Environmental Performance Report 2003

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Environmental Performance

Striving for sustainability

As a responsible and caring corporate citizen, Bell Canada is dedicated to the principle of sustainability --- maintaining the often delicate equilibrium between the environment, the economy and the needs of society.

With our extensive business operations, we continuously strive to minimize our impact on the environment. We rely on rigorous management, strong controls and on close monitoring of our activities to achieve our environmental objectives.

In this section, we report on Bell's performance in the various environmental programs that have been implemented in the company over the years. The programs successfully enable us to :

- understand our overall consumption and reduce our demand on the earth's scarce resources;
- be proactive in reducing our air emissions, effluents and waste; and,
- minimize the impact of our corporate footprint on the environment.

Bell Canada has a comprehensive environmental policy and an efficient Environmental Management System in place.

MORE INFO ON OUR CSR POSITIONING *Link to message on main page of Sustainability section*

NOTEWORTHY ACHIEVEMENTS

Innovation
Our TelePod™ system, which provides real-time information on the operating efficiency of our vehicle fleet via satellite and wireless communications, allows us to reduce fuel consumption and air emissions by approximately 10%.

Stewardship
29,800 old cellular phones were collected for recycling under a new program. 5,000 refurbished units were donated to more than 150 women's shelters across Canada.

e-Solutions
We facilitated more than one million teleconferences in 2003. Convenient and cost effective, teleconferences help reduce air pollution and energy consumption by eliminating the need for travel.

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DID YOU KNOW?

This report is based on the Global Reporting Initiative (GRI) guidelines.

In 2002, Bell enacted a policy against the use of pesticides for aesthetic reasons on company properties.

Bell favours dealings with green-friendly suppliers who must demonstrate strong environmental stewardship in the performance of their operations, products and services

Bell Canada actively participates in many environmental associations, including the Business Network on the Environment of the Conference Board of Canada, and the Global e-Sustainability Initiative (GeSI).

CSR Positioning

As a company, we touch millions of people in countless ways every day. As a member of the community, the imprint we leave extends far beyond our products and services. In fact, cultivating strong relationships with all of our stakeholders has been a guiding force throughout our 124-year history.

We recognize and embrace the interdependencies between our business and our stakeholders. After all, we share common goals – a prospering economy, strong communities, satisfied stakeholders and motivated employees in a healthy environment. It's clear that we're part of a much larger picture.

Profile

Taking a systematic approach to protecting the environment

Bell Canada is well-positioned in regard to environmental protection because of the very nature of its business – telecommunications. Still, because we run the largest company of its kind in the country, the sheer scope of our operations demands that we minimize our impact on the environment through the systematic and rigorous management, control and monitoring of our activities.

Whether it's business related to customer products and services or the construction, maintenance and renewal of our network, our company must comply with a wide variety of federal and provincial laws, as well as municipal by-laws, that can range from federal park regulations to rules governing migratory bird paths.

The company has a number of subsidiaries that offer a wide variety of services across Canada. Bell Canada provides connectivity to residential and business customers through wired and wireless voice and data communications, local and long distance phone services, high speed and wireless Internet access, IP-broadband services, e-business solutions and satellite television services.

For the last 15 years, Bell Canada has been developing a strong Environmental Management System (EMS) which is aligned with ISO14001, and includes many supporting programs and initiatives. Initially created for its wireline business, Bell's EMS now includes our wireless and ExpressVu businesses, as well as Expertech, Bell Nordiq, Bell West and BCE Nexxia Corp. *Link to section 2.0*

Wireless business	The wireless business provides cellular, PCS, paging and wireless access to Internet services across Canada, and has points of presence in Ontario, Québec, British Columbia and Alberta.
ExpressVu business	The ExpressVu business provides Direct-to-Home (DTH) television services. ExpressVu provides the highest quality and most comprehensive satellite services across the country and is the leader in home digital entertainment.
Expertech	Expertech provides installation of telecommunication networks for Bell Canada.
Bell Nordiq	Bell Nordiq includes Télébec and Northern Telephone, mainly provides telecommunications services in the Northern part of Quebec and Ontario
Bell West	Bell West operates as a competitive local exchange carrier in British Columbia, Alberta and Manitoba
BCE Nexxia Corp.	BCE Nexxia Corp. provides fully managed, end-to-end, e-business solutions to large enterprises using its powerful IP/Broadband network across North America.

This performance report includes the environmental initiatives and results for these organizations, whenever available.

Aliant, which provides telecommunications services in the Atlantic provinces, also reports on its environmental performance. Their report is available on the Aliant Web site.
http://www.aliant.ca/english/about/aic_environment.shtml

In 2004, we will integrate the following subsidiaries into our Environmental Management System:

- NorthwesTel, which provides local telephone, long distance, data, and other services to residential and business customers in Northwest Territories, Nunavut and Yukon;
- Bell Distribution Inc., which operates numerous retail outlets throughout the country offering the full range of Bell products and services;
- Telesat, which operates a fleet of satellites for the provision of broadcast distribution and telecommunications services.

VIEW BELL CANADA INTEGRATED STATISTICS *New window*

New window:

Statistics

Bell Canada Integrated Statistics

The following are integrated company statistics for Bell Canada's wireline, wireless and ExpressVu businesses as well as Bell Nordiq and Bell West.

OPERATIONS:

Vehicles	7,825
Poles in-use	1.5 M
Wire & cable	160 M km
Manholes	65,000
Storage tanks	1,305
Generators	1,198
Controlled substances	800+
Real estate	3600+

CONSUMPTION: *(Year 2003)*

Energy	820 M kWh
Vehicle fuel	27 M liters
Oil	123,000 liters
Tires	9,900
Paper	5,636 tons

RECYCLED MATERIALS: *(Year 2003)*

Paper, cardboard, commingled	831 t
Cable & network equipment	5,060 t
Poles	503 t
Telephone and cellular sets	49 t
CO lead acid batteries	960 t
Vehicle batteries	49 t
Tires	99 t
Used oil & filters	109 t
Solvents & antifreeze	19 t
Fluorescent tubes	11 t
General Hazmat	181 t
TOTAL	**7,871 t**

RELEASES: *(Year 2003)*

Solid waste	3,400 t
Safe disposal of Hazmat	22 t
Greenhouse gases (CO_2E)	220,000 t
Effluents pumped from manholes	352 M liters

NOTE: *Statistics for BCE Nexxia Corp. are currently being collected and could not be included in the above tables.*

Environmental Management System

Exercising diligence in managing environmental issues

Without a sound management system, it would be difficult to properly monitor and control the company's diverse environmental issues. And that's precisely why we've developed the Environmental Management System (EMS). The EMS, which is aligned with ISO14001 guidelines, is an integrated management tool that identifies potential problems or opportunities, reduces risks, ensures continuous improvement through a rigorous feedback process, and controls costs. Moreover, through an on-going legal monitoring, which is an integral part of the system, Bell can exercise due diligence in managing environmental issues.

Environmental Management System (EMS)

Key components of the system

ENVIRONMENTAL POLICY

Bell's Environmental Policy, which represents Bell's commitment in terms of environmental protection, has been approved by the Board of Directors, and is regularly reviewed by the Environmental Issues Network (EIN), a committee composed of company's Officers. Our policy is aligned with the company's daily business realities and demonstrates Bell's high environmental management standards.

MORE ON BELL'S ENVIRONMENTAL POLICY *Link to Section 3.0*

PLANNING

The Corporate Environmental Action Plan (CEAP) is the main management and control tool. Revised and approved annually, the plan details all the environmental activities to be undertaken by the various business units within the company. The CEAP identifies funding requirements, as well as accountabilities and deliverables, and allows for follow-up of the company's progress in meeting its objectives. Results and analysis for improvement opportunities are also presented to the EIN for review and actions.

IMPLEMENTATION

Within the Environmental Management System, Bell has clearly defined each of the programs addressing the company's environmental issues. To ensure each program meets its goals, Bell sets specific objectives, identifies responsibilities and develops procedures.

MEASURES AND EVALUATION

To ensure our management system and each of the programs run smoothly, Bell has put a number of control points in place. These include:

- Environmental Reviews (ER), which are performed to follow up on environmental programs at various Bell sites . *New window*
- The Environmental Risk Evaluation (ERE), which is used to evaluate the environmental performance of some of our suppliers. *Link to section 5.3*
- The Environmental Questionnaire, which is sent to Bell's suppliers to collect information about their own environmental management and to assist the company in the selection of environmentally responsible suppliers. *Link to section 5.3*
- Internal and external audits which are performed on a regular basis.
- Performance measures related to the Corporate Environmental Action Plan.

REVIEW AND IMPROVEMENT

Reporting quarterly to the Audit Committee of the Board of Directors, the EIN has been put in place to ensure that Bell's environmental policy is current, and that the company is taking the necessary actions to comply with its environmental policy.

As well, Bell has implemented various working committees to ensure that the programs work in harmony and they reflect the reality of daily operations.

ENVIRONMENTAL INFORMATION SYSTEM

The EMS is supported by comprehensive documentation and a sound information system. The computerized system is now web-enabled, and gathers information on all issues and programs. Our Enviro-line enables any employee to reach an on-duty manager in the case of environmental incidents or to get information regarding environmental issues. In 2003, our Environmental Services specialists received and responded to 286 calls and 90 electronic messages.

ENVIRONMENTAL SERVICES TEAM

Environmental protection is an integral part of doing business, and all employees in our operations directly contribute to the success of our initiatives. In order to support our environmental commitment, policy and governance process, we've assigned the management of our green efforts to the Environmental Services team. This team is the focal point for all of Bell's environmental issues, and is responsible
for:

- ensuring legal compliance of the environmental management system
- preventing, analyzing and resolving problems
- monitoring and reporting corporate environmental performance
- providing environmental expertise and support to operations groups
- increasing environmental awareness and competencies
- building Bell's environmental image with our external stakeholders

TO VIEW THE COMPLETE MANDATE *New window*

New window #1

Environmental Reviews

Environmental Reviews (ER)

Environmental Reviews is a process developed internally by Environmental Services (ES) to evaluate and improve the performance of Bell's various environmental programs. The process involves a site visit by a team of ES representatives and employee interviews to determine the state of environmental compliance at specific Bell locations. The information gathered provides essential data enabling our subject matter experts to continuously improve environmental programs.

The selected buildings provide a representative cross section of the environmental issues at Bell Canada. A total of 88 properties have been evaluated since it began in 2000.

New window #2

Environmental Services Mandate

Environmental Services Mandate*

Our Company believes that environmental protection is an integral part of doing business. In order to support its environmental commitment, policy and governance process, the Company has mandated Environmental Services to develop and control its environmental program so that environmental risks and opportunities are managed in a diligent and cost-effective manner.

As the focal point for all environmental issues, Environmental Services is mainly responsible for:

SUPPORT OF THE ENVIRONMENTAL GOVERNANCE PROCESS

Ensuring legal compliance through continuous improvement of the company's Environmental Management System by:

- performing risk and situation analyses of environmental issues
- monitoring regulation requirements and changes and ensuring one common corporate interpretation
- developing gap analysis and review protocols based on legal and due diligence requirements
- identifying, as required, corrective measures to be implemented so that due diligence may be exercised in meeting compliance requirements
- coordinating the preparation of the yearly Corporate Environmental Action Plan
- ensuring timely system documentation and update

Preventing problems by:

- developing for approval corporate policies
- developing strategic guidelines and standards or plans to address current or emerging issues
- conducting research and/or benchmarking studies
- performing environmental risk evaluation of selected suppliers

Monitoring and reporting corporate performance by:

- tracking and monitoring achievement of stated objectives against policy and plans (e.g. Environmental Management System including the Corporate Environmental Action Plan)
- performing environmental reviews of operations
- coordinating the issuance of the yearly Letter of Environmental Assurance
- ensuring regular reporting to the Environmental Issues Network and the Audit Committee of the Board including the timely disclosure of issues of material importance
- acting as the corporate focal point for the environmental reporting to governmental authorities

SUPPORT TO OPERATIONS

- providing, as required, environmental expertise to operational groups to help them resolve current or emerging issues
- intervening and ensuring that the necessary expertise is provided in environmental emergency situations

ENVIRONMENTAL AWARENESS AND COMPETENCE BUILDING

- communicating policies, standards and program procedures to employees

- developing and providing environmental training programs and tools to employees
- regularly communicating Bell's environmental performance internally

CORPORATE IMAGE BUILDING

- acting as the corporate interface with governmental authorities, for environmental issues
- preparing the necessary information to be communicated** to external stakeholders relative to the Company's environmental performance

* This mandate applies to Bell Canada and some BCE entities

** In accordance with Bell Canada's disclosure policy

Environmental Policy

Towards environmental excellence

We believe that environmental protection is an integral part of doing business and are committed to minimizing, through a continuous improvement process, the impact that some of our activities, products or services have on the environment.

In support of our commitment, we will:

- exercise due diligence in our approach to meet or exceed the requirements of all applicable legislation
- prevent, control and reduce releases into the environment
- correct in a timely manner, problem situations which could not be prevented
- promote and support cost-effective resource and waste minimization initiatives
- deal with suppliers who seek to minimize their environmental impacts
- develop and market telecommunications services aimed at providing people and organizations with innovative solutions to their environmental challenges
- participate with governments, businesses, the public and relevant interest groups to advance environmental protection
- communicate our environmental initiatives and performance to stakeholders on a regular basis
- ensure that our employees adhere to this policy and understand their responsibilities in putting it into practice

Compliance with this policy is every employee's responsibility.

- All environment-related incidents and infractions must be reported to Environmental Services immediately upon discovery. *Link to section 2.0*
- Non-compliance with this policy will lead to disciplinary action, up to and including dismissal.

Policy approved on 1998-12-16 and re-assessed in April 2003.

Programs & Initiatives

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

To support our environmental policy, our environmental programs have been developed based on an analysis of legal requirements, broader government objectives and assessments of our operations. They have been prioritized based on business risk, as well as their potential economic and environmental impacts.
This report has been structured according to GRI (Global Reporting Initiative) guidelines, and contains last year's achievements, on-going measures, program objectives as well as specific targets for next year.

Our consumption

- Energy conservation
- Water conservation
- Product Stewardship

Our emissions, effluents and residual materials

- Hazardous Residual Materials
- Non-Hazardous Residual Materials
- Air Emissions
- Noise
- Manhole Effluents
- Environmental Incidents

Our presence in the environment

- Site Assessments
- Petroleum-related Equipment
- Vegetation
- Internal Environmental Evaluations
- Poles

Energy Conservation

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Energy conservation

Optimizing our energy consumption to save valuable resources

ISSUE

Today, much of the energy we use is generated through hydro, thermal or nuclear means. Each method can have consequences for the environment, such as flooding, the release of emissions into the air or the disposal of waste materials. By reducing our consumption of energy, we decrease the need for it to be produced.

ON-GOING MEASURES

Over the past ten years, Bell Canada has initiated many measures to reduce the energy required to operate telecommunications equipment and to heat or cool buildings. Some examples include:

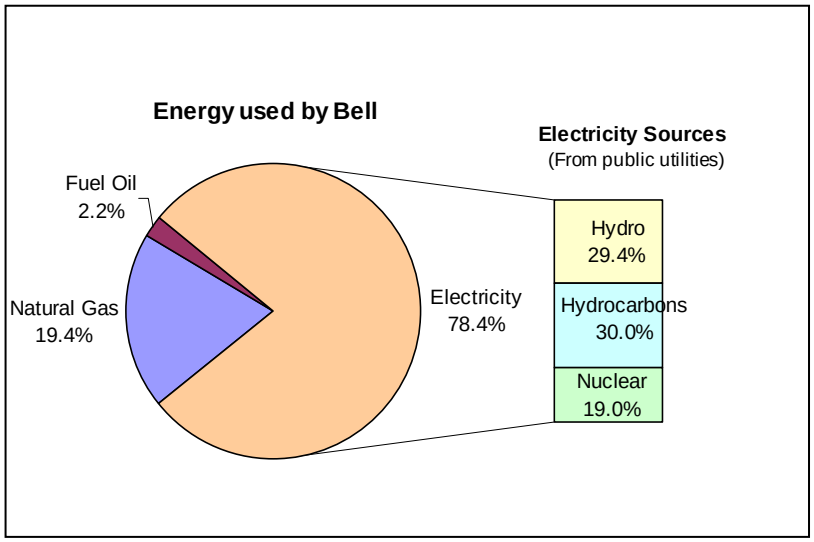
- the installation of motion sensors and more efficient lighting fixtures and fluorescent tubes in our buildings
- modifying the operating schedules of fans and lights to reflect actual building occupation
- optimizing digital control sequences for humidification, temperature settings, and outdoor air supply
- modifying air distribution in buildings in order to optimize heating and cooling systems
- increasing the insulation thickness during roofing projects
- replacing air conditioning units with units that use free cooling
- installing interlocks to suspend a heater's operation when garage doors open
- replacing electric motors used in our building ventilation systems with high-efficiency models
- re-commissioning digital control systems to ensure proper operation
- benchmarking building consumption to identify buildings with energy-savings potential

2003 ACHIEVEMENTS

The company used electricity (78.4%), natural gas (19.4%) and fuel oil (2.2%) to power its network and real estate. Approximately 65% of the total energy consumption is used for network operations, while the remainder is related to Bell's real estate.

Electricity was produced by utility companies in Québec, Ontario and Western Canada. In Québec, most of the electricity came from hydro sources, which are renewable. In Ontario and the western provinces, electricity was produced from nuclear, coal, hydro, natural gas and wood waste.

The following chart illustrates the percentage of each type of energy used by Bell, and the breakdown of sources of electricity produced by public utilities:



The chart below indicates an 8.4% increase in total surface because both Bell Canada and its subsidiaries were included in the 2003 calculations.

	CONSUMPTION (MILLIONS KWH)	TOTAL FLOOR AREA (000 FT2)	KWH/FT2	NAS (000)	KWH/NAS
2001*	788,392	23,985	32.9	11,444	68.9
2002*	814,315	23,462	34.7	11,276	72.2
2003**	820,187	25,431	32.3	11,168	73.4
Variance 02/03 (%)	**0.7%**	**8.4%**	**-7.1%**	**-1.0%**	**1.7%**

* Includes wireline business

** Includes wireline, wireless and ExpressVu businesses; Bell Nordiq and Bell West.

kWh/ft^2	is an indicator used to compare consumption in buildings of different sizes.
kWh/NAS	allows us to analyze a variation in consumption based on our business activities. (NAS stands for Network Access Services, and represents the level of telecommunication services provided)

Despite the increase in total area, energy consumption only rose by 0.7% or 5.87 million kWh from 2002 to 2003. In fact, our main efficiency indicator, our consumption expressed in terms of kWh/ft^2, indicates a reduction of 7.1%. The reduction is largely due to the intensive energy-saving programs implemented at over 500 Bell locations in 2003.

PROGRAM OBJECTIVE

To pursue the optimization of our energy consumption initiatives for network-related equipment and estates.

TARGETS

The energy initiatives underway for 2004 include:

- installing renewable energy generating system such as wind turbines and solar panels in remote company locations
- upgrading direct digital control (DDC) systems in various buildings for improved energy management
- exploring the potential of load-shedding in order to reduce costs during peak consumption periods
- increasing the use of cooling towers and heat exchangers instead of refrigeration equipment during the winter season
- optimizing cooling equipment configurations to benefit from free-cooling
- installing devices such as motion-detectors in equipment rooms to control lighting and reduce energy consumption
- conducting energy audits to identify energy-saving opportunities

Water Conservation

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Water conservation

Understanding our consumption to better protect a valuable resource

ISSUE

High levels of water use have strong environmental and economic implications. High consumption places stress on rivers, lakes and groundwater aquifers requiring the creation of dams and forced flooding, and resulting in serious ecological problems.

On the economic side, high water use requires ever-increasing and expensive investments in water infrastructure, from dams, reservoirs and water treatment facilities to distribution networks and sewage treatment plants.

At Bell Canada, water is used by employees for drinking and sanitary purposes, and is used at some locations to cool the air in buildings.

2003 ACHIEVEMENTS

The company conducted its first water consumption estimate in 2003 which showed that it consumed about 852 million litres per year. This corresponds to approximately 110 litres per employee, per work day. As a comparison, the average Canadian uses approximately 147 litres per day at home.

PROGRAM OBJECTIVE

To optimize the company's water consumption.

TARGET

To monitor and benchmark our water consumption patterns and identify possible ways to optimize usage.

Product Stewardship

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Product Stewardship

Reducing our demands on earth's scarce resources

ISSUE

Product stewardship is a product-centered approach to environmental protection. Also known as extended product responsibility, product stewardship calls on those in the product life cycle--manufacturers, retailers, users, and disposers--to share responsibility for reducing the environmental impact of products.

We recognize that the creation of our products and services place demands on the earth's resources. Through our supply chain, we contribute to materials and energy being consumed and waste being produced.

Bell Canada shares a responsibility for: minimizing the energy consumed during the life of our products; reducing the use of hazardous materials in their manufacture; and enabling reuse, recycling and ultimately, safe disposal.

ON-GOING MEASURES

Bell Canada has put in place several initiatives that support Product Stewardship principles:

Universal Boxes

Bell developed and since 1997 has been using Universal Boxes to store and transport delicate printed circuit cards. The cards enable a customer's telephone features, such as high capacity data, teleconferencing and call display. Circuit cards received from major suppliers are removed from their original packaging and stored immediately in the Universal Boxes which come in four standard sizes, These durable boxes can be reused more than 90 times and eliminate the approximately one million non-reusable bubble packs that used to temporarily store the circuit cards every year.

This innovative idea won the Financial Post's Product Stewardship Award in 1998

MORE ON ENVIRONMENTAL AWARDS *Link to Section 7.0*

Product Packaging

In 2001, Bell conducted its first assessment of the product packaging used in its operations and that is part of customer sales. More than 700 products were assessed and useful information was gathered in a database on primary, secondary and tertiary packaging. The information continues to allow us to evaluate the quantities of materials produced every year and identifies reduction opportunities.

The company recently developed a guideline for product managers to use when dealing

with suppliers that recommends types of materials to use in packaging and ways to reduce quantities.

Telephone Sets

Used residential and business telephone sets are collected by our technicians upon customer request and through our Bell World stores. The sets are either sold on secondary markets or returned to the manufacturer for refurbishing or recycling. Plastic from non-repairable sets is also recovered and used in the production of new sets.

In 2003, some 50,200 telephone sets were sold or recycled. This is a decrease over previous years largely because Bell Canada discontinued its telephone rental program in 2000, which had a major impact on the total quantity of sets returned to the company.

ITEMS	QUANTITY (UNITS)		
	2001*	**2002***	**2003***
Telephone sets sold or recycled	278,000	174,000	50,200

* Includes wireline business only

Telecommunication Services

Electronic solutions such as teleconferencing, teleworking and Electronic Data Interchange (EDI) contribute to reduced travel costs and, by extension, a reduction in air emissions and energy consumption.

MORE ABOUT ELECTRONIC SOLUTIONS *Link to Section 6.0*

2003 ACHIEVEMENTS

Recycle, Reuse, Redial Program

In April 2003, Bell launched its Recycle, Reuse, Redial Program for used cellular phones. Under the program, customers can bring back their used cellular phone to any participating Bell World™ store in the provinces of Quebec, Ontario, Alberta and British Columbia.

The program reduces landfill waste by recycling old phones from any manufacturer, and reusing phones through resale and refurbishment. 29,800 old cellular phones (8.9 metric tons) were collected between April and December 2003. Those units with remaining functional life were sent to a refurbishing facility where they were checked over and purged of all data, such as phone numbers, e-mail messages and other personal information. These units were then redistributed to be sold or recycled. In addition, 2.5 metric tons of batteries and 5.7 tons of chargers and other cell phone accessories were collected and recycled.

Some 5,000 units were donated to more than 150 women's shelters in Ontario, Québec, Alberta and B.C. The phones were supported with unlimited local airtime, call display and 911 access.

MORE ON THE RECYCLE, REUSE, REDIAL PROGRAM *New window*

PROGRAM OBJECTIVE

To pursue the application of product stewardship principles in order to reduce energy consumption and the use of natural resources, as well as minimize the environmental impact of our products .

TARGETS

- Collect more than 50,000 cellular phones, under the Reuse, Recycle and Redial program in 2004.
- Promote the use of the company's Packaging Reduction Guideline.

New window

'3R' Program supports women in need

When Bell Mobility launched a national cellular phone recycling program in April 2003 it not only found an environmentally responsible way to dispose of used cellular phones, it gave them new life in a worthy cause.

Some 5,000 phones have been donated under the program by Bell Mobility to more than 150 women's shelters in Ontario, Québec, Alberta and B.C. The phones are supported with unlimited local airtime, call display and 911 access.

"Having a cell phone makes a huge difference in the lives of women in shelters," says Rhonda Roffey, Executive Director of Women's Habitat in Toronto, one of the first shelters to benefit from the program. "Obviously, security is a big issue for abused women, especially if they are working late or must go outside of the shelter. But cell phones also provide a great deal of privacy for someone in a crisis situation who is looking for a job, an apartment or child care. She doesn't have to deal with the stigma of giving out the shelter's phone number and no one finds out her private business."

As these women and their children transition to a new life outside of a shelter they can also benefit from Bell Mobility's Second Stage program, in which they are given a cell phone along with a significantly-discounted monthly rate plan. "It's a fantastic program because it meets a real need for many of these women who are living in poverty and don't have disposable income for a cellular phone," adds Rhonda. "Bell Mobility really rose to the occasion to make the phones and service accessible. When you consider that a phone is a basic necessity, that's no small thing."

There are currently more than 10 million used cellular phones in Canada which are 96 per cent recyclable by weight. Owners who no longer want older personal devices—including cellphones, pagers, PDAs, wireline phones, accessories and batteries—can drop them off at any Bell World or Espace Bell location, plus such retail partners as Futureshop, Best Buy and Telephone Booth. There are currently more than 380 drop-off locations in Ontario, Québec, Alberta and British Columbia, with more on the way.

Hazardous Residual Materials

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Hazardous Residual Materials

Protecting human health and the environment

ISSUE

Many residual materials are defined by law as hazardous because they can threaten human health or the environment when stored, transported, treated or disposed of. If sent to landfill sites, these materials increase the amount of toxic substances that can leach into groundwater and enter drinking water supplies. There are ways, however, to properly handle hazardous materials in a safe manner and to reduce their impact on the environment.

Hazardous materials must be disposed of according to current laws and regulations.

Due to the nature and small quantities of residual materials generated every year at Bell, the company is not required to report under the National Pollutant Release Inventory (NPRI) program.

ON-GOING PROGRAMS

Bell Canada collects hazardous materials generated by its operations and manages them according to applicable government standards. Materials are either returned to inventory or the manufacturer, reused within our operations, recycled or safely disposed of.

The following programs have been in place to prevent, control or reduce the release of hazardous materials into the environment. In 2003, they contributed to divert from landfill 1,426 metric tons of hazardous residual materials.

Centralized Collection Program

The following table presents the amount of hazardous residual materials, in metric tons, collected under the Centralized Collection Program.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002****	**2003*****
Gell Cell Batteries	142.9	117.4	143.5
Ozone Depleting Substances	4.1	5.0	1.6
General Program	28.8	28.6	32.2
Miscellaneous	25.3	3.2	3.7
Total	**201.1**	**154.2**	**181.0**

* Includes wireline business only

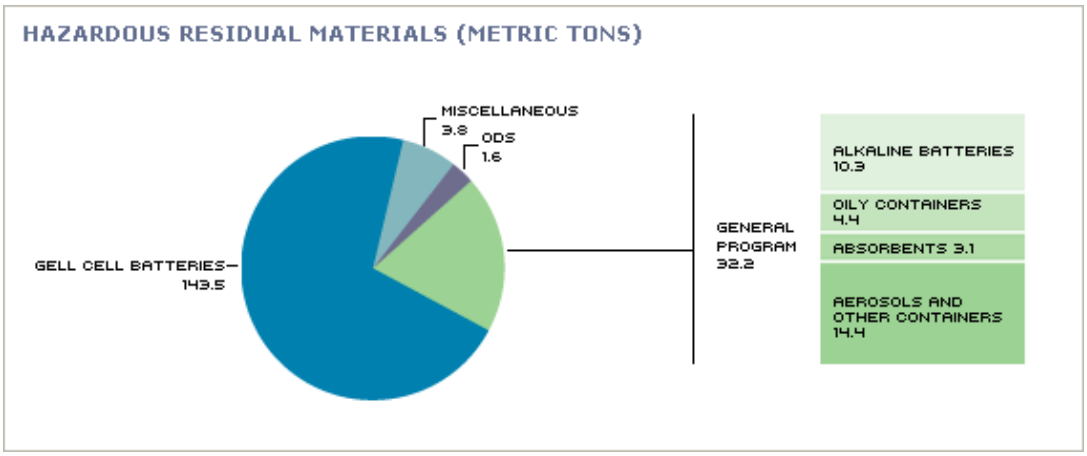
** Includes wireline and wireless businesses, and Bell Nordiq

*** Includes wireline, wireless and ExpressVu businesses, and Bell Nordiq

The Centralized Collection Program began in 1995 and now includes 267 participating sites. A total of 181 metric tons of hazardous residual materials were recovered from these sites in 2003 and sent to our two centralized recovery sites. The amount represents an increase of 17% over 2002, which can be attributed to the growth in the number of sites participating in the program. It is broken down as follows:

- 143.5 metric tons (79.3%) of these materials were generated by the Gel Cell battery maintenance program that ensures that telecommunications equipment remains fully operational;
- 5.3 metric tons (2.9%) were generated from Ozone Depleting Substances and other miscellaneous items; and,
- 32.2 metric tons (17.8%) were generated from our general HazMat recovery program, which is implemented in our work centres and central offices.

The following chart provides a breakdown of the variety of materials that were managed in our hazardous material collection centres in 2003.



Fluorescent Tubes

The company collected and sent 28,200 fluorescent tubes to recyclers in 2003. Quantities vary from year to year depending on the number of lamp replacement programs conducted in the various Bell occupied buildings.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002***	**2003****
Fluorescent Tubes	13.17	10.72	10.59

* Includes wireline business only
** Includes wireline business and Bell Nordiq

Aluminium and brass metals recovered from fluorescent tubes were recycled; glass was reused within the foundry process; mercury was extracted in the distillation process and recycled; and the powder was used as pigment in paint.

This highly successful initiative now includes sodium and mercury lamps, and covers all Bell buildings, huts and vaults.

Central Office Batteries

Wet cell (lead-acid) batteries are used in Central Offices. These batteries, which are powered by alternate current from utility companies, generate regular and direct current that is necessary to transmit voice and data.

960 tons of obsolete central office batteries were sent for recycling in 2003.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002****	**2003*****
Central Office Batteries	513.0	998.0	960.0

* Includes wireline business only
** Includes wireline and wireless businesses
*** Includes wireline and wireless businesses, and Bell Nordiq

The quantity of batteries sent for recycling varied according to the dismantling and renewal activities in the network. The higher quantities in 2002 and 2003 were the result of a large number of expired twenty-year-old batteries being replaced.

The recycler recovered lead and plastics, neutralized acids for disposal or for use in producing sodium sulphate, and burned ebonites.

Automotive Fleet

A number of products from Bell's vehicles are now included in our collection process. The following table provides examples of the materials and quantities that were sent to recyclers in the last three years. The data includes products generated from the maintenance of vehicles used in our wireline, wireless and ExpressVu businesses, and by Bell Nordiq, NorthwesTel and other independent companies. Figures have been converted into metric tons:

ITEMS	QUANTITY (METRIC TONS)			TREATMENT
	2001	**2002**	**2003**	
Tires	122.4	85.5	99.0	Recycled or used in cement kilns
Used batteries	31.3	25.6	49.3	Lead and plastics recovered or exchanged for new batteries
Used oil	119.7	108.8	108.5	Regenerated in refineries
Used oil filters	14.9	16.8	19.1	Oil recovered and components recycled
Washing fluids for automotive parts	4.8	3.8	4.3	Recycled or safely disposed
Engine antifreeze	17.7	5.3*	5.0*	Recycled into new antifreeze base stock
Total	**310.7**	**245.7**	**285.2**	

* Engine antifreeze is now reused locally in many work centers.

- All mechanics and automotive fleet managers have now been trained in how to use the Automotive Fleet Environmental Guide which outlines procedures such as: management of petroleum products and equipment, hazardous materials, and spills or other environmental incidents.
- A new biotechnology, water-based solution to replace the use of solvents in the cleaning of automotive parts was successfully trialed at four maintenance centers in 2002. The system was implemented in 10 additional maintenance centers in 2003.
- Since 2001, the company has been trialing two energy-efficient hybrid vehicles, which use both fuel and electricity. Two more such vehicles were purchased in 2003.

PCBs

From 1996 to 2002, Bell Canada's wireline business removed all telecommunications equipment containing PCBs from its operations and sent them to specialized firms for recycling and destruction. Other subsidiaries will be assessed in the coming years to ensure similar compliance.

Only a small percentage of the in-service ballasts used in lighting systems contain a very low quantity of PCBs. Bell has a process in place to identify PCB-bearing ballasts and to control their destruction. The company sends these ballasts to its PCB storage facilities, where they are forwarded to a specialized firm for destruction.

PROGRAM OBJECTIVES

To minimize the consumption of hazardous materials and to avoid sending them to landfill sites by reuse, recycling and recovery.

TARGETS

In 2004, the company will:

- maintain current programs and conduct employee environmental training on the management of hazardous residual materials. *Link to section 5.1*
- pursue the use of the new eco-friendly cleaning solution for automotive parts in 12 additional maintenance centers .
- purchase two more hybrid company vehicles; and,
- perform field trials of environmentally friendly fuel cells to replace backup battery plants in central offices.

Non- Hazardous Residual Materials

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Non-Hazardous Residual Materials

Our Reduction, Reuse and Recycling principles in action

ISSUE

Bell Canada uses literally tons of materials and products in its operations, and their disposal has to be managed with the environment in mind. With careful vigilance and the application of the reduction, reuse and recycling principles, the company can avoid using non-renewable resources, occupy less space at landfill sites and ultimately generate cost-savings.

All operations within Bell generate non-hazardous residual materials: construction and demolition of our buildings, administrative operations, construction, maintenance and dismantling of the old network; and automotive fleet maintenance.

ON-GOING MEASURES

Bell's non-hazardous residual management policy outlines the company's commitment to support cost-effective resource and waste minimization initiatives in line with government objectives. Our initiatives are also based on a commitment to sustainable development that encompass financial, environmental and social objectives.

The company's activities to manage non-hazardous materials have been successful. In 2003, 5,891 tons of non-hazardous residual materials were diverted from landfill. In addition to garnering much public recognition for our previous efforts, we also received a Silver Award in 2003 from the Recycling Council of Ontario for our outstanding achievements in waste reduction.

MORE ABOUT ENVIRONMENTAL AWARDS ⊞ *link to section 7.0*

The following initiatives are closely monitored and continuously improved:

Network Operations Activities

Materials from the construction, maintenance and dismantling of the old part of Bell's network are collected from all work centers and central offices and reused, sold or recycled. Residual materials, such as copper cables, steel hardware and lead sleeves, are sent to recyclers for secondary markets. Equipment in good operating condition is sold for reuse, and any hazardous materials are handled according to environmental legislation. In 2003, a total of 5,060 tons of materials were collected from all work centers and central offices. Quantities vary from year to year depending on the intensity of the dismantling activities.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002***	**2003****
Cable and other telecom network equipment	5,636	5,740	5,060

* Includes wireline business

** Includes wireline and wireless businesses, and Bell Nordiq

Material Collection Centers have been established in 54 of our main work centers (i.e. 77% of all work centers).

Containers used for hazardous and non-hazardous materials, as well as telephone poles and waste destined for landfill, are relocated to a central area in each of the work centers. This simplified process facilitates recycling, thereby helping the company to divert a significant quantity of material from landfill. In 2003, additional controls and user pay principles were applied to prevent non-recyclable waste from being put in the recycling containers. The total diversion rate in these work centers reached 79.5% in 2003, the fifth consecutive year that the diversion rate was greater than 70%.

Bell has also found a way to contribute to a good social cause and help protect the environment at the same time. The Centre de formation en entreprise et récupération (CFER) is now collecting and sorting recyclable materials generated at fourteen of our work centers located in Québec. CFER is a recycling training school that provides useful manual skills to young people who do not have a high school education. The diversity of work the students perform on the Bell contract, such as shipping, receiving, sorting, baling, weighing and cable-cutting provides excellent training for mainstream employment. The program also favours local recycling of many materials such as cardboard, steel or aluminum, while helping Bell to reduce transportation costs to ship the materials elsewhere for recycling.

MORE ABOUT CFER *New window*

Zero Waste™

Our Zero Waste program is aimed at diverting non-hazardous residual materials, such as paper, cardboard, glass, steel and aluminium used during our administrative activities, from landfills. Over the past years, we have implemented recycling programs for various materials in most of our administrative offices and network maintenance centers. As well, the company has actively promoted the application of the 3R principles to our employees.

As targeted in 2003, we implemented a paper recycling process for 2,800 employees at 91 additional Bell locations. This now brings the paper recycling service to more than 98% of employees located in Bell-owned buildings. Employees at remaining sites use municipal collection services where available.

During “Waste Reduction Week” in October 2003, more than 700 employees chose to view a Zero Waste presentation on Bell’s intranet. The multimedia presentation provided information on the recycling results for 17 main Bell buildings in the last 12 months Students from CFER also visited four main Bell buildings in Montréal and Ottawa to provide recycling news to employees.

We now have a data collection process in place that enables us to track our progress as well as the efficiency of the Zero Waste program in each company-owned location. The process targets 295 sites throughout Bell’s territory, and addresses costs, revenues and quantities of recyclables and waste to landfill.

Last year’s results indicate an average diversion rate of 24.9% at the participating sites which was based on the total quantity of residual materials that were generated, a reduction of 1.6% compared to 2002. Overall, it meant that 831 metric tons of material were diverted from landfill sites.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002***	**2003***
Paper	485,3	500,1	471,0
Cardboard	356,5	303,1	318,0
Plastic and glass bottles	29,8	28,6	25,1
Organics	40,4	23,1	15,2
Aluminum cans	1,5	0,9	1,7
Total	**913,5**	**855,8**	**831,0**
Diversion rate	**30.0%**	**26.5%**	**24.9%**

* Includes wireline business only

Reduce and Reuse programs

Beyond recycling, Bell’s efforts also encompass programs to reduce and reuse materials. Specifically:

- In 2002, Bell implemented a new process to collect and refurbish splice closures and aerial terminals commonly used in our network. A product refurbishing specification and training video was developed, and employees were informed of the collection procedure. As a result, 1,895 splice closures and terminals were refurbished and reused in 2003.
- In 2003, 21,195 wood pallets were repaired for reuse within Bell’s operations or sold.
- In 2003, Bell Canada continued efforts to minimize paper consumption in operations. Overall paper consumption for our wireline business was 4,268 tons, which represents a reduction of 4,048 tons since 1991, and annually saves more than 68,800 trees. The result is attributed to the increasing use of e-mail and Internet, e-billing, mechanization of our business forms, and the increasing availability of on-line internal reports.

ITEMS	QUANTITY (METRIC TONS)		
	2001	**2002**	**2003**
Paper consumption in wireline business only	4,363	4,707	4,268
Paper consumption in wireless and ExpressVu businesses, BCE Nexxia Corp. and BDI	----	----	1,368
Total *	**4,363**	**4,707**	**5,636**

- Bell is maintaining its successful collection program for laser printer toner cartridges of various types. In 2003, we purchased 11,998 refurbished cartridges from our supplier, reducing the consumption of new materials and reducing waste to landfill.

ITEMS	QUANTITY (METRIC TONS)		
	2001*	**2002****	**2003****
Refurbished cartridges	7,200	12,000	11,998

* Includes wireline business only

** Includes wireline and Wireless businesses, and Bell Nordiq

As in the past, savings from this initiative continue to be substantial. Using refurbished cartridges instead of purchasing new ones generates a cost reduction of 30% to 50%.

PROGRAM OBJECTIVE

To maintain current efforts and to promote cost-effective resource and waste minimization initiatives.

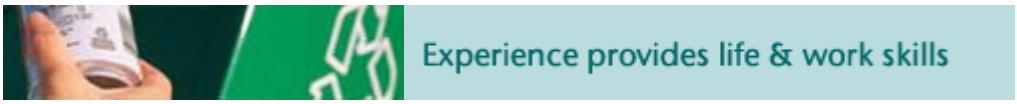
TARGETS

Reassess the recycling process under the Zero Waste program to identify improvement opportunities, and pursue employee awareness of the program in order to increase their participation.

In 2004, evaluate the potential of a CFER partnership for Bell Nordiq operations.

New Window:

Experience provides life & work skills



Mathieu Lafrance has a renewed sense of purpose. For the first time in his young life, this 16-year old student has the opportunity to contribute his skills to a worthwhile social cause and feels better about himself as a result.

The cause is Bell Canada's three-year partnership with the **Centre de formation en entreprise et récupération (CFER)**, a network of specialized schools in Québec which gives recycling job training to young men and women with learning difficulties. "This is the first job I've ever really had and I'm learning a lot as I go," says Mathieu who hopes for a job in agriculture in the future. "I especially like working in a team because we all have something to contribute to get a job done."

Before the partnership with CFER, Bell sent all its network-related material to a recycler in Barrie, Ontario. With the CFER program, about 100 students now collect and sort the material generated at fourteen of our work centers located in Québec. Cardboard, plastic, steel and aluminium are recycled locally, and cables are bailed before being sent to Barrie for recycling. Thanks to the work of the CFER students, overall transportation costs are reduced.

A large part of the training that the students receive at CFER is focused on separating materials and learning how to recognize their value on the market. "The training gives these kids a chance to learn good basic work habits such as being organised, punctual, productive and respectful. It opens their eyes to the importance of teamwork and a job well done," says director of the program, Normand Maurice. For kids who aren't able to learn in a regular school curriculum, CFER provides them with opportunities that are otherwise difficult to gain. What's important to remember, Normand adds, is that society has a real need for useful manual skills. "CFER gives these people a chance to improve themselves, to take pride in their work and do something that is worthwhile. We help them prepare for life."

Air Emissions

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Air Emissions

Reducing air emissions and supporting the objectives of the Kyoto protocol

1- Ozone Depleting Substances

Issue

Ozone Depleting Substances (ODS), such as chlorofluorocarbons (CFCs), some chlorinated solvents and Halon, deplete the stratospheric ozone layer that protects the earth from ultraviolet rays (UVB). Ultimately, UVB rays are harmful to the environment, and prolonged exposure can cause skin cancer.

These substances are contained in various products. For example, CFCs are commonly used as coolants in refrigeration, freezer and air conditioning units, and were used as an active agent in aerosols employed for cleaning electronic parts. Halon is used in some portable and engineered fire extinguishing systems.

Due to the nature of air emissions and the relatively small quantities generated by our operations every year, Bell Canada is not required to report under the National Pollutant Release Inventory (NPRI) program.

On-going Measures

Since 1989, Bell continues to rely on a number of highly successful measures to minimize ODS releases.

- Only CFC-free aerosols may be used in the company.
- CFCs were replaced with nitrogen to detect leaks under cable sheaths.
- CFCs are recovered and condensed during maintenance of refrigeration and air conditioning systems – as per regulation requirements.
- Halon recovered is safely stored and managed.
- Portable fire extinguishers that contain Halon 1211 have been replaced with water, CO_2 or dry chemical extinguishers.
- Since 1989, 70,765 kg of Halon 1301 used in fire protection systems have been decommissioned and sold to an approved supplier. Bell's wireline business has reduced its usage of Halon 1301 by 79%.
- Since 1996, 100 chillers out of 108 containing CFCs that were used in our wireline business have been removed or replaced.

2003 Achievements

- Bell began installing Very Early Warning Fire Detection (VEWFD) systems, along with effective power down procedures at key central office sites. The VEWFD and power down are accepted as effective fire protection systems. Where installed, they will enable the removal of the Halon 1301 fire protection systems. VEWFD detects a fire before visible smoke or flame is apparent, and alerts in-house personnel that an inspection of a specific area is necessary.
- 13 chillers containing CFC-11 were replaced with HFC-134a or converted with HCFC-123.

Program Objective

To replace all systems that use ODS with more environmentally friendly substitutes.

Targets

- To replace six additional chillers containing CFCs in 2004.
- To decommission 3,200 kg of Halon 1301 in locations where Very Early Warning Fire Detection and power down systems have been installed, and to safely dispose of the Halon 1301 through an approved supplier.

2- Greenhouse Gases

Issue

Bell is also working to reduce its emissions of greenhouse gases to support the Kyoto Protocol. This protocol mainly targets the following gases: carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons, and sulphur hexafluoride.

At Bell, greenhouse gases are produced indirectly through electricity consumption, and directly by the consumption of hydrocarbons. This consumption is necessary to light, heat or cool Bell buildings, power telecommunications and electronic equipment, and fuel vehicles used to build and maintain Bell's telecommunications network.

2003 Achievements

The following table provides details of the emissions which are presented in terms of a "CO_2 equivalent" (CO_2E) measure, in line with global Canadian and provincial inventories. The measure includes other greenhouse gases, such as nitrous oxide and hydrofluorocarbons. Calculations were made using a tool provided by the Office of Energy Efficiency, Natural Resources Canada. Bell completed a first estimate of the greenhouse gases it produced in 2001, and re-evaluated greenhouse gas production for 2003.

ACTIVITY	ESTIMATE OF CO_2E (TONS)	
	2001*	**2003****
Bell vehicle fleet	49,920	60,450
Building and Network heating and air conditioning	102,285	154,420
Cooling systems (HFCs)	118	199
Employee vehicles used for company business and rentals	7,018	4,183
Mobile generators	158	353
Total	**159,499**	**219,604**

* Includes wireline business only.

** Includes wireline, wireless and ExpressVu businesses, Bell Nordiq and Bell West

The total quantity represents 0.02% of the total CO_2E emitted in Canada.

- In 2003, Bell partnered with Nature Action to develop an employee awareness program on greenhouse gas emission and the concrete steps that employees can take at work and at home to reduce such emissions. The program will use web conferences, face-to-face presentations and e-mail to voluntarily engage employees in the effort, and will be delivered in 2004.
- A new and innovative telematics system called TelePod™ , with an interface developed by Bell, will help in reducing greenhouse gases emitted from our vehicle fleet. With TelePod™, it is possible through satellite communications and on-board vehicle sensors to obtain remote maintenance diagnostics and other information, such as vehicle positioning, idling time or excessive engine revolution. Once installed on all vehicles, the system will allow the company to save on fuel consumption and reduce its air emissions by approximately 10%, or 2,800 tons of CO_2E. The system has been installed on 500 vehicles in 2003, and is currently trialed at Aliant and other external companies.
- Bell also has four hybrid vehicles in its fleet which consume less than 5 litres of gasoline per 100 km. Each vehicle is expected to reduce air emissions by 2.2 tons of CO_2E per year.
- Bell was proven to be the best in class in air quality protection and in its efforts to reduce fuel consumption by winning the Repair Our Air Challenge at the Toronto Smog Summit in June 2003.

  MORE ABOUT THE REPAIR OUR AIR CHALLENGE *New Window*

- Find out how Bell Teleconferencing Services can help reduce greenhouse gas emissions, and how our energy conservation initiatives contribute to supporting the objectives of the Kyoto protocol. *Link to section 6.2 and Link to section 4.1*

PROGRAM OBJECTIVES

To document and quantify Bell's greenhouse gases, and report these annually.

Evaluate and implement greenhouse gas reduction opportunities in Bell's operations.

TARGET

Conduct an employee awareness program in 2004 on the importance of reducing greenhouse gases.

Install TelePod™ telematics systems on 4,000 Bell vehicles in 2004.

NEW WINDOW

Bell a winner in Repair our Air Challenge

The Repair Our Air Challenge was created to highlight how effectively drivers can cut harmful CO_2 emissions by simply turning off their engines when they don't need to be running.

Ten Field Services technicians working out of Toronto's North Queen work centre agreed to compete in the Challenge's 'Light Duty' category. Going head-to-head with employees from Toronto Hydro and Enbridge, these drivers had their idling times tracked over a three-month period. Result: Bell scored the lowest 'final idling' total (3.24%) and the biggest overall improvement (9.42%).

Winning drivers share a rare 'idle' moment at the North Queen work centre.

Left to right: Wilfred Walton, Luca Giannone, Daniel Garcia, Sergio Catuna, Paul MacIntyre, Ray Paisley. Missing: Mohamed Yunes, Jude Hamilton Angelo, Frank Taccogna, Damien Harry

"An event like this really drives home the importance of minimal idling," says Fleet Solutions Manager Elgin McMillan. "Ideally, other companies will get on board and follow Bell's example. We now hope to roll out this focus on idle time awareness across our own fleet as well."

According to experts with the Challenge, Canadian fleet vehicles idle between 20-60% of their operating time. If every driver of a light-duty vehicle avoided idling for just five minutes per day, Canada would save 1.6 million litres of fuel worth more than $1.28 million (assuming a fuel price of $0.80 per litre). We would also prevent more than 1.4 million tonnes of CO_2 from entering the atmosphere and contributing to climate change.

Noise

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Noise

Minimizing the nuisance of noise emissions

ISSUE

Unwanted noise can be considered an environmental pollutant.

At Bell Canada, noise may come from stand-by generators, air conditioners and cooling fans. The company is aware of the possible effect of this noise in the communities in which we operate, and has initiated several mitigation measures to address the issue.

ON-GOING MEASURES

- The company adopted a noise management policy in 2001. Under this policy, Bell is committed to undertaking appropriate measures to minimize any possible nuisance caused by our noise emissions.
- The company implemented noise guidelines for the installation of new equipment in 2002, which specify the maximum noise level at property limits and ways to reduce noise levels when required.
- Bell standardized the use of new network equipment that is less noisy and meets company guidelines. The effort reduced noise levels by 5 to 16 decibels (dB(A)).

2003 ACHIEVEMENTS

- Cooling fans with variable speed and sound enclosure were tested on one walk-in network cabinet and three smaller cabinets currently used in the outside plant network.
- A study was launched to evaluate the noise generated from stand-by generators that are used to maintain telephone service during power failures. 283 generators were measured in 2002 and 2003, providing sufficient data for the company to explore improvement opportunities.

PROGRAM OBJECTIVES

To continue initiatives that reduce noise emissions and to ensure that Bell's operational equipment meets new guidelines.

TARGET

- Conduct additional testing on outside plant cabinets to validate noise reduction efforts.
- Pursue noise assessments on stand-by generators and identify solutions.

Manhole Effluents

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Manhole Effluents

Minimizing manhole discharges

ISSUE

There are approximately 65,000 manholes on Bell Canada territory which all house network components, such as cables and splices. Since manholes are not watertight, they can become contaminated with urban run-off such as road water and sediments. And when pollutants build up in concentration and exceed discharge standards, they cannot be pumped from manholes into storm or sanitary sewers.

ON-GOING MEASURES

Bell has a variety of measures in place to improve the management of manhole effluents:

- The company continually adapts its standard pumping procedures to minimize manhole effluents in accordance with legislation.
- When required, Bell uses accredited, licensed suppliers to pump effluents from manholes, remove the contaminated sludge and to dispose of it appropriately.
- The company has introduced new hardware inside the manholes such as non-metallic ladders and cable supports that prevent or reduce the release of contaminants into the water.
- In 2001, the company began installing new watertight covers on manholes which reduce the infiltration of sediments and consequently the need for specialised pumping. 500 covers were installed in 2002 on new manholes and on those where contamination was an issue.

- Bell continued employee training on pumping procedures aimed at preventing contaminants from going back into the streets and municipal sewers.

2003 ACHIEVEMENTS

- 625 new watertight covers were installed on Bell territory. They were installed on new manholes and on those where contamination was an issue.
- A computerized system to collect data on the quantity of water pumped from manholes, and other details was put in place. The data will help flag recurrent situations and enable Bell to find solutions.

PROGRAM OBJECTIVES

To minimize manhole discharges, and to ensure that these do not exceed the limits set by

municipalities.

TARGETS

In 2004, Bell will continue to reduce contaminants that can seep into manholes in respect of municipal by-laws by installing new watertight covers.

Environmental Incidents

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Environmental Incidents

Being responsive to unpreventable incidents

ISSUE

The sheer scope of the company's operations increases the potential for environmental incidents. An incident can range from a minor event, such as spilling a litre of oil, to a full-blown emergency, such as a fire in a hazardous material storage facility.

Bell Canada must comply with provincial, federal and municipal laws that require specific environmental incidents to be reported to authorities and remediation efforts to be undertaken when required.

ON-GOING MEASURES

Bell has strict measures in place to deal with environmental incidents:

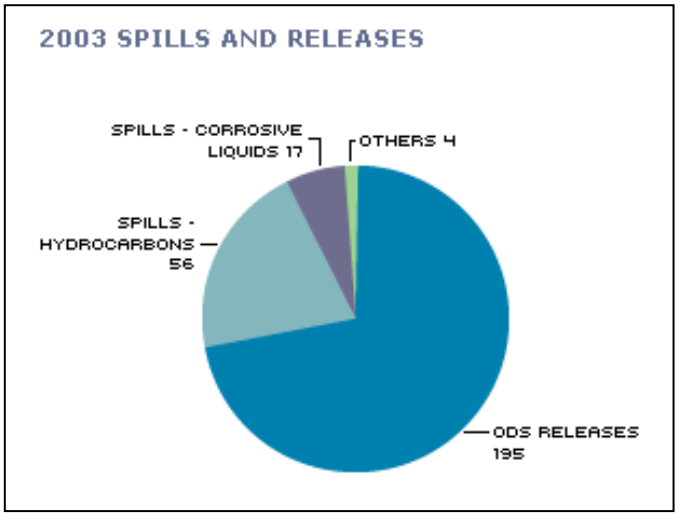
- Employees from the operational groups must promptly report all environmental incidents to the company's Environmental Services group, which has the ability to respond to incidents on a 24-hour basis. The group determines the best plan of action, and also reports incidents to appropriate governmental authorities. In addition, they train employees on how to properly deal with environmental incidents.
- Information kits about spills have been distributed at all work centers, central offices and in vehicles equipped with hydraulic systems.
- General procedures on how to respond to environmental incidents are available to all employees on the company intranet site.

2003 ACHIEVEMENTS

Our wireline and wireless businesses, Bell Nordiq and Bell West began participating in the reporting of environmental incidents, enabling the company to quickly address problems. The appropriate governmental authorities were advised of all environmental incidents by the Environmental Services Team and remediation actions were undertaken when required.
In 2003, 286 environmental incidents, such as ODS leaks, oil spills or fires, were reported by employees. The increase is mainly attributable to the systematic reporting of ODS leaks from cooling systems which we began to track in June 2002.

TYPE OF REPORTED INCIDENTS	QUANTITY		
	2001*	**2002****	**2003*****
Notice of environmental infraction:			
- Administrative in nature	4	2	3
- Causing damage to the environment	1	0	0
- Resulted in penalty	0	0	0
Spills and releases	69	124	272
Concerns reported by third party	9	8	11
Total	**83**	**134**	**286**

* Includes wireline business and Bell Nordiq
** Includes wireline and wireless businesses, and Bell Nordiq
*** Includes wireline and wireless businesses, Bell Nordiq and Bell West



PROGRAM OBJECTIVES

To pursue training and awareness on employee roles and responsibilities in the handling and reporting of environment-related incidents and infractions.

To reduce environmental incidents by addressing the root cause, quickly remediate any situation that could not be prevented and promptly report incidents to the proper authorities.

TARGET

In 2004, the company will begin to manage environmental incidents at ExpressVu and BCE Nexxia Corp.. It will continue to train employees and maintain a diligent approach to the management of environmental incidents.

Site Assessments

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Site Assessments

Reducing exposure to environmental liabilities

ISSUE

Today, environmental site assessments are performed on a routine basis to assess the environmental conditions of a property. These assessments also ensure that Bell meets environmental criteria related to the use of its properties. Assessments are mainly conducted when buying, leasing, selling properties or when contamination is suspected.

Previous or current activities conducted by Bell Canada or those of former owners may have lead to soil and water contamination at certain company sites. The sources of contamination can vary and include: former industries, snow deposits, petroleum products, pole storage, and vehicle maintenance activities.

ON-GOING MEASURES

Environmental site assessments greatly reduce exposure to environmental liabilities and allow Bell to exercise due diligence in its approach, while meeting the requirements of applicable legislation. Along with assessing existing contamination, the company identifies and assesses its current activities that could potentially contaminate sites. When contaminants exceed applicable criteria, Bell proceeds with remediation work in the most effective and cost-efficient manner.

Remediation projects at remote sites in Northern Ontario are closely monitored and near completion. These projects mainly involve petroleum hydrocarbon contamination. *New window*

Bell participates in a number of research projects on the impact of specific contaminants on soil and water and on the development of remediation techniques.

MORE ON RESEARCH PROJECTS *Link to Section 5.2*

2003 Achievements

The company conducted 228 projects to assess, characterize or remediate sites in 2003.

Activities	Quantity		
	2001	**2002**	**2003**
Assessments *(Phase 1 or Compliance audit)*	367 *	17	202 **
Characterization *(Phase 2)*	6	16	2
Remediation *(Phase 3)*	27	35	24
Ground water monitoring	12	7	1

* Includes 330 assessments related to wireless business Western expansion

** Includes 82 assessments at Bell Nordiq, 42 at Bell West and 11 at BCE Nexxia Corp.

Bell used its telecommunications network and leading-edge environmental remediation technology to ensure the proper monitoring of remediation activities at selected sites.

Because of better environmental management of our assets over the years, such as reducing the risks associated with petroleum equipment, Bell has reduced the number of environmental site assessments it needs to conduct annually.

More on petroleum-related equipment projects *Link to Section 4.11*

Program Objectives

Pursue environmental site assessments and remediation projects to minimize soil and groundwater contamination.

New Window

Northern Ontario sites

In 1996, Bell Canada began clean-up and bioremediation efforts on a total of 19 sites in remote Northern communities. These sites, mostly on First Nations reserves, were contaminated further to the operation of diesel-powered generators that provided electricity for Bell's installations. These generators were installed in 1975.

Today, the generators have been removed, the installations dismantled, and eighteen bioremediation sites reached their soil remediation targets and required no further attention.

Monitoring and remediation activities were completed at all but one site. At some locations, the naturally occurring soil micro-organisms were used to break down the remaining fuel products in the soil. On other sites, the process was activated by excavating a small quantity of contaminated soil, mixing it with fertilizer and returning it to the excavation site which had since been lined with aeration pipes.

Target

Pursue monitoring and remediation at the only remaining site.

Petroleum-related Equipment

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Petroleum-related Equipment

Preventing leaks and accidental spills

ISSUE

The company uses underground and aboveground tanks to store various petroleum products including gasoline, diesel, heating oil, lubricants and used oil. These are usually situated in or near work centres, office buildings, microwave towers, central offices and vehicle maintenance centres.

All together, Bell Canada's wireline, wireless and ExpressVu businesses, BCE Nexxia Corp, Bell Nordiq, NorthwesTel and Bell West have 958 aboveground and 347 underground storage tanks for a total of 1,305 tanks.

ON-GOING MEASURES

Over the years, through its modernization program, Bell has:

- increased the proportion of aboveground tanks to 73%
- reduced the total number of tanks at Bell Canada by 231 (18%) since 1992
- replaced all underground steel tanks with new tanks constructed of double-wall non-corrosive fibreglass and equipped with high-tech monitoring and alarm systems that allow Bell to act quickly in the event of leaks

- replaced all aboveground, single-wall storage tanks located outside buildings and containing more than 4,000 litres of petroleum products, with double-wall tanks

Bell has a private and government-approved inspection program for petroleum-related equipment in Québec. Under this prevention program, all storage tanks are inspected every year; databases are verified and updated every month; and, fuel inventories are rigorously controlled. Similar controls are applied to petroleum-related equipment in Ontario.

When removing or replacing storage tanks, Bell cleans up and restores all soil that may have been contaminated by petroleum product spills and leaks.

MORE ON SITE ASSESSMENTS *link to section 4.10*

2003 Achievements

Bell continued to modernize its underground and aboveground petroleum equipment.

Initiatives	Quantity (units)		
	2001*	**2002***	**2003****
Aboveground tanks installed	7	0	5
Underground storage tanks (UST) installed	3	8	0
Upgrade UST piping	9	6	61
Installation of overfill protection and spill containment boxes for UST larger than 5,100 litres	---	11	12

* Includes wireline business only

** Includes wireline and wireless businesses

In 2003, the company:

- replaced four aboveground tanks and one underground tank with five aboveground tanks
- upgraded 61 underground storage tanks with flexible piping
- installed twelve overfill protection and spill containment boxes for underground storage tanks with a capacity larger than 5,100 litres. Under this program, and as per current inventory, a total of 44 systems will be gradually upgraded to be in line with provincial regulation replacement objectives or as a preventive measure.

Program Objective

To prevent leaks and accidental spills of petroleum products.

Targets

In 2004, Bell will follow through on its inspection program and pursue the modernization of petroleum-related equipment by:

- installing automatic overfill protection boxes and upgrading equipment with flexible piping for 16 underground storage tanks with a capacity larger than 5,100 litres
- installing automatic overfill protection boxes on 20 aboveground storage tanks larger than 2,500 litres
- repairing or replacing accessory equipment and facilities for fuel dispensing systems.

Vegetation

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Vegetation

Going green, naturally

ISSUE

The control of vegetation with pesticides is a common human activity. We know that certain pesticides break down quickly in the environment while others persist over longer periods of time, accumulating in the food chain, causing surface water pollution or transforming into toxic by-products. Pesticides can cause other problems too, such as destroying useful organisms including earth worms or bees.

ON-GOING MEASURES

Since 2002, and ahead of regulation, Bell Canada introduced a vegetation management policy by which the company has stopped using pesticides on its properties for aesthetic reasons choosing alternative methods of controlling vegetation. The company is undertaking a number of other measures to minimize the use of pesticides:

- using manual methods in locations where brush control is deemed necessary. Approval of Bell Canada's Environmental Services group must be obtained if pesticides have to be used;
- providing training on the ecological management of vegetation to Bell Realty Services managers;
- continuing its 3-year partnership with the Coalition for Alternatives to Pesticides (CAP), to develop an environmental vegetation management program. The program includes measures such as organic lawn care, alternative landscaping and site naturalisation, while promoting biodiversity as well as water and energy conservation.
  link to http://www.cap-quebec.com/index_eng.html

2003 ACHIEVEMENTS

- Organic lawn care, alternative landscaping and site naturalisation were implemented at 22 additional sites in 2003.
- 100 sites in Montreal, Ottawa and Toronto were characterized to identify their needs for sustainable landscaping. The study gathered information such as grass and soil conditions and types of vegetation, and provided recommendations on how best to harmonize with the surrounding area. Natural fertilization, trimming and protection of young trees were carried out when necessary.

- An awareness program on the company's new vegetation management policy was carried out for employees in targeted buildings, and members of the surrounding communities. "Pesticide Free" signs were installed on the properties at each of the sites. And, Bell conducted a larger awareness campaign of pesticide-free tips and information for all employees via intranet.
- In collaboration with CAP, Bell developed new ecological specifications for suppliers who carry out landscaping and vegetation maintenance.

MORE ABOUT OUR VEGETATION MANAGEMENT PROGRAM *New window*

PROGRAM OBJECTIVE

To diligently manage green spaces at Bell using ecological methods while ensuring the promotion of biodiversity, as well as water and energy conservation.

TARGETS

In 2004, planned activities include:

- characterizing 20 additional sites for sustainable landscaping
- applying new landscaping methods at 30 additional sites
- training external service providers who work on Bell properties

New window

Staying green, naturally

When Bell decided to “go green” under its vegetation management policy, that stopped the use of pesticides for aesthetic reasons, it embarked on a plan of action that would have positive benefits outside of the company and inside, too.

Bell worked in partnership with the Coalition for Alternatives to Pesticides (CAP) to use environmental vegetation management measures such as organic lawn care, alternative landscaping and site naturalisation. “*Bell’s decision to voluntarily engage in the ecological management of its green spaces was certainly avant-garde at the time*,” says **Édith Smeesters**, spokesperson for CAP. “*The company’s commitment shows a progressive change in corporate mindset towards the environment, where alternative solutions to keeping green are considered. We know it can be achieved cost-effectively and efficiently. It takes effort and vision*.”

Bell’s efforts, however, weren’t simply limited to company sites. Recognizing the importance of engaging employees in a much larger cause, the company spread the word about eco-friendly methods for lawn care to all employees. In 2003, Bell’s Environmental Services group created a web page of tips and suggestions for more natural and ecological alternatives to pesticides in home lawns and gardens. The website included a 12-step organic lawn care program, information about pesticides, frequently asked questions about alternatives as well as useful internet links. A contest awarded prizes to employees for correctly answering questions on proper lawn care.

“*I was happy to see Bell taking a proactive approach in making environmental information available to employees*,” says Wayne Murdoch, a Bell Installation Technician who won a water-powered weeder for his effort. “*As a big company, I think Bell has an obligation to bring issues important in society - like the environment - to the forefront so that people are informed. I learned more than a few things after surfing the Bell site and have benefited from that knowledge*.”

link to http://www.cap-quebec.com/index_eng.html

Internal Environmental Evaluations

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Internal Environmental Evaluations

Protecting sensitive natural areas

ISSUE

Bell Canada's access network is composed of approximately 1.5 million poles, 65,000 manholes and 160 million kilometres of cable and wire that are either underground, buried, underwater or aerial.

Bell's network extends over a vast territory that crosses many interconnected ecosystems. As a result, the company's network planning, construction, maintenance, operating, and modernization activities can have an impact on human activity (e.g. visual and noise) and on natural elements (e.g. water, air, soil, flora and fauna). Special care is taken when the company's activities involve sensitive natural areas.

ON-GOING MEASURES

Internal Environmental Evaluation (IEE) program

Bell has built a strong reputation as an environmentally responsible corporate citizen. To minimize the impact that the company has on the environment, Bell initiated an Internal Environment Evaluation (IEE) program in 1994, which integrates environmental evaluations into current practices and operating procedures. The program is designed to minimize the environmental impact of our infrastructure.

A key component of the program is the training of employees and contractors on important environmental requirements. An environmental training guide and procedures outline the preventive and mitigation measures for network development, construction and removal. The guide and procedures are available on Bell's intranet site. *Link to section 5.1*

Environmental Assessments

As part of the company's efforts to reduce the impact of its telecommunications network on the environment, Bell conducts environmental impact studies, environmental assessments, and fish habitat site inspections. These are conducted to minimize any potential impact on the environment and to obtain regulatory approval for our continued work. Environmental evaluations also help us identify environmentally sensitive areas and to build the network in a manner that minimizes potential impacts. Environmental Assessments are conducted for network development projects in various areas, including federal lands, provincial parks and native reserves.

Working with the communities

Bell pursued initiatives aimed at improving the streetscapes in our communities. As part of this activity, various groups within Bell helped develop and install outside plant equipment that minimizes the visual impact of network infrastructure.

Examples include the use of Trafalgar poles (right) that resemble lamp posts but house telecommunications and utility infrastructure.

Flush mounted pedestals (left), contain hardware that was once housed upright.

The Municipal Liaison group at Bell also developed community design guidelines to optimize the design and location of equipment, and minimize the impact of construction and maintenance activities. These types of initiatives helped build a positive relationship with customers, developers, and municipalities.

Protecting our heritage

The company continued to participate in the Québec government's program to bury network cable at tourism, cultural or heritage sites. 100 municipalities have shown interest in this program. and 20 projects have thus far been announced by the Québec Ministry of Natural Resources. Eight projects were initiated in 2003 and two others were completed in Wendake and Tadoussac. Six more projects will be started in 2004.

Bell also continued the training of staff who design, build, and maintain outside plant infrastructure, in an effort to minimize the environmental impact of our activities and ensure staff continue to be diligent in their efforts to protect the environment.

2003 ACHIEVEMENTS

- Bell Canada received an award of Distinction and Excellence from the Centre d'expertise et de recherche en infrastructures urbaines (CERIU), in recognition of its work in urban infrastructure. The award recognizes the cooperative efforts of municipalities, Bell and its partners in the development and implementation of common infrastructure equipment. *http://www.ceriu.qc.ca/infra%5Fprixduceriu.htm*

- Bell Canada added environmental considerations in its Quality Audit process for network projects. The Quality Audit Team, which reviewed a representative number of projects last year (388 projects), ensured that all environmental procedures and preventive measures identified in the IEE guide were applied. Recommendations for improvement were forwarded to the respective project managers.

- An Environmental Guide was developed for our wireless business. It will be used in the design, construction and maintenance of their network which is composed mainly of cellular towers and antennas. The guide, written by our Environmental Services Team, was tailored to our wireless network infrastructure, and will be distributed to project managers in 2004.

PROGRAM OBJECTIVE

To minimize the impact of our network infrastructure on the natural and human environment during network planning, construction, maintenance and dismantling activities.

TARGETS

Specific targets for 2004 are to:

- continue participating in the buried network cable program for tourism, cultural and heritage sites;
- maintain employee training and support to ensure proper environmental management of network projects;
- provide and raise awareness of the Environmental Guide for wireless network project managers; and,
- assess network development and maintenance in Bell West operations.

Poles

Consumption

Emissions, Effluent and Residual Materials

Presence in the environment

Select: Poles

Managing through the entire life cycle

ISSUE

Bell Canada owns approximately 1.5 million poles that are located throughout its territory. Telecommunications companies and utilities alike use poles to support their physical infrastructure. The most common poles used at Bell are made from pine trees. Because the greatest threat to poles is biological decay over time, they must be chemically treated to slow down the natural biodegradation process, which extends their life. Although treating wood poles can help preserve valuable forest resources, the preservatives do have an impact on the environment throughout a pole's life cycle.

ON-GOING MEASURES

Bell has been proactive in managing environmental issues surrounding poles and continues to support initiatives such as:

- actively participating, since 1994, with key stakeholders in the Strategic Option Process (SOP) in the Wood Preservation Sector of Environment Canada. This initiative is aimed at developing and implementing best management practices for the safe storage, use and disposal of treated wood in Canada *link to Section 5.2 - SOP*
- standardizing the use of steel and non-treated cedar poles in environmentally sensitive areas, such as near watercourses or water wells
- standardizing site selection criteria for the installation of treated wood poles
- conducting research to evaluate the impact of using treated wood poles *link to section 5.2- Research*
- managing a product stewardship agreement with our pole supplier, which imposes strict requirements on how poles are treated and repatriated at the end of their useful life. The company conducts Environmental Risk Evaluations of the supplier to ensure due diligence *link to section 5.3 in line with the subject*
- prohibiting the sale or donation of used poles to the public since 1995

2003 Achievements

Bell continued its efforts to increase employee and supplier awareness of the importance of recovering poles and returning them for recycling or safe disposal. A total of 3,920 poles (980 metric tons) were recovered from Bell's operations in 2003. As a result, the recovery rate reached 76%.

Items	Quantity (metric tons)		
	2001*	**2002***	**2003****
Poles recycled	602	730	503
Poles – safe disposal	469	451	477
Total poles recovered	**1,071**	**1,181**	**980**

* Includes wireline business only

** Includes wireline business and Bell Nordiq

Program Objectives

- Optimize the number of pole storage yards necessary for our operations .
- Minimize the risk of contamination by avoiding the use of treated wood poles in environmentally sensitive areas.
- Maximize the recovery rate of poles removed from the network, reuse poles whenever practical and recycle those that cannot be reused.

Targets

- Assess the potential of environmentally friendly resin poles for Bell’s operations.
- Develop a formal process to maximize pole testing and reuse poles wherever possible.
- Assess the possibility of recovering used poles for their energy potential and consequently reducing disposal.

Key Stakeholders

Employees
Community
Suppliers
Telecom Industry

Working in harmony with our stakeholders

Bell's success with its environmental initiatives is linked to building a strong rapport between the company and its key stakeholders, whether it's understanding customers needs, supporting employees in their on-going efforts, or working in harmony with community groups, suppliers and industry .

We invite you to view the E-Solutions section providing customers a choice of services that can help minimize their own impact on the environment.

MORE ON E-SOLUTIONS *Link to Section 6.0*

Employees

Employees
Community
Suppliers
Telecom Industry

Employees are the foundation of our environmental success

ON-GOING MEASURES

Enviro-Line

Our Enviro-line is the main entry for questions and answers on any environmental issue at Bell. The line can be used 24 hours a day, 7 days a week to reach an on-duty manager in the case of environmental incidents. *Link to section 4.9*

Calls and e-mail messages are handled by an Environmental Services specialist. In 2003, our specialists responded to 286 calls and 90 electronic messages.

Tel. 1-877- BELL-ENV
E-mail: enviroline@bell.ca

Face-to-face Training

738 employees were trained by the Environmental Services group in 2003, bringing the total number of employees who have been trained in the company since 1996 to 10,969. On-site courses were delivered to employees on a diversity of subjects in response to the needs of their operational groups. Training was widely supported with videos, pamphlets and presentations. Environmental topics of training included:

- **Internal Environmental Evaluation (IEE):** addresses environmental issues, policies and procedures, and ways to minimise the impact of Bell equipment on the environment. Participants were also given an overview of permit requirements by municipal, provincial and federal authorities.
- **Hazardous Residual Materials**: provides guidance on how to manage various types of hazardous substances in the company with accompanying responsibilities in the operational groups.
- **Recyclable Materials:** addresses the new collection process for all recyclable materials that are generated during the construction, maintenance and dismantling of the outside plant network. Participants learned about various recyclable products, as well as how they are collected at work centers and recycled.
- **Environmental Incidents:** covers the different types of environmental incidents that can occur at Bell, the roles and responsibilities of various groups, legal requirements, and the response mechanisms that have been put in place.
- **Environmental Guide – Fleet Services:** addresses environmental procedures and regulations related to vehicle fleet management and operations. Topics included the management of petroleum-related equipment, hazardous materials and emergency procedures to follow in case of an incident.

Code of Business Conduct

Bell Canada's Code of Business Conduct provides employees with guidelines for ethical behaviour based on our mission and values, as well as applicable legislation. A section dedicated to environmental responsibility outlines how each Bell employee is personally responsible for protecting the environment in their job activities, and how this complements Bell's formally adopted values, such as integrity, communication and innovation.

MORE ON THE CODE OF BUSINESS CONDUCT

http://www.bce.ca/en/governance/codeofconduct/

2003 ACHIEVEMENT

On-line Training

Bell developed a dynamic and user-friendly new web-based training tool that allows employees to:

- take training customized to the requirements of their job and regulatory obligations;
- conduct self-paced learning;
- increase the frequency of training while reducing the duration of each course; and,
- follow their training path with a personal reporting card.

PROGRAM OBJECTIVES

To provide face-to-face training to the remainder of employees in the operational groups who have not yet received it, and train new employees within their first six months on the job.
To facilitate access to regular environmental training for all employees.
To improve the training process through more efficient training tools.

TARGETS

In 2004, the company expects to increase employee training by:

- providing face-to-face training to approximately 500 employees; and,
- providing on-line training to approximately 1,200 employees.

Community

Working with the community

COMPUTERS FOR SCHOOLS PROGRAM

Bell actively participates in the Computers for Schools (CFS) and the Ordinateurs pour les écoles du Québec (OPEQ) programs, which donate surplus computer equipment and software to Canadian elementary and secondary schools.

All usable donated equipment is tested and refurbished before delivery, and parts of non-usable equipment are used to repair other systems or are alternatively sent to metal and plastic recyclers. Under the program, computer repair workshops provide students and young adults with practical work experience.

In 2003, OPEC and its partner, the Centre de formation en entreprise et récupération (CFER), a network of specialized schools in Québec providing education and recycling job training to young men and women, were presented with the Conference Board of Canada's National Award of Excellence for their partnership. For OPEQ, it was the sixth consecutive award in six years for their outstanding work.

Thanks to the co-operation of private sector firms and provincial and federal government organizations, the Computers for Schools program has distributed more than 90,000 computers in Québec and 175,000 in Ontario. From this total, Bell alone has donated more than 13,000 computers, screens and printers. Moreover, the company provided additional resources, such as staff and office space, and a Bell employee assumed the presidency of OPEQ.

MORE ON COMPUTERS FOR SCHOOLS

http://cfs-ope.ic.gc.ca/default.asp?lang=en&id=6

UNIVERSITY RESEARCH FUNDING

Bell continues to encourage research excellence in universities in Québec and Ontario. Among the funded studies and other activities in which we are actively involved:

École Polytechnique (Montréal):

- Analysis of the impact of in-service utility poles.
- Industrial Chair in Site Remediation and Management with the Natural Sciences and Engineering Research Council of Canada (NSERC)
- Interuniversity reference center for the life cycle assessment, interpretation and management of products, processes and services. (CIRAIG)

Université du Québec à Montréal / Station expérimentale des procédés pilotes en environnement (UQAM / STEPPE):

- A project to track atmospheric releases, evaluate their potential sources and quantify results.

COMMUNITY CURBSIDE RECYCLING PROGRAMS

Bell is involved with the implementation of community recycling programs. For example, the company provides financial and administrative support to Collecte Sélective Québec (CSQ), an organization that promotes curbside recycling programs and brings financial aid to communities.

THE CONFERENCE BOARD OF CANADA

Bell is an active member of the Board's Business Network on the Environment, a forum for the exchange of ideas and experiences in order that individuals and industries may improve their environmental performance. Bell has also agreed to chair the Network committee, which conducts independent research on key environmental issues.

STRATEGIC OPTION PROCESS

Bell is the only telecommunications company in Canada to have been actively participating in the Strategic Options Process (SOP) since 1994. The Process was established to manage the potentially toxic contaminants that are used by the Canadian wood preservation industry. The SOP committee is chaired by Environment Canada, and takes a consultative approach to the responsible management of treated wood products, such as poles..

DONATIONS

For the last five years, in line with the company's reduce, reuse and recycle principles, , Bell has been donating surplus binders, chairs and assorted office equipment to In-Kind Canada and other charitable organizations, such the Centre de formation en entreprises et récupération and la Fondation des sourds du Québec.

QUÉBEC ENVIRONMENT FOUNDATION

Bell is represented on the Board of the Québec Environment Foundation, a non-profit organization that creates awareness on many environmental issues, such as climate change, pesticide alternatives, used oil and paint recovery.

Suppliers

Teaming up with our suppliers to protect the environment

ON-GOING MEASURES

Sourcing Policy

In support of the company's Environmental Policy, Bell Canada's Sourcing Policy states that : *Link to Section 3.0*

"Suppliers must demonstrate strong environmental stewardship in the performance of their operations, products and services and have an articulated vision of environmental consciousness and protection."

Bell's Purchasing group continues to identify and encourage green-friendly suppliers through the regular use of its environmental questionnaire. All new suppliers are asked to complete the questionnaire prior to contract negotiations. This allows companies to demonstrate their environmental commitment and performance during requests for quotations or requests for information.

Environmental Training

- Some 80 supply chain managers in 2002 and 2003 attended lunch-and-learn sessions on Bell Canada's environmental initiatives and the importance of using the environmental questionnaire with suppliers.
- The construction, maintenance and dismantling of our network usually involves a diversity of suppliers. Along with our employees, suppliers attend training on Bell's Internal Environmental Evaluation program and on the diligent management of hazardous and non-hazardous residual materials. A total of 502 representatives from 62 supplier companies received this training from Bell in the last seven years.

Environmental Questionnaires

- Environmental questionnaires were returned by 33 new suppliers to Bell. Survey results for 183 suppliers or their divisions are now included in our database.
- On-site audits were also conducted of three key suppliers to verify their responses on Bell's environmental questionnaire.

Environmental Risk Evaluation

Bell's Environmental Risk Evaluation (ERE) procedure is an integral part of the company's Environmental Management System. It is a tool that is used to evaluate the environmental risks associated with Bell suppliers who provide services related to the transportation, handling, recycling or elimination of residual materials. A total of 40 EREs have been conducted since 1995, including one in 2003. *Link to section 2.0*

PROGRAM OBJECTIVES

To pursue initiatives that support Bell's Sourcing Policy, and that ensure the company continues to deal with suppliers who seek to minimize their environmental impact on the environment.

TARGETS

In 2004, Bell will:

- ensure that all new suppliers complete an environmental questionnaire and that environmental considerations are a part of contract negotiations
- ask suppliers who completed the questionnaire more than two years ago to submit updated information
- work with the GeSI Supply Chain Working Group to produce a supplementary supplier questionnaire focused on Corporate Social Responsibility issues

Telecommunications Industry

Employees
Community
Suppliers
Telecom Industry

Towards sustainability

GLOBAL E-SUSTAINABILITY INITIATIVE

Bell Canada is a member of the Global e-Sustainability Initiative (GeSI), which provides a collective voice for Information and Communications Technology (ICT) service providers and suppliers. The initiative is supported by the United Nations Environment Programme and the International Telecommunications Union. GeSI's main objective is to create an open and global forum for reporting and actively promoting ICT solutions that encourage economic and social development and a sustainable environment.

The members of GeSI help to influence government policies and work to inform the public of their voluntary role in reducing the impact of their operations on the environment. Along with managing their own operations in a sustainable manner, members take a leadership role in providing individuals, businesses and institutions with sustainable solutions that balance environmental, economic and social objectives.

In 2003, GeSI created the Supply Chain Working Group. Chaired by Bell's Director of Environmental Services, this group will develop or improve information tools, management practices, processes or systems that will assist each participant and their company's supply chain to deal effectively with corporate social responsibility (CSR) issues.

TARGET:

In 2004, the GeSI Supply Chain Working Group will commission a project to produce a supplier CSR self-assessment questionnaire. The project aim at raising suppliers awareness of best practices and standards, and provide supplier's GeSI customer with valuable information to decide if further investigation or action is required.

TO ACCESS THE GESI WEB SITE *http://www.gesi.org/*

NORTH AMERICAN TELECOMMUNICATIONS INDUSTRY

For many years, Bell Canada has been working closely with other North American telecommunications companies to exchange information on our respective environmental policies and procedures. Joined by our common interests, Bell and a number of telcos developed and endorsed the Environmental Charter for the North American Telecommunications Industry in 1999. *PDF document*

In 2003, Bell continued to support the Charter by ensuring that its principles were integrated in the company's environmental management practices. Also, as a member of the United State Telecom Association (USTA) – Health, Safety and Environment Committee, Bell will continue to share learnings from our environmental initiatives and advance new approaches to environmental protection in the industry.

E-Solutions

E-commerce
Teleconferencing
Teleworking
Electronic Phone Books

Bringing people together in new and faster ways

Bell Canada's telecommunications services are bringing people together in simpler and faster ways than ever before which have positive benefits for the environment, too.

Electronic solutions for customers, such as e-commerce, teleconferencing and teleworking help reduce travel, air pollution and energy consumption. The solutions are also attractive from a bottom-line business perspective: meeting and travel costs are reduced while productivity is increased through better time management.

Bell has a wide range of customer products and services that support reduction, reuse and recycling principles.

SEE OUR COMPLETE RANGE OF PRODUCTS AND SERVICES ☐

Link to: http://www.bell.ca/shop/application/commercewf

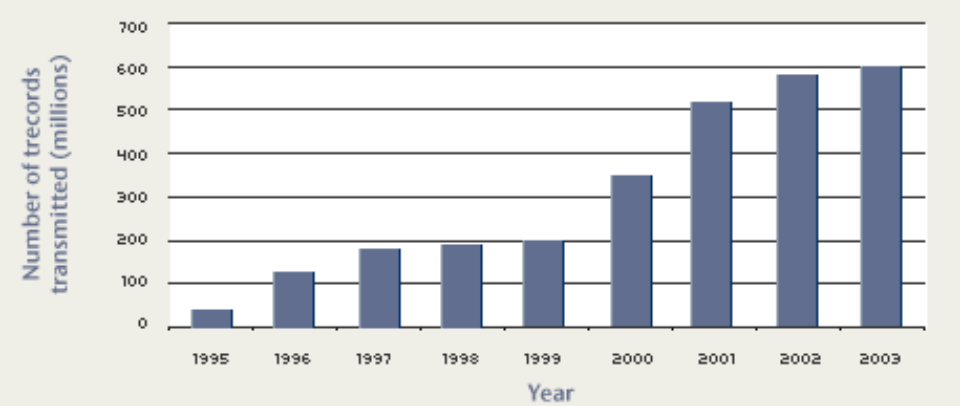
E-Commerce

- E-commerce
- Teleconferencing
- Teleworking
- Electronic Phone Books

Building integrated communications solutions

ELECTRONIC DATA INTERCHANGE (EDI)

Bell uses Electronic Data Interchange (EDI) in all types of transactions with customers and suppliers, significantly reducing paper usage and mailings. More than 602 million records were transmitted during 2003, which represents approximately 48 billion letter characters, a 4% increase relative to 2002. The rapid growth since 2000 is mainly due to the decision by more customers to receive their bills electronically.



Bell's EDI relies on a business-to-business data gateway, which enables the secure exchange of billing, finance and sales & marketing data between Bell Canada affiliates and their external partners.

Today, Bell offers customers a complete range of services in order to build integrated communications solutions, including Connectivity, E-Marketing Consulting Services, Web Site Creation, Catalogues, Web Hosting, Security, and Secure Virtual Private Network.

CLICK HERE FOR MORE E-BUSINESS SOLUTIONS FROM BELL ⊞

http://www.bell.ca/shop/application/commercewf?origin=noorigin.jsp&event=link(goto)&content=/jsp/content/business/ebusiness/index.jsp&REF=HP_BUS

E-COMMERCE SOLUTIONS FOR OTHER COMPANIES

Using the expertise of BCE Emergis, Bell offers clients e-commerce business solutions, such as electronic billing systems that enable organizations to better compete in the global marketplace. These systems link together participating financial institutions, billers and customers, enabling customers to receive, review and pay their bills on-line.

MORE ON BCE EMERGIS SOLUTIONS

http://www.emergis.com/en/solutions/index.asp

ON-LINE BILLING

Bell has an on-line billing service that customers may use to view and pay their bills via the Internet at their convenience, 24 hours a day, 7 days a week. Gains for the environment range from paper savings to reduced energy consumption.

The service is also available through Bell's Integrated Voice Response (IVR) system, which automates routine requests and transactions, or through the Vista† 350, 390, 450, Cybiolink 2000 or Cybiolink 8000 telephones.

MORE INFO ABOUT THIS SERVICE

https://belldirect.webapp.bell.ca/belldirect/index.asp

BELL CUSTOMIZED E-MAIL

Bell enables its customers to obtain free information on-line about its products and services. Clients may customize the information to suit their needs.

FOR MORE ON THIS SERVICE

https://belldirect.webapp.bell.ca/belldirect/permissionMarketing/About.asp

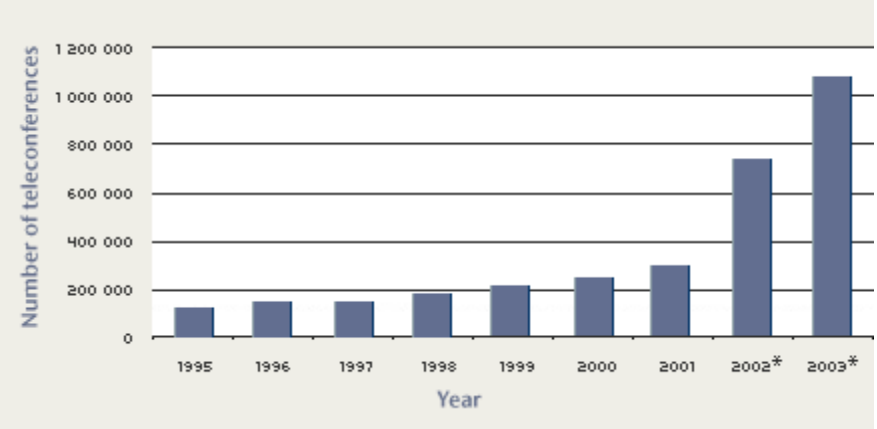
Teleconferencing

E-commerce
Teleconferencing
Teleworking
Electronic Phone Books

Linking efficiency, productivity and environmental protection

Teleconferencing is a convenient and cost effective tool that continues to gain popularity in the business world with important gains for companies and the environment. Teleconferencing helps reduce air emissions, save money through reduced meeting and travel costs, as well as increase personal efficiency through better time management.

Bell Canada facilitated more than one million teleconferences last year, an increase of 31% over 2002.



* *Bell Conferia, which was created in 2002, merged the services of Bell Teleconferencing and Darome Teleconferencing*

More and more customers are taking advantage of the flexibility provided by Reservationless Teleconferencing service, a pay-per-use service that allows customers to conduct conference calls 24/7, 365 days a year without having to book in advance.

Customers are also enhancing their company's image or brand with Bell Webcasting, a simple and cost effective tool which uses the Internet to broadcast an audio or video message to shareholders, customers, employees and other business partners.

MORE ON BELL'S CONFERENCING SERVICES *www.bell.ca/conferencing*

TELECONFERENCING - ENVIRONMENTAL BENEFITS

A study was conducted in 1999 by McGill University engineering students to assess the environmental benefits of using telecommunications services, such as teleconferencing, over traditional travel for face-to-face conferences.

Using typical business scenarios, e.g. travel from Montréal to Toronto, Chicago, and Ottawa researchers considered such factors as mode of transportation, distance travelled, duration of the meeting and the number of passengers and vehicles involved if travel by road took place.

Here are some findings from their report:

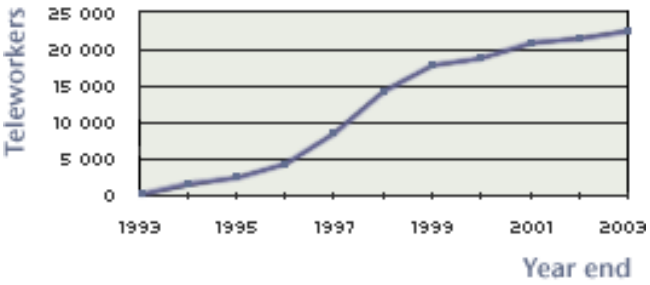
- Four persons travelling by plane from Montréal to Toronto for a four-hour meeting consumed 87 times more energy and produced 26 times more air emissions (in grams of CO, CO_2, NOx, PM-10, SO_2 and VOC) than if they used teleconferencing services,
- When travelling by train, they consumed 70 times more energy and produced 61 times more air emissions.
- A vehicle making a roundtrip between Montréal and Ottawa consumed up to 180 times more energy and generated up to 30 times more air emissions than a two-hour teleconference.

Teleworking

E-commerce
Teleconferencing
Teleworking
Electronic Phone Books

Providing a positive work-life balance

Bell and its subsidiaries have more than 22,350 employees equipped to telework, either full-time or part-time. This increase in the last few years is largely due to the deployment of an internal communications system that enabled more employees to use portable computers and access our network remotely. Leveraging our expertise, the company is now designing and implementing teleworking solutions for a number of large corporations.



In 2003, 9,200 teleworking employees used high-speed Sympatico connections to access Bell's internal network using the Virtual Private Network service. Users were also able to access Bell's network using Sympatico dial-up accounts from any location.

The preliminary findings of a study conducted by the Global e-Sustainability Initiative (GeSI) indicate that teleworking provides a positive work-life balance for the majority of teleworkers.. From an environmental perspective, teleworking can contribute to reduced air emissions from vehicles and lower consumption of energy.

Link to http://www.gesi.org/

PROGRAM OBJECTIVE
To explore new and innovative ways to provide better, expanded service to teleworkers.

TARGET
In 2004, we expect to migrate most teleworkers using dial-up service for remote access to the Virtual Private Network service.

Electronic Phone Books

E-commerce
Teleconferencing
Teleworking
Electronic Phone Books

Providing electronic access to business and residence listings

Enabled by Vista† 350, 450 and 390 phones, as well as the Cybiolink 8000 and 8500 technology, the Electronic Phone Book provides Bell Canada customers with free electronic access to more than four million Bell Canada business and residence listings. Customers have the choice of using voice commands or a keypad to obtain the listing they want. The first of its kind in North America, the service uses speech recognition technology, and is ideally suited to visually impaired customers.

Electronic Phone Books enjoy wide popularity among Bell customers. No major modifications were made to the service in 2003.

See our on-line directories:

- 411 Canada
- Yellow Pages

Note: Printed phone books are produced by Yellow Pages Group.

http://www.bell.ca/shop/application/commercewf?origin=.jsp&event=link(browsephones)&wlcs_catalog_category_id=DisplayPhone*

http://canada411.sympatico.ca/

http://www.yellowpages.ca

Environmental Awards

Leading with successful green initiatives

Over the years, Bell Canada's role as an environmental leader and our successful green initiatives have earned the company numerous awards or local recognition.

In 2003: Bell was recognized for its efforts in minimizing the impact of its operations on the environment:

- **The Recycling Council of Ontario** presented Bell Canada with a Silver Award for its outstanding achievement in waste reduction. Today, more than 7,871 metric tons of recyclable materials, such as paper, cardboard, cable, telephone sets, batteries and other hazardous residual materials are diverted from landfill every year.
- Bell Canada received an award for Distinction and Excellence from the **Centre d'expertise et de recherche en infrastructures urbaines (CERIU).** The award recognized Bell's outstanding contribution to the CERIU center in the urban infrastructure field. It also highlighted the cooperative working relationship of municipalities, Bell and its partners in the development and implementation of common infrastructure equipment.
- Bell was proven the best in class in air quality protection and in its efforts to reduce fuel consumption by winning the Repair Our Air Challenge at the **Toronto Smog Summit** in June 2003.

MORE ABOUT THE REPAIR OUR AIR CHALLENGE *new window – see section 5.7*

In 1999: Bell and four other companies were recognized by the **École Polytechnique** de Montréal for 10 years of continued contribution to research efforts on site assessments and remediation.

In 1998: Bell received the **Product Stewardship award** from the Financial Post for developing a new and innovative way to store circuit cards - the Universal Box.

In 1996: In partnership with five other companies, Bell received the "**University Industry Synergy R & D Award**" from the Natural Sciences and Engineering Research Council & the Conference Board of Canada for innovative research on using poles as alternative fuel. As well, the Association québécoise pour la maîtrise de l'énergie awarded Bell an "Énergia" for its creative energy conservation efforts.

In 1994: Bell attracted global attention with its presentation to the United Nations Conference on the environment and ethics. The same year, **Zero Waste™** earned two major awards – the "**Mérite environnemental**" award from the Québec Ministry of the Environment and the "Prix de reconnaissance du mérite

environnemental" from the Québec City Conseil régional de l'environnement. The program also prompted a favourable rating in the Financial Post's Top 500.

In 1993: The success of Bell's Zero Waste™ program was given positive coverage on CBC TV's "The Nature of Things" and CTV's "W5". Environment Canada's Eco-Action and Ste. Foy, Québec's Chamber of Commerce presented Bell with awards for its program. In Ottawa, **Place Bell Canada was named Building of the Year** for energy conservation by the Building Owners and Managers Association.

In 1992: Bell was bestowed the **Recycling Council of Ontario's** highest honour, receiving **–the "Chairman's Award"** – for its achievements in waste reduction, reuse and recycling. The company also earned a plaque of recognition from the Ontario Minister of the Environment for our environmental work, and our initiatives were highlighted in an Environment Canada guidebook called "Working Your Way to a Green Office".

In 1991: Bell was presented with a Recycling Council of Ontario award for outstanding 3R initiatives. The company also received the "**Environmental Management Award of Distinction**" from The Financial Post.

MORE ON OTHER AWARDS RECEIVED BY BELL

http://www.bce.ca/en/social/awards/index.php