SMALL- AND MEDIUM-SIZED BUSINESS ENVIRONMENTAL ROAD MAP

REPORT FOR



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SME ENVIRONMENTAL ROAD MAP

The SME Environmental Roadmap is an Industry Canada sponsored tool prepared by Strandberg Consulting, a Burnaby-based consultancy providing strategic advice and support to firms integrating social and environmental considerations into how they do business. Amy Robinson collaborated on the project. The tool provides how-to guidance for small- and medium-sized businesses (SMEs) on how they can benefit their business and improve environmental conditions.

INTRODUCTION

It's likely that your business already has some initiatives that save resources, protect the environment or otherwise contribute to sustainability – initiatives that look beyond pure financial considerations to include social and environmental aspects. Although some small- and medium-sized businesses (SMEs) are motivated entirely by environmental concerns, others are saving resources and greening production to innovate and remain competitive.

Sustainability offers SMEs a competitive advantage since their smaller size and staff allows them to be more flexible integrating sustainability into their business, making them more responsive and adaptive to shifting markets. Canadian companies are known for their flexibility in responding to the fluctuating Canadian dollar, scaling up or down in response to changes in trading with the US. There are many opportunities for small businesses in what is called the "green economy", as innovators retool to expand existing product lines or adapt their offerings to supply parts to clean tech firms, as just two instances.

Given that SMEs account for 99.8% of enterprises, 60% of employment, and 57% of gross domestic product in Canada, they are an essential partner in the country's action on climate change, resource conservation and other areas of environmental management. This roadmap is intended to assist SMEs in their work to manage their environmental impact, develop products that meet the needs of a greening market, and show leadership on climate change and other pressing environmental issues.

How to Use the Roadmap

The roadmap is intended to be modular – you can drop in to any section and you will find a concise guide to the topic area. However, each section is also part of a larger area of management, operations or leadership. The business case is a stand-alone document. Many examples of sustainability in practice are offered throughout the document. Where possible, they refer to the practices of SMEs. In some cases, however, examples that refer to larger companies are included for illustrative purposes.



Business Case for Environmental Programs & Initiatives

Why Do It?

Businesses embarking on new environmental programs and initiatives are typically driven by three main drivers: values, compliance or opportunity. 1

- Values: "the right thing to do" refers to those businesses that seek to lessen their
 impact on the environment as a demonstration of their values. Businesses that
 show concern for reducing their environmental impacts earn a reputation as a good
 company with employees, customers, suppliers, investors and community members.
- Compliance: "the thing you must do" focuses on reducing time spent to manage current regulation, and the advantages of staying ahead of future regulation. All regulation can affect a business' ability to operate and its profitability. Reducing regulatory risk of fines, reducing time to understand and comply with regulations, and anticipating new regulation is just good management. For example, many businesses are working to reduce their energy use and carbon emissions, expecting that regulation will soon follow and force businesses to pay for their emissions.
- Competitive Advantage: "the thing you can do to make money" highlights that an environmental focus offers businesses the chance for increased revenues and profits. Some businesses improve cash flow by reducing resource inputs (water, energy, waste services) to lower operating costs, while others diversify existing product lines to meet new customer demand for green products and services. Once a business has embarked on this path, marketing and advertising their green successes help to build brand and market share.

Benefits You Can Expect

Attract & Retain Good Employees

Environmental programs affect human resources by putting a business' values into action, and by engaging employees in the change. Such efforts can improve the morale and productivity of existing employees, and attract new talent to the business. Since many workers feel that they are greener than their employers², environmental initiatives allow them to bring their values and their ideas to work. When employees are proud of the business they work for, they are more productive, more creative, and more committed.³ Employee retention can reduce the costs associated with turnover. When considering recruiting, interviewing, hiring, training, and reduced productivity it costs a business approximately \$3,500.00 to replace one \$8.00/hour employee.⁴

⁴ Blake, R. 2006. WebProNews. *Employee Retention: What Employee Turnover Really Costs Your Company*. www.webpronews.com/expertarticles/2006/07/24/employee-retention-what-employee-turnover-really-costs-your-company



 $^{^{1}}$ Titles adapted from: Willard, Bob. The Sustainability Advantage. Page 11. New Society Publishers.

² Greenbiz.com. 2008. Big Companies Can Make it Harder for Employees to Go Green: Survey. Accessed February 19, 2009 from www.greenbiz.com/news/2008/08/19/uk-us-workers-surveyed-about-going-green ³ Canadian Business. 2007. Canada's Best Workplaces: Proud Out Loud. Accessed February 16, 2009 from www.canadianbusiness.com/managing/career/article.jsp?content=20070423_85409_8540 9

Environmental commitments can provide the following benefits to a business' attraction/retention efforts:

- Increase competitive advantage for recruiting;
- Create a sense of teamwork among employees; and
- Establish an emotional tie between employee and the business.⁵

Reduce Your Operating Costs

Environmental initiatives reduce operating costs by reducing material and resource costs. More efficient use of materials – even if it's a simple as using less toner and paper – reduces the cost of inputs. Resource efficiency – using less water, energy and sewage – reduces utility costs. It is also possible to reduce maintenance costs. For example, efficient lighting needs to be changed less often and waterless technologies require less maintenance. Small businesses can save up to 40% of energy costs simply by following recommended maintenance schedules for their equipment – cleaning and sealing ducts, changing filters and cleaning coils. Studies show small commercial buildings have duct leaks twice that of residential buildings. Identifying and repairing these problems is a cost effective way of reducing your energy costs and your impact on climate change.

Improve Your Brand

Brand is a business' most important asset. It represents your company's intangible worth – your reputation in the market. Environmental initiatives help protect and enhance your brand. By walking your talk, you protect your brand from being tarnished. Further, a visible commitment to reducing your environmental impacts can help foster strong relationships with your customers, your employees and your community. Many businesses refer to this as "social license to operate."

Good news for resource-strapped small businesses is that it doesn't take fancy marketing campaigns to broadcast your reputation. When surveyed, customers say that their decision to buy is mainly influenced by a product/company's reputation (21%), word of mouth (19%) and brand loyalty (15%). Dollars spent on green advertising impacts their decisions only 9%.⁷

Maintain and Improve Your Market Share

As large organizations green their supply chains, the small businesses that supply them are affected by increasingly stringent environmental requirements. Innovative small businesses will maintain if not gain market share and stay ahead of competitors. For instance, global giant Walmart is pushing many of its suppliers to green their operations, working to reduce waste from product packaging and reduce carbon emissions from production of products.⁸

⁸ MSN. 2007. Wal-Mart's Bold Environmental Move - Maybe. Accessed February 19, 2009 from www.msnbc.msn.com/id/20976217/



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⁵ Odell, Anne. 2007. Working for the Earth: Green Companies and Green Jobs Attract Employees. http://www.socialfunds.com/news/article.cgi/2389.html

⁶ Centre for Small Business and the Environment. 2009. *Profitable Greening: Energy Efficiency*. Accessed February 19, 2009 from http://www.aboutcsbe.org/efficiency.html

⁷ Environmental Leader. 2009. 82 Percent of Consumers Buy Green Despite Economy. Accessed February 19, 2009 from www.environmentalleader.com/2009/02/05/82-percent-of-consumers-buy-green-despite-economy/

Your business' green strategy can help you stay ahead of competitors, create a market differentiator, and gain access to new markets. In the refillable water bottle market in 2008 for instance, consumer concerns about the potential dangers of bisphenol-A (BPA) created a market opportunity for a small upstart called Klean Kanteen, positioning them as the safer alternative to BPA containing Nalgene bottles.⁹

Reduce Your Risk

By reducing your environmental impacts, your business can reduce the risks associated with volatile energy and commodity prices, and rising insurance premiums. Environmental initiatives help your business hedge against rising natural resource (water, energy, wood, minerals) costs by reducing demand. In some instances you can switch to alternative and renewable sources. By eliminating hazardous materials, you can reduce the risk and costs associated with spills and injuries. Businesses who demonstrate they are proactively managing their environmental impacts

Businesses who demonstrate they are proactively managing their environmental impacts are more likely to reduce their insurance bill as they are perceived by insurance companies as having a lower risk profile. Environmentally managed companies are better managed companies overall and likelier to have fewer insurance claims and pay lower insurance premiums.

Improve Your Access to Bank Financing

Businesses that are managing their environmental impacts are more able to access credit. They are seen as better-managed companies overall and this is a good indicator of credit worthiness. Some Canadian banks, including HSBC and Vancity, have begun scrutinizing the environmental track records of potential loan recipients as part of the loan assessment process.

Find Further Resources

The Business Case for Corporate Social Responsibility. Industry Canada.

www.ic.gc.ca/eic/site/csr-rse.nsf/eng/h rs00100.html

The Business Case for Corporate Social Responsibility (2003). Business In The Community (BITC) and Arthur D. Little.

www.bitc.org.uk/resources/publications/key publications/

The Sustainability Advantage. Bob Willard.

www.sustainabilityadvantage.com/products/sustainadv.html

⁹ Harvard Business Review. 2008. *The Strategic Obligation of Sustainability*. Accessed February 19, 2009 from http://blogs.harvardbusiness.org/leadinggreen/2008/11/the-strategic-obligation-of-su.html



Marketing

Background

Marketing is an important aspect of any business that ensures your customers are aware of your products and your brand. Communicating your story effectively is the key to effective marketing. You'll want to talk about your environmental initiatives and integrate them into your messaging to enhance your brand's image and attract customers to your environmentally beneficial products. Few businesses do this well. Create an effective green message by communicating what you're doing well and what you're working towards related to your business' specific impacts. Communicate the environmental benefits of your offerings through honest communication. For both the brand and the products, avoid sweeping statements and grandiose language.

Businesses are sometimes accused of "greenwashing" when they try to make

Businesses are sometimes accused of "greenwashing" when they try to make themselves or their products look green without the action to back it up. An example of this is when a company spends more resources on advertising its green attributes than resources spent on its green programs. Other examples include vague and meaningless product claims that are not explained such as "environmentally-friendly" or claims that are not backed up such as shampoos and conditioners advertised as not tested on animals which offer no evidence or certification of their claim.

Action

Gather Facts and Figures

In order to communicate effectively about your environmental program or initiatives, gather any relevant facts or figures about your efforts. The best marketing includes concrete examples about how much water, energy or material you have saved, how much waste you have diverted, or greenhouse gases you have reduced through your environmental programs.

To make effective product claims, pull together specific details of the environmental benefits of your product compared to others in the marketplace, or a new product or formulation compared to an old one. For instance, if a new product reduces packaging, an effective message might communicate "55% less packaging".

Create "CRED"

Greenbiz outlines a simple green marketing formula: create Credible, Relevant, Effective messaging that Differentiates your company and your products from your competitors:

Credible: Provide credible messages by backing up your statements with appropriate facts and figures. The level of information may depend on the image or environmental history of your sector, and the audience you are targeting. Your approach may be to provide different information if your message is for customers versus employees, for instance you may want to create a simple snapshot for the internal website for employees, and a more detailed report for other stakeholders like investors or your board.

Relevant: A relevant message reports environmental success that is in line with the company's impacts. For example, if an automotive company focuses on advertising its efforts to green its facilities while not delivering on fuel efficiency improvements of its cars, its green message is not relevant to its key environmental impacts. Effective: An effective message translates the environmental information to make sense of the magnitude of your achievements. For instance, you may have reduced a tonne of



waste, but making that relevant to the audience often means translating it into "reducing our dumpster pick-ups from four to three per week" or something else that is easily understood. How the message is communicated also affects its effectiveness. The message should be expressed in a way that is appropriate for your business. For example, rather than a splashy PR campaign or press release, your message might be better spread through word of mouth, or a story in an industry association or local business magazine

Differentiate: To differentiate your company or your products make the message unique and distinct from competing products and companies. Small and medium sized businesses have an advantage since there isn't a lot of green competition within the SME sector. They can often distinguish themselves as the environmental business of choice for some small unique efforts to green their operations or their product line.

See the Resources section for a link to the Greenbiz article and further background on their "CRED" marketing approach.

Business Benefits

The many benefits of environmental management are found in the <u>Business Case</u>. Here are a few that are specific to green marketing:

Differentiate your Business and your Products

It's important to distinguish your business based on your green products and/or your environmental achievements. Communicating this to your customers is key, since Globescan's CSR Monitor reports that 80% of Canadians say they are willing to pay more for products produced in a socially and environmentally responsible manner. If your customers are other businesses or organizations, the greening of supply chains and liability concerns will make your green products stand out from your competitors. Free Advertising ("Earned Media")

Environmental achievements are an opportunity for media attention referred to as "earned media". Although not as targeted as paid advertising, earned media can provide free advertising to help build public awareness of your company as a green brand. For instance, Mountain Equipment Co-op's green building efforts have earned the company considerable media attention, being highlighted as a green brand on prime time TV when similar advertising would cost hundreds of thousands of dollars.

Resources

Greenbiz Green Marketing Steps http://www.greenbiz.com/feature/2008/11/24/the-four-simple-steps-pitch-perfect-green-marketing?page=0%2C0

Small Business Green Marketing

http://sbinfocanada.about.com/od/marketing/a/greenmarketing.htm

The Six Sins of Greenwashing

www.terrachoice.com/Home/Six%20Sins%20of%20Greenwashing



Product Development

Background

There is an opportunity to green all aspects of the product development cycle – from concept and design to the manufacture, packaging, delivery and possible return of the product. Critical to the process of greening product development is the concept of examining a product's lifecycle. A lifecycle assessment (LCA) examines the "cradle to grave" aspects of a product – from the extraction of raw materials, through manufacturing, distribution, retailing and use to final recycling or disposal. This critical thinking at the product design and development stages offers an opportunity to reduce a product's impact on the environment in the many aspects of its life – something that would be of great value to your stakeholders, particularly your customers.

You might even wish to take the product development cycle further by thinking through how your product is best disposed of at the end of its life. Is it possible, for example, to have a product-take-back program where you set up the facilities to recycle and possibly reuse the materials from the original product sold to your customer base? Is there another company with whom you can joint venture who can use the returned materials for another product? *Teck Cominco, for example, has an e-waste* process where they shred and smelt electronic waste such as TVs, monitors, computers and printers, and recover germanium, zinc, indium and lead as powder for use in their metal products. Other e-waste materials (silica and iron) are incorporated into a product which is then sold for use in Portland cement manufacturing.

Green Product Design

Product design offers the opportunity to incorporate green attributes into a product. Often referred to as Design for Environment (DfE), it is a process that addresses environmental considerations in the earliest stages of the product development process to minimize negative environmental impacts throughout the product's life cycle. Green product design can encompass the selection of materials, use of resources, production requirements and planning for the final disposition (recycling, reuse, or disposal) of a product. It is not a stand-alone methodology but one that must be integrated with a company's existing product design so that environmental parameters can be balanced with traditional product attributes such as quality, cost, and functionality.

When large corporations make commitments to sustainability (e.g. Walmart or GE), delivery on these commitments plays out in their supply chain, and small- and medium-sized companies must respond to their customer's needs. Since 50-75% of costs are locked-in at the design stage, smaller companies who are at the front end of other company's product cycles need to consider green product redesign. For more information, see *Going for the Green* in the Resources section.

Green Production

Leaner, Cleaner Production

Leaner – or "green" – production aims to address wasted resources in production to increase productivity and drive down costs. It is one aspect of the green design process. It is focused on continuous improvement, recognizing that reducing environmental impact is a circular process that begins and ends and begins again with the inquiry into how to make products of better quality, using fewer resources, and creating less or no waste in the process.



According to international consulting firm Deloitte, there are six sources of waste a business should address:

- Over-production: Producing more products than you can sell leads to waste from the raw materials, energy and water used to make the products, and recycling or landfill waste when those products spoil or become obsolete before they can be sold.
- 2. Inventory: Look for the excess packaging used for stored products, the potential for damage when products are being stored, the replacement of products in process, and the wasted energy required to heat/cool inventory space.
- 3. Transportation and motion: Look for opportunities to reduce energy, emissions, and spills during product transport.
- 4. Defects: Look to reduce defects as they are a waste of raw materials, energy and water used in their manufacture. Defects also require the extra effort of recycling or landfilling to dispose of them, and additional energy, water and labour to rework materials into new products.
- 5. Over-processing: Look to reduce over-processing of products, where more raw materials, energy, water, and waste are used and emissions created per product than necessary.
- 6. Waiting: Look for spoilage or component damage when products are waiting to be finished, and the energy consumed during downtime.

For more on these six sources of waste, see *Green, Lean Six Sigma* in the <u>Resources</u> section.

Action

With these concepts in mind, the opportunity for SMEs is to redesign products in ways that improve upon existing products; create a new product line altogether; or consider moving into the "services" sector, where you lease or reconfigure your product so you are selling a service or a function (such as heating) rather than a product (such as heaters).

Green design and production allows your business to incorporate environmental attributes into your product's design while meeting the growing environmental requirements of your customer base and reducing your costs.

Greening Product Design

Think about your customer's requirements. If you are a supplier to another business, review what their concerns might be, or ask them directly. Ignoring toxics and other problematic materials may keep your product's price low in the short-term, but dealing with these materials proactively creates value for your customers. Assess the following aspects of your product for redesign opportunities:

- Product lifespan: Increase a product's lifespan by improving its durability or designing it for easy upgrades. This will increase its value and longevity while reducing waste.
- Material choices: Investigate the availability of green materials to substitute for traditional materials. This may include creating a remanufactured product out of high



- quality used parts, sourcing materials with higher recycled content, or substituting a greener material.
- Recyclability: Taking the end of a product's life into account makes products easier
 and safer to disassemble and recycle into component parts. For example,
 eliminating lead solder and glued joints in consumer electronics and redesigning
 them to include modular parts and snap-fittings makes disassembly for recycling
 cheaper, easier and safer.

Green Product Line

Some firms redesign and reconfigure one product at a time, launching each as they are market-ready. Other firms might launch a suite of environmental products on the market, constituting their "green product line". You might consider if you prefer to remodel your entire product line or have legacy products and environmentally preferred products available to your diverse customer base. The Marketing section reviews the pros and cons of green branding for those at this stage of their business.

You might want to consider having your product third-party certified for its environmental qualities. <u>Ecologo</u> is the Canadian environmental product certifier, and you can find other product certification programs at <u>www.ecolabelling.org</u>.

A BC courier company, Novex Couriers, has been building its "environmental offering" by purchasing hybrids for its fleet of courier vehicles. They added to their green product line by launching a second green product: a "digital" courier service that reduces the negative environmental impacts of vehicle emissions and saves clients and themselves costs by providing clients the option of sending legal documents with legal signatures via the internet.

Product to Value-Added Services: "Servicizing"

Green design offers businesses the opportunity to rethink their focus on products and examine the potential for providing customers with high value services instead. Moving from a product to a service-based offering refers to a shift from selling hard goods to selling the function of a product or the service it provides, with the idea that fewer goods will emerge in the end to meet the same needs. Producing fewer goods leads to fewer environmental impacts in the manufacturing process, and less waste when products outlive their usefulness. For manufacturers and suppliers there is the potential to create more stable profits and improve revenue by selling services, and cutting material and energy costs while maintaining and growing the customer base.

Not every product lends itself well to the service model. Electronics, office equipment, chemicals, cleaning supplies, and equipment are all good candidates due to limited lifespans and upfront costs which make them more expensive to purchase outright. For example, a number of years ago Mountain Equipment Co-op created a value-added line of business when it began renting – rather than selling – outdoor equipment from its stores. Another example is US-based Gage Products Co., a specialty chemical supplier for auto paint shops. Gage moved from solely selling chemical blends for auto painting to providing additional value-added services, helping autobody staff apply the mixtures properly, get through colour changes and reduce the need for solvents. This value-added service eventually attracted larger customers, such as Chrysler, which they helped to meet new environmental regulatory demands, reducing pollution through



reduced use of chemicals. For this and other examples of "servicizing", see *Sustainability Through Servicizing* in the Resources section.

Benefits

The many benefits of environmental management are found in the <u>Business Case</u>. Implementing green product design can provide numerous specific benefits to a company. Focusing on resource efficiencies can reduce costs and often shorten production time. Because designing green products sometimes requires bringing diverse functional groups to the design table for the first time, green product design efforts can also drive other product and process innovations.

Meeting Customer Expectations for Greener Products

Whether you are in someone's supply chain or providing products directly to retail customers, the market is shifting to demand greener products. Green product development ensures that you retain your market share and remain competitive.

Innovation in Product Line

Product innovation creates a diversified product line, opening up new lines of business and expanding your customer base. This creates competitive advantage for your business. Your business may even move into a service line of business, further diversifying your revenue sources. All of these changes make your firm more resilient and able to adapt and respond to the changing market and growing costs of material inputs.

Resources

Design for the Environment: A Competitive Edge for the Future – Toolkit www.pca.state.mn.us/oea/publications/dfetoolkit.pdf
Going for the Green: A Manufacturer's Guide to Lean and Green www.ic.gc.ca/eic/site/dir-ect.nsf/eng/h_uw01017.html
Deloitte's Green Lean Six Sigma article on six common sources of production waste: www.deloitte.com/dtt/article/0,1002,sid%253D143146%2526cid%253D210826,00.html
Sustainability Through Servicizing www.greeneconomics.net/Servicizing.pdf



Purchasing

Background

Purchasing is an area where your business can put its values into action. Buying greener paper and more energy efficient lighting and equipment, and substituting non-toxic cleaners demonstrates to your employees and customers that you are walking your talk. Green purchasing is where you identify your environmental priorities and require your suppliers and the products and services you buy to reflect them. With green purchasing you are basically concerned with two aspects: the environmental properties of the product and how it was manufactured and the environmental practices of the firm that produces, distributes or leases the product or service.

Reduce Raw Materials

Green purchasing reduces the inputs of virgin raw materials necessary in the products a business consumes. For instance, buying recycled paper with 30-100% recycled fibre reduces the need to harvest trees for virgin paper fibre. It also requires much less energy to produce that paper. See Buying Greener Paper for more information.

OUESTIONS TO ASK BEFORE PURCHASING A PRODUCT

- Can we do without it?
- Can we borrow it, rent or get it gently used?
- Can it be smaller, lighter or made from fewer materials?
- Is it energy efficient?
- Does it reduce the amount of waste destined to landfill?
- Is it locally manufactured?
- Is it made with post-consumer recycled or reclaimed materials?
- Can it be recycled?
- Is it designed to be durable or multi-functional?
- Is it made with less energy?
- Is it available in a less toxic form?
- Is it possible to reduce the amount of packaging that is used to transport the product?
- Are the product and/or packaging refillable, recyclable or repairable?
- Does it use renewable resources?
- Is reuse practical and encouraged?
- Will the supplier take it back at the end of its useful life?
- What were the health, safety and environmental conditions under which it was manufactured?
- What are the social and environmental practices of the firm that produced it?

Reduce Toxics

Green purchasing reduces the amount of toxics your business consumes. For instance, green cleaners and degreasers substitute many of the toxic ingredients, like corrosives and heavy metals, in standard chemical formulation. One restaurant in Vancouver, BC, managed to eliminate an entire cleaning process by investigating green purchasing



options – they substituted a steam cleaning process for heavy chemical degreasers and now complete their 3-hour oven hood cleaning in 6 minutes.

Reduce Transportation

Green purchasing can reduce the amount of transportation associated with a product. For example, when businesses buy local products, they often reduce transportation emissions associated with their products. You might consider the opportunity of hiring "Smartway Transport Partner" freight and logistics services which post their fuel efficiency and environmental performance scores on line at:

www.epa.gov/smartway/transport/what-smartway/swtp.htm. A second option would be to source these services from suppliers following FleetSmart, a program offered by Natural Resources Canada which helps firms reduce greenhouse gas emissions and energy and fuel consumption of their fleets. http://fleetsmart.nrcan.gc.ca/

Green the Supply Chain

In addition to looking at the environmental attributes of the products you buy, you may also wish to consider the environmental practices of the firms from which you source your services and products. Do they have an environmental commitment, for example? How are they managing their environmental impacts? A hair salon in BC that markets itself as an environmentally friendly salon, not only sources organic hair products, but where organic products are not available sources from firms that have strong in-house environmental programs.

Action

Just Get Started

There are so many green purchasing opportunities and so much information, that it can be daunting to begin. Get started with easy wins that build success and buy-in with your employees. There are ten steps to starting and further developing your approach to green purchasing – you can start with any one:

- 1. Find Allies in your Organization: identify champions and decision-makers to support you
- 2. Tap Into Key Resources: identify external sources of information to aid decision-making (see, for example, the Sustainability Purchasing Network below)
- 3. Draft a Policy Statement and Make a Plan: create a framework for your activity
- 4. Start a Sustainability Conversation with Current Suppliers: communicate your goals; ask for information on supplier green activities and products
- 5. Find Ways to Use Less of What You Already Have: rethink the purchase, reduce your use and recycle old products into new uses
- 6. Choose New Suppliers Committed to Sustainability: identify suppliers with green product/service lines or green operations
- 7. Take a "Total Cost of Ownership" Approach to What You Buy: think of the long-term costs of your purchase and incorporate health and safety and disposal costs into the purchase decision. See Business Planning & Finance for more information.
- 8. Make a "Top 10" Sustainability Shopping List: identify your top 10 products (see below)



- 9. Set Goals and Track Your Activities: set a goal to guide your work (ex. 2 new green suppliers) and measure how well you do
- 10. Communicate and Reward Achievements: create momentum with staff by informing them of successes and rewarding their ideas.

For more information on this list, see Industry Canada http://www.ic.gc.ca/eic/site/sd-dd.nsf/eng/sd00548.html

Assess Opportunities on "Top 10 Shopping List"

There are some product and service areas where the market is well developed, the costs premiums are lowest, the savings are proven, and the environmental benefits are biggest. Use the following shopping list when looking for opportunities to green your purchasing:

- 1. Electronic Equipment: computers, monitors, printers and photocopiers
- 2. Office Supplies: paper, binders, markers and pens
- 3. Office Furniture: chairs, tables, and wall partitions
- 4. Paper: copy paper, books and note pads
- 5. Lighting: office, kitchen, bathroom and shop floor
- Cleaning Supplies and Custodial Services: general purpose, floor, surface, carpet and solvents
- 7. Meetings/Conferences/Events: facilities, food, recycling and travel
- 8. Business Travel: mode and frequency of travel
- 9. Gifts and Apparel: uniforms, caps, shirts, awards and gifts
- 10. Coffee, Tea and Other Commodities: coffee and coffee services, other food and beverage

For more information on this list, see Industry Canada http://www.ic.gc.ca/eic/site/sd-dd.nsf/eng/sd00549.html



Take a Systematic Approach

BUYING GREENER PAPER

Green paper is a great place to start your green purchasing effort, since it's a material that everyone uses, it has been extremely well developed and tested to work in all applications, it's well-priced against standard products and it has many environmental benefits.

What Can You Do:

- Don't buy as much. Reduce paper consumption by increasing document margins, printing double-sided, and saving one-sided paper for scratch pads or for printing drafts.
- Buy recycled. Reduce the need for harvesting new trees by purchasing paper with a high-recycled content. Recycled paper reduces tree harvesting and is made with much less electricity than other paper, resulting in reduced greenhouse gas emissions.
 See www.edf.org/papercalculator/ to compare the environmental benefits (wood use, total energy, greenhouse gases, wastewater and solid waste) of one paper to another.
- Buy certified paper: Certification gives an assurance of the paper's claims and fibre sources - that the paper contains the recycled content it claims, and that it contains no illegal or protected forest fibre. See www.fsc.org for more information or www.fsc-info.org to search for certified papers (use "paper" under product and "Canada").
- Buy local: Paper that is manufactured locally travels less, reducing greenhouse gas emissions. It may also support jobs and business that are important to your local economy. For more information, see WWF's Guide to Buying Paper: http://miniurl.com/7744

Resources: WWF Guide to Buying Paper Paper Calculator Tool

For businesses that want to take a more systematic approach, focus your effort on the supplies that you buy most often and the suppliers with whom you spend the most. In purchasing, this typically refers to a "spend analysis" which breaks all business spending out into commodities and suppliers. It requires a more sophisticated financial system and some time to provide a business with the bigger picture on where it can leverage spending for greater environmental gain. Most businesses then start a conversation (see #4 above) with their top 5 suppliers, or work to green their top 10 or 20 supplies.

Benefits

The many benefits of green purchasing and environmental management are found in the <u>Business Case</u>. Here are a few that are specific to green purchasing:

Alignment with Organizational Values

Green purchasing is a way to implement your values, to "walk your talk". It is a visible sign to your employees, suppliers and customers that you are working towards greener



operations in your business. It focuses on how a business can align operational decisions with organizational goals and values. For instance, Vancity Credit Union's commitment to become carbon neutral by 2010 was achieved in part due to their choice to purchase 100% post-consumer copy paper for internal use and member (customer) statements.

Closes Loop on Recycling

Green purchasing creates a market for products containing recycled materials, to ensure that the plastic, paper and other materials are recycled into useful products. This closes the loop – at one end **you** manage your waste by recycling as much as you can, and at the other end you buy products containing recycled materials.

For a comprehensive overview of the many benefits of sustainability purchasing, see the Industry Canada sponsored *Guide to the Business Case and Benefits of Sustainability Purchasing* http://www.buysmartbc.com/spn-resources/business-case-and-trends.html.

Resources

Industry Canada's Sustainable Purchasing Website: www.ic.gc.ca/eic/site/sd-dd.nsf/eng/h sd00555.html

Buy Smart Network - a non-profit organization that provides tools and resources on integrating environmental and social considerations into your purchasing decisions: www.buysmartbc.com

Guide to the Business Case and Benefits of Sustainability Purchasing: www.buysmartbc.com/UserFiles/File/SPN-Business-Case-Guide-v5.pdf



Human Resources

Background

Employees are an important aspect of environmental program success. People – your employees and the community in which you operate – are an essential aspect of the "People, Planet, Profit" paradigm of sustainability. Managing human resources effectively means going beyond communication to seek out staff ideas, and solicit their time and energy to help implement initiatives. Engaging your employees taps into a wealth of knowledge about your business and ideas to innovate, reduce costs and rework processes and products to reduce environmental impacts. And the more engaged employees are, results show (see Business Case), the more motivated, loyal and productive they are as well, driving further overall benefits to your business.

Action

Communicate Goals

Communicating the organization's goals for new environmental initiatives or programs is essential to build a shared understanding of where the business is headed and how everyone can help. If done well, this provides a clear roadmap for the company's efforts and outlines how employees can play their part. Sharing this information builds employee buy-in as staff come to understand the context and the rationale for change.

Involve and Empower Employees

Getting employees engaged in any kind of workplace innovation or change is essential. Human resource practices can help embed environmental values in a business, ensuring employee buy-in. Employees who are encouraged and empowered to participate in environmental programs benefit the business' bottom line with their front-line ideas of ways to reduce waste and retool processes to meet the company's goals. For example, 3M started an employee program to engage employees to reduce its environmental impact. The program has generated more than 3,000 projects, mostly from employee ideas, that reduced emissions by over 1 billion pounds and saved approximately \$500 million since 1975 (for more information see http://hbr.harvardbusiness.org/1994/05/its-not-easy-being-green/ar/1). There is no substitute for shop floor knowledge and enthusiasm.

Reward Innovative Ideas and Hard Work

Celebrating success and rewarding achievement are an important factor in managing human resources to implement environmental goals. A pat on the back, award, internal newsletter article or contribution to an employee's favorite social or environmental charity will help spread interest and engagement in your programs. You may also want to consider how your employees are financially compensated because if all your performance targets and financial incentives are focused on your financial goals, you may find it a challenge to motivate your employees to consider other factors in their work. Think, too, abut whether you would like to put environmental objectives into employee job descriptions or annual performance contracts. This can have a positive effect as well.



Manage Change

Innovation and sustainability require change, and with change comes fear and uncertainty. To manage human resources well, and help support your staff through this process, it's important to create an open climate for discussion. This means creating a culture where it's OK to disagree and share opinions. By providing opportunities for feedback you'll get positive and negative feelings out in the open and understand the source of concern. See Leadership (Culture) for more information.

Incorporate your Sustainability Commitment Into Employee Recruiting Programs
Increasingly employees prefer to work for organizations that are aligned with their social
and environmental values. Leading companies are incorporating sustainability
messaging into their recruitment programs. Check the job ads sometime for evidence of
this – it might give you a few ideas for how to take your recruitment to the next level,
increasing your chances of attracting the best and the brightest.

Resources

Corporate Social Responsibility and Human Resources Management Paper and Checklist

http://www.corostrandberg.com/publications_Corporate_Social_Responsibility.html#1h



Business Planning & Budgeting

Background

Businesses that commit to environmental and social responsibility – sometimes referred to as corporate social responsibility or sustainability – begin incorporating environmental and social priorities into their business decisions, including their business plans, purchases and financial investments. This approach is often referred to as the triple-bottom line (rather than a single bottom line that only looks at financial aspects), or the "blended bottom line". In so doing, the business becomes concerned with environmental and social factors, in addition to economic ones when measuring its success and planning for the future.

Firms with business plans who are following the path to become more sustainable often begin to incorporate their environmental and social objectives into their annual and long-range plans. This way they are better equipped to monitor their performance towards their "non-financial" objectives and introduce course corrections as necessary. Since some environmental initiatives require upfront investments in order to achieve environmental goals and realize cost-savings, their costs must be incorporated into financial plans and budgets. An obvious example of this is retrofitting your premises for energy efficiency. The costs of building upgrades might not be realized for three or four years. These costs need to be budgeted for and factored into the annual budgeting process.

Firms that incorporate social and environmental factors in their business cases and financial analyses, often incorporate extended timelines in payback cycles, consider supply chain implications, look at end of life or lifecycle issues, and consider additional stakeholder interests. By applying this wider lens to decision-making, businesses are able to take into account hidden costs and unrealized opportunities in their business, investment and purchasing plans. For instance, comparing the costs of using a toxic product with a greener alternative is not a simple purchase price comparison, but rather must include other hidden costs like worker health and safety, product handling/storage and regulatory issues.

Action

Incorporate Environmental Objectives into Business Plans and Budgets

An important success factor in environmental management is to ensure that environmental programs and initiatives are integrated into regular planning and budgeting cycles and business cases, rather than considered as side projects. When environmental aspects of the business are managed in this way they become a second bottom line to report on, plan and resource. Once you have identified your top environmental initiatives, you need to identify the resources you will require in time and money to carry them out. Some organizations find the cost-savings they generate from simple environmental measures (such as reductions in paper consumption or energy savings from energy efficiency measures) can be used as a set-aside to fund other environmental initiatives. The University of BC, for example, has saved approximately \$23M since 2000 as a result of avoided energy costs and they use these savings to fund their Sustainability Office which designs and implements campus-wide sustainability initiatives, many of which identify additional annual cost-savings for the university.



A further step would be to mandate your purchasing and financial staff to consider longer-term social and environmental aspects in business investments, such as capital projects. BC Hydro has done this in a process they call "<u>Structured Decision-Making</u>" in which they incorporate their social and environmental objectives in their business case requirements. (Contact Strandberg Consulting for a copy of the Case Study.)

Use Lifecycle Costing

Lifecycle assessment or lifecycle costing is a business case process that incorporates many of the costs that are not included in traditional financial accounting. The lifecycle cost is the sum of all recurring and one-time (non-recurring) costs over the full life span or a specified period of a good, service, structure, or system. It includes purchase price, installation cost, operating costs, maintenance and upgrade costs, and remaining (residual or salvage) value at the end of ownership or its useful life.

In traditional models, lifecycle costs such as health and safety, environmental impacts and other costs are often seen as external to the decision at hand and not incorporated into financial and business case analysis. For instance, a business may choose a toxic product for a cleaning application because the toxic product is cheaper than the greener option. However, if it takes the lifecycle costs into account, the business also includes the value of other related costs in the product's lifecycle such as the use or disposal aspects. In the case of the toxic cleaning product, the business might consider other hard costs such as the need for hand and eye protection to use the toxic product, employee work downtime when accidents happen, and indirect costs like the environmental harm associated with the product.

The resource below can provide guidance on how you can start to implement lifecycle costing in your financial assessments.

Resources

Sustainability Purchasing Network Total Cost of Ownership Workbook Scroll to the Workbook accessible at this link: www.buysmartbc.com/spn-resources/tools.html

BC Hydro Case Study on Structured Decision-Making: Contact Strandberg Consulting for a copy.



Measurement, Tracking & Reporting

Background

Measurement, tracking and reporting is an important aspect of sustainability programs. Measurement provides a way for you to gauge your progress towards your goals, tracking helps you monitor your progress and continually improve, and reporting allows you to communicate it to staff or other stakeholders. Common examples would be measurement of resources used (energy, water, paper consumption, materials), waste created, greenhouse gases emitted, employee volunteer hours or donations to social or environmental groups.

A common axiom of environmental management is that you can't manage what you don't measure. As your business begins to manage and reduce its environmental impacts, consider appropriate measures of success to measure your progress, set specific targets and then begin to monitor your environmental performance over a monthly, quarterly or annual basis. This will help you track your performance, as with other aspects of your business, pointing you to areas where it might be necessary to step up efforts. Measuring in this way can be a real incentive to staff, too, as it can encourage them and further motivate them to do more. Many businesses start the measuring process by conducting an environmental audit of their operations. You may wish to start here too, there are some examples in Resources to help you with this, or see the Resource Use section.

Over the last decade, reporting on environmental and sustainability performance has grown worldwide, with many large and some medium sized organizations producing an annual sustainability report. Such reporting addresses the positive and negative aspects of the company's environmental and social performance with the goal of increasing transparency and building goodwill with stakeholders such as shareholders/investors, employees, community members and your clients. Reporters also find that the process of issuing a sustainability report helps bring more clarity and focus to the organization's efforts in managing its environmental performance, so it can be a good way to improve your performance as well.

In practice, SMEs are less likely to issue sustainability reports. However, reporting on environmental performance can help them gain credibility with customers, investors and bankers who are increasingly looking to environmental measurement and reporting as a tool to assess the credit worthiness and risk profile of businesses. As noted in the Business Case, employees are also interested in working for companies aligned with their values. Being able to read about concrete efforts and the positive impacts the company has generated in the environment or the community can make the best and the brightest talent more attracted to your company. The goal is to provide a means to communicate information to stakeholders to gain trust and credibility. This may be as simple as posting information on your website, or providing an update to suppliers, customers and staff, all the way to more robust and complex annual sustainability reporting.

<u>Action</u>

Measure

Measuring the success of your environmental programs and initiatives helps you ensure that you track your progress and meet your goals. Measurement allows you to create an



accurate description of your current state, so that you can set goals and be sure when you meet them. The measurement of your current state is often referred to as creating a baseline. Ultimately, you need measures that work for your business, that can easily be integrated into workflows, and can be reproduced regularly to monitor and track progress. Get started on your baseline by:

- Gather your bills for each area of resource consumption. Typically, this would include
 waste and recycling, energy (electricity and natural gas), water, and materials use.
 Take a look at what unit of measurement are provided by your utility, contractors and
 suppliers and assess whether this is sufficient to help you monitor progress over
 time; or
- Conduct an audit to dig deeper into one of your resource use areas. For instance, if you want to reduce energy use from a specific part of your building, or reduce one of the materials in your waste stream, you'll need to have a better breakdown than your bills provide. A simple dumpster dive will provide you with your total waste volume, a breakdown of your waste stream and ideas about where the biggest opportunities for reduction might be. An energy or greenhouse gas audit will provide you with energy use or emissions from different areas of your business, that will allow you to set specific goals.

For more information on conducting inventories and reducing your impact in various areas, see Resource Use.

Track

Tracking is the periodic checking of your success towards your goals. At regular intervals, you'll want to use your measurement techniques to assess how well you are doing and make any necessary changes. Tracking may be an annual activity toward a specific goal, for example reducing waste to landfill by one dumpster per week, but it can also be used along with measurement to set new goals and ensure your programs continue and always improve on your previous success. This is the concept of continuous improvement.

Report

Consider your audience when reporting on your environmental program success.

- For staff and most customers, a snapshot may be all that's required. You might want to make more detail available for other groups that may be interested in more detail (such as bankers or employees).
- Consider your impacts and report success that is in proportion to them. Sustainability reporting comes up short when a company doesn't address its most important environmental impacts. For instance, if a business reports on progress towards its paper recycling goals, while making no progress on a highly toxic waste stream, it won't improve its credibility. If you are not sure about which areas of your business generate the most impacts, conduct an audit as noted under "Measure" and in the Resource Use section, or contact your local environmental organization, government department or trade association for advice. You could even consult your staff, suppliers, neighbours and customers for their ideas, since what matters to them will also matter to you.
- Develop an appropriate and reproducible format that considers your company's goals and the resources that can be allocated to reporting. Develop an appropriate



means to report on your progress that can impact management, staff and stakeholders without unduly taxing limited resources.

Resources

Global Reporting Initiative Handbook for SMEs: An international guide to sustainability reporting for small and medium sized businesses:

http://www.globalreporting.org/Learning/LearningPublications/Pathways/Pathways.htm

Industry Canada Corporate Social Responsibility Verification and Reporting: an overview to reporting plus link to a sustainability reporting toolkit: www.ic.gc.ca/eic/site/csr-rse.nsf/eng/rs00136.html

Microsoft Sustainability Dashboard for Performance Tracking in Small and Medium Sized Businesses:

www.sustainablelifemedia.com/content/story/strategy/microsoft develops sustainability dashboard for smes

Sample SME Reports (past winners of the CERES sustainability report awards)

- Seventh Generation www.svg2007report.org/
- YSI http://sr.ysi.com/meet.htm
- Ecologic Designs http://www.corporateregister.com/a10723/EcoDesigns-sus-usa.pdf
- Workspace Group http://www.corporateregister.com/a10723/wok07-sus-uk.pdf
- Australian Ethical Investment http://www.corporateregister.com/a10723/AEI06-sus-au.pdf
- Green Mountain Coffee Roasters http://www.gmcr.com/PDF/gmcr csr 2007 final.pdf
- Recycle Bank http://www.corporateregister.com/a10723/RecycleBank06-csr-usa.pdf



Resource Use

1) Paper & Printing

Background

Reducing Use of Paper

Paper is a prolific material in business, and paper wastage is commonplace – from printing emails to single-sided copiers, the dream of the paperless office is far from a reality. Although it's important to buy greener paper (see <u>Buying Greener Paper</u>), reducing paper consumption prevents the outright purchase of paper, with the associated environmental effects of reduced tree harvesting, reduced water and energy consumption required to process paper, and reductions in water and air pollution associated with its production and transport. Not to mention a significant reduction in costs to purchase the paper. Reducing paper consumption is one key opportunity for businesses who want to reduce their greenhouse gas emissions. See more in the Leadership section (Climate Leadership).

Printing Green

Office printers use ink and energy and have a negative impact on indoor air quality. Reducing printing saves paper, ink, and energy and prevents air pollution. When you are in the market to upgrade your printer, first consider the opportunity of purchasing a multi-function device that incorporates your printer, scanner, copier and fax. Ensure the equipment is Energy Star compliant, allows for double-sided printing and print reduction (two-to-a-page) capacity, has a tray for reused paper and the warranty allows for paper with high recycled content.

When you purchase printing services, ensure that you discuss the type of paper or cardstock with potential printers. It's important to specify high recycled content and certified paper as outlined in <u>Buying Greener Paper</u>. Ask your printer about other environmental aspects of the printer's operation, like ink toxicity, the use of solvents, and whether or not fountain solution is recycled.

Action

Print Double-Sided

Double-sided printing is the simplest measure for reducing your paper use. If your printers have the capacity to double-side, implement a policy to default printers to the double sided option. If printers don't have the capacity, ensure that you select printers with this option during your next upgrade.

Reuse One-Sided Paper

Collect paper that's only been used on one side and reuse it when you can, or have it bound to create scratch pads.

Switch to Electronic Communications

Electronic communications can dramatically reduce paper use. From employee payroll and news to marketing and customer statements and invoicing, there are many options to move from paper to electronic. Increasingly your customers will expect this option to be available to them. Businesses that don't switch to on-line customer relationships will lose market share to those offering electronic services.



Business Benefits

The benefits of reduced paper use and green printing are found in cost savings related to paper use and ink. These and other benefits of environmental initiatives are outlined in the Business Case.

Resources

WWF Paper and Printing Reduction Tips

www.panda.org/how you can help/greenliving/climate forests oceans/forests action/c onsumers/save paper/

Greenprint Software To Eliminate Blank Pages www.printgreener.com/ Paper Calculator www.printgreener.com/

2) Water

Background

Water is a vital natural resource and important input for businesses. As the effects of climate change are felt around the globe, with the growing population pressures in urban areas, and as the scarcity of water becomes clear, regulators will place more focus on protecting water sources from pollution and on reducing worldwide consumption of fresh water. Although water use has historically been under-priced, the effects of climate change are likely to force prices up sharply in the near future.

Action

Gather Water Bills

Monitoring water bills is an important first step to managing water use. A review of water bills allows you to identify leaks, see daily and weekly cycles in water use, and to identify areas of opportunity for water conservation.

Assess Biggest Contributors

Use water bills to assess your business' opportunities for reducing water use by matching billed usage with process water use, and other uses like taps, toilets and kitchens. Assess seasonal and other factors that affect usage, and make an action plan for how to make reductions. There may be ways to reduce process use, to change cleaning procedures, to install flow restrictors in washrooms, or to educate employees about conservation. If you want to be more rigorous, you may want to complete a water audit. See the Resources below and Measurement, Tracking & Reporting for more information on conducting audits.

Investigate Incentives and Rebates

If process or other changes can significantly reduce water use, your business may be able to offset the cost with incentives and rebates. Some applicable rebates may be related to energy savings, since reductions in hot water use in kitchens and bathrooms save energy required to heat the water. Incentives for business can be found at http://oee.nrcan.gc.ca/corporate/incentives.cfm. Municipalities across Canada offer rebates for water savings. Check your City's website for information.

Prepare a Business Case for Water Saving Devices and Process Changes

Use a lifecycle analysis (see <u>Business Planning & Finance</u>) to produce a business case of water saving opportunities. This business case will include all the tangible financial details – costs, savings and payback, but should also address intangible benefits like



improved brand. Creating a business case will allow your business to compare and choose between other environmental opportunities.

Business Benefits

The benefits of water savings are found in reduced water and sewer bills, and an associated drop in energy bills for hot water. These and other benefits of environmental initiatives are outlined in the Business Case.

Resources

World Business Council for Sustainable Development Water footprint calculator: http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=MTUxN Q&doOpen=1&ClickMenu=LeftMenu

Metro Vancouver Water Audit Process:

www.metrovancouver.org/about/publications/Publications/gvrdstandardizediciwateraudit processfinalreport09jun20061.pdf

3) Energy

Background

Your energy use refers to your electricity and natural gas use, as well as any fuel you use for generators. SMEs have a big role to play in reducing greenhouse gas emissions associated with energy use, and reducing the effects of climate change. Because of the large numbers and smaller relative impacts of SMEs, each and every business must play a part in reducing energy use. For more on greenhouse gas reductions see "Climate Change Leadership" in the <u>Leadership</u> section.

Action

Gather Energy Bills

Monitoring energy bills is an important first step to managing and reducing your energy use. A review of energy bills allows you to identify peak daily energy use, and identify areas of opportunity for conserving energy. If you lease your premises, engage in a conversation with the property owner about energy savings, and how you can work together to meet your energy reduction goals.

Assess Biggest Contributors

To address energy use, put a team together to create a process map identifying energy inputs at various stages. Be sure to get as much staff input from the shop floor as possible. If you want a more rigorous approach, you may want to complete an energy audit. Many provincial energy suppliers will conduct energy audits or assist you in sourcing a reliable consultant.

Building energy use can be assessed by considering major energy contributors such as lighting, heating and cooling. Lighting upgrades have the potential to reduce 40% of energy use. Minimizing heat loss and gain has the potential to reduce energy use more than 5%, often for very little cost. Proper maintenance of existing equipment can cut energy use considerably. Simple steps such as identifying duct leaks, checking airflow and refrigerant charge, cleaning coils and changing HVAC filters can dramatically reduce energy use. Finally, use employee engagement to reduce "phantom" power draws by encouraging staff to turn off office equipment, lights and computers when not in use.



Investigate Incentives and Rebates

If there are opportunities to reduce energy use, your business may be able to offset the cost with incentives and rebates. Many provincial energy suppliers provide incentives and rebates for small business energy audits and retrofits like lighting and appliances. Check your province's energy supplier website for information or see http://oee.nrcan.gc.ca/corporate/incentives.cfm for a list of incentives and rebates.

Prepare a Business Case for Energy Saving Devices and Equipment

Use a lifecycle analysis (see <u>Business Planning & Budgeting</u>) to produce a business case of energy saving opportunities. This business case will include all the tangible financial details – costs, savings and payback, but should also address intangible benefits like improved employee productivity related to better lighting, and improved brand from your greenhouse gas reductions. Creating a business case will allow your business to evaluate various green purchasing options to improve the energy efficiency of equipment, and to compare and choose between other environmental opportunities.

Business Benefits

The benefits of energy savings are found in reduced energy bills and associated greenhouse gas reductions. These and other benefits of environmental initiatives are outlined in the <u>Business Case</u>.

Resources

Industry Canada Tools For Energy Use available at: www.ic.gc.ca/eic/site/ee-ee.nsf/eng/h ef00021.html

BC Hydro Power Smart for Business provides easy-to-use online guides for commercial energy reduction opportunities such as lighting, HVAC, refrigeration: www.bchydro.com/powersmart/commercial.html?WT.mc id=rd business

Natural Resources Canada Energy Star equipment life cycle savings calculator for purchases:

http://oee.nrcan.gc.ca/residential/business/energystar/procurement/calculator.cfm?attr=4
Energy Star for Small Business (Energy Star is an international standard for energy efficient consumer products. The website provides tips for reducing your energy use.) www.energystar.gov/smallbiz

4) Materials

Background

Using materials efficiently means creating more products with fewer materials, producing fewer defects, and producing less byproduct. Reducing material use creates cost savings and prevents the need for further resource extraction. Preventing material use reduces harvesting, mining and other significant environmental effects of resource extraction. Using fewer materials also creates less waste from the process, providing further saving in avoided waste disposal and recycling fees.



Action

Create a Material/Product Ratio

A material/product ratio allows you to understand your material use in relation to production, set efficiency goals and assess your performance. This ratio represents the "material efficiency" of your production. For example, a cheese maker might assess that for every 1litre of milk, she makes 200 grams of product. Some of the milk makes product and some creates waste, and the amount that creates product creates the material/product ratio of 1L: 200 g. She can set a goal to create more cheese with the milk, looking for opportunities and ideas from her staff to get the ratio closer to 1L: 250g.

Assess Your Waste Stream

Look for material efficiencies in byproduct and product defects. Using a mass balance approach (see text box), you will see that materials either produce products or byproducts – waste, in the form of air, liquid or solid wastes. Assessing your waste stream will help you identify ways in which materials are being used inefficiently to produce your product. The goal is to use more of the materials you buy to create products, and less to produce byproduct. Another area of wasted material use to address is product defects. Creating a defect rate and setting goals to reduce the number of product defects will allow you to use materials and all other resources more efficiently.

Redesign Your Product or Process

Using this information on material efficiency and waste, redesign your process or your product to improve material efficiency and reduce waste. See <u>Product Development</u> for more information.

Business Benefit

The benefits of reduced material inputs are found in reduced material bills. These and other benefits of environmental initiatives are outlined in the Business Case.

Resources

Cut Waste in Your Production Process – a UK-based guide that outlines opportunities to reduce waste from production:

 $\frac{www.businesslink.gov.uk/bdotg/action/detail?r.l1=1079068363\&r.l3=1079437989\&r.lc=e}{n\&type=RESOURCES\&itemId=1079438489\&r.l2=1079363666\&r.s=sc}$

How to Reduce Material Waste – an article that puts material waste into context and provides resources and links to waste reduction measures:

http://news.thomasnet.com/IMT/archives/2008/11/reduce-raw-material-waste-inventory-reuse-reprocess-product-design.html



WHAT'S AN ENVIRONMENTAL AUDIT?

An environmental audit is an assessment of the uses of a resource by various processes or the sources and types of waste created in a business. For example:

- An energy audit provides a breakdown of a business' energy consumption by use – for example by lighting, heating/air conditioning, refrigeration, dishwashing, etc.;
- A water audit provides a breakdown of a business' water consumption by use – for example by cooling, production, dishwashing, laundry, and domestic (taps and toilets) uses.
- A waste audit provides a breakdown of a business' wastes in various categories that are recyclable and not recyclable – for example by paper, cardboard, plastic, metal, hazardous waste, e-waste, etc.;
- A material audit (or mass balance, based on a physical law that whatever
 material enters a system leaves or accumulate in the system) provides a
 breakdown of a business' uses of materials, accounting for the inputs that
 enter and either create products or leave as emissions, waste or recycling.

You may want to perform an audit yourself – check for links in the "Resources" section. Otherwise, your utility provider (energy company, municipal water or waste contact), consultants or engineering firms in your area can help you conduct one.



Waste Management

1. Solid Waste

Background

Many business materials are disposed of in landfills, including electronic waste such as old computers and other toxic materials that lead to pollution of land and water. Reducing your waste and recycling all you can is important to reduce pollution and stretch the capacity of our landfills. However, it's much more than a space and toxicity issue – materials in landfills produce methane, a greenhouse gas that is 21 times more potent than carbon dioxide. The more businesses can do to reduce their contribution to methane gas buildup, the better able society is to slow climate change.

Action

Gather Expertise

If you want help to manage your solid waste, there are many resources available to you. Contact your local municipal recycling division to find out what programs and services they have to help you. Local recycling councils or non-profit organizations have extensive knowledge about recycling opportunities, and sometimes offer waste exchange services. Contact the Recycling Council of Ontario, the Recycling Council of British Columbia, the Recycling Council of Alberta or an Environment Canada office in your region for help.

Gather Waste Bills

If you pay your own waste bills, collect your bills for a year in order to create a total of your annual costs and the amount of waste you produce. Once you know the size of your bin and the number of weekly pick-ups, you can calculate your waste production (see text box). If your landlord deals with waste management, contact him/her to discuss your waste reduction goals.

Assess Waste Stream and Brainstorm Solutions

A waste audit is the best way to determine the areas of opportunity for waste reduction and improved recycling. The purpose of the waste audit is to identify the "streams" or categories of waste that you are sending to the landfill. You will want to know the most significant sources of your waste in order to develop alternative solutions to land filling. Your waste or recycling contractor will sometimes perform an audit for you. However, a simple "walk-through" to assess your facility's waste bins and receptacles, including waste and recycling containers in the front office and back alley, will inform your waste reduction efforts. Have a meeting to ask staff for input on opportunities for reducing waste and increasing recycling. A waste audit can be a means by which to engage and motivate staff if they are given the opportunity of doing the analysis and brainstorming and implementing solutions. For other opportunities to reduce waste, see six sources of waste under Product Development (Greener Production).

Investigate Reuse and Recycling Options

There are many programs that will reuse products that you are ready to dispose of or recycle. For example, *Cell Phones for Food* and *Computers for Schools* collect useful e-waste and repurpose it. Paper, office furniture and office supplies can sometimes be donated to schools, daycares and community organizations, and artists are sometimes interested in scrap materials like wood and metal. Contact your local recycling council for more ideas and contacts.



Consolidate Contracts

Chances are your business holds several waste management contracts – one or more for recycling and one for waste. There is an opportunity to consolidate contracts with one company. This requires less time for you to manage, and contractors often offer a discount for consolidating contracts. Work with a contractor that offers valuable help to reduce your waste stream. Waste management contractors are now offering services like walk-throughs and audits. If your current contractor does not offer them, as part of consolidating your contracts, investigate the offerings of other contractors who might.

Work with Neighbouring Firms

Consider the opportunity of working with neighbouring companies to reduce waste and increase recycling. A neighbour might be able to reuse a waste material that you can't, or partner with you on a new recycling or organics composting collection contract.

Business Benefits

The financial benefits of reducing your solid waste and improving recycling are in cost savings on waste hauling and consolidated contracts. These and other benefits of environmental initiatives are outlined in the <u>Business Case</u>.

Resources

Waste Management Guide for Canadian Small and Medium Enterprises www.qc.ec.gc.ca/dpe/Anglais/dpe_main_en.asp?innov_guide_mat_residuelles EPA Waste Prevention Guide for Small Business http://www.epa.gov/oppt/p2home/pubs/assist/sbg.htm

2. Liquid Waste

Background

Liquid waste from businesses puts a strain on sewer systems and wastewater treatment plants that are designed to carry and treat only wastes from taps and toilets. Chemicals, metals, oil and grease, food and other wastes from businesses clog the system and pollute receiving waters with contaminants that treatment plants can't remove. Businesses can stretch the capacity of the sewer system and protect receiving environments by reducing the amount of contaminants they discharge and by preventing contaminants from entering sewers. Additionally, there may be storm sewers near your business that drain rainwater to areas where fish may be affected if liquid waste is permitted to enter the sewer. On public streets in some jurisdictions these drains are marked with a yellow fish to signal the risk to fish habitats from liquid waste and other materials.

Action

Gather Expertise

If you want help to manage your liquid waste, there are many resources available to you. Contact your local municipal pollution prevention division to find out what programs and services they have for small businesses. Review relevant resources for your sector – there are many guides available for specific sectors. Contact Environment Canada, the Canadian Centre for Pollution Prevention, your industry association, or an environmental consultant for more help.



Divert Liquid Waste from Storm Drains

To prevent pollution from entering sensitive natural environments, investigate which of the drains outside your facility are storm drains. Most outside drains are storm drains, which are intended to carry only rainwater, and they drain to nearby streams, rivers and oceans. Any substances that enter these drains may harm fish and other species in receiving environments. If you have storm drains on your grounds, first label them. The label will serve as a visual reminder to staff of the potential harm of wastes entering storm sewers.

Next, identify key activities that take place near the storm drains. For example, you may notice that vehicle, equipment or dumpster washing is taking place near an outside storm drain. To reduce liquid waste run-off you have a few options available to you: consider altering procedures to wash equipment indoors, capturing and diverting the liquid waste from storm drains to inside sanitary drains that are better equipped to deal with soaps for instance. You might alter dumpster-area cleaning procedures to include sweeping and using green soaps that don't need water. Consider the potential for substituting a green alternative for your wash chemicals under Assess Substitutes below. A final alternative for diverting liquid wastes from the storm sewer is to provide a rudimentary form of treatment – for instance, installing a simple sump separates oils from water before water enters storm drains.

Ensure you communicate your goals to reduce liquid waste impacts to your staff, modify procedures if necessary, and train your staff on the new procedures.

Pollutant Inventory

Develop a list of your liquid waste streams such as chemicals, cleaners and solvents, paints, liquid absorbents, oils and lubricants, etc. Review your procedures for the proper use and disposal of these materials and ensure you are compliant with your policies and with government regulations in this area. If you aren't sure what the appropriate method of disposal is for a liquid waste, or you need ideas about how to recycle liquid wastes, contact your local municipality, or Environment Canada.

Assess Substitutes

Use your pollutant inventory to assess the toxicity of various chemicals that end up in your drains. With a bit of research, or a few calls to chemical suppliers, you will be able to determine opportunities to substitute greener products. Consider adopting a policy of no toxic liquids to drains. Brainstorm solutions to address the liquid waste from your business with your staff. Use your pollutant inventory and assessment of substitutes to make a plan to substitute greener products. When you do, use a lifecycle approach (see Budgeting) by accounting for all the costs for disposal, protective equipment for employees, and health and safety incidents associated with toxic materials.

Business Benefits

The benefits of preventing pollution from the liquid waste your business produces are in health and safety improvements from substituting greener alternatives to toxics. Some businesses may also benefit from reduced sewer fees. These and other benefits of environmental initiatives are outlined in the Business Case.

Resources

Toxic Free Canada www.toxicfreecanada.ca



Pollution Prevention Planning Guide http://www.ene.gov.on.ca/envision/gp/2586e.pdf

CALCULATE YOUR WASTE PRODUCTION

Step 1: Measure your bin, or ask your contractor what size it is. Compare the measurement in yards to the appropriate volume in the chart below.

Bin Type	LxWxH	Volume (m3)
2 Cubic Yards	6'א'3'צ'"	1.529109716
3 Cubic Yards	6'x3'6"x4'	2.293664574
4 Cubic Yards	6'x4'8"x4'	3.058219432
5 Cubic Yards	6'x4'8"x5'	3.82277429
6 Cubic Yards	6'x5'6"x5'	4.587329148
8 Cubic Yards	6'x5'6"x6'8"	6.116438864
12 Gallon Bin	19" x 16" x 13"	0.045424942
35 Gallon Tote	23.75 "x19 "x37.5"	0.132489413
64 Gallon Tote	29.5"x23.25"x40.25"	0.242266355
95 Gallon Tote	37"x26.5"x46"	0.359614121

- Step 2: Multiply the volume of your bin by the number of pick-ups per week.
- Step 3: Multiply the result by the number of weeks of pick-up per year (likely 52).
- Step 4: Multiply the result by the average density of municipal solid waste (MSW) (150 kg/m3)*.

Example

A 4-yard bin (3.06 m3 from chart above) picked up 3 times per week.

Weekly volume: $3.06 \text{ m3} \times 3 = 9.18 \text{ m3}$

Annual volume: 9.18 m3/week x 52 weeks/year = 477.36 m3

Annual weight: 477.36 m3 x 150 kg/m3 = 71 604 kg (or 71.6 tonnes)

*Uncompacted MSW density from Henry, J. and Heinke, G. 1996. Environmental Science and Engineering. New Jersey: Simon & Schuster, p.574.



Leadership

Introduction

A business moves into a leadership position when it begins to work to affect change beyond its borders. For instance, it may work to affect change in its industry, within its supply chain, or how its employees behave at home, or work to involve others in protection of the planet's vital resources. It may even work with government, whether local, provincial or federal, to help advance government policy on the environment. Read further to learn more about what you can do to infuse an environmental ethic into your corporate culture, your community relations and the influence you have through your business relationships. You may also wish to consider a role for your business in climate leadership.

Corporate Culture Background

What's Your Culture?

Culture reflects the attitudes, beliefs and values of a business. Culture influences how staff interacts with managers, with each other and with other stakeholders outside the organization, like suppliers or customers. Culture is a reflection of staff alignment with organizational values; in responsive and adaptive cultures staff is well aligned with business values and respond quickly to change.

Creating an Adaptive Culture

Sustainability requires changes in behaviour and in mindsets; business is best positioned to lead when it creates a culture that expects and anticipates change. If you involve people at all levels in the change effort, they will become a vital part of the creative process. Creating an adaptive culture is based in a work environment that allows ideas to flow, and makes room for mistakes. Staff begins to do things because they believe it is the right thing to do, and the deep involvement of staff creates a cohesive group that function to meet the goals of the group rather than the motivations of individuals within the group. Creating an adaptive culture can foster environmental and product innovations. Allowing creative freedom and support for change is a competitive advantage when you can be more flexible, adaptive and responsive to market shifts than your competitors.

Action

Set the Tone from the Top

Leadership from the top is essential for any sustainability initiative to succeed, since it provides direction from the place where decision-making is expected. In this way, a culture of environmental values is communicated through action, reinforced through decision-making and understood by staff who see the organization demonstrating its values and goals, or "walking the talk". Ensuring that the business owner and management set the example for the company is crucial. One way of doing this is to incorporate environmental performance into the salaries or bonuses of executives and managers to ensure that it is taken seriously and fairly compensated. As a leader you might also want to consider things like how you get to work, whether you use a lap top to record notes in meetings, or what type of container you use for your morning coffee at the office, etc. It is the little things that communicate "support from the top".



Create "Green Teams"

Creating groups of employees committed to various projects and initiatives is a way to divide the implementation work, create synergy and foster team spirit. Green teams typically are groups of employees representing different business areas, such as purchasing, marketing, facilities, sales, etc. They can be self-selecting or hand picked or some combination of the two. One important advantage of this approach is that groups of employees from different parts of the business can come together to solve problems, meet goals and bring their divergent viewpoints and skill sets to the tasks at hand. Resources

Incorporating Sustainability Into Corporate Culture
https://www.vhb.com/template-article.asp?pagename=employee-article-IncorporatingSustaina-bilityintoCorporateCulture

Community Giving & Volunteerism Background

Community giving is an opportunity to demonstrate your environmental commitment to the broader community. It's important to donate to worthy causes, and it provides an opportunity to market your business (see more under Marketing). Contributing to community causes has a great impact when it is consistent with your goals and values. For instance, a number of years ago Mountain Equipment Co-op aligned its charitable donations with its environmental goals of protecting and providing access to wilderness. This focused their contributions on organizations and events that protect wilderness. They subsequently launched a campaign called "The Big Wild" with other partners working to increase the amount of Canadian protected wilderness to 50%.

Another way to contribute to community causes and provide a benefit to employees is to encourage employees to volunteer for a local charity or non-profit organization during work time. The charity or non-profit benefits from the donated talents of your employees, while your business benefits by creating a better image and happier more engaged employees. Not only that, but it can help build skill sets for employees and can supplement your employee training program. The Knowledge Development Centre of Canada reports that businesses supporting employee volunteer activities benefit from an improved public image (33%), employee morale (21%) and relations with the surrounding community (17%). Since large businesses are more likely than small ones to support such initiatives, it offers a way for small businesses to distinguish themselves from competitors in the small business sector.

You can also build employee team spirit by adopting a local environmental charity to support. Stream and shoreline cleanups and de-littering highways are some of the opportunities available.

Action

Align Community Giving with Environmental Goals

Ensure that your community giving has impact that reinforces your environmental goals by:

Reviewing existing annual donations and targeting some funding to environmental projects



- Reviewing environmental goals and aligning your community giving programs with your environmental aims
- Reviewing marketing opportunities offered by environmental charities, non-profits and environmental events
- Contacting your local environmental organization to see if there are projects you can support with dollars or employee time.

Create an Employee Volunteerism Program

Create a program to benefit your staff and the community by allowing employees to volunteer to community organizations on work time. Survey your staff on their existing volunteer activities and their charities/non-profits of interest; discuss their interest and potential structures for the program. Some options are:

- Paid time to volunteer
- Award schemes to recognize employee volunteering
- Short-term secondments to environmental organizationsResources

Knowledge Development Study

http://nonprofitscan.imaginecanada.ca/files/kdc-dc/imagine business support report.pdf Volunteer Canada http://www.volunteer.ca/en/find-volunteer-centre

Leverage Your Influence

Background

Leveraging your influence sets you apart as a business leader and helps distinguish your brand. It demonstrates that not only are you a business-savvy leader, reaping the financial benefits of reducing your environmental impact, but you are working to tell your story, share best practices, bring others along, and influence public policy for the betterment of the environment and your community.

Action

Work With Others in Your Sector

No one understands your business like others in your sector. Telling your story and sharing best practices can drive innovation, stop you and others from reinventing the wheel, and raise the bar for the entire industry's environmental performance in a shorter period of time. Work with your industry association or group to leverage your influence, tell your story and share best practices with others. The risk to your business of course, is that if your entire industry or sector has a poor environmental record, government might decide it needs to regulate for improved performance. The opportunity is that if your industry association helps move your sector forward, you can all benefit from the social license to operate and an improved industry brand locally and in global markets. Contact your business association and ask them how you can get involved or whether you can head up an effort to launch an environmental committee.

Collaborate with Other Businesses and Organizations

There are many environmental improvements a business can make on its own. However, working together with other businesses can reduce the costs of improvements a single business cannot afford, or may give rise to opportunities for sharing services or



exchanging waste (so each can incorporate waste as a product input, for example) or joint contracting of recycling services. For instance, business members of the Chicago Waste to Profit Network diverted almost 50 tonnes of waste and related CO_2 and produced \$1.9 million in revenue generated or cost savings in 2008, creating much more value and savings than these businesses could create on their own. A business might share a recycling bin with a neighbour, or work with a group of businesses to install geothermal or solar heating. To get started contact your local Chamber of Commerce or Board of Trade to see what efforts or initiatives are underway. Or offer to lead a networking group yourself.

Engage with Government

Businesses show leadership by engaging with government to influence public policy and public programs. For example, there may be no local pick up of compost and a group of businesses might want to get together to work with government on a solution. Local building codes might not permit innovations in processing facilities that allow you to reuse water in your systems. Perhaps federal regulations to create a level playing field in green marketing might be your area of interest, or provincial government programs to support product take-back programs. There are any number of areas where government can help you advance your leadership position in your sector and show your support for a healthy environment. This will create a lasting legacy of your efforts and generate employee pride to be in association with your firm.

Action:

Contact your industry association or local chamber of commerce or board of trade to find out if efforts are underway you can join. Contact your local mayor or councilor, or your local provincial representative or member of parliament to get their advice about how to get started or engaged.

Resources

Industry Association Sustainability Roadmap http://www.corostrandberg.com/publications-Industry-Associations-and-Sustainability.html#1c

Climate Change Leadership Background

Why it's important

Climate change is one of the most important environmental issues of our time. It involves a long-term shift in average weather conditions over time, including temperature, precipitation, winds, and other indicators. The impacts of climate change may affect our infrastructure, weather patterns, wildlife and landscapes.

Climate change can be caused by both natural processes and human activities. In Canada, 80% of the total greenhouse gas emissions associated with human activities are linked to the production or consumption of fossil fuels for energy purposes.

What the Role of Business Is

Through energy use, transportation and other activities, businesses big and small contribute to global greenhouse gas emissions. Although it's easier to point the finger at big industries, small businesses collectively contribute a large portion of Canada's commercial emissions. Actions big and small are needed by all businesses to reduce



these emissions. This calls for leadership at a grand scale. Those businesses that get ahead of the curve and measure and reduce their own emissions will be better able to withstand the predicted rising costs of oil and potential future government regulation in this area. Those businesses that don't take the lead run the risk of lagging their competitors and having to play catch up at greater expense down the road. Recognize, too, that the public sector and private sector are starting to require their suppliers to reduce their greenhouse gas emissions in their products and services. Those that get ahead of the game will fare better in the marketplace.

Action

Your action to manage your greenhouse gas emissions will be closely connected to your action to reduce your energy use. See energy management strategies in the <u>Resource</u> Use section.

Companies that aim to show leadership on climate change typically adopt climate change strategies with the following components:

- 1) Get your house in order by first reducing your greenhouse gas emissions. Have a greenhouse gas management plan. Set bold targets to reduce your emissions. Some businesses set a target of carbon neutral. Others are starting to go carbon negative, in which they become net generators of energy, selling their surplus energy back to the grid. As you work on reducing your greenhouse gas emissions, consider the opportunity of switching to renewable energy, such as solar, wind or hydro. Many energy utilities are starting to profile their renewable and alternative energy efforts. Contact your energy provider to see if there are opportunities to purchase green energy certificates to reduce your emissions further. There are also private renewable energy providers who can help you achieve your carbon reduction goals.
- 2) Offer innovative products and services that address climate change and enable your customers to reduce their greenhouse gas footprints
- 3) Use your purchases and investments to influence the behaviour of your suppliers (e.g. require your major suppliers to have greenhouse gas management plans) and to get those who manage your money to invest in sustainable companies which are responsibly managing their own greenhouse gas emissions
- 4) Offer public education and awareness programs on climate change issues and what the public can do about lessening their impacts
- 5) Work with others to influence local, provincial and federal governments to take action on climate change

Use a Rule of Thumb: Estimate Your Biggest Contributions

For businesses that want to start reducing their greenhouse gas emissions without getting involved in measurement, there are several areas to target. As a rule of thumb, according to the Climate at the Center for Environmental Leadership in Business, the top three areas where businesses should focus their efforts include reducing:

- Energy used in their buildings
- Employee travel
- Paper consumption.



You'll find measures to reduce building <u>energy use</u> and <u>paper consumption</u> in the Resource Use section of this Roadmap.

To achieve reductions in employee travel:

- Replace travel to meetings with teleconferencing, video or web conferencing
- Reduce employee commuting by offering flexible work options (telecommuting, condensed work weeks), arranging carpooling and encouraging transit use.
 Consider providing showers for employees who cycle to work, and having secure lock-up facilities for commuting bikes. Hold contests to encourage employees to get engaged. Make your free parking spots available to carpools or hybrid vehicles to send a message.

Going Carbon Neutral

For businesses that want to take a more rigorous approach to managing greenhouse gases or even go carbon neutral, follow these three steps:

- Measure: Complete a full accounting of your areas of greenhouse gas impacts (i.e. a greenhouse gas inventory). (Often firms hire an energy auditor to help them with this step as it can be guite technical)
- Reduce: Create action plans to reduce your emissions as much as possible
- Offset: Consider purchasing carbon offsets for the remainder of your emissions that you cannot reduce. Go to the Carbon Catalog (www.carboncatalog.org) to find an offset provider that meets your needs. Carbon offsets are financial credits you can purchase which invest in local or global projects that reduce greenhouse gas emissions to "offset" those you are not able to reduce. Some businesses start by offsetting one part of their business, such as the greenhouse gas emissions associated with air travel, the owner's office or a key product.



WHAT'S A PRODUCT'S CARBON FOOTPRINT?

A product's carbon footprint is a way to measure the relative impact of your product in terms of its contribution to climate change. Carbon footprints are a measure of the tonnes of carbon emissions emitted over the life of the product, from the extraction of the raw materials, through manufacturing, transportation, retailing, use and disposal.

Carbon footprints are particularly important for small businesses that are suppliers to larger organizations. As the "Walmart effect" hits small suppliers everywhere, large corporations are requesting small suppliers to disclose and reduce their GHG emissions. In 2007 Walmart piloted a program to measure and reduce the carbon footprint of seven products. It's likely that over time this list will grow to include many more of the company's 60,000 plus suppliers.

This effect will be seen by many of the world's smaller suppliers as global programs like the Carbon Disclosure Project's Supply Chain Leadership Council identify supply chain carbon risks for companies like Cadbury Schweppes, Dell, HP, IBM, L'Oréal, Nestlé, Procter & Gamble, Unilever, Colgate-Palmolive, Heinz, Johnson Controls, Vodafone and others. Many of these companies identify that the majority of their emissions are in their supply chain, and that they will engage their suppliers to understand the carbon liability and to reduce emissions. Suppliers that effectively manage their emissions are most likely to maintain their business with large companies.

Resources

Guide to Climate Change for Small and Medium Sized Enterprises www.chamber.ca/cmslib/general/Guide%20to%20CC%20from%20SMEs%20-%20final%20layout%20-%20ENGLISH.pdf

World Resources Institute (WRI) 9-5 Office Guide www.wri.org/publication/working-9-5-climate-change-office-guide

David Suzuki Climate for Business How-to Guide

www.davidsuzuki.org/Climate Change/What You Can Do/carbon neutral business.asp Climatebiz: an American resource that provides companies tips and tools on reducing their GHG emissions www.climatebiz.com/resources/tools

