

at the source



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Small Business
Edition



The Focus of this Issue

Pollution prevention in small business is recognized as challenging, yet uniquely rewarding. After all, change in a small organization is easier and more immediate than one that is large. Deep pockets and internal experts are also not necessary for improvements. Environmental performances can be improved in a one-person operation or an organization of 12,000. It is the cumulative impact that ultimately counts.

Small and medium-sized businesses have traditionally been difficult to reach, mobilize or engage in any improvements to do with the environment. When compared to large industry, small businesses generally:

- Generate less environmental data
- Have less environmental expertise and/or experience
- Have fewer resources
- Differ in organizational structure

This issue of *at the source* will focus on strategies aimed at reaching small and medium sized businesses. It will also highlight some successful initiatives undertaken by small businesses that have resulted in improved environmental and economic performance.

Encouraging Eco-Efficient Businesses in the GVRD

by Nancy Knight, Greater Vancouver Regional District

The design and construction of buildings, and the operation of businesses that occupy them provide a unique opportunity for pollution prevention, and for improvement in a business' bottom line. Buildings and businesses in the GVRD represent about $\frac{3}{4}$ of municipal solid wastes, $\frac{1}{3}$ of water consumption, over $\frac{3}{4}$ of key wastewater pollutants, and about $\frac{1}{2}$ of air pollution.

Overall, $\frac{1}{3}$ of all energy and natural resource consumption is for the construction and operation of buildings.

The Greater Vancouver Regional District (GVRD)

provides its member municipalities with essential public services including: trunk sewers and wastewater treatment; watersheds, dams and delivery of drinking water; solid waste facilities and waste reduction programs; regional parks; air quality management, monitoring, and permitting; a stock of public housing; and long range growth management and utility planning.

Encouraging eco-efficient businesses and buildings is a priority for the GVRD in order to cost-effectively manage the demand for these public services, and contribute to overall sustainability in Greater Vancouver.

To target this sector, the GVRD has historically operated environmental programs in solid waste, liquid waste, water conservation and air quality. However, these were products of independently developed long-range plans, and thus there was little coordination between them. In addition, these separate programs were mostly reactive rather than proactive, used mainly

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Trends in SME programs

- Single window access
- Recognition and incentives
- Environmental training
- Plain language regulatory/technical information

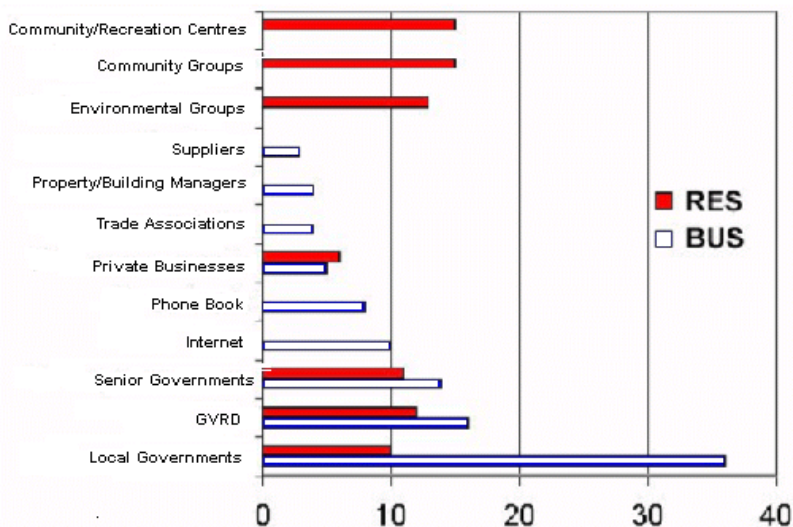


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conventional printed materials, and relied on the 'marketing' of reduced environmental impacts as the primary incentive for change.

The GVRD is now substantially revamping its business environmental programs, driven by a number of factors:

- In 2001, the GVRD formally recognized **Sustainability** as the fundamental framework for its functions.
- The trend is moving away from regulation of businesses, and towards the encouragement of businesses to develop their own eco-efficiency programs to become more cost-effective and competitive. Research also confirms a large appetite/market in the business community for straightforward, fundamental information on improving environmental performance, and a preference for **voluntary approaches** with **financial incentives** to encourage environmental improvements among businesses.



- In 2000 (see figure left), most businesses (in white) **relied overwhelmingly on local governments** for information on environmental matters, particularly at the local level. In the future, GVRD will be building capacity with good trade industry associations to develop and deliver technical assistance information.

- A task group evaluating the GVRD's relationship with local businesses identified the business community's need for **'one window' access** to the GVRD's technical assistance and products.

The revamping of the business programs will include:

- The **integration** of relevant aspects of the Solid waste, Liquid waste, Air Quality and Water Conservation programs, restructured to deliver to two key areas: Sustainable Businesses, and Sustainable Buildings.

- An emphasis on **business casing** pollution prevention/demand side management in terms of operating efficiency (i.e. financial savings) as much as possible.

- A true **customer relationship management database** to allow for: coordination between all staff contacts with businesses (including enforcement), target marketing by industry sector and other parameters, and tracking/quantification of program impacts for cost-benefit evaluations

- An emphasis on providing **non-traditional tools and services** for businesses, such as online business self-audits, delivery partnerships with other utilities organizations, public training courses for/through business associations, and longer term, a standard system for certifying the overall sustainability of a business

A particularly important aspect of the revamped business programs will be an increased emphasis on proactive, strategic partnerships with key business associations partnerships, training and assistance through relationship-based marketing. Recent examples include:

- A partnership with the GVRD, the BC Restaurant and Foodservice Association, the BC & Yukon Hotel's Association, local municipalities and some service providers to produce a wastewater Code of Practice for Food Sector Establishments. That code enhanced existing municipal plumbing requirements for grease interceptors, by specifying minimum standards for sizing, servicing and maintaining those interceptors to better reduce municipal costs for clearing sewer lines.

- Following the completion of an Emission Regulation for Automotive Refinishing, the GVRD partnered with the Insurance Corporation of BC (ICBC) to develop a comprehensive environmental accreditation course for operators of automotive refinishing operations, combining ICBC's access to the industry, and the GVRD's technical resources.

By revamping the GVRD business programs, we should enjoy improved environmental quality and more competitive businesses that better meet the public expectations for social, economic, and environmental performance.

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Small Business, Huge Successes

Traces Screen Printing of Waterloo, a small locally owned business, has integrated environmental quality into its corporate culture. It uses only non-carcinogenic chemicals in its processes, minimizes use of water, electricity and heating and has implemented waste reduction strategies. Early in its history, Traces corporately mandated a respect for the environment and a commitment to reducing long-term effects of industrial waste. Below is an outline of Traces' successes:

Green Purchasing

- All of the manufacturers and suppliers with whom Traces works, carry products which have environmental benefits and are derived from organic materials.
- Constant watch for new products that are not harmful to the environment.
- Orders to distributors are placed in bulk, combining as many orders as possible. Traces requests that all shipping be packed in bulk, reducing the amount of cardboard used. Traces also reuses the boxes in packing orders to customers.

Process Changes

- Environmental reassessment of all processes each year.
- The business instituted a new ink mixing system in August 2000 which allows exact amounts of ink to be mixed per job specification, thereby reducing the amount of ink used, as well as excess waste.
- Over the course of two years, Traces researched and developed temporary tatoos using a specially formulated adhesive which is safer than bandage glue. The glue is completely organic, and breaks down safely and easily in water.
- Newspapers are reused for screen cleaning, old garments for cleaning, ruined garments are used for test prints and unsolicited faxes are cut up and used for scratchpads.

Improved Staff Consciousness

- Employees bring in newspapers, unlabeled containers, clothing and other goods to be re-used in production.
- All computers are turned off nightly, all heat is turned down when people are out of the building and everything is powered down when not in use.

Outreach Activities

- Traces publishes quarterly newspapers which often include handouts or articles promoting environmental awareness.
- Tracey Johnston-Aldworth, CEO of Traces Screen Printing Ltd., offers free public speaking to community groups, schools and companies on simple ways to make lasting and economical environmental change.

Results and Recognition

- Traces accounts five per cent of the firm's profits to waste-reduction efforts.
- Other groups seek out Traces when wishing to do print orders, based on Traces' excellent environmental record.
- In 1994, Traces won the Kitchener-Waterloo Chamber of Commerce Environmental Achievement Award. The following year Traces was the recipient of The Regional Municipality of Waterloo's Environmental Award.
- In 1995, Traces participated in a 15 minute movie, produced by the Association of Municipal Coordinators: "Stop Waste From Adding Up". This short shows how environmental efforts in business can help the environment and increase your "bottom line".
- In 2001, Traces was given an Environmental Sustainability Award for business in the Region of Waterloo.

Traces Screen Printing Ltd. is a textile screen-printing company located in Waterloo, Ontario. Since its inception in 1985, Traces has been a trailblazer in the print industry for its environmental efforts. It presently employs 9 staff and is lead by CEO Tracey Johnston-Aldworth. For more information on Traces' environmental efforts please contact Tracey at: (519)746-3478 or via e-mail at: traces@ionline.net.

at the source, a newsletter produced by the Canadian Centre for Pollution Prevention, highlights pollution prevention programs and provides up-to-date information on Canada-wide activities

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Tools that Assist Small and Medium Sized Businesses (SME)



SME Tool: Oxegen

Oxegen is an internet-based Environmental Management System (EMS) delivery tool based on ISO 14001. The genesis for Oxegen originated with three environmental lawyers whom after defending clients on environmental charges, realized there was no low cost, practical Environmental Management solution for small and medium sized business or for large business with multiple sites.

As a result, Oxegen was developed to assist the environmental management and compliance needs of what is termed as "MOE's" - Multiple Outlet Enterprise. These are smaller retail, service, inventory or processing sites having similar environmental issues within a given industry or company. Because Oxegen is industry or company specific, the EMS content appears in industry specific terminology so that the user requires no environmental expertise.

Some examples of where Oxegen has been successfully applied or contracted for are as follows: automotive dealerships, autobody repair, forestry management, wineries, and smaller municipalities. Oxegen was also used as the EMS delivery system that helped New Oak Ford (Melbourne, Australia) become Australia's first 14001 certified automobile dealership.

Oxegen is price based on an initial license fee per company, or in the case of a company with many sites, a per site fee. A small annual maintenance fee is then charged to keep the environmental, industry and legislative information current, ensuring the customer has the latest and most up-to-date information in their EMS.

Oxegen was originally developed by the International Environmental Systems Inc., an Australian based company. The company originally founded in 1999 has since moved to Canada but continues to operate in Australia, Asia Pacific, and Europe. For more information on Oxegen, contact Ryan Vincent at: ryan.vincent@oxegen.com or visit: <http://www.oxegen.com>

SME Tool: Three Steps to Eco-efficiency

The "Three Steps to Eco-efficiency" self-assessment tool was created for Industry Canada to assist small and medium-sized manufacturers to develop an eco-efficiency program that is custom tailored to their business needs. The process involves the following steps:

- 1) Self-Assessment - determines the current level of eco-efficiency activities in your company by business function.
- 2) Strategic Planning - provides a framework to develop a customized eco-efficiency program.
- 3) Benefit-Cost Analysis - helps you to get the best return for your eco-efficiency investment.

This three-step process is available as a package of user-friendly worksheets which can be downloaded onto your computer or printed. When viewed by computer you will find that the individual worksheets contain hyperlinks to valuable resources on eco-efficiency. An on-line version is currently under development and is expected to be available by the Fall of 2002.

Industry Canada gratefully acknowledges the contribution of the following organizations in the development of this tool: Canadian Centre for Pollution Prevention, Dalhousie University, Farnell Packaging Limited, Marconi, and NTN Bearing Corporation of Canada.

The "Three Steps to Eco-efficiency" self assessment tool is available on Industry Canada's eco-efficiency web site at: <http://strategis.ic.gc.ca/SSG/ef00012e.html>



SME Tool: Metal Finishing Pollution Prevention Guide

The Metal Finishing Task Force has developed a new, easy-to-use Metal Finishing Pollution Prevention Guide. The checklists and guidebook within this manual help small and medium-sized metal finishers develop an environmental management system to reduce costs and increase profits.

The metal finishing industry is made up of many small businesses. In fact, fewer than 10 percent of the firms have more than 100 employees. In Canada, the industry consists of 650 establishments, employs 20,000 people and produces \$3.5 billion in annual revenues.

The manual outlines a systematic, eight step pollution prevention planning process. It is built on the premise of continuous improvement. It also helps metal finishers in promoting pollution prevention activities in their plants. The focus is on the reduction of toxic substances used, generated, or released from the metal finishing plant.

The Metal Finishing Task Force, a joint industry/government initiative, was established to oversee the Metal Finishing Pollution Prevention Project. The Metal Finishing Pollution Prevention Project is a voluntary cooperative effort between the Canadian Association of Metal Finishers, the American Electroplaters and Surface Finishers Society, the Metal Finishing Suppliers' Association, the Ontario Ministry of the Environment, and Environment Canada. For copies of the guide or information about CAMF please contact Brigitte Roth at: info@camf-acfm.com or (519) 578-0613.

Key Lessons Learned When Working with SMEs

-BC Pollution Prevention for Small Business Working Group-

Sector Organization

- Small business sectors not always cohesive
- Small business representatives not always able to reach out to their sector

Time and Expertise

- Small businesses have no time and little environmental expertise
- Suppliers have knowledge
- Information sources from within sector most credible

Small Businesses' Perceptions

- Don't see selves as significant contributors to environmental problems
- Government seen as responsible for environmental solutions
- "One-window" is desired, even expected

Governing Small Businesses

- Small businesses are more motivated to action if regulatory changes are imminent
- Seek to solve specific problems before promoting P2/EMS

Source: Recommendations for Promoting Pollution Prevention for Small Business in British Columbia, 2001

Background: The British Columbia Pollution Prevention for Small Business Working Group was established in 1998 with a mandate to provide recommendations on how to promote pollution prevention among small businesses. To fulfill this mandate the working group selected three small business sectors (printing, automotive and repair, and metal finishing) to pilot a pollution prevention approach to environmental protection. The working group reported 'lessons learned' as part of an interim progress report. The working group consists of representatives of all levels of government and continues to meet on a quarterly basis.



Across Canada

Pollution Prevention Activities and Events



Wanted: Green Dry Cleaners

From a consumers perspective, more people are interested in buying green and dry cleaning services are no exception. Other than the Green Cleaners list produced as part of the 1995 Green Clean Project, there is no reference on green cleaners for Ontario consumers to turn to. Public education for consumers about this sector is extremely important as it has potential to catalyze change.

The Canadian Centre for Pollution Prevention (C2P2) is pleased to support Environment Canada-Ontario Region on a project to survey the dry cleaners of Ontario. One of the primary goals of the survey is to establish where Ontario dry cleaners are at with respect to green cleaning. This information will be used to formulate an online Green Cleaners List hosted on C2P2's website.

From a regulatory perspective, Environment Canada has made significant progress on regulating a common dry cleaning solvent, tetrachloroethylene, also known as perchloroethylene and commonly called PERC. In March 1999, the listing of PERC as a CEPA Schedule I toxic substance was published in Canada Gazette Part II. In the Summer 2001, tetrachloroethylene regulations under the Canadian Environmental Protection Act (CEPA) were published in Canada Gazette Part I. The regulations are expected to be in force in the early part of 2002.

In light of the regulatory changes, fabricare professionals in Ontario and across Canada are now considering Green Cleaning, the use of water-based technologies, as well as other emerging technologies such as ozone cleaning as means to move away from the use of PERC. To learn more about these technologies visit the C2P2's Dry Cleaning webpage at: www.c2p2online.com, click on 'Tools and Resources' and 'Library and Links' and look under 'sector-based activities'.

Engaging Small Businesses: The Eco-efficiency Centre

Since 1998, the Eco-efficiency Centre has been assisting small to medium sized businesses primarily located in the Burnside Industrial Park, Halifax to reduce toxics, minimize waste, and conserve energy and water. It is supported

through a partnership of a university, private corporations, governments, and foundations. The Centre is proving to be a practical and efficient way to engage businesses in making both environmental and economic improvements.

By March, 2002, over 100 companies had joined the Centre's Eco-Business Program - adopting an environmental code and committing to achieving specific waste reduction and conservation goals. Membership entitles companies to a number of services, such as an environmental review and provision of appropriate technical materials. The program also encourages networking among businesses that share common interests. With support from the Shell Environment Fund, the Centre created a "Tools for Greening Your Business" starter kit. Kits contain practical information to implement pollution prevention as well as water and energy conservation in the workplace. Eco-Business members receive a kit upon joining the program.

Individual company success stories and fact sheets are featured on the Eco-efficiency Centre website. For inquiries about the Eco-Efficiency Centre please contact: Peggy Crawford at: kpcrawfo@is.dal.ca.

Enviroclub™ Celebrates Successes Online

Enviroclub™ is a federal-private sector initiative launched by Environment Canada-Quebec Region in 1998. Its purpose is to introduce pollution prevention projects or develop environmental management systems in small and medium-size businesses. Some recent successes are highlighted below:

Cycles Devinci Inc., a manufacturer of top-of-the-line bicycle frames, has significantly reduced its emissions of volatile organic compounds by changing its paint application procedure. The return on the investment was eight months and recurring annual savings total \$82,000.

Can-Lak Inc., a manufacturer of paints, stains, and lacquers, has undergone operating improvements to prevent solvent losses to the atmosphere. The new measures have reduced volatile organic compound emissions by 4,125 kg/year.

To improve your business' profitability and competitiveness, visit: <http://brouillard.wul.qc.ec.gc.ca/dpe/>

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