be an environmentally friendly consumer by looking for this symbol on products when you go shopping. If you see three white arrows in a circle that means that the product or package contains recycled material.



per cent
Post-
consumer

The percentage of post-consumer recycled content may also be specified below the Mobius Loop.

Post consumer refers to recycled materials that were collected through a recycling program after being purchased and used. Pre-consumer or Recovered Content, on the other hand, means materials that never make it to the marketplace (such as trimmings from materials cut out in a factory), but are put back into the process of manufacturing new products. This pre-consumer recovered content is incorporated back into the production process is considered part of the recycled content. As such, strive to purchase items with post-consumer content rather than pre-consumer content whenever possible.



Table 1 – EPA recommended recycled content levels for commercial paper products

Item	Post-consumer content (%)	Recovered Content (%)
Bathroom Tissue	20-60	20-100
Paper towels	40-60	40-100
Paper napkins	30-60	30-100
Facial tissue	10-15	10-100
General purpose industrial wipes	40	40-100
Plastic trash bags	10-100	10-100

Adapted from USGBC “Existing Buildings Reference Guide” (2006)



Green Purchasing Self Assessment Action Survey

Instructions:

This tool is designed to help assess baseline information and track your progress in implementing your organization's *Green Purchasing Plan*.

In the table below, input your green purchasing initiatives and indicate your progress on incorporating them into your daily routine. As an example, if the organization has committed to use 100 per cent recycled content paper, you can use the table to indicate whether you are practicing the behaviour and how frequently you are doing so (e.g. from (1) seldom to (5) always). If you cannot practice the green purchasing initiative, please indicate why not. If you happen to be practicing others add it to the bottom of the table.

Green Purchasing Report

Date: _____

Green Products	Will Purchase	Already Purchasing	FREQUENCY SCALE 1=Always; 2=Almost Always; 3=Most Often; 4=Frequently; 5=Occasionally; 6=Never	Can't Purchase	Explain
# 1	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
# 2	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
# 3	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
# 4	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
# 5	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	

Please answer the questions below to provide more feedback about your experience. Please be sure to identify and elaborate on any barriers to adopting a specific behaviour as well any support needs you have.

- 1) Related to green products you have purchased, how has your experience been so far? What support, if any, do you need to continue?



- 2) Related to green products that you intend to purchase, when do you intend to purchase them? What support, if any, do you need to start?

- 3) Related to green products you cannot purchase, what are the barriers preventing you from purchasing them? What support do you need to overcome these barriers?



Third Party Certifications



BOMA BEST

www.bomabest.com/

BOMA BEST (Building Environmental Standards) is a national program launched in 2005 by BOMA Canada to address an industry need for realistic standards for energy and environmental performance of existing buildings based on accurate, independently verified BOMA provides common standards; an array of educational and on-line assessment tools; independent data audits; and a four-level performance certification program.



Canada Organic

www.inspection.gc.ca/english/fssa/orgbio/orgbioe.shtml

Canada's Organic Products Regulations (OPR), which came into force on June 30, 2009, set out rigorous standards for the certification of products as organic by accredited certification bodies. Products that meet the production requirements and contain at least 95 per cent organic content may be labeled as "organic" and feature the new Biologique Canada Organic Logo.



Canopy Eco-paper Database

<http://canopyplanet.org/EPD/index.php>

This database contains a list of paper products available in the Canadian marketplace. For each product, this tool identifies which green standards each product meets. Products have information regarding percentage of post-consumer recycled content and whether the product was processed chlorine-free. It also lists which other third party certifying standards the products meet such as ancient Forest Friendly™, FSC, and Ecologo certification.



Dfe Formulator

www.epa.gov/dfe



This mark, created by the Environmental Protection Agency of the United States, allows consumers to identify and choose products that can help protect the environment and are safer for people. When you see the Dfe logo on a product it means that the Dfe scientific review team has screened each ingredient for potential human health and environmental effects and that-based on currently available information, EPA predictive models, and expert judgment, the product contains only those ingredients that pose the least concern among chemicals in their class.



Electronic Product Environmental Assessment Tool

www.epeat.net/

EPEAT is a system that helps purchasers evaluate, compare and select electronic products based on their environmental attributes. The system currently covers desktop and laptop computers, thin clients, workstations and computer monitors.

Desktops, laptops and monitors that meet 23 required environmental performance criteria may be registered in EPEAT by their manufacturers in 40 countries worldwide. Registered products are rated Gold, Silver or Bronze depending on the percentage of 28 optional criteria they meet above the baseline criteria. EPEAT operates an ongoing verification program to assure the credibility of the registry.



EnerGuide

<http://oee.nrcan.gc.ca/energguide/home.cfm>

EnerGuide is a Natural Resources Canada initiative that helps consumers identify the energy consumption rate of appliances. The EnerGuide label displays energy consumption in a year of normal service and rates it on a scale of low efficiency to high efficiency. It is displayed on both low and high efficiency appliances.



ENERGY STAR

www.oee.nrcan.gc.ca/energystar/index.html?text=N&printview=N

While Canada's EnerGuide label enables you to compare the energy consumption of various appliances, the ENERGY STAR symbol – displayed alone or as part of the EnerGuide label – helps you identify those that are the most energy efficient in their class. ENERGY STAR is an international symbol of premium energy efficiency. Products that display the ENERGY STAR symbol have been tested according to prescribed procedures and have been found to meet or exceed higher energy efficiency levels without compromising performance.



Environmental Choice EcoLogo Program

<http://www.terrachoice-certified.com/en/>

Created by the Government of Canada but recognized world-wide, EcoLogo™ is North America's largest, most respected environmental standard and certification mark. EcoLogo™ provides customers – public, corporate and consumer – with assurance that the products and services bearing the logo meet stringent standards of environmental leadership. The program compares products and services with others in the same category and develops rigorous and scientifically relevant criteria that reflect the entire lifecycle of the product. The EcoLogo™ symbol indicates that the products and services are certified as environmentally friendly under the Environmental Choice Program. The EcoLogo™ program has designed a website for both professional purchasers and consumers. Under the professional purchasers section, you are able to search for certified products by category, product type, or manufacturer. You can also create a Purchaser's Toolbox.



Forest Stewardship Council

www.fsccanada.org



FSC is an international certification and labeling system that guarantees that the forest products you purchase come from responsibly managed forests and verified recycled sources. Under FSC certification, forests are certified against a set of strict environmental and social standards, and fiber from certified forests is tracked all the way to the consumer through the chain of custody certification system. The end result is products in the marketplace carrying the FSC 'check-tree' logo.



GREENGUARD Indoor Air Quality Certified

www.greenguard.org

The Greenguard Environmental Institute (GEI) governs the GREENGUARD Certification Program and provides the world's only guide to third-party certified low emitting interior products and building materials. All certified products undergo quarterly indoor air quality performance testing according to stringent environmental chamber testing protocols and meet current indoor air quality standards. There are different streams of this certification program that specialize in furniture and education products that are safe for children and schools. Another stream deals specifically with building and construction materials.



The Green Key Program

<http://www.greenkeyglobal.com>

The Hotel Association of Canada's (HAC) Green Key Eco-Rating Program is a graduated rating system designed to recognize hotels, motels, and resorts that are committed to improving their fiscal and environmental performance. Based on the results of a comprehensive environmental audit, hoteliers are awarded a 1-5 Green Key rating and given guidance on how to "unlock" opportunities to reduce operating costs and environmental impacts through reduced utility consumption, employee training, and supply chain management.



Green Seal

www.greenseal.org

Green Seal certification is intended to help manufacturers, purchasers, and end users alike make environmentally responsible choices that positively impact business behaviours. Green Seal provides science-based certification standards and use internationally recognized methods and procedures. To earn Green Seal certification, a product must

meet the Green Seal environmental standard for the category as demonstrated by rigorous evaluation, testing and a plant visit.



LEED

www.usgbc.org/DisplayPage.aspx?CategoryID=19

Leadership in Energy and Environmental Design (LEED) is a Green Building Rating System developed by the U.S. Green Building Council that provides a set of standards for environmentally sustainable construction. Many new projects are being constructed using LEED

standards and many older buildings and houses are being retrofitted to meet LEED standards. Green Building Council members, representing every sector of the building industry, developed and continue to refine LEED. The rating system addresses six major areas:

- Sustainable sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality
- Innovation and design process



Solicitation Clauses

Green purchasing opportunities may be relevant to your organization's purchases that require a formal solicitation process. The sample clauses presented here are designed specifically to assist you with greening your formal solicitation documents. These clauses are intended to send a signal to the marketplace that your organization is looking to work with suppliers who share similar goals when it comes to environmental sustainability. These clauses can be inserted as desirable criteria so that suppliers who demonstrate a strong commitment in these areas can receive additional points in the evaluation. The following includes clauses related to reducing waste, greenhouse gas emissions and toxins:

Waste Reduction Clause

Our organization aims to reduce waste going to landfill where possible. Therefore, we will look favorably upon suppliers who support this aim. Please tell us how the design and the use of your product takes into account strategies to minimize and divert waste from landfill. Examples include initiatives that you have taken to reduce packaging or products that are made from recycled materials.

Energy Reduction Clause

Our organization aims to reduce its energy usage and associated greenhouse gas emissions where possible. Therefore, we will look favorably upon suppliers who support this aim. Please tell us how the design and use of your product takes into account strategies to reduce its energy usage and greenhouse gas emissions. Examples could include offering products with a limited amount of embedded carbon or limiting the amount of disposal carbon.

Toxin Reduction Clause

Our organization aims to reduce toxins in the workplace where possible. Therefore we will look favorably upon suppliers who support this aim. Please tell us what steps you have taken to reduce toxic and hazardous materials in your product offering. Furthermore, please identify any regulated hazardous materials found in your products. Examples could include products that contain volatile organic compounds (VOCs).

Water Conservation Clause

Our organization aims to conserve water in the workplace where possible. Therefore we will look favorably upon suppliers who support this aim. Please tell us what steps you have taken to conserve water in your product offering.



Supplier Leadership Questionnaire

Suppliers: Review the questionnaire. Mark which green initiatives you are practicing and submit this questionnaire with your bid. Please note that for any claims made below, the successful bidder will need to provide proof prior to final endorsement of the contract.

1. Does your company or facility have an environmental management system and is the system audited and/or registered?
 - ☐ We have a documented Environmental Policy.
 - ☐ We have an environmental management system registered to ISO 14001.
 - ☐ We have a system registered, certified or recognized by another standard (e.g., EMAS) please specify: _____.
 - ☐ We have a non-registered audited environmental management system.
 - ☐ We conduct compliance audits to health, safety and environmental legislation.
 - ☐ None of the above applies to our organization.

2. Does your company work to reduce waste in its daily operations?
 - ☐ We conduct waste reviews/audits and have a waste reduction plan.
 - ☐ We have an office recycling program (e.g., office paper, beverage containers, batteries, printer cartridges).
 - ☐ We have other recycling programs in our operations (e.g., cardboard, metal, packaging, fibres). Please specify: _____.
 - ☐ We have a composting program.
 - ☐ None of the above apply to our organization.

3. Does your company work to reduce waste associated with its product or service offering?
 - ☐ We take back our products and packaging at end of life.
 - ☐ We have substituted packaging with compostable or biodegradable material.
 - ☐ None of the above apply to our organization.



4. Does your company work to save energy and reduce its greenhouse gas (GHG) and air emissions?

- ☐ We have conducted an energy consumption audit and have an energy reduction plan.
- ☐ We have retrofitted our facility with energy efficient lighting and equipment (e.g. HVAC).
- ☐ We use ENERGY STAR (or equivalent) certified office equipment and/or appliances.
- ☐ We purchase renewable (or green) energy and/or purchase carbon off-sets for all the company's corporate travel.
- ☐ We have retrofitted our facility, our fleet or made process improvements to decrease GHG and air emissions.
- ☐ We have an alternative transportation program for employees (e.g., public transit subsidy, cycling facilities, carpool promotion) and/or a program to green our fleet.
- ☐ None of the above apply to our organization.

5. Does your organization promote water conservation?

- ☐ We have installed low-flow and flow control fixtures or waterless technologies
- ☐ We promote efficient water use habits among our employees
- ☐ None of the above apply to our organizations

6. Tell us about any significant policies, programs or practices not identified in the questions above that advance the principles of environmental sustainability. This may include product innovation, community outreach or other practices not addressed by questions one through five. Attach additional documentation as necessary.



Purchasing Networks

This resource provides a list of purchasing networks active in Canada. These organizations are a source of new information and resources on green purchasing and they also offer opportunities for networking. These resources may help you identify products and strategies for your green purchasing plan and its implementation.

Sustainability Purchasing Network

What: A learning resource centre for sustainable purchasing offering in-person learning events, web forums to exchange information, networking opportunities, collaboration and advisory services.

Why: Their mission is the creation of a sustainable economy by means of educating, connecting and inspiring organizations to the ways of sustainable purchasing

Where: Website: www.buysmartbc.com/
 Address: First Floor, 470 Granville Street
 Vancouver, B.C., V6C 1V5
 Canada
 Email: info@buysmartbc.com
 Telephone: 1-604-488-5350

Responsible Purchasing Network

What: The Responsible Purchasing Network (RPN) is an international network of buyers dedicated to socially responsible and environmentally sustainable purchasing. The RPN website provides a wide variety of tools and resources including product guides, sample policy, procedures, terminology, and more, to support green purchasing initiatives. The RPN also facilitates networking events and hosts a variety of webinars (similar to seminars, but in an online setting) on various green purchasing topics.

Why: Their mission is to “promote and practice responsible purchasing by identifying best practices, developing effective purchasing tools, educating the market, and using our collective purchasing power to maximize environmental stewardship, protect human health, and support local and global sustainability.”

Where: Website: www.responsiblepurchasing.org
 Address: 6930 Carroll Avenue, Suite 900
 Takoma Park, MD 20912
 USA
 Email: rpn@newdream.org
 Telephone: 1-877-683-7326



North American Green Purchasing Initiative

What: An initiative designed to promote green purchasing and facilitate the development of a North American-wide network that can share resources, knowledge and experiences to support enhancement of the green purchasing movement. The website includes a wide range of materials that can support your green purchasing efforts including the Eco-Eval self assessment tool.

Why: North American Green Purchasing Initiative (NAGPI) plays a coordinating role to:

- Compile and maintain a list of ongoing green purchasing activities to avoid unintended duplication of effort;
- Create a unified voice to engage manufacturers, purchasers, politicians, the media and the general public;
- Develop and maintain a database of supporting tools and purchasing policies used across North America;
- Identify research needs (such as the need to better quantify environmental benefits of green purchasing);
- Facilitate development of common marketing language beneficial to all; and
- Launch coordinated campaigns to improve the performance of specific commodity areas

Where:

Website:	www.cec.org
Address:	393, rue St-Jacques Ouest Bureau 200 Montréal (Québec), H2Y 1N9 Canada
Email:	info@cec.org
Telephone:	1-514-350-4300



Training and Communication Activities

These activities are intended to be considered for Communication, Education and Training Schedule ([Worksheet 5A](#)).

1. **Meeting Presentations** – Leaders from your organization, or green team members can help to spread the word about the *Green Purchasing Plan* and priority green products by integrating key messages into meetings.

Example goals:

- Demonstrate high-level support and commitment.
- Generate enthusiasm and motivate staff to participate.

Example target:

- Provide information about the *Green Purchasing Plan* in 90 per cent of organization meetings during the implementation phase.

Who could help deliver this activity?

- Senior managers, department leads or members of the green team

2. **Green Purchasing Lunch and Learn** –a lunch and learn series can be organized to provide training on how to procure priority green products and measure purchasing levels

Example goals:

- Provide information and resources for procuring and tracking purchasing levels related to the priority green products.

Example target:

- 75 per cent of staff attends.

Who could help deliver this activity?

- Interested green team members

3. **Poster and Sticker Campaigns** – displaying posters and stickers around your worksite as reminders and information resources related to procuring green products and reducing overall consumption levels

Example goals:



- Provide reminders and encouragement to change behaviour in relation to the green purchasing.

Example target:

- When using posters and/or stickers distribute them across 100 per cent of organization's facilities.

Who could help deliver this activity?

- Interested green team members

4. **Email Campaigns** – ongoing email communication with your colleagues should involve sending reminders, tips and facts, FAQs, updates, and invitations to events. Emailing is a simple and effective way to keep staff members motivated and informed.

Example goals:

- Send reminders, tips and facts, FAQs, updates and/or invites to events.

Example target:

- Send a message at least once a month to all employees.

Who could help deliver this activity?

- Interested green team members

5. **Orientation Programs** – you should work with your HR department (if applicable) to integrate a green purchasing component into orientation programs to inform new staff of their role in procuring priority green products.

Example goals:

- Adapt orientation programs so that all new staff are informed of the *Green Purchasing Plan*.

Example target:

- 100 per cent of new staff are aware of the organization's *Green Purchasing Plan*.

Who could help deliver this activity?

- Interested green team members
- Human Resource staff

6. **Online Training Programs** - Flexible, readily available online training is effective in providing the necessary skills and knowledge related to procuring green products.



Example goals:

- Develop an online training program that allows staff to access information and resources at anytime.

Example target:

- Consider making this training mandatory for all staff with a target of 100 per cent new staff.

Who could help deliver this activity?

- Internal or external specialist (i.e., consultant)

7. **Specialized In-Person Training** - Specialized training courses could also be organized. For example, training could be provided to help staff understand how to properly use green cleaning supplies.

Example goals:

- Provide specialized, technical training related to green purchasing.

Example target:

- Specialized training should target select individuals who can act as trainers to other staff members.

Who could help deliver this activity?

- Internal or external specialist (i.e., consultant)
- Informed green team members

8. **Celebration and Kick-Off Events** - celebrating major milestones is an important time to engage your colleagues. You should think about organizing a kick-off event and celebrating implementation achievements.

Example goals:

- Present an overview of your plan and/or achievements.
- Reward and recognize staff for their efforts to motivate them to continue and engage new staff members to take action.

Example target:

- Reach 80 per cent of your colleagues.

Who could help deliver this activity?

- Interested green team members

9. **Raise Awareness about Buying Less** - If not questioned or analyzed, behavioural habits can be inefficient and often lead to excessive consumption and waste.



There is a wide range of simple behavioural practices that should be scrutinized in order to reduce excessive consumption, and thus, excessive purchasing. A very common example can be found in the over use of copy paper. Just the simple action of printing your copies double sided will reduce your purchasing needs by up to half. An important part of a green purchasing campaign is therefore to raise awareness of how purchasing habits can be improved. A major goal should be to buy less and improve the overall efficiency of your organization's purchasing practices.

Example goals:

- To develop a communication activity that will result in staff consuming less in order to reduce the amounts that are purchased.
- To talk to people who make purchases and discuss how they can be more efficient in planning their purchases in order to reduce the amounts they buy (e.g., right-sizing your orders or renting instead of purchasing to serve short-term needs).
- Set up methods to track level of consumption so that you can measure performance.

Example targets:

- Reduce consumption of priority green products by 5 per cent by a specific date.
- Increase the use of surplus sales items by 5 per cent by a specific date.
- Hire short-term service providers or rent products that are only needed temporarily, as often as possible.

Who could help deliver this activity?

- Implementation team with support from your organization's senior leaders.

10. **Website Updates** – make use of the intranet and/or internet to provide information, tools and training related to green purchasing. For example, the [Top Green Purchasing Products Factsheets](#) could be made available online for staff to consult when purchasing the priority green products.

Example goals:

- Provide information, tools and other resources online so that they are easily accessible.

Example target:

- Develop a green purchasing page on your organization's intranet within the first 6 months of implementing your Plan.



Who could help deliver this activity?

- Implementation team and IT staff



Top Green Purchasing Products Factsheets



Green Chairs Factsheet

Factsheet Contents

- What is a Green Chair?
- Rethink Your Behavior
- What are the Benefits of Buying Green Chairs?
- Additional Costs of Ownership
- Selecting a Green Chair
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is a Green Chair?

A green chair includes a combination of the following features:

- It has recycled and/or biodegradable content
- It contains minimal volatile organic compounds (VOC's)
- It has minimal packaging, high durability and is easy to repair
- It is adjustable and adaptable to new spaces and styles
- It is light-weight and compact
- It is in accordance with third party eco-certification

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Is the product actually necessary?
- How can recycling and reuse of chairs be integrated into office operations?
- Can we source used furniture that will suit our needs before buying new?
- Do we select products with warranties to ensure long-life?



What are the Benefits of Buying Green Chairs?

Reduce the use of natural resources:

- Green chairs contain recycled components, which reduces the consumption of wood, metals and petroleum products.
- Recycling components saves fossil fuel needed to extract raw materials used in the construction of new components.

Improve air quality:

- Green chair design avoids using materials that emit volatile organic compounds (VOCs) which reduce indoor air quality that is unhealthy for humans in high concentrations (e.g., formaldehyde found in glue is a known carcinogen).
- Green chairs are designed to be light-weight and compact in order to reduce carbon emissions associated with transport and storage.

Divert solid waste:

- Green chairs are more durable and last longer, preventing frequent disposal and reducing accumulation in landfills.
- They are also designed to be adaptable to new spaces and styles to prevent frequent replacement and waste issues.
- Green chairs also avoid excessive and non-recyclable packaging, which reduces unnecessary waste management issues.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, conventional, non-recycled chairs can be less expensive to buy initially, but when you factor in the costs to employee health and performance you will find that the total cost of owning that chair is higher than initially expected. The volatile organic chemicals emitted into the workplace from conventional chairs can cause respiratory problems and headaches that reduce employee performance, and thus increase the costs to your organization.

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a chair’s manufacturing process, from the harvesting of raw materials used to build the components (i.e., wood and metal) through the burning of fossil fuels during the assembly of the chairs in factories.
Natural Resources	Chairs made with virgin natural resources (i.e., wood and metal) will have greater costs to the environment than those made with recycled or reused materials.
Disposal Costs	
Packaging	Chairs with excessive packaging should be avoided as there will be additional costs associated with managing the waste. Recyclable packaging should also be selected, as some recyclables can be sold to offset costs.
Reuse or Recycling	Chairs that can be recycled and are durable enough to be reused will have reduced disposal costs. For example, some items can be sold for recycling purposes through surplus sales.
Disposal Carbon Emissions	The equipment needed to haul and disassemble chairs will generate added carbon emissions that should be considered in the total cost of owning a chair. Those that can be recycled will have lower carbon emissions associated with disposal.



Selecting a Green Chair

When selecting a green chair, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional chair characteristics to avoid, and highlights the desirable features of green chairs to seek out. Try to select green chairs with the highest quantity of these attributes.

Table 2: Selecting a Green Chair

What to Avoid	What to Choose
Products without third party eco-certifications	Products that are certified with third party eco-certifications (see Table 3)
Non-recyclable materials and components	Furniture with materials and components that can be recycled
Excessive, non-recyclable and non-reusable packaging	Recyclable/reusable packaging
New products made of non-recycled, non-reusable materials	Used, refurbished, remanufactured, recycled products
Materials containing toxic chemicals that can be emitted as VOCs and reduce air quality	Materials containing non-toxic chemicals
Non-adaptable	Modular furniture that can be adapted to new office spaces
Non-durable	Durable furniture with longer life cycles. Look for warranties that ensure durability.
Heavy, large furniture	Light-weight, compact furniture
Suppliers without take-back programs	Suppliers with take-back programs that guarantee resell the product or reuse its components
Purchasing furniture for temporary use	Leasing furniture for temporary use
Design and appeal that is not “timeless”	Design that will hold its appeal and not become “outdated” as trends and styles change
Suppliers without sustainability commitments	Suppliers committed to environmental sustainability
Non-renewable resources	Products made with fast-growing renewable resources
CCA pressure-treated wood, which contains chromium, copper and arsenic	Non-CCA pressure-treated wood



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green chairs. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
	GREENGUARD: www.greenguard.org/
	Blue Angel eco-logo: www.blauer-engel.de
	Environmental Choice EcoLogo: www.environmentalchoice.ca
	Forest Stewardship Council: www.fsccanada.org



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green chairs. For example:

- ___ per cent of chairs will be GREENGUARD certified
- ___ per cent of chairs will be made with at least 50 per cent recycled content
- ___ per cent of chairs will be purchased with warranties guaranteeing durability
- ___ per cent of suppliers will provide take-back programs



Green Computers Factsheet

Factsheet Contents

- What is a Green Computer?
- Rethink Your Behavior
- What are the Benefits of Buying Green Computers?
- Additional Costs of Ownership
- Selecting a Green Computer
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is a Green Computer?

A green computer includes a combination of the following green features:

- It is user-friendly and has energy saving attributes
- It is made with minimal hazardous substances
- It is a durable computer designed for upgrade
- It comes with minimal packaging that can be returned to the manufacturer or supplier
- It is in accordance with third party environmental standards

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Do I really need to buy this computer? Can I buy less?
- Can currently owned computers be redeployed for your use?
- Am I buying durable computers that can be upgraded?
- Do I turn off computers when I am not using them?
- Are our old computers recycled or reused?
- Do our training programs address greener habits?



What are the Benefits of Buying Green Computers?

Reduce the use of natural resources:

- Buying green computers from manufacturers who recycle or reuse components reduces the demand for virgin natural resources.

Reduce energy consumption:

- Green computers are equipped with energy saving features that can reduce energy use by 40 per cent or more.

Improve air quality:

- Components of computers that contain ozone, volatile organic compounds (VOCs), formaldehyde, and flame retardants can “off-gas” and impact air quality and human health.

Divert solid waste:

- Re-sale or redeployment of computers through surplus sales recycling programs will divert computers from landfills.
- Buying durable and upgradable computers increase their lifespan, reducing the frequency of replacement.
- Selecting products with minimal packaging also reduces waste management issues.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, when one considers the energy consumption associated with operating computers, those that use less electricity as a result of energy saving features, will provide savings to your organization and reduce impacts to the environment. According to the Responsible Purchasing Network (2008), ENERGYSTAR certified computers can save you up to 40 per cent on energy costs.

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good's manufacturing process. Carbon emissions occur while mining the metals and petroleum products that make up computers and also during assembly in the manufacturing facility.
Natural Resources	Computer manufacturing requires the use of natural resources such as metals and petroleum products for plastics. Upfront costs will be higher for computers with greater virgin natural resource content.
Costs of Operation	
Electricity Consumption	Computers consume various amounts of electricity while in use. Therefore, it is important to predetermine the amounts of electricity you will need to operate the computer. Selecting computers with energy saving features will ensure a lower total cost of ownership.
Disposal Costs	
Packaging	Computers with excessive packaging should be avoided as there will be additional costs associated with managing the waste.
Reuse or Recycling	The possibility to recycle or reuse computers should be analyzed in order to assess if there will be resale value at the end of the product's life or if there will be costs associated with disposal.
Hazardous Waste Management	Computers contain hazardous materials that can lead to additional costs of managing the disposal of this product. The hazardous materials, if not managed properly, can also have increased costs to the environment.
Disposal Carbon Emissions	Another cost to consider is the amount of carbon emissions that will result from transporting the used computer and dismantling it for disposal or reuse.



Selecting a Green Computer

When selecting a green computer, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional computer characteristics to avoid, and highlights the desirable features of green computers to seek out. Try to select green computers with the highest quantity of these attributes.

Table 2: Selecting a Green Computer

What to Avoid	What to Choose
Products without third party eco-certification	Choose products with third party eco-certifications (see Table 3)
No built-in power management features	Built-in, user-friendly power management features
Excessive, non-recyclable and non-reusable packaging	Choose recyclable/reusable packaging and a supplier that accepts packaging returns
Hazardous substances such as hard metals and volatile organic compounds	Products made with minimal hazardous substances and suppliers that manage their disposal
Manufacturers who are not members of the Electronic Industry Citizenship Coalition (EICC)	Manufacturers with EICC memberships
Non-upgradable computers	Durable computers designed to be upgraded



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green computers. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
 EcoLogo™	Environmental Choice EcoLogo: www.ecologo.org
	Energy Star: www.oeenrncan.gc.ca/energystar/english/consumers/index.cfm
	GREEN GUARD: www.greenguard.org/
	Blue Angel: www.blauer-engel.de/en/index.php
	The Electronic Product Environmental Assessment Tool: www.epeat.net/



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green computers. For example:

- ___ per cent of all new computers purchased will have a minimum EPEAT™ and Energy Star™ certification

References and Additional Resources

Energy Star symbol: www.oeenrcan.gc.ca/energystar/english/consumers/index.cfm

Environmental Choice EcoLogo: www.terrachoice.com/Home/Services/EcoLogo_percent20Program

Blue Angel eco-logo: www.blauer-engel.de/en/index.php

The Electronic Product Environmental Assessment Tool: www.epeat.net/

The Electronic Industry Code of Conduct: www.eicc.info/index.htm



Green Multifunction Device Factsheet

Factsheet Contents

- What is a Green Multifunction Device (MFD)?
- Rethink Your Behavior
- What are the Benefits of Buying Green MFDs?
- Additional Costs of Ownership
- Selecting a Green MFD
- Third Party Certifications
- Example Green Purchasing Targets

What is a Green Multifunction Device (MFD)?

A MFD can copy, scan, print, and even fax. This in itself benefits the environment as it can prevent your organization from buying several machines. Additionally, there are green features to consider when selecting the optimal MFD for your office. A green MFD contains a combination of the following features:

- It has user-friendly energy saving attributes
- It is equipped with automatic duplexing capabilities
- It is made with minimal hazardous substances
- It is durable and designed for upgrade
- It comes with minimal packaging that can be returned to the manufacturer or supplier at the end of its life
- It is in accordance with third-party environmental standards

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Do we really need to buy this MFD now?
- Can we buy fewer or lease them temporarily?
- Can our old devices be reused or donated to other organizations through Surplus Sales? If not, can we recycle old machines?
- Do staff know how to properly use green MFD features?
- Do we turn off MFDs when they are not in use?

What are the Benefits of Buying Green MFDs?



Conserve natural resources:

- MFDs avoid the need for buying separate machines, reducing natural resources consumption associated with office equipment.
- MFDs with duplexing features help to reduce impacts on forests by reducing paper consumption by up to 50 per cent.

Reduce energy consumption:

- Electricity consumption in the energy-saver mode is at least 50 per cent less than in regular idle mode.
- MFDs replace multiple machines, reducing the overall number of machines using electricity.

Improve air quality:

- By purchasing MFDs you can reduce the number of machines in the office, thus reducing:
 - ozone emission concentrations
 - dust emission concentrations
 - the release of volatile organic compounds (VOC's)
 - formaldehyde and fire retardants

Divert waste and prevent hazardous waste:

- Green MFDs do not contain CFCs and come with reduced packaging.
- MFDs also support remanufactured toners, reducing the amount of waste associated with the machines operation.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, conventional MFDs without energy saving features may have a lower purchase price point, but when you factor in additional “hidden” costs, such as higher energy consumption rates, conventional MFDs have a high ownership cost. According to the Responsible Purchasing Network (2008), ENERGYSTAR certified MFDs can save you up to 40 per cent on energy costs. Additionally, green products with minimal packaging and hazardous wastes enable you to reduce the labour costs of managing packaging and the disposal costs associated with hazardous wastes.



Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.

Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good’s manufacturing process, from the mining of raw materials that are used to make MFDs through to the assembly of MFDs. The carbon associated with the creation of MFDs is an added cost to the environment.
Natural Resources	MFDs made with more virgin natural resources will have greater costs to the environment (land degradation and loss of wildlife habitat) than those made with recycled or reused materials.
Costs of Operation	
Electricity Consumption	Operation costs are important to consider as they occur over the entire time the product is in use. To get an idea of the electricity costs associated with using MFDs ask the supplier about the average amount of electricity consumed by the device per year and check to see if it has any energy-saving features.
Disposal Costs	
Packaging	MFDs that come with excessive, non-recyclable packaging should be avoided as there will be additional costs associated with managing the waste.
Reuse or Recycling	The environmental and social cost associated with the disposal of MFDs can be quite significant. MFDs that can be recycled or reused will mitigate these costs and offset upfront costs for the new user.
Hazardous Waste Management	MFDs can potentially contain hazardous waste materials which will need to be managed at a cost.
Disposal Carbon Emissions	Costs associated with the carbon emitted during the transportation of MFDs and at the disposal phase of their lifecycle can be quite high as many are shipped overseas for disposal purposes.



Selecting a Green MFD

When selecting a green MFD, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional machinery characteristics to avoid, and highlights the desirable features of green MFDs to seek out. Try to select green MFDs with the highest quantity of these attributes.

Table 2: Selecting a Green MFD




What to Avoid	What to Choose
Products without third party eco-certification	Choose products with third party eco-certifications (see Table 3)
No built-in power management features	Built-in, user-friendly power management features
Excessive, non-recyclable and non-reusable packaging	Choose recyclable/reusable packaging and a supplier that accepts packaging returns
Hazardous substances such as hard metals and volatile organic compounds	Products made with minimal hazardous substances and suppliers that manage their disposal
Purchasing to fulfill temporary needs	Consider leasing, which requires the distributor to take equipment back when you no longer need it
Manufacturers who are not members of the Electronic Industry Citizenship Coalition (EICC)	Manufacturers with EICC memberships
Non-upgradable MFDs	Durable MFDs designed to be upgraded



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green MFDs. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
 EcoLogo[™]	Environmental Choice EcoLogo: www.ecologo.org
 ENERGY STAR	Energy Star: www.oeenrcan.gc.ca/energystar/english/consumers/index.cfm
 DER BLAUE ENGEL JURY UMWELTZEICHEN	Blue Angel: www.blauer-engel.de/en/index.php



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green MFDs. For example:

- ___ per cent of all new MFDs acquired will be Energy Star™ certified
- ___ per cent of all MFDs acquired (that are primarily photocopiers) will be Environmental Choice EcoLogo certified

References and Additional Resources

Energy Star symbol: www.energystar.gov/

Environmental Choice EcoLogo: www.ecologo.org/

Blue Angel eco-logo: www.blauer-engel.de/en/index.php

The Electronic Industry Code of Conduct: www.eicc.info/index.html



Green Copy Paper Factsheet

Factsheet Contents

- What is Green Copy Paper?
- Rethink Your Behavior
- What are the Benefits of Buying Green Copy Paper?
- Additional Costs of Ownership
- Selecting Green Copy Paper
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is Green Copy Paper?

Green copy paper includes a combination of the following green features:

- It contains recycled, post-consumer fibers
- It is not bleached with chlorine
- It is made of fibers from alternative fast-growing sources such as hemp
- Is in accordance with third party environmental certification

Myth Buster!

Today recycled paper does not jam printers. Recycled paper is of equal quality to non-recycled paper and works well in printers and copiers.

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- How can the amount of paper currently used be reduced?
- Is duplexing a common practice?
- How can recycling and reuse of copy paper be integrated into office operations?
- Do our training programs address green practices?
- How can we provide staff with a better understanding of and commitment to our green purchasing program?



What are the Benefits of Buying Green Copy Paper?

Reduce resource consumption:

- Recycled paper substituted for non-recycled paper, saves trees, oil, water and energy.
- The recycling of one ton of paper saves 17 trees and 7,000 gallons of water (US EPA).

Improve air quality:

- By using recycled paper options, the amount of GHG emissions associated with harvesting of trees is reduced.
- Preserving trees, maintains vital carbon sinks.
- The emissions associated with the pulp and paper industry have local and global implications.

Divert solid waste:

- Though half of all paper and paperboard is recycled, these items still make up about 34 per cent of municipal solid waste (EPA, 2008).
- Buying recycled products will help to reduce this amount.

Improve water quality:

- Non-bleached paper reduces the use of chlorine (which poses potential hazards during the manufacturing and handling of chemicals, the emissions during production, and effluent afterwards).

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, an important factor to consider when purchasing copy paper is the weight of the paper. The heavier the paper, the more expensive it is. By selecting a lighter weight paper the cost to the environment will be reduced, as will the purchase price.

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good’s manufacturing process, from the harvesting of trees through the burning of fossil fuels during the processing of pulp.
Natural Resources	Products made with virgin and old growth trees will have greater costs to the environment than those made with recycled or reused paper fibres because they will result in the loss of valuable carbon sinks as well as wildlife habitat.
Disposal Costs	
Reuse or Recycling	Used paper can be sold in some cities, which will help to offset purchase costs. Packaging for copy paper should also be recyclable to avoid the cost of managing it for the landfill.



Selecting Green Copy Paper

When selecting green copy paper, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional paper characteristics to avoid, and highlights the desirable features of green copy paper to seek out. Try to select green copy paper with the highest quantity of these attributes.

Table 2: Selecting Green Copy Paper

What to Avoid	What to Choose
Products without third party eco-certifications	Products with one or more third party eco-certifications (see Table 3)
Virgin or low post-consumer recycled fibre content	High post-consumer recycled fibre content (ideally 100 per cent)
Unsustainably harvested wood	Paper made of sustainably harvested wood fibre or alternative fibres such as hemp
The use of chlorine in manufacturing	Chlorine-free paper
Highest basis weight*	Lowest basis weight
Old growth tree fibres	Old growth fibre free
Inappropriate brightness	Appropriate brightness**
<p>*The basis weight of a paper is the designated fixed weight of 500 sheets, measured in pounds and sheet size. Standard basis weight is 20 lbs.</p> <p>**The brighter the paper the more chemicals and/or less recycled content were used in production. Use bright paper only when necessary.</p>	



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green copy paper. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
	Forest Stewardship Council: www.fsccanada.org/paperproducts.htm
	Ancient Forest Friendly Paper: http://marketsinitiative.org/index.php?page=ecopaper-labels
	Processed chlorine free - Chlorine Free Product Association: www.chlorinefreeproducts.org/about.htm
	Environmental Choice EcoLogo: www.ecologo.org/
	PEFC – Programme for the Endorsement of Forest Certification schemes: www.pefc.org/internet/html/about_pefc.htm



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green copy paper. For example:

- ___ per cent of all copy paper purchased will contain at least 30 per cent post consumer recycled content
- ___ per cent of all copy paper purchased will contain 100 per cent post consumer recycled content

References and Additional Resources

Responsible Purchasing Network:

www.responsiblepurchasing.org/purchasing_guides/copy_paper/

Forest Stewardship Council: www.fscscanada.org/paperproducts.htm

Ancient Forest Friendly Paper: <http://marketsinitiative.org/index.php?page=ecopaper-labels>

PEFC – Programme for the Endorsement of Forest Certification schemes:

www.pefc.org/internet/html/about_pefc.htm

Chlorine Free Product Association: www.chlorinefreeproducts.org/about.htm

Environmental Choice EcoLogo:

www.ecologo.org/en/certifiedgreenproducts/?category_id=28#28



Green Writing Instrument Factsheet

Factsheet Contents

- What is a Green Writing Instrument?
- Rethink Your Behavior
- What are the Benefits of Buying Green Writing Instruments?
- Additional Costs of Ownership
- Selecting Green Writing Instruments
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is a Green Writing Instrument?

A green writing instrument includes a combination of the following green features:

- It is made of recycled content
- It is refillable
- It is biodegradable
- It contains soy or vegetable based inks
- It does not contain toxic substances
- It is in accordance with third party environmental standards
- It has a third party eco-certification

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Is the product actually necessary? If so, how can we purchase less?
- How can recycling and reuse of pens and pencils be integrated into office operations?
- Do our training programs address green practices?

Myth Buster!

Refillable pens/pencils are not difficult to reload and the refill cartridges are not difficult to find. They have become so common that they are available from nearly office supply wholesalers.



What are the Benefits of Buying Green Writing Instruments?

Reduce use of natural resources:

- Reduce the consumption of petroleum products used to create energy for the extraction of the materials that are used to make instruments.
- Depletion of other natural resources used to construct instruments such as rubber, metals, trees and petroleum can also be reduced.

Improve air quality and human health:

- The use of non-toxic markers and highlighters improves indoor air quality and improve human health.
- Recycled products reduce the burning of fossil fuels during extraction of natural resources, which reduces GHG emissions and smog.

Divert solid and toxic wastes:

- Using inks without heavy metals prevents the accumulation of metals in nature, which have negative human and wildlife health impacts.
- Purchasing recycled, biodegradable, refillable or reusable products will reduce accumulation of used instruments in landfills.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, pens and pencils that come with excessive packaging will have higher costs associated with managing the packaging. Also, by purchasing refillable writing instruments the costs of buying new instruments are reduced to only buying refills (this further reduces landfill waste).

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good's manufacturing process, from the mining of petroleum products and metals that make up the components of pens, through the burning of fossil fuels during production.
Natural Resources	Products made with more virgin metals and petroleum products will have greater costs to the environment than those made with recycled or reused natural resources.
Disposal Costs	
Packaging	Writing instruments that are packaged individually will have higher costs associated with managing/handling packaging.
Reuse or Recycling	Pens and pencils can be refilled, which is good way to reduce the cost of managing waste.
Hazardous Waste Management	Writing instruments can contain hazardous wastes including toxins found in plastics, metals and inks, which have environmental and human health costs.
Disposal Carbon Emissions	The disposal of writing instruments has associated environmental costs. The more disposable writing instruments purchased, the greater carbon emissions associated with the disposal of the instrument.



Selecting Green Writing Instruments

When selecting green writing instruments, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional writing instrument characteristics to avoid, and highlights the desirable features of green writing instruments to seek out. Try to select green writing instruments with the highest quantity of these attributes.

Table 2: Selecting Green Writing Instruments

What to Avoid	What to Choose
Products without third party eco-certification	Products with third party eco-certification (see Table 3)
Single use pens and pencils	Refillable pens and pencils
Virgin materials	Recycled materials
Petrochemical-based materials	Bio-based materials (ensure sustainable harvesting practices)
Inks made of heavy metals	Soy-based or vegetable inks
Solvent-based markers/highlighters	Water-based markers/highlighters
Wide-point instruments	Fine point instruments
Ketone-based dry-erase markers	Alcohol-based dry-erase markers



Third Party Certifications

Selecting products with an eco-certification ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certification that is applicable to green writing instruments. The standards set by this organization can be reviewed by visiting the website listed below.

Table 3: Third Party Eco-Certification

Eco-Logo	Additional Information
	Environmental Choice EcoLogo: www.ecologo.org/



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green writing instruments. For example:

- ___ per cent of writing tools are labeled as being green choices

References and Additional Resources

Responsible Purchasing Network: www.responsiblepurchasing.org/purchasing_guides/

Sustainable Purchasing Network: www.buysmartbc.com

Environmental Choice EcoLogo: www.ecologo.org/



Green Cleaning Supplies Factsheet

Factsheet Contents

- What are Green Cleaning Supplies?
- Rethink Your Behavior
- What are the Benefits of Buying Green Cleaning Supplies?
- Additional Costs of Ownership
- Selecting Green Cleaning Supplies
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What are Green Cleaning Supplies?

A green cleaning product includes a combination of the following green features:

- It contains biocompatible ingredients
- It is highly concentrated
- It has minimal and recyclable packaging
- It has pH levels that are not extremely high or low
- It is in accordance with third party eco-certifications
- It does not contain phosphates or toxins

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Is the product actually necessary? If so, how can the amounts used can be reduced?
- How can recycling and reuse of cleaning product containers be integrated into office operations?
- Do our training programs address using less and reusing containers?

Myth Buster!

It's not true that all green cleaning solutions clean poorly. There are many quality green solutions on the market that create long lasting suds and clean effectively. (You can also make your own effective green cleaners!)



What are the Benefits of Buying Green Cleaning Supplies?

Improve air quality and employee performance:

- Green cleaners reduce the amount of toxins, known as volatile organic compounds (VOCs), released into the atmosphere that impact human health in the workplace and beyond.
- Green cleaning programs have shown to improve human health and thus employee performance by reducing sick days associated with respiratory problems, headaches and more.

Reduce greenhouse gas (GHG) emissions:

- Concentrated green cleaning materials are lighter in weight and smaller in volume, reducing pollutants (i.e., GHG) emitted during transportation of goods.

Reduce toxic accumulation in water systems:

- Green cleaners are made of biodegradable ingredients and do not accumulate in water systems.
- Green cleaning supplies are not toxic to humans and aquatic life.

Divert solid waste from landfills:

- Purchasing bulk supplies and refilling containers diverts solid waste from landfills.
- Concentrated products also come with less packaging.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, conventional cleaning supplies are often not concentrated. This presents additional transportation costs (financial and environmental) and excess packaging issues. Using concentrated products will reduce both your impact on the environment and at the same time reduce transportation and packaging management costs. Additionally, conventional cleaners often have an added cost associated with employee performance. They emit toxic VOCs and can lead to respiratory and other health problems that increase number of sick days and lower employee's abilities to perform. By using green cleaners these costs can be reduced.



Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.

Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon in cleaning solutions refers to carbon dioxide emitted at all stages of a good's manufacturing process, from the mining of raw materials that make up the product (conventional solutions include petroleum products) through the burning of fossil fuels required in the processing of these materials.
Natural Resources	Some conventional cleaners use petrochemical-based solvents as an ingredient. These solvents come from fossil fuels extracted from the earth's crust.
Water Concentration	Traditional commercial cleaning products often contain a high concentration of water (if ingredients are listed, water is often listed first, indicating its high concentration). This means that your organization is basically paying for water. Green Cleaners are often more concentrated, giving you more value for your dollar.
Costs of Operation	
Energy Consumption	Concentrated solutions take up less space resulting in a smaller space to heat and maintain. Cleaning solutions that cannot be diluted in cold water require the use of energy to heat water in order to dilute the solution (this applies more to floor cleaners than dish and hand soap).
Disposal Costs	
Packaging	Concentrated cleaning solutions use less packaging because they have less volume. If purchased in bulk, less packaging is required, and dispensers can be refilled.
Reuse or Recycling	If packaging can not be recycled or reused your organization will incur the costs of disposal.
Hazardous Waste Management	If there are hazardous waste materials in cleaning supplies they will have to be managed carefully at the disposal phase, at additional cost to your organization.
Disposal Carbon Emissions	Costs associated with the carbon emitted during the disposal of a product should also be taken into consideration. Again, this is largely related to packaging of cleaning supplies. If they are reused the carbon associated with disposal of used containers/dispensers will be reduced.



Selecting a Green Cleaning Supplies

When selecting green cleaning supplies, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional cleaning supply characteristics to avoid, and highlights the desirable features of green cleaning supplies to seek out. Try to select green cleaners with the highest quantity of these attributes.

Table 2: Selecting a Green Cleaning Supplies

What to Avoid	What to Choose
Products without third party eco-certification	Products with third party eco-certification
Products that do not list the ingredients clearly on the package	Products that list the ingredients clearly on the package
Toxic chemicals: VOCs, EDTAs, NTAs, APEs, phosphates, chlorine, petro-chemicals, Triclosan, 2-butoxyethanol, powdered silica, and sodium silicate	Biocompatible ingredients: sodium carbonate, bicarbonate, citrate, pine oil and citrus based solvents
Excessive, non-reusable, and non-recyclable packaging	Products made with minimal packaging that can be re-used and recycled
Extreme pH levels (low or high)	pH levels close to 7.0
Non-Concentrated solutions	Concentrated solutions that can be diluted with water at room temperature.



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green cleaning supplies. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
 EcoLogo[™]	Environmental Choice Ecologo: www.ecologo.org
	Green Seal: www.greenseal.org
	NSF International: www.nsf.org
	Design for the Environment (DfE) Formulator: www.epa.gov/dfe



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green cleaning supplies. For example:

- ___ per cent of all cleaning solutions purchased are third party eco-certified

References and Additional Resources

Responsible Purchasing Network: www.responsiblepurchasing.org/purchasing_guides/cleaners/

The Green Cleaning Network: <http://greencleaningnetwork.org/gc-home.html>

Whistler 2020: www.whistler2020.ca/whistler/site/productAssessment.acds?context=2065129

Sustainable Purchasing Network: www.buysmartbc.com/spn-resources/products-and-services.html#cleaningsupplies

CancerSmart Consumer Guide. Labour Environmental Alliance Society. 2007.

Ecologo: www.ecologo.org

Green Seal: www.greenseal.org

NSF International: www.epa.gov/dfc

DfE Formulator: www.nsf.org



Green Letterhead & Business Card Factsheet

Factsheet Contents

- What Makes Letterhead and Business Cards Green?
- Rethink Your Behavior
- What are the Benefits of Buying Green Letterhead and Business cards?
- Additional Costs of Ownership
- Selecting Green Letterhead and Business Cards
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What Makes Letterhead and Business Cards Green?

Green letterhead and business cards contain a combination of the following green features:

- They are made up of recycled, post-consumer fibers
- They are not bleached with chlorine
- They are made of fibers from alternative, fast-growing resources such as hemp
- They are in accordance with third party environmental certification
- They include logos and text that will not be changed or updated frequently
- They are not printed in excessive quantities to prevent discarding of outdated material

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- How can the amounts used be reduced?
- How many do we really need to print?
- How can recycling and reuse be integrated into office operations?
- Do our training programs address green practices?



What are the Benefits of Buying Green Letterhead and Business Cards?

Reduce resource consumption:

- Recycled paper substituted for non-recycled paper, saves trees, oil, water and energy.
- Recycled paper saves 60 per cent of the energy needed to produce virgin paper (Centre for Ecological Technology).
- The recycling of one ton of paper saves 17 trees and 7,000 gallons of water (US EPA).

Improve air quality:

- By using recycled paper options, the amount of GHG emissions associated with harvesting of trees is reduced.
- Utilizing recycled paper leaves standing trees remove carbon from the air helping to improve air quality.
- Recycled paper generates 95 per cent less air pollution than paper production from virgin fibres (Centre for Ecological Technology).

Divert solid waste:

- Though half of all paper and paperboard is recycled, these items still make up about 34 per cent of municipal solid waste (EPA, 2008).
- Buying recycled products will help to reduce this amount.

Improve water quality:

- Non-bleached paper reduces the use of chlorine (which poses potential hazards during the manufacturing and handling of chemicals, the emissions during production, and effluent afterwards).

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, an important factor to consider when purchasing letterhead is the weight of the paper. The heavier the paper, the more expensive it is. By selecting a lighter weight paper the cost to the environment will be reduced, as will the purchase price.

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good’s manufacturing process, from the harvesting of trees through the burning of fossil fuels during the processing of pulp.
Natural Resources	Products made with virgin and old growth trees will have greater costs to the environment than those made with recycled or reused paper fibres because they will result in the loss of valuable carbon sinks as well as wildlife habitat.
Disposal Costs	
Reuse or Recycling	Used paper can be sold in some cities, which will help to offset purchase costs. Packaging for copy paper should also be recyclable to avoid the cost of managing it for the landfill.



Selecting Green Letterhead and Business Cards

When selecting green letterhead and business cards, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional paper characteristics to avoid, and highlights the desirable features of green letterhead and business card paper to seek out. Try to select green paper with the highest quantity of these attributes.

Table 2: Selecting Green Letterhead and Business Cards

What to Avoid	What to Choose
Products without third party eco-certifications	Products with one or more third party eco-certifications (see Table 3)
Virgin or low post-consumer recycled fibre content	High post-consumer recycled fibre content (ideally 100 per cent)
Unsustainably harvested wood	Paper made of sustainably harvested wood fibre or alternative fibres such as hemp
The use of chlorine in manufacturing	Chlorine-free paper
Highest basis weight*	Lowest basis weight
Old growth tree fibres	Old growth fibre free
Inappropriate brightness	Appropriate brightness**
<p>*The basis weight of a paper is the designated fixed weight of 500 sheets, measured in pounds and sheet size. Standard basis weight is 20 lbs.</p> <p>**The brighter the paper the more chemicals and/or less recycled content were used in production. Use bright paper only when necessary.</p>	



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green letterhead and business cards. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
	Forest Stewardship Council: www.fsccanada.org/paperproducts.htm
	Ancient Forest Friendly Paper: http://marketsinitiative.org/index.php?page=ecopaper-labels
	Processed chlorine free - Chlorine Free Product Association: www.chlorinefreeproducts.org/about.htm
	Environmental Choice EcoLogo: www.ecologo.org/
	PEFC – Programme for the Endorsement of Forest Certification schemes: www.pefc.org/internet/html/about_pefc.htm



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green letterhead and business cards. For example:

- ___ per cent of all letterhead purchased will contain at least 30 per cent post – consumer recycled content
- ___ per cent of business cards contain at least 30 per cent post-consumer recycled content

References and Additional Resources

Responsible Purchasing Network:

www.responsiblepurchasing.org/purchasing_guides/copy_paper/

Forest Stewardship Council: www.fscscanada.org/paperproducts.htm

Ancient Forest Friendly Paper: <http://marketsinitiative.org/index.php?page=ecopaper-labels>

PEFC – Programme for the Endorsement of Forest Certification schemes:

www.pefc.org/internet/html/about_pefc.htm

Chlorine Free Product Association: www.chlorinefreeproducts.org/about.htm

Environmental Choice EcoLogo:

www.ecologo.org/en/certifiedgreenproducts/?category_id=28#28



Green Paint Factsheet

Factsheet Contents

- What is Green Paint?
- Rethink Your Behavior
- What are the Benefits of Buying Green Paint?
- Additional Costs of Ownership
- Selecting Green Paint
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is Green Paint?

Green paint includes a combination of the following green features:

- It contains recycled, post-consumer content
- It contains water based “latex” solvents
- It contains low or no volatile organic compounds (VOCs)
- It contains natural, non-petrochemical components
- It is in accordance with third party eco-certifications

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Can we avoid the need for painting by using different construction materials (i.e., bricks don’t need to be painted)?
- Can I plan better to buy the right amount of paint to avoid having leftover paint?
- How can I dispose of leftovers properly (i.e., recycle them)?
- Do our training programs address greener habits?

Did you know?

As part of its pollution prevention efforts, the U.S. Army’s Aberdeen Proving Ground (APG) adopted Green Seal’s environmental standards for latex paint. The initial sales savings combined with disposal cost-reductions resulted in a first year savings of \$60,000. (Responsible Purchasing Network, 2007)



What are the Benefits of Buying Green Paint?

Reduce the use of natural resources:

- The use of fossil fuels in the extraction of raw materials, manufacturing and transport of paint can be reduced when using recycled paints.
- The use of heavy metals and oil can also be reduced or avoided by using green paints.

Improve air quality and human health:

- Buying green paints ensures that you prevent the emissions of volatile chemicals that reduce indoor air quality, contribute to smog and cause serious health concerns for humans.
- Employee health can be impacted by the emissions of volatile chemicals causing headaches, dizziness and reduced performance.

Prevent toxic waste:

- Green paints ensure heavy metals and other toxic chemicals (such as methyl benzene and formaldehyde) are not used in paints as pigments and additives, which can accumulate in nature and harm wildlife and humans.
- These chemicals have been linked to cancer, nervous system, kidneys, liver and heart damage (Responsible Purchasing Network).

Reduce waste:

- Paints can be collected and recycled in order to prevent disposal into landfills.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, about 34 million gallons, or five per cent of architectural paint sold, becomes leftover paint each year in the U.S. At an average disposal cost of \$8 per gallon, it would cost municipalities \$272 million dollars to collect and properly manage all this leftover consumer paint (Responsible Purchasing Network, 2007). This type of “hidden” financial and environmental cost must be taken into consideration to properly understand the true cost of ownership for paint.



Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.

Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a good’s manufacturing process, from the mining of raw materials (conventional paints are made of petroleum products) through the burning of fossil fuels during production.
Natural Resources	Products made with more virgin natural resources (i.e., petroleum in the case of paint) will have greater costs to the environment than those made with recycled or reused materials. Green recycled paint reduces the demand for virgin natural resources.
Disposal Costs	
Packaging	Paint products with excessive packaging should be avoided as there will be additional costs associated with managing the waste
Reuse or Recycling	Paint that is not toxic can be recycled, thus reducing the cost of managing the disposal of paint.
Hazardous Waste Management	Paints that contain toxic chemicals will require proper disposal, increasing your costs.
Disposal Carbon Emissions	The carbon emissions associated with transporting used paint and managing it in landfill sites generate further costs related to paint.



Selecting Green Paint

When selecting a green paint, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional paint characteristics to avoid, and highlights the desirable features of green paint to seek out. Try to select green paint with the highest quantity of these attributes.

Table 2: Selecting Green Paint

What to Avoid	What to Choose
Paint without third-party certification logos	Paint with third-party certification logos (see Table 3)
Non-recycled paints	Recycled paints with post-consumer content
Petrochemical-based solvents	Water-based, latex solvents
High VOC paints that are often quick drying	No or low VOC paints
Petrochemical-based components	Natural components
Excess, left over paint	Appropriate amounts for the space you are painting



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green paint. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
	Environmental Choice EcoLogo: www.ecologo.org
	Green Seal: www.greenseal.org
	GREEN GUARD: www.greenguard.org/



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green paint. For example:

- ___ per cent of paints purchased will be third-party eco-certified

References and Additional Resources

Responsible Purchasing Guide - Paint. Responsible Purchasing Network. 2007.

www.responsiblepurchasing.org/purchasing_guides/paint/index.php

Environmental Choice EcoLogo:

www.ecologo.org/en/certifiedgreenproducts/?category_id=20#20

Green Seal: www.greenseal.org/findaproduct/paints_coatings.cfm

GREENGUARD: www.greenguard.org/Default.aspx?tabid=12/



Green Motor Vehicle Factsheet

Factsheet Contents

- What is a Green Motor Vehicle?
- Rethink Your Behavior
- What are the Benefits of Buying Green Vehicles?
- Additional Costs of Ownership
- Selecting a Green Vehicle
- Third Party Certifications
- Example Green Purchasing Targets
- References and Additional Resources

What is a Green Motor Vehicle?

A green motor vehicle includes a combination of the following green features:

- It has high fuel efficiency
- It produces low emissions
- It operates on alternative energy sources
- It is an appropriate size for use
- It is in accordance with third party eco-certifications

Rethink Your Behaviour... Reduce, Reuse, and Recycle!

- Do I need to drive? If so, how can I plan to cut back on mileage and fuel use?
- Does the manufacturer use recycled components or offer take back programs to recycle used cars?
- Are our company vehicles properly maintained and in good working condition?
- Do our company vehicles idle too often?
- Is there unnecessary weight in our company vehicles?
- Are we wasting fuel by driving too fast?
- Does the size of the vehicle make sense for what we use it for?



What are the Benefits of Buying Green Vehicles?

Reduce the use of natural resources:

- Green vehicles are designed to have high fuel economy, which reduces the rate of fossil fuel consumption.

Improve air quality and human health:

- Green cars are designed to operate on alternative energy sources in order to reduce GHG emissions, smog and global warming.
- By reducing the emissions released into the air, green vehicles help to reduce pressures on human health issues such as asthma, respiratory diseases, cancer, heart disease, birth defects, and brain damage.

Reduce the impacts on natural ecosystems:

- Green vehicles are also designed to reduce the emission of chemicals, such as nitrogen oxides, contribute to acid rain, which destroys forests and other terrestrial and aquatic ecosystems.

Additional Costs of Ownership

People often think that green products are expensive and less affordable than their conventional counterparts, but if one is to consider total cost of ownership, the green alternative may show a lower total cost. That is, if you consider all costs of owning a product (such as energy consumption, packaging, and disposal), the total cost of owning a product over its entire life cycle can be significantly different than the cost reflected by the purchase price.

As an example, when considering new vehicles for your fleet, it is important to consider the total costs associated with owning a vehicle. If you carefully consider the upfront acquisition costs, operational costs and disposal costs you will have a better understanding of the overall long-term cost of the vehicles you are considering. Important factors to consider that will help you to reduce your long-term costs and save money are the size of the vehicle and the fuel efficiency of the vehicle. You should be careful to select a vehicle that is the right size for the primary use of the vehicle and one that is rated best in class for fuel efficiency. By avoiding the purchase of large vehicles whenever possible and ensuring you are receiving the best fuel efficiency for that size of a vehicle, you will find that your total costs can be significantly reduced.

Table 1 provides additional costs that are not often considered, but often impact the total cost of owning a product. Be sure to consider these costs when rationalizing purchasing decisions for this product.



Table 1: Additional Costs of Ownership

Upfront Acquisition Costs	
Embedded Carbon	Embedded carbon refers to carbon dioxide emitted at all stages of a vehicle’s manufacturing process, from the mining of raw materials used to make vehicle components through the burning of fossil fuels and consumption of energy in vehicle assembly facilities.
Natural Resources	Vehicle components made with virgin natural resources will have greater costs to the environment than those made with recycled or reused parts and materials.
Costs of Operation	
Fuel Consumption	Fuel consumption is a constant expense associated with operating a vehicle and by carefully selecting the more fuel efficient options you can save your organization significant fuel related costs.
Disposal Costs	
Reuse or Recycling	Vehicle disposal costs can be avoided if the vehicle can be resold once your organization is done with it. If the vehicle is to be disposed of, the cost can be offset by dismantling the vehicle and selling its components for reuse.
Hazardous Waste Management	Hazardous waste materials in vehicles need to be managed, which will generate additional costs. Be conscious of selecting vehicles with minimal hazardous contents.
Disposal Carbon Emissions	The equipment needed to haul and disassemble vehicles will generate added carbon emissions that should be considered in the total cost of owning a vehicle.



Selecting a Green Vehicle

When selecting a green vehicle, your organization will need a list of characteristics to help you select between the variety of available options. Table 2 contains a list of conventional vehicle characteristics to avoid, and highlights the desirable features of green vehicles to seek out. Try to select vehicles with the highest quantity of these attributes.

Table 2: Selecting a Green Vehicle



What to Avoid	What to Choose
Vehicles without third-party certification logos	Vehicles with third-party certification logos (see Table 3)
Low fuel efficiency/economy	High fuel efficiency/economy
High emissions	Low emissions
Manufactured using components that increase risks to the environment and human health	Manufactured using “clean” components
Not designed for easy dismantling, reuse and recycling	Designed for recovery
Oversized vehicles	Appropriate vehicle sized based on usage



Third Party Certifications

Selecting products with one (or more) eco-certification(s) ensures that the product meets environmental standards set by a third party. Table 3 outlines third party eco-certifications that are applicable to green vehicles. The standards set by each organization can be reviewed by visiting the websites listed below.

Table 3: Third Party Eco-Certifications

Eco-Logos	Additional Information
 EcoLogo[™]	Environmental Choice EcoLogo: www.ecologo.org
	EnerGuide (identifies most fuel efficient vehicles): www.oeenrncan.gc.ca/energguide/home.cfm



Example Green Purchasing Targets

It will be necessary for your organization to set specific, achievable and measurable targets associated with the purchasing of green vehicles. For example:

- ___ per cent of vehicles purchased will be one of the 3 best in class, based on the Federal Government listings, at the time of purchase

References and Additional Resources

Ecologo: www.ecologo.org

Green Seal: www.greenseal.org/findaproduct/fvm.cfm

Natural Resources Canada EnerGuide for Vehicles:

www.oeenrcan.gc.ca/energuide/home.cfm

List of most fuel efficient vehicles awarded by Natural Resources Canada:

www.oeenrcan.gc.ca/transportation/personal/pdfs/most-efficient-vehicles-2009.pdf

Green Purchasing Plan Worksheets

0A – Gaining Senior Level Approval Template

Executive Summary

____ *Name of organization* _____ commits to greening its operations through a Green Purchasing Team set up to develop and implement a Green Purchasing Plan. The Green Purchasing Team will use the “One Simple Act Green Purchasing Project Guide to Develop and Implement a Green Purchasing Plan”. This plan will ensure that we have the foundation necessary to fulfill our commitment to improve the environmental footprint of our purchasing practices.

Background

Why is your organization pursuing this plan? What has already been accomplished?

Corporate linkages

How will this plan link to organizational priorities, strategies or documents or commitments?

Goals

Specific goals may be useful in guiding the planning process. Examples of goals that an organization may have include:

- Consult staff in the development priorities
- Train and develop staff to deliver on green purchasing priorities
- Evaluate the ongoing success and impacts of our green purchasing priorities
- Evaluate the total cost of ownership of products procured
- Use evaluation to ensure the continuous improvement of subsequent green purchasing plans

Accountability

_____ has been designated as the **Project Champion**. The Project Champion will ensure that the executive team is informed about this initiative, adequate resources are available to enact this policy, and that the Project lead has a regular reporting schedule.

_____ has been designated the Project Lead. The Project Lead will be responsible for coordinating the implementation of the seven steps identified in *the One Simple Act Green your Organization and/or Green Purchasing Project Guide(s)*. This includes creating a green purchasing team, developing, implementing and evaluating a green plan.

Target Dates

_____	Develop a green purchasing policy (<i>can be done after forming your Green Purchasing Team</i>)
_____	Form a Green Purchasing Team
_____	Progress Update
_____	Progress Update
_____	Green Purchasing Plan Review and Approval
_____	Implementation Update
_____	Implementation Update
_____	Implementation Update
_____	Year 1 Report
_____	Year 2 Plan

Strategy Review

The Organization Green Purchasing Policy will be reviewed in the XX year after it comes into effect and every five years thereafter.

Sample Terms of Reference - Green Purchasing Team

Mandate

The organization's Green Purchasing Team has been asked by the Executive Project Champion (e.g., CEO) to develop an Organization Green Purchasing Plan. The Organization's Green Purchasing Team will use the *One Simple Act at Work Toolkit* to develop and implement the Green Purchasing Plan and will report back to the Senior Lead on implementation prior to the end of DATE.

Membership

The organization's Green Purchasing Team will consist of a cross-functional team of about four to eight individuals. Consideration should be given to those already involved with purchasing or purchasing decisions and may also include senior staff, specialized staff and local leaders.

Timeline

This project will begin around Date and be complete by Date.

Frequency of Meetings & Time Commitments

The team will meet _____ indicate frequency _____ during the development of the Green Purchasing Plan. Following the completion of the Plan, the team will meet _____ indicate frequency _____ (or more frequently as required) to track the status of implementation and to identify opportunities and challenges.

Team Roles and Responsibilities

Roles and responsibilities for each team member will be determined at the outset of the project and adjusted as needed. On a general level, team members will be expected to participate in team meetings and contribute their expertise to the development and implementation of the Green Purchasing Plan.

Deliverable

At the conclusion of the project, the team will be responsible for completing a Green Purchasing Plan that is approved by their *Executive*. This Plan will be a result of a series of worksheet exercises outlined in *One Simple Act's Green Purchasing Guide*. The team will also be responsible for overseeing the implementation of this Plan.

Key Tasks

The key tasks are outlined in detail One Simple Act's *7 Steps to Green Purchasing* include the following:

- Step 1 – Form a Green team
- Step 2 – Develop a Baseline
- Step 3 – Identify Priorities
- Step 4 - Measure Performance and Set Targets
- Step 5 – Develop an Implementation Schedule
- Step 6 – Implement your Plan
- Step 7 – Report and Communicate Results

Outcome

At the conclusion of the project, the organization's green team (with the support of the Project Team Lead and Executive Champion) will have completed:

- A Green Purchasing Plan approved by the Executive.

- Implementation of the organization's Green Purchasing Plan, including implementation of necessary support infrastructure and communication and training with select staff.
- A report outlining the progress achieved during the first year of implementation.

Budget

Budgetary requirements to carry out the development and implementation of the Plan will be determined by the team and approved by the Executive.

OB - Developing Green Purchasing Policy

Why is it Important

- Formalizes and embeds explicit commitment to environmental sustainability and economic efficiency
- Demonstrates environmental leadership, influences innovation, market development and demand for environmental products
- Provides a framework for strategic action and programming
- Defines responsibility and accountability

Examples:

Policy Best Practices

- Clear objective, statement, goals, scope and definitions
- Guides strategic action planning
- Connection to related policies/initiatives
- Commitment to continuous and ongoing improvement
- Legal compliance

Government of Canada's and Government of Alberta Policy	City of Calgary – Sustainable Environmental & Ethical Procurement Policy (SEEPP)
<p>Objective It is the objective of this policy to advance the protection of the environment and support sustainable development by integrating environmental performance considerations into the procurement decision-making process.</p> <p>Expected Results: The Government of Canada expects that the application of this policy will: Benefit the environment by contributing to environmental objectives, such as:</p> <ul style="list-style-type: none"> • Reducing greenhouse gas emissions and air contaminants; • Improving energy and water efficiency; • Reducing ozone depleting substances; • Reducing waste and supporting reuse and recycling; • Reducing hazardous waste; and • Reducing toxic and hazardous chemicals and substances. <p>The Government of Alberta is committed to greening government's operations by using services, processes, practices and products that:</p> <ul style="list-style-type: none"> • minimize resource use; • reduce or even prevent the generation and release of waste, greenhouse gases, and other pollutants to air, water and land; • manage waste (that cannot be avoided) in an environmentally responsible manner; and • meet or exceed Government of Alberta's business needs. 	<p>The purpose of SEEPP is to ensure that products and services purchased by The City are manufactured, produced and provided in accordance with:</p> <ul style="list-style-type: none"> • established international environmental standards and guidelines; • environmental labeling; and, • applicable jurisdictional legislation regarding wages, working conditions, safety, forced labour and freedom of association, such as those embodied in the United Nations Declaration of Human Rights and International Labour Organization Conventions. The City encourages suppliers to exceed jurisdictional legislated requirements in all these area. <p>SEEPP demonstrates The City's commitment to creating a sustainable community by:</p> <ul style="list-style-type: none"> • promoting worker health and safety and ensuring compliance with applicable legislation; • taking a leadership role in market development for green and ethical, or otherwise sustainable products; and • promoting innovation and enhancing access to green and ethical products to lower costs of sustainable purchasing over time.

1A - Selecting your Green Purchasing Team Members				
	Who should be represented on your team?	Potential Team Member (Name and Title)	Contact Information (email and phone number)	Willing to join the team? (Yes or No)
1	Who has purchased green products before?			
2	Who has experience with the products and services that are listed in the <i>Top Product Fact Sheets</i> ?			
3	Who has experience or knowledge of third party eco-labels that help to identify green products (e.g. EcoLogo, Green Seal)?			
4	Who understands your organization's purchasing protocols?			
5	Who could represent Surplus Sales? Who declares items as "surplus" before they go to Surplus Sales?			
6	Who can represent the finance division?			
7	Who can represent administrative staff who make purchases?			
8	Who can liaise with property or facility managers?			
9	Who can assist the team in communicating the Plan to your organization's staff?			
10	Is there an expenditure officer that could join the team?			
11	Other skills/experiences:			
12	Other skills/experiences:			
13	Other skills/experiences:			

1B – Green Purchasing Team Members				
Team Member	Role (Representing Surplus Sales, Finance, etc?)	Name and Title	Phone Number	Email
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

1C – Green Purchasing Planning and Implementation Process and Timeline

Steps		Start Date	End Date	Who is responsible? (assign individuals, when feasible)	Potential Challenges / Opportunities?	Ways to overcome challenges /take advantage of opportunities?
1	Develop a Green Purchasing Team					
2	Develop a Baseline					
3	Identify Goals and Priorities					
4	Measure Performance and Set Targets					
5	Create an Implementation Schedule					
6	Implement your Plan					
7	Communicate Results					

3 - Priority Green Products and Services Example

	Priority Products and Services	Description (Insert from <i>Top Product Factsheets</i> , if applicable)	Criteria Met (Insert from <i>Top Product Factsheets</i> , if applicable)	Eco-benefits: Environmental risk/opportunity (Insert from <i>Top Product Factsheets</i> , if applicable)	Rational for Selecting Product (check those which apply)
1	Copy Paper	Copy Paper with post-consumer recycled content	<ul style="list-style-type: none"> • High volume. • High symbolic value • Environmental risk/opportunity. • Mature market. • Third-party certification. 	<ul style="list-style-type: none"> • Reduces waste • Saves energy. • Conserves Water. • Reduces GHG. • Conserves natural resources. 	<input checked="" type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input checked="" type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input checked="" type="checkbox"/> This product will result in significant eco-benefits.
2	Computers	Desk tops and laptops with EPEAT™ and Energy Star™ certification	<ul style="list-style-type: none"> • High volume. • High symbolic value • Environmental risk/opportunity. • Mature market. • Third-party Certification. 	<ul style="list-style-type: none"> • Reduces waste. • Saves energy. • Reduces GHG. • Conserves natural resources. 	<input checked="" type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input checked="" type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input checked="" type="checkbox"/> This product will result in significant eco-benefits. <input checked="" type="checkbox"/> This product is already being procured/available on standing offer.
3	Vehicle fleet	Vehicles that are of the three best in class as defined by the Federal Government listings at the time of purchase.	<ul style="list-style-type: none"> • High symbolic value • Environmental risk/opportunity. • Mature market. 	<ul style="list-style-type: none"> • Saves energy. • Reduces GHG. • Conserves natural resources. 	<input checked="" type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input checked="" type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input checked="" type="checkbox"/> This product will result in significant eco-benefits.
4					
5					

3 - Priority Green Products and Services

	Priority Products and Services	Description (Insert from <i>Top Product Factsheets</i> , if applicable)	Criteria Met (Insert from <i>Top Product Factsheets</i> , if applicable)	Eco-benefits: Environmental risk/opportunity (Insert from <i>Top Product Factsheets</i> , if applicable)	Rational for Selecting Product (check those which apply)
1					<input type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input type="checkbox"/> This product will result in significant eco-benefits. <input type="checkbox"/> This product is already being procured/available on standing offer. <input type="checkbox"/> Other reasons for selecting this product:
2					<input type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input type="checkbox"/> This product will result in significant eco-benefits. <input type="checkbox"/> This product is already being procured/available on standing offer. <input type="checkbox"/> Other reasons for selecting this product:
3					<input type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input type="checkbox"/> This product will result in significant eco-benefits. <input type="checkbox"/> This product is already being procured/available on standing offer. <input type="checkbox"/> Other reasons for selecting this product:
4					<input type="checkbox"/> This product is on the <i>Recommended Top Green Products</i> . <input type="checkbox"/> This product is in agreement with the <i>Green Purchasing Policy</i> . <input type="checkbox"/> This product will result in significant eco-benefits. <input type="checkbox"/> This product is already being procured/available on standing offer. <input type="checkbox"/> Other reasons for selecting this product:

4A - Four Methods of Measuring Baselines and Performance

The following four options can be used to measure baseline information and eventually measure performance against targets at year end. Methods 1, 2 and 3 require less resources and time. Method 4 is more complex and will require more time and resources; however, it will provide more detailed information that will support more thorough reporting. Not all of these methods will work for all products and your team may want to use a combination of methods. Finally, remember that this is the beginning of the process, so don't get bogged down with detail collection. Rather, collect available information knowing that you can revisit the specifics in the future if necessary.

Method 1 – Self-Assessment Action Survey

- A [Green Purchasing Self-Assessment Survey](#) is provided in the Toolkit of this Manual. This can be used to survey staff to determine the quantity of green products they purchase.
- This survey should be targeted at key staff that procures green products.
- This option can be used in combination with other methods of measuring performance.

Method 2 - Visual Inspection of Stock/Inventory

- This simple exercise requires a few volunteers to visually inspect the products you have in stock or inventory to see if they have green qualities. Refer to the [Top Green Purchasing Products Factsheets](#) to learn more about how you can identify green attributes of these products (e.g. third-party certifications).
- This option can be used in combination with other methods of measuring performance.

Method 3 - Number of Green Products Available on Standing Offer

- There may be standing offers in place from which your organization can source priority green products. You should designate someone from your team to learn which priority green products are available from current standing offers.
- If there are standing offers that provide the priority green products outlined in your Plan, you should investigate how many of these green products your organization is purchasing. You may find that this type of information is not readily available, but at this time in your *Green Purchasing Plan*, you can begin to track this data.
- You should also consider adapting the Self-declaration Staff Survey to ask who is aware of any standing offers that provide the priority green products and how often they select the green alternatives, if relevant.

Method 4 - Supplier Purchasing Systems that Track Green Purchasing

- A good way to track thorough data related to green purchasing is to work with suppliers to develop electronic purchasing systems that identify green products for clients and track how often the green products are procured. This is an existing system that a supplier offers (or will develop and populate for you) as part of their service.
- Electronic systems have potential to easily chart trends in green purchasing, and provide a level of accuracy that will be very effective when reporting on implementation progress.
- A significant level of commitment from suppliers is needed and staff will need to be trained to use this system. This method of measure may also require significant financial resources and perhaps a third-party contractor to develop this system.
- Measuring green purchasing in this way is becoming more common across North America and is considered a best practice in green purchasing programming.

4B - Measuring Performance and Setting Targets for Green Purchasing						
	Priority Green Products	Method of Measure (From Step 2, select the method/combination of methods used to assess Baseline Information)	Pertinent Baseline Information Gathered (Using the method(s) in the column to the left)	Key Performance Indicators (See recommended <i>Top Product Factsheets</i> , if applicable)	Year 1 Targets (See recommended <i>Top Product Factsheets</i> , if applicable)	Results Achieved (to be completed at the end of year one)
1		<input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2 <input type="checkbox"/> Method 3 <input type="checkbox"/> Method 4				
2		<input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2 <input type="checkbox"/> Method 3 <input type="checkbox"/> Method 4				
3		<input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2 <input type="checkbox"/> Method 3 <input type="checkbox"/> Method 4				
4		<input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2 <input type="checkbox"/> Method 3 <input type="checkbox"/> Method 4				
5		<input type="checkbox"/> Method 1 <input type="checkbox"/> Method 2 <input type="checkbox"/> Method 3 <input type="checkbox"/> Method 4				

5A – Green Purchasing Communication, Education and Training Schedule

	Activities (see the Training and Communication Activities section of the Purchasing Toolkit.)	Is this activity specific to certain products? (list products)	Goals & Targets	Key Audiences	Who is accountable?	Who will Deliver it?	When will it be delivered?	Estimated Resources
1			Goals: Targets:					
2			Goals: Targets:					
3			Goals: Targets:					
4			Goals: Targets:					
5			Goals: Targets:					
6			Goals: Targets:					

5B – Green Purchasing Schedule for Setting up Green Standing Offers, Infrastructure and Contractor Evaluation

	Priority Green Products and Services	Standing offer renewal dates, contractor evaluation and infrastructure needs for tracking green purchasing	Key tasks for setting up standing offers and infrastructure (see examples in from <i>Top Product Factsheets</i>)	Timeframe for completing tasks? (to be determined by talking with select staff)	Who is accountable for ensuring standing offer and infrastructure is set up?	Who in your organization will you need to work with to set up the standing offer and infrastructure?	Estimation of financial and human resources
1.		Standing offer renewal date:	<i>Examples:</i> <ul style="list-style-type: none">• Develop product specifications	Standing offer:	Standing offer:		Standing offer:
		Infrastructure needs: <i>Examples:</i> <ul style="list-style-type: none">• System for tracking green purchases off standing offers• Supplier online purchasing system to identify and track green purchasing	<i>Examples:</i> <ul style="list-style-type: none">• Work with Purchasing Services to track green purchases from standing offers• Work with suppliers to develop electronic purchasing systems to identify and track green product purchases.• Develop a system to solicit and evaluate green initiatives from potential contractors and service providers.	Infrastructure:	Infrastructure:		Infrastructure:
2.		Contractor evaluation: <ul style="list-style-type: none">• System to solicit and evaluate green	Work with Financial services to embed solicitation clauses into	Contractor evaluation:	Contractor evaluation:	Contractor evaluation:	Contractor evaluation:

5B – Green Purchasing Schedule for Setting up Green Standing Offers, Infrastructure and Contractor Evaluation

	Priority Green Products and Services	Standing offer renewal dates, contractor evaluation and infrastructure needs for tracking green purchasing	Key tasks for setting up standing offers and infrastructure (see examples in from <i>Top Product Factsheets</i>)	Timeframe for completing tasks? (to be determined by talking with select staff)	Who is accountable for ensuring standing offer and infrastructure is set up?	Who in your organization will you need to work with to set up the standing offer and infrastructure?	Estimation of financial and human resources
		initiatives from potential contractors and service providers.	contractor evaluation processes.				
3.							
4.							
5.							

6 - Memorandum

From: Executive Project Champion

Date: _____

To: _____

Phone: _____

Fax: _____

Subject: Green Purchasing Plan Approval

The Green Purchasing Plan for our organization has been completed. This Plan is based upon a needs assessment of the most appropriate green purchasing items for our organization. It will guide our purchasing strategies for the next year. The Plan includes the following:

Green Purchasing Plan

Green Purchasing Form 1B – Green Purchasing Implementation Team Members

Green Purchasing Form 1C – Green Purchasing Planning and Implementation Process & Timeline

Green Purchasing Form 3 – Priority Green Products

Green Purchasing Form 4B – Measuring Performance and Setting Targets for Green Purchasing

Green Purchasing Forms 5A & 5B – Green Operations Implementation Schedules

Green Purchasing Form 7 – Green Purchasing Reporting Template

Please review the enclosed Green Purchasing Plan for more detail and provide approval by signing below.

We are seeking your support as a champion for communications and training. In particular, your support would be greatly appreciated during the campaign kick-off to generate momentum for the program and for communicating the results of the program at the end of the first year of implementation.

Also, we ask that you please review and approve the estimated staff time and resources that will be needed for training, education, communication and infrastructure set-up related to implementing the Green Purchasing Plan. Refer to the Green Purchasing Forms 5A & 5B – Implementation Schedules for details related to staff time and resources.

Signed (Project Lead):

Date: _____

Executive Project Champion signature of Approval:

Date: _____

Attachments: Green Purchasing Plan

7 – Green Purchasing Annual Reporting Template*

*This template serves as an example, modify to meet specific organizational needs.

Implementation Team

Did you develop a *Green Purchasing Plan* team for your organization?

YES

NO

Who is represented on the team? List members and who they represent.

Purchasing Plan

Did you complete a *Green Purchasing Plan* for your organization? Yes or no? If not, what were the barriers?

YES/NO. If No...

Did you gain approval from your Project Lead and your organization's Senior Leader(s) for your Plan?

YES

NO

If yes, when was it approved and what challenges (if any) did you encounter? If no, what were the barriers to gaining approval?

Plan Implementation

Did you gather baseline data for the green products that are specific to your organization's *Green Purchasing Plan*?

YES

NO

if no, what were the barriers?

Have you held a kick-off event for your organization's *Green Purchasing Plan*?

YES

NO

If yes:

What was the event?

Did your organization's senior management attend and what were the key messages of this event?

Who attended this event? How many people attended?

How did you advertise the event?

If no:

What were the barriers to holding a kick-off event?

What significant communication activities have you initiated/completed? Was “buying less” a general message in any of these activities?			
Have you provided specific training to anyone in your organization? If yes, please provide details.			
Describe your organization’s progress in achieving the targets set out for each of the products identified in your organization’s Plan (refer to Worksheet #2).			
	Target	Achievement	Comments or actual impacts
Product #1			
Product #2			
Product #3			
Product #4			
Product #5			
Describe any challenges you have encountered with respect to achieving the targets set out in your Plan as they relate to each of the products listed above.			
Describe any further initiatives and successes you have had with green purchasing regarding products <u>not</u> identified in your Plan. For example:			
Have you purchased green products through other channels aside from standing offers? If so, please provide details.			
Have you incorporated green requirements into recent solicitation processes? If yes, please provide details.			
Outline your progress in delivering on the Education and Implementation Schedule Activities			
Activity	Status	Comment	

<p>Identify three major barriers you have faced in rolling out your organization's <i>Green Purchasing Plan</i>.</p> <p>1.</p> <p>2.</p> <p>3.</p>		
<p>Next steps</p>		
<p>Identify your priorities for the next year of your organization's <i>Green Purchasing program</i>.</p>		
<p>What communication strategies do you want to enhance or initiate?</p>		
<p>What training programs do you need to enhance or initiate?</p>		
<p>What additional green products are you going to focus on? What might some specific targets be for these products? Who will gather the baseline data for these products?</p>		
<p>What major challenges might you face and how can these be overcome?</p>		