Green Purchasing

These guidelines have been developed as part of Vancouver Community College's (VCC) Environmental Policy & Procedures to implement a long-term strategy that reduces VCC's impact on the environment.

Departments are encouraged to follow the Guidelines for Procurement of Environmentally Responsible Products and Services.

Guidelines for Procurement of Environmentally Responsible Products and Services

Objectives:

These procurement guidelines are designed to encourage Departments to consider environmentally responsible products and services as part of their purchasing decisions. The objectives of these guidelines are:

- To provide an environmental role model for VCC procurement, by making it a priority to use environmentally responsible products and services, where feasible and cost effective.
- To increase demand for environmentally responsible products and services, which may ultimately enhance their quality and cost competitiveness.
- To continue to increase VCC's conservation of resources through the use of more reusable products, and products and services which require less energy and materials to produce or use.

Principles:

- Where feasible and cost effective, VCC will acquire products and services that are environmentally responsible. Environmentally responsible products are those that reduce waste, improve energy efficiency, limit toxic by-products, contain recycled content or are reusable. Environmentally responsible services are those that employ environmental responsibility in their delivery.
- The substitution of environmentally sensitive products for more environmentally harmful products will increase as their usage becomes more prevalent and as they become more cost effective and of comparable quality to those products previously purchased.

Practices:

- Where feasible and cost effective and where the products are compatible with individual departments requirements, preference should be given to purchase of environmentally sensitive products and services.
- As part of prudent acquisition management, departments should consider use of environmentally sensitive products and services on a trial basis to ensure performance and technical requirements are met, prior to making longer term purchasing commitments.
- Evaluation criteria specified in the solicitation document should consider the environmental impact over the life cycle of each product compared to the alternatives, by taking into account economic and environmental impact, production processes used, energy use, maintenance and disposal requirements.
- Evaluation criteria specified in a services solicitation document should consider a proponent's corporate environmental sustainability policy.
- Where they are cost effective and meet performance and technical standards, products certified under a relevant environmental labelling program may be specified in the solicitation document. Specific environmental technical requirements may also be included in product specifications.

Below are TIPS and helpful tools for environmentally responsible purchasing:

TIPS for Green Purchasing

Purchasing and the Environment

The following pages provide **brief and simplified** explanations of the connection between purchasing and the environment, and the concepts that will help you know what to look for when you're purchasing green.

Why Consider the Environment in Your Purchasing?

Environmental stewardship is about taking steps to ensure that our air, water, and land, and our flora and fauna, are healthy - now and into the future. Purchasing green products and services is one of these steps. There's also an economic advantage to green purchasing that's not been obvious until recently - here's how it works:

It's a fact that:

- All products require energy to be manufactured, delivered to us, and disposed of;
- Some products require energy while being used (e.g. vehicles or computers);
- Sometimes energy is used in the delivery of our services (e.g. when contractors travel, or when they use equipment on our behalf);
- This energy creates harmful greenhouse gases (GHGs);

And:

- Hazardous and toxic substances are sometimes created and released in the manufacturing and disposal of products

So the costs for this associated energy use, remediation of climate change due to GHGs, and clean-up of hazardous substances can be attributed to the goods and services we purchase

Until recently consumers may not have been aware of these costs because they are paid separately, through utility bills or environmental taxes. Now that we've begun to link these costs to their source, we've realized that we can also reduce them at their source, by asking producers to design their products, and contractors to deliver their services, with environmental stewardship in mind.

Rethink Purchasing

Of course we need goods to deliver programs to the VCC students and the community, but when we use them efficiently, so that we don't have to buy as much, we're saving money and reducing our environmental footprint. Avoid or minimize purchasing by planning smart, shopping smart, and taking care of your stuff. Here are some ideas:

- RETHINK and only buy what you need.
- REUSE furniture and equipment through Asset Investment Recovery's **Surplus Assets**.
- REDUCE purchasing by choosing durable products that will last, rather than ones you might need to replace in a short time.
- RETHINK purchases of products that are used infrequently, or products with technology that changes regularly – why not rent or lease them?
- REPAIR – adopt preventative maintenance programs for your goods.
- REDUCE by optimizing – when your photocopiers, printers and fax machines are at the end of their lives, switch them out with a single multi-function device.
- REDUCE by buying REUSE-able goods – like refillable pens, or rechargeable batteries.

Environmental Cost of Ownership

The term "total cost of ownership" means evaluating not only the upfront cost of the product, but any costs associated with it after we purchase it, such as maintenance costs. Some products, in comparison with others, might cost less up front, but more to maintain, and since you will have to pay for those maintenance

costs, calculating them into your price at time of purchase ensures a fair and complete price comparison. Total cost of ownership can include environmental considerations too.

For example, if the product you are purchasing uses energy then there are two costs to calculate when you determine best value for money:

- The upfront price; and
- The cost of the energy used over the time you will use the product.

A more energy efficient product might cost more upfront, but if you pay less for energy over the time you use it, you'll save money in the end.

Be sure to include both costs in your price comparison – here is an example using refrigerators:

Fridge with freezer 14.8/3.7 cu ft	Upfront cost	KWH per year	Energy cost over life span*	Total cost
Standard fridge:	$470.00	424.8	$577.73	**$1,047.73**
Energy Star fridge:	$505.00	354	$481.44	**$986.44**

*Assume average life span 17 years, and $.08 per KWH (kilowatt hour)(data sourced from BC Hydro Powersmart)

Design for Environment

Often purchasers can rely on environmental labels to identify greener products, but not always – lots of greener products aren't certified. (See the Province of BC's Standards and Certifications page to learn about environmental labels.)

Some products that have been around for years are just inherently greener than others. And recently, many products are being re designed with environmental stewardship in mind, using a methodology called Design for Environment (DfE).

The way greener products are designed contributes to a low environmental footprint over their whole life cycle (i.e. when they're manufactured, distributed, used, and disposed of).

Understanding these design considerations helps in selecting a greener product. Here we've included the categories of a typical DfE program on the left, and how they translate into what to look for in a product, on the right.

Note that these are examples to help with choices when choices are available; and performance and cost should always be considered in any buying decision.

Design for Environment	**What to Look For**
Energy efficiency (during manufacture, assembly, distribution, use, and disposal).	Less dense products (i.e. soft plastic vs. hard plastic, aluminium vs. steel) take less energy to manufacture. Lighter products take less energy to ship. Fewer parts take less energy to assemble. Energy efficient products (choose Energy Star if available) use less energy when used. Less volume overall equals less to break down when disposed of.
Reducing hazardous materials (toxins and ozone depleting substances).	Certified 100% biodegradable. Lowest VOC (volatile organic content) emissions. Urea Formaldehyde free. (These are hazardous materials typically found in cleaners, paints and

	adhesives – For a complete review listing BC Ministry of Environment's **website**
Material selection (recycled, recyclable, bio-based plastics, lighter for shipping).	Recycled content: should be post consumer PCR) or post industrial (PIR) regrind, (PCR is better than PIR), look for highest percentage recycled content. Bio-based plastics (i.e. corn plastic). Choose materials that are readily accepted for recycling in BC (cardboard, paper, glass, aluminium, steel, rigid plastics). Lighter products take less energy to ship.
Product longevity.	Durable – looks like it will last. Manufacturer's suggested life span. Repairable – if it breaks, can you fix it instead of disposing of it? Available replacement parts. Standard and extended warrantee.
Design for end of life.	Readily accepted for recycling in BC. Minimal number of materials (i.e. a tool that is all metal can be recycled – if it has a rubber coated handle that you can't remove, the whole thing has to go to the landfill because mixed materials can't be processed for recycling). Easy to disassemble (i.e. if the rubber coating can be separated from the tool, both materials can be recycled).

Environmental Standards and Certifications

There are many 'eco' certifications and standards out there – what do they mean, and how do you know you can rely on them? Here are some tips on the subject:

- There are single attribute labels (e.g. **Energy Star**, which only applies to energy consumption); or **GreenGuard**, which applies to indoor air quality); or
- There are multi-attribute labels (e.g. **EcoLogo**, or **C2C** (Cradle to Cradle)), which apply to a variety of issues related to sustainability, such as: energy consumption, waste reduction, water conservation, social equity, etc.
- We suggest you rely on labels that are created by government agencies, industry associations or not-for-profits, rather than those created by a company for their own products; and
- Watch out for labels that have typical environmental symbols on them (planets, leaves, trees, etc.), but very little, or vague, detail about what they're claiming. If you don't recognize it, try to find it online. Some labels are 'green washing' (false or misleading environmental claims), and can't be verified by an internet search.
- If you are using certifications in a specification, cite all the reliable ones in the category. For example, when specifying wood products, cite "Must be FSC, SFI, PECF or CSA Z809-02 certified" rather than citing just one of them. This example is particularly important to us, as BC forest products are not all certified by one organization. Citing all reliable certifications ensures fairness to suppliers, who may have achieved only one certification for their product. (Not sure which are reliable? Consult with BC Ministry of Environment

Packaging

Because most of the products we buy come in some sort of packaging, encouraging suppliers to use greener packaging is an opportunity to make a difference with most of our purchases.

Of course packaging serves an important function, protecting goods from breaking and from moisture damage while they're being shipped, so it has to meet performance and safety specifications first. But there might be greener options that meet specifications – why not ask your suppliers to be as green as they can be?

Here are some tips on what to look or ask for:

- Less is greener – it just makes sense that if there's less packaging, then there's less to chuck away or recycle. Buy bulk to reduce individual packaging.
- Take back – wherever possible ask manufacturers or distributors to take back their packaging. Ask for blanket wrapping for furniture or appliances, or ask your supplier to take back all the cardboard boxes and re use them or recycle them.
- Reusable transport packaging - **Distribution Centre Victoria** (DCV) offers a reusable bin delivery program to reduce use of packaging in shipping. If you have a supplier who delivers the same type of product on a repeating basis, ask them if they can deliver in reusable bins.
- Recyclable packaging – ask for packaging that's made from a material that can be recycled. Cardboard is better than plastic, because it can be endlessly recycled into new cardboard (right here in BC), while plastic degrades each time it's recycled (and, we don't recycle all plastics at a municipal level in BC yet).
- Recycled content – again, choose cardboard, or pressed paperboard (like egg cartons) which is made from recycled newsprint. If you have to go with plastic, ask for the highest content of recycled material available. Both soft (LDPE) and hard plastic (HDPE) are available with recycled content.
- There are two types of recycled content:
  - Post consumer recycled content is best because, as its name implies, it's already been used once – PCR (Post Consumer Regrind) is made from the plastics we all put in our blue boxes or take to the depot; and
  - Post industrial recycled content is okay too – PIR (Post Industrial Regrind) is made by recycling end cuts or waste product from within the plant where the virgin material is made.
- Plastics – most plastic packaging (other than "biodegradable") is made from LDPE, HDPE or PET:
  - Low Density Polyethylene (LDPE) takes less energy to make, less energy to recycle, and takes up less room in the landfill than High Density Polyethylene – choose LDPE when it's an option. LDPE includes 'foamed' polyethylene, like the squishy wrap you find around breakables, or bubble or stretch type wraps – the softer, or lower density, the better, environmentally speaking.
  - High Density Polyethylene (HDPE) is what some plastic bottles and 'blister packs' are made of. There are some instances where HDPE is required for protection of liquid products, or those that are susceptible to crushing in shipping.
  - Polyethylene terephthalate, or PET, is what most clear bottles for cold drinks are made from. You pay a recycling deposit when you buy a plastic drink bottle – be sure to take your bottles back, claim your deposit, and ensure they're recycled.
  - All these plastics are available with recycled content – choose the highest percentage recycled content available.
- Biodegradable – if packaging claims to be biodegradable, make sure it's 100% Certified Compostable. Biodegradable packaging should meet ASTM D6400 (North American standard) or EN13432 (European standard) for compostability.

DID YOU KNOW?

In October 2009, the Canadian Council of Ministers of Environment endorsed the Canada-wide Action Plan for Extended Producer Responsibility (EPR), which aims to have industry-led product stewardship programs in place for all forms of packaging and printed materials by 2015. (EPR is a market-based strategy that incorporates the environmental costs of products into the product price. For example, there is now a fee embedded in the price of electronics that helps to pay for our **Return-It** recycling depots.) Visit the Ministry of Environment's **Product Stewardship** page to learn more.

Waste Reduction

We pay to dispose of products at the end of their life: there's a fee to dump them at the landfill, or to recycle them. This money pays for managing our waste – for handling it and managing pollution at the landfill, and for sorting the materials and getting them to companies that process them for re-cycling.

But we don't often think about this when we're purchasing something because the end of the product's life, and the associated cost, might be a long way off.

There is an exception to this, called Extended Producer Responsibility - EPR is a market-based strategy that incorporates the environmental costs of products into the product price. For example, there is now a fee

embedded in the price of electronics that helps to pay for our Return-It recycling depots. To learn more, check out the BC Ministry of Environment's Product Stewardship program.

Choosing products that are durable or are repairable will save on disposal costs.