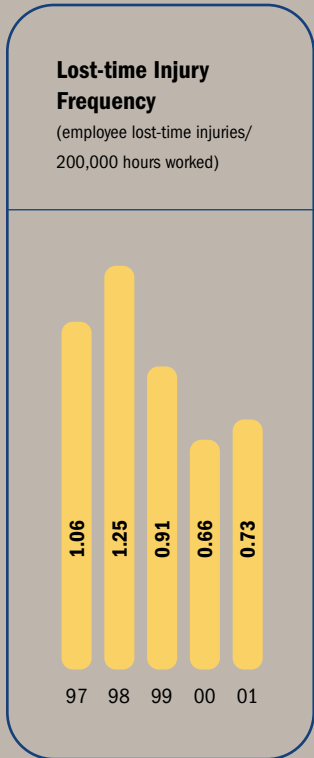


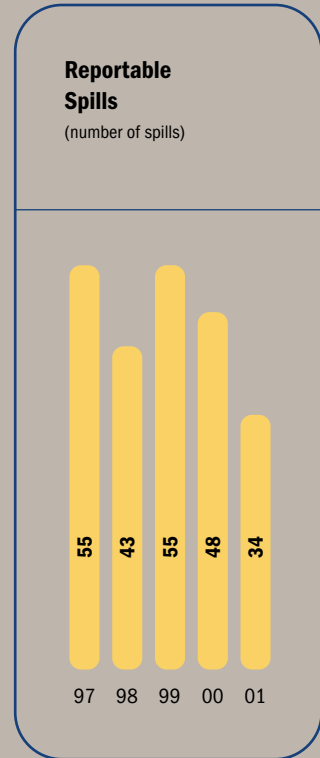


<b>Financial performance</b>	<b>2001</b>	<b>2000</b>
Earnings applicable to common shareholders (millions of dollars)	<b>458.5</b>	392.3
Earnings per common share (dollars/share)	<b>2.91</b>	2.54
Return on average common shareholders' equity	<b>18.6%</b>	18.6%
Assets (billions of dollars)	<b>13.1</b>	10.6
<b>Operating performance</b>	<b>2001</b>	<b>2000</b>
Deliveries of crude oil and liquids (thousands of barrels/day)	<b>2,196</b>	2,164
Volume of natural gas distributed (billion cubic feet)	<b>427</b>	421

**Environment, health and safety performance**



- **Enbridge Consumers Gas was honored at the 2001 Financial Times Global Energy Awards with the *Environmental Practice of the Year Award*, recognizing the company's "commitment to putting sustainable development principles into action with measured and impressive results."**
- **Enbridge Inc.'s 2001 Update Report to Canada's Climate Change Voluntary Challenge and Registry was recognized with a gold champion level reporting award.**
- **With the launch of the SunBridge Wind Power Project, Enbridge added wind power to its portfolio of emerging and renewable energy technologies.**
- **Despite continued system expansion, Enbridge had 29% fewer spills than in 2000, and 38% fewer than in 1999.**
- **Employee lost-time injury frequency was up 11% over 2000, but overall has improved 31% since 1997. Employee total recordable injury frequency was up 18% over 2000, but overall has improved 14% since 1997.**
- **Enbridge was selected as a member of the Dow Jones Sustainability Index for 2002. The index recognizes companies from around the world for their commitment to the principles of sustainable development.**



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## MESSAGE FROM THE PRESIDENT & CHIEF EXECUTIVE OFFICER



*Patrick D. Daniel, President & Chief Executive Officer*

This, Enbridge's second environment, health and safety annual report, is part of our commitment to excellence in implementing standards that not only comply with government and regulatory requirements, but also respond to social, economic and environmental expectations of our shareholders, customers, business partners, and the communities where we live and work. We believe that prevention of accidents and injuries, and protection of the environment benefits everyone – and delivers increased value to our shareholders.

From a financial and operational perspective, 2001 was an excellent year for us. We made significant progress on expanding our North American footprint, and I believe our achievements were particularly noteworthy given the backdrop of events that occurred – specifically, the tragedy of September 11 and the collapse of Enron.

September 11 has changed the world and how individuals and organizations view that world. As the owner and operator of strategically important energy delivery assets in North America, we have always been security conscious. Now we are even more so. The Enron experience has also had an impact. It has reinforced the recognition that publicly traded companies must be open, understandable and transparent in day-to-day operations, and in reporting to stakeholders.

Enbridge has long had a reputation as a good neighbour, a socially responsible corporate citizen, and a company with very transparent financial reporting. In 2001 we took some significant steps to be even more transparent in all aspects of our business reporting – including publication of our first environment, health and safety annual report.

We also took specific steps to enhance our environment, health and safety performance in all aspects of our operations. The following are just a few of our achievements:

- We integrated the operations and the environment, health and safety activities for our crude oil and liquids mainline in Canada and the United States. This provides for greater efficiencies and coordination of safety and environmental protection programs.
- We continued to address the challenge of climate change, and in 2001 our emissions intensity in Canada – the amount of greenhouse gas emissions per unit of energy delivered – was 49% lower than 1990 levels.
- We added environmentally friendly wind power to our portfolio of emerging and renewable energy technologies, partnering with Suncor Energy to build 17 wind turbines in Saskatchewan for the SunBridge Wind Power Project.
- Last year we updated and strengthened our Statement on Business Conduct that all employees read and sign as a condition of employment. The statement clearly spells out our commitment to ethical, honest conduct; fair treatment of employees and all stakeholders; human rights; and safety and environmental protection. Early in 2002, we adopted the internationally recognized Voluntary Principles on Security and Human Rights, which deal with responsible corporate action in “zones of conflict” and are very relevant to our business involvement in Colombia. We have appended the Voluntary Principles to our Statement on Business Conduct, strengthening an already strong code of conduct.

All of these achievements enhance our corporate culture and will assist us to continue to operate openly, safely, and in an environmentally responsible manner, while continuing to grow our businesses.

A handwritten signature in blue ink, appearing to read 'P. Daniel'.

Patrick D. Daniel  
President & Chief Executive Officer  
June 10, 2002

# CORPORATE PROFILE

Enbridge Inc. is a leader in energy transportation and distribution in North America and internationally. We operate the world's longest crude oil and liquids pipeline, and we own and operate Canada's largest natural gas distribution company.

Our energy delivery systems deliver products that provide fuel for transportation, heat for homes and the resources to manufacture a wide range of consumer products.

Enbridge is organized into four business units:



## ENERGY TRANSPORTATION NORTH

The Energy Transportation North business unit includes the company's Canadian energy transportation assets. The business unit also operates the U.S. portion of our crude oil pipeline systems, including the Lakehead System and North Dakota System owned by Enbridge Energy Partners, L.P.

Enbridge Pipelines transports crude oil and other liquid hydrocarbons in Canada, and together with the Lakehead System delivers more than 2 million barrels per day to customers in Eastern Canada and the U.S. Midwest. The combined systems span 5300 kilometres (3,300 miles) of pipeline across North America.

Enbridge also owns and operates feeder pipelines that connect to the common carrier mainline. These include the Enbridge Athabasca pipeline and terminal facility, which connects the oil sands and heavy oil deposits of northeastern Alberta to the Enbridge mainline; a crude oil pipeline from Norman Wells, Northwest Territories, which was the first buried crude oil pipeline to be constructed through permafrost in Canada's North; and the Enbridge Saskatchewan System, which gathers crude oil from Saskatchewan and southwestern Manitoba.

We have a 21.4% interest in the Alliance Pipeline, which transports liquids-rich natural gas from Fort St. John, British Columbia, to Chicago, Illinois. We also own 45% of and provide operating services to the Vector Pipeline, which transports natural gas from Chicago to Dawn, Ontario.

## ENERGY TRANSPORTATION SOUTH

Energy Transportation South includes our U.S. energy transportation assets. The business unit, which is based in Houston, Texas, includes Enbridge Energy Partners, L.P., which is approximately 12.9% owned by Enbridge. Enbridge Energy Partners owns the Lakehead System, which is the U.S. portion of Enbridge's integrated crude oil mainline system, as well as the North Dakota System, which feeds into the Lakehead System and is also connected to the Enbridge Saskatchewan System.

Energy Transportation South also includes Enbridge Midcoast Energy, Inc., and Enbridge's interests in several other crude oil pipeline systems connected to the Lakehead System or, in the case of the Frontier Pipeline, serving other key U.S. markets.

The 2001 acquisition of Midcoast Energy Resources provided us with a platform for expanded U.S. growth. It also added natural gas transportation, gathering, processing and marketing assets primarily in the U.S. Gulf Coast and Midcontinent regions. Additional natural gas delivery assets have also been acquired in Texas.

## ENERGY DISTRIBUTION

Enbridge owns and operates Canada's largest natural gas distribution company, which serves more than 1.5 million customers in parts of Ontario, Quebec and New York State. We are also developing a natural gas distribution network in New Brunswick, and we manage and have a one-third interest in a distribution system supplying Inuvik, Northwest Territories, with northern natural gas. Through our 32% interest in Noverco Inc., we also have an interest in Gaz Métropolitain, which distributes natural gas in Quebec and Vermont.

## INTERNATIONAL

Enbridge International is responsible for Enbridge's international investments. We have a 24.7% interest in and operate OCENSA, a crude oil pipeline in Colombia. We also have a 25% interest in Compañía Logística de Hidrocarburos CLH, S.A., Spain's largest refined products transportation and storage business. Enbridge Technology provides consulting and technology transfer services in countries around the world, including a contract to operate the Jose crude oil marine terminal in Venezuela.

## CORPORATE INFORMATION

Enbridge common shares trade on The Toronto Stock Exchange in Canada and the New York Stock Exchange in the U.S. under the trading symbol ENB. Enbridge Energy Partners common units trade on the New York Stock Exchange under the trading symbol EEP.

Additional information on our businesses is provided in the Enbridge Inc. 2001 Annual Report and on our website at [www.enbridge.com](http://www.enbridge.com).

## POLICIES, ORGANIZATION AND MANAGEMENT SYSTEMS



*We recognize the business value of responsible environment, health and safety (EH&S) performance. Our focus is to conduct all our activities in cost-effective ways that enhance operational and EH&S excellence.*

### **Policies**

Our commitment to environment, health and safety excellence is based on our EH&S policy, which sets our goals as having no incidents and causing no harm to the environment. This policy defines the company's position on EH&S issues and what is expected of all employees in carrying out the policy.

The year 2001 was a time of significant transformation for our organization. During this period, our policy continued to guide the company as it adapted to change.

We expanded our business presence in the United States and established Energy Transportation South, moving our U.S. headquarters from Duluth, Minnesota, to Houston, Texas.

We also delivered natural gas to our first customers in New Brunswick through Enbridge Gas New Brunswick. These businesses adopted our corporate EH&S policy and are developing plans to meet internal EH&S standards.

As we continue to integrate these and other businesses into the Enbridge group of companies, our challenge will be to build on existing best practices and to identify further improvements. Our objective is to achieve consistent EH&S performance, while recognizing that different business needs and regulatory requirements will call for different local programs.

## Environment, health and safety policy

Enbridge Inc. is committed to the protection of the health and safety of our employees and the general public, and to sound environmental stewardship. We believe that prevention of accidents and injuries and protection of the environment benefits everyone, and delivers increased value to our shareholders, customers and employees.

**Our goal is to have no accidents and to cause no harm to the environment. To achieve this, we will:**

- consult openly with our customers, neighbors, employees and partners, work with our regulators, industry peers and other partners to promote responsible environmental, health and safety performance.
- strive for continuous improvement, with all Enbridge operations establishing business-specific policies compatible with this policy, setting measurable targets and reporting on performance.

**This commitment is a shared responsibility involving the corporation, our subsidiaries, employees and contractors.**

**To this end:**

- Enbridge will conduct business in a manner that recognizes health and safety management as an integral part of our activities, and that promotes pollution prevention and resource conservation to achieve environmental sustainability.
- Employees are responsible for conducting their activities in a manner that makes health, safety and environmental management a primary part of their daily activities.

### Organizational structure and responsibilities

Enbridge's activities are diverse, but share a common commitment to ensuring the highest standards of health, safety and protection of the environment. This commitment extends from our Board of Directors to all employees.

The Board of Directors' EH&S Committee is responsible for providing strategic direction and oversight for our EH&S practices. To oversee overall performance, the committee receives and reviews annual and periodic performance reports from our business groups.

Senior management EH&S committees in Energy Transportation and Energy Distribution are responsible for establishing and communicating EH&S policy and strategic commitment across these businesses.

Our EH&S departments, based in Edmonton, Toronto, Houston and Duluth, develop corporate EH&S standards and provide expert advice on their application. Our 36 full-time EH&S professionals work with staff in regional offices to support our daily operations. All of the company's more than 4,000 employees have a role in supporting and attaining our EH&S objectives.

In 2001, Energy Transportation North consolidated its Canadian and U.S. (Lakehead and North Dakota systems) EH&S departments and added environmental responsibilities to its eight regional health and safety committees. Comprised of management and employees, the committees provide a forum for sharing best practices and examining new ways to integrate EH&S activities into daily operations. Similar EH&S committees operate in Energy Distribution's 10 regional offices.

### Management systems

Enbridge has developed and implemented comprehensive EH&S management systems. This framework provides a set of documented principles and systems to assist our employees in meeting regulatory standards and achieving best practices, and establishes a base from which individual business units develop specific programs and procedures.



These systems are continually reviewed to reflect changes in our business and the regulatory environment as well as new approaches to EH&S management.

Every five years Energy Transportation North conducts an in-depth review of its environmental management system. Last year, the system was revised to ensure it reflects industry best practices and remains aligned with the ISO 14001 standard for environmental management systems.

The EH&S management system of Energy Distribution is also aligned with the same standard.

We are continuing to integrate EH&S management systems in Energy Transportation South. While the nature of our newly acquired natural gas midstream systems is different than our liquids pipelines, we will strive to build on existing Enbridge programs and to leverage our expertise in formal safety programs and processes.

We incorporate EH&S standards appropriate to our international operations. Employees at the OCENSA pipeline in Colombia and the Jose Terminal in Venezuela receive guidance and assistance from Enbridge in developing EH&S procedures.

## Reviews and inspections

We conduct internal reviews to evaluate the status of EH&S performance at our facilities. These range from monthly facility inspections to broad comprehensive system reviews every five years. The reviews are a means of assessing whether our management and staff are performing their jobs in accordance with regulations, permits, operating approvals and corporate standards.

A final report of each review is forwarded to the regional manager and senior management for their review. Each area is responsible for developing and implementing a corrective action plan to address any deficiencies identified during the review.

In 2001, we conducted 18 internal reviews of our operations in Canada and the United States. These included:

- an environmental review of Enbridge Pipelines (Saskatchewan).
- a due diligence evaluation of Enbridge Midcoast Energy facilities against state and federal air quality regulations.
- EH&S audits of two Ontario regions of the Enbridge Consumers Gas System.
- a safety audit of the Enbridge NW System.

No significant compliance issues were identified in any of the reviews.

Routine environmental and safety audits and inspections of our operations are also carried out by local regulatory agencies.

In 2001, the U.S. Department of Transportation, Office of Pipeline Safety carried out a comprehensive safety audit of the Lakehead System. The audit reviewed safety conditions, system operations and maintenance, public education activities, and facility security. No significant compliance issues were identified.

Inuvik Gas facilities and pipeline right-of-way were also inspected by regulatory agencies to ensure the project is operated in a technically sound, safe and environmentally acceptable manner. No significant issues were identified.



Enbridge Commercial Services' fleet and equipment department, which services our vehicles and construction equipment in the Toronto area, is the first Enbridge business unit to apply for ISO 14001 certification. In 2001 and early 2002, an Enbridge audit team, together with external consultants, reviewed the department against ISO 14001 requirements. In 2002, the department was audited by SGS International and successfully qualified for ISO 14001 registration.

### Major incidents

Major incidents are EH&S incidents that result in a critical employee injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.

Throughout our operations, Enbridge experienced eight major incidents in 2001, compared with three in 2000 and eight in 1999. Of this total, seven involved liquid spills in excess of 100 barrels. Another involved an unauthorized discharge of drilling mud during pipeline construction.

### Regulatory compliance

Enbridge's operations are subject to extensive national, provincial, state and local EH&S rules, regulations and laws. We monitor compliance with these requirements through regular reviews and inspections.

Our goal is full compliance with government regulations and corporate guidelines. While we generally meet or exceed these requirements, occasionally there are facility failures or human errors that result in non-compliance. Enbridge's system of reviews and inspections, as well as follow-up review of recommended corrective measures, ensures the company maintains a high level of regulatory compliance.

Last year, there were nine regulatory notifications for EH&S issues across the company:

- Energy Transportation North received a warning letter from Environment Canada for a PCB storage permit contravention at our Sarnia Terminal. Corrective action was taken to address this requirement.
- Four notifications occurred in our new business acquisitions in Energy Transportation South and were largely the result of historical issues and practices. We are taking action to integrate these businesses with our existing Enbridge EH&S standards and systems, where appropriate. In 2002, we will provide supplemental training to our employees and continue our internal review programs to reinforce effective EH&S practices and regulatory compliance.
- Energy Distribution received four orders from the Ontario Ministry of Labor. Of the four, three were for minor administrative requirements and one concerned a traffic safety procedure. All were corrected within the required timeframe.

We incurred regulatory fines totaling approximately US\$46,000. A penalty of US\$15,000 was incurred by Energy Transportation South for an unauthorized discharge of drilling mud during construction of the Enbridge Pipelines (Bamagas Intrastate) System in Alabama. Two penalties totaling US\$30,000 were also incurred for submitting late reports on a pipeline spill and a natural gas release in Louisiana.

## ENVIRONMENTAL PERFORMANCE



*Enbridge is committed to sound environmental stewardship, and to the belief that protecting the environment benefits everyone. To that end, the company operates in an environmentally responsible manner and integrates environmental planning into its various North American and international operations and projects.*

### AIR

#### Greenhouse gases

Climate change is an issue of significant public concern and business risk. Enbridge shares this concern and believes that industry, working with government and other stakeholders, should take voluntary action to identify and implement innovative and cost-effective solutions.

The implementation of greenhouse gas reductions is affected by government policies in the countries in which we operate. In Canada, we have instituted measures to track greenhouse gas emissions as a participant in Canada's Climate Change Voluntary Challenge and Registry (VCR). In the United States, we have invested significantly in energy efficiency measures and emission controls, and are evaluating our future approach to emission tracking against internal policies and government requirements.

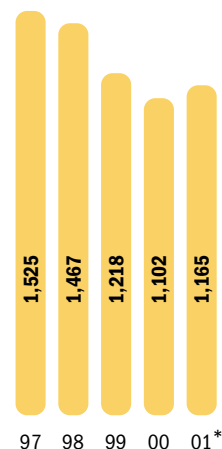
Approximately 66% of Enbridge's annual greenhouse gas emissions in Canada result indirectly from electricity consumed to operate our energy transportation and distribution systems. The remainder is produced directly from the use of equipment to drive product through our systems and the release of fugitive methane emissions from natural gas pipes and facilities.

We are committed to minimizing Enbridge's greenhouse gas emissions while continuing to meet customer demand for energy. For this reason, we have set a corporate target to reduce direct emissions from our operations to 20% below 1990 levels by 2005. This target exceeds the Canadian commitment to the Kyoto Protocol.

Our climate change action plan, submitted annually to VCR Inc., outlines a comprehensive approach for achieving this target through internal efficiencies, demand-side management programs, development of alternative and renewable energy, and greenhouse gas offsets. These activities are described further in our latest update to VCR Inc., which provides a consolidated report on the progress of our Canadian operations in 2000 (for more information, visit VCR Inc.'s website at [www.vcr-mvr.ca](http://www.vcr-mvr.ca)).

### Greenhouse Gas Emissions Canadian Operations

(thousand tonnes of CO<sub>2</sub> equivalent)



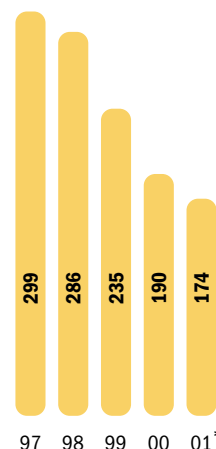
Greenhouse gas emissions in 2001 from our Canadian group of companies were 18% below 1990 levels.

Source: 2001 VCR Update Report

\* Forecast

### Greenhouse Gas Emission Intensity Canadian Operations

(tonnes of CO<sub>2</sub> equivalent/ petajoules of energy delivered)



Emission intensity in 2001 from our Canadian operations was 49% lower than 1990 levels.

Source: 2001 VCR Update Report

\* Forecast

Our actions to address climate change include:

- *increasing the efficient use of electricity* – We continued to improve energy efficiency in our energy transportation systems through pipeline expansions, system enhancements and conservation measures. In 2000, our Terrace pipeline expansion projects saved an estimated 800 gigawatt-hours of electricity in Canada, reducing indirect emissions by more than 400,000 tonnes of carbon dioxide (CO<sub>2</sub>) equivalent.
- *reducing fugitive emissions* – Our largest source of direct emissions of methane is leaks due to pipeline corrosion in older cast iron pipes in the Enbridge Consumers Gas System. We constantly improve pipeline construction techniques and materials in ways that conserve product and reduce emissions. In 2000, our program to replace cast iron pipe in the system with corrosion-free polyethylene pipe saved the equivalent of 96,000 tonnes of CO<sub>2</sub>.
- *helping customers save* – Enbridge Consumers Gas provides demand-side management (DSM) programs that encourage and enable customers to use natural gas more efficiently.

Since 1995, our DSM programs have resulted in “avoided” emissions of approximately 900,000 tonnes of CO<sub>2</sub>.

- *developing alternative and renewable energy* – In southwestern Saskatchewan, we partnered with Suncor Energy to build the province's first wind power project. The project is expected to result in “avoided” emissions of about 30,500 tonnes of CO<sub>2</sub> every year.

In 2000, we released 1.1 million tonnes of CO<sub>2</sub> equivalent from our Canadian group of companies, compared with 1.2 million tonnes in 1999 and 1.5 million tonnes in 1997. This total was 18% below 1990 levels, even though these companies delivered 48% more product to meet growing consumer demand.

Each year, as part of preparing our VCR report, we review our progress toward our greenhouse gas targets. This progress and the climate change actions of the Enbridge group of companies are reviewed by our Climate Change Task Force, which includes representatives from across the corporation. This task force provides strategic direction to climate change activities throughout Enbridge.



### Environmental awards

Enbridge Consumers Gas received the *Environmental Practice of the Year Award* at the 2001 Financial Times Global Energy Awards, which recognize the most outstanding accomplishments of the international energy industry. The company was honored for the long-standing nature, diversity and sustainability of its environmental practices, and its “commitment to putting sustainable development principles into action with measured and impressive results.”

Enbridge also received the *EnerGreen Award* for financial and volunteer contributions to the EnerGreen Foundation, a non-profit organization that fosters the development of renewable and alternative energy projects with positive social and environmental impact.

Early this year, Enbridge’s 2001 Update Report to Canada’s Climate Change Voluntary Challenge and Registry was recognized with a gold champion level reporting award. The report received a rating of 96 out of a possible 100 marks on items such as senior management support, setting targets for greenhouse gas emission reductions, results achieved and public education on climate change issues.

### Alternative and renewable energy

Enbridge is developing and applying emerging energy technologies, including alternative and renewable energy sources, which have the potential to enhance our competitive advantage while providing environmental benefits. Currently our actions are focused on wind power and fuel cells.

#### Wind power

Last year, we partnered with Suncor Energy to build and commission a \$22-million wind power project at Gull Lake, Saskatchewan. The SunBridge Wind Power Project’s 17 turbines generate more than 11 megawatts of electricity, or enough to power 6,000 homes. The project is expected to increase Canada’s wind power generation by approximately 10%. Enbridge has a 50% interest and operates the facility.

As part of the regulatory approval process, the companies conducted a detailed environmental and socio-economic assessment, and are committed to ongoing monitoring of the project’s environmental impacts.

We continue to examine opportunities to invest in or purchase electricity from wind power projects in Canada and the United States.

Enbridge Consumers Gas is a member of the Toronto Renewable Energy Co-operative (TREC), a non-profit environmental organization developing renewable energy projects. In 2002, TREC, in a joint venture with Toronto Hydro, will commission the first wind turbine on the city’s waterfront. Enbridge Consumers Gas will purchase green energy from the turbine, helping to support development of renewable energy locally.

#### Fuel cells

We are partnering with Calgary-based Global Thermoelectric in a program to develop solid oxide, natural gas-powered fuel cells for the residential market. The units are designed to derive hydrogen from natural gas and to produce electric power and heat with high efficiency and with lower greenhouse gas emissions.

In 2001, a 2.3-kilowatt prototype was tested at Enbridge Consumers Gas laboratory facilities in Toronto. (The base load of an average home is approximately two kilowatts.) Further tests will be carried out on new units in 2002 as part of product development.



### Clean Air Renewable Energy Coalition

In the past, renewable energy markets have been limited in Canada due to low demand, high costs and marginal economics. This can be changed through the introduction of new policies that support the emerging alternative and renewable industry.

In 2001, Enbridge joined the Clean Air Renewable Energy (CARE) Coalition, an alliance of companies, environmental interest organizations and municipalities working together to promote government tax incentives to stimulate supply and demand for renewable energy.

### Local air quality

Reducing vehicle emissions is a key priority in improving air quality issues in large urban areas. Improvements in transportation technologies and fuel use reduce smog-forming emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) while helping companies to manage fuel costs. These actions also provide other environmental benefits by decreasing CO<sub>2</sub> and sulphur dioxide (SO<sub>2</sub>) emissions.

To encourage the purchase and use of natural gas, the Better Transportation Partnership Program was established with the City of Toronto, in which Enbridge Consumers Gas pays for one factory-built natural gas vehicle (NGV) for every four NGVs purchased by the city. Last year, the program replaced 100 vehicles in the city's gasoline-powered fleet. Federal government emission studies show that, compared with gasoline-powered counterparts, the vehicles produce 43% less NO<sub>x</sub>, 93% less VOCs, 63% less SO<sub>2</sub> and 23% less CO<sub>2</sub>.

As well, the company provides incentives to Toronto's taxi industry to adopt NGV taxis. Since 1999, this has led to over 400 dedicated NGV taxis in service in the city, reducing CO<sub>2</sub> emissions by more than 5,000 tonnes each year.

In 2001, Energy Distribution issued the Enbridge Fleet Challenge to other companies operating fleet vehicles in the Greater Toronto Area to reduce fleet fuel consumption by 20% from September 2001 to February 2002. We adopted a variety of measures, such as reducing vehicle idling time and monitoring vehicle speeds, to lower fuel consumption and associated emissions.

Throughout Ontario, Enbridge companies operate more than 1,300 vehicles, of which 800 can use natural gas. We encourage our vehicle operators to use natural gas, wherever possible. Enbridge Consumers Gas has established an internal operating target to have fleet vehicle operators using natural gas 80% of the time.

Enbridge promotes the use of natural gas as an environmentally preferred fuel in existing and new markets. In 2001, Enbridge Gas New Brunswick began delivery of gas to its first customers. The use of natural gas will allow them to generate lower levels of SO<sub>2</sub> and CO<sub>2</sub> per unit of energy than other traditional energy sources in New Brunswick.

Enbridge recognizes that we generate emissions that may contribute to local air quality issues in the vicinity of our facilities. At Hardisty, Alberta, we operate a pipeline terminal as part of the Enbridge System. Since the 1990s, there has been public concern over odor issues associated with hydrogen sulphide (H<sub>2</sub>S) emissions from local oil and gas operations. Last year, we worked with industry to develop H<sub>2</sub>S emission limits for facilities in the Hardisty industrial complex. These are currently under regulatory review.

We continue to monitor changes in air quality regulations in Canada and the United States. In 2001, new state environmental guidelines for "grandfathered" gas processing facilities went into effect in Texas. Energy Transportation South is assessing its facilities to ensure compliance. To date only one facility, the Tilden Plant, is subject to this new rule. The plant's SO<sub>2</sub> emissions will be significantly reduced to meet this rule over the next five years.

**LAND**

**Spills**

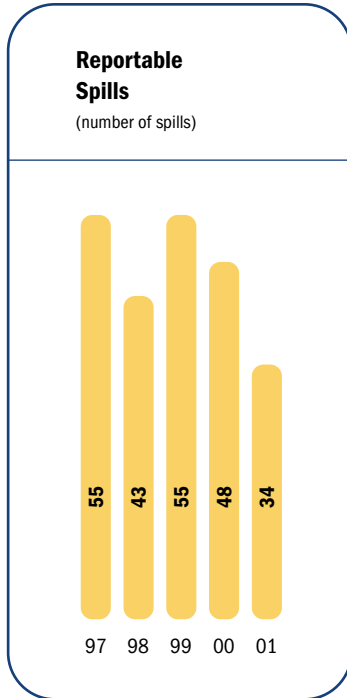
Enbridge's goal is to prevent all spills from our energy transportation and distribution systems. Working with this goal in mind, we carry out spill prevention and detection procedures by continual monitoring of pipeline integrity, day-to-day maintenance activities, training and computerized control systems. Our communication programs are designed to keep property owners and neighbors along our rights-of-way informed about our operations and to enlist their help in effective prevention, detection and safe response to pipeline spills.

Despite our best efforts to prevent spills, mishaps still occur. In 2001, Enbridge reported 33 spills from our liquids pipeline systems in Canada and the United States, for a total volume of 4,130 cubic metres (25,980 barrels) spilled. Approximately 96% of the total was recovered. We also reported a minor spill of brinewater from an oil well near Corunna, Ontario.

In each case, emergency response procedures effectively contained the spills, minimizing environmental impacts. We also worked in consultation with regulatory agencies, landowners and other concerned parties to develop remediation and monitoring plans, and took corrective actions to prevent similar incidents from occurring in the future.

Significant reportable spills during the year included:

- **Hardisty, Alberta (January 17):**  
Approximately 3,800 cubic metres (23,900 barrels) of crude oil were released on land and a nearby slough after a seam failure on the Energy Transportation North pipeline near our Hardisty Terminal. Nearly 74,000 tonnes of contaminated soil were collected and thermally treated at the terminal.



- **Satartia, Mississippi (February 13):**  
Approximately 16 cubic metres (100 barrels) of crude oil were released from the Enbridge Pipelines (Midla) Inc.'s Tinsley System after a farmer's implement contacted the pipeline. A dike was built to protect a nearby river. Nearly all crude oil was recovered, and contaminated soil was treated on site.
- **Fairbanks, Louisiana (September 3):**  
Approximately 7 million cubic feet of natural gas and 68 cubic metres (428 barrels) of an oily mixture were released from the Enbridge Pipelines (Midla) System. Contaminated liquids were removed, contaminated soil was treated on site, and a small creek was cleaned up.
- **Binbrook, Ontario (September 29):**  
Approximately 95 cubic metres (598 barrels) of crude oil were released from the Energy Transportation North System. Contaminated soil was removed, and continuous air monitoring was put in place to ensure the safety of our workers and the general public.

**Site protection and remediation**

We are diligent in assessing the impact of liquid pipeline spills and have a program to assess historic leak sites to ensure that past cleanup efforts meet today's standards. Throughout Canada and the United States, we conduct programs to assess these sites for potential environmental impacts, and take corrective action, as needed.

Since 1994, we have reviewed historic leaks on the Lakehead System. Last year, 17 locations were assessed. In some instances, additional testing or remedial actions were employed to address residual contamination. We plan to complete this multi-year program in 2002.

We also inspected 13 stations and terminals on the system for historic contamination. This involved a review of past leak history and surrounding land use, as well as groundwater monitoring and testing. In 2001, we identified trace amounts of oil contamination in groundwater near Rapid River, Michigan, and Cass Lake, Minnesota. Additional tests are being carried out to further assess these sites and confirm that drinking water resources are not affected.

Historic releases and risks posed by the company's facilities continue to be assessed in Canada. Currently we are working to remediate six historic spill sites, which have been identified through our risk assessment process. Since the mid-1990s, we have also inspected pipeline terminals and stations for historic contamination. Last year, we inspected and established groundwater monitoring at the Cardinal, Ontario, station.

In 2001, Enbridge Consumers Gas remediated one gate station at Markham, Ontario, where contamination has occurred as a result of historic practices. We also plugged and abandoned one oil well, discontinued due to uneconomic production levels, at Tecumseh Gas Storage Operations near Sarnia, Ontario. Approximately 50 cubic metres (65 cubic yards) of soil were removed. The site was reclaimed and returned to agricultural use.

### Land use and biodiversity

Before building new pipelines or facilities, we undertake in-depth environmental assessments to reduce our impacts to agricultural lands and ecological resources, including wildlife habitat, wetlands, streams and rare plants. Based on these assessments, we develop plans to minimize our environmental impact.

In 2001, we demonstrated this in a number of ways:

- We consulted with the Canadian Wildlife Service to minimize impacts to wildlife during construction of Phase II of the Terrace pipeline expansion program between Hardisty, Alberta, and Kerrobert, Saskatchewan. As compensation for potential impacts to bird habitat, we provided funding to the Nature Conservancy of Canada and the Alberta Conservation Association for the development of conservation projects in Alberta.
- We carried out environmental assessments and public consultation to support Phase III of the Terrace pipeline expansion program between Clearbrook, Minnesota, and Superior, Wisconsin. In December 2001, work began on segments near Deer River and Floodwood, Minnesota, and within the Chippewa National Forest. By carrying out construction during the winter months, we minimized impacts to wetland areas, fish habitat and a recreational trail area in the forest.
- We implemented erosion and sediment control measures to minimize disturbance to nearby wetlands during construction of our gas distribution system in New Brunswick.
- Prior to construction of the SunBridge Wind Power Project in Saskatchewan, we completed wildlife and rare plant surveys to identify and protect sensitive areas.

Through a partnership established in 1997 with the Canadian Wildlife Service, Energy Transportation North has participated in a conservation project at Lake Diefenbaker, Saskatchewan, to assist in recovery of the endangered Piping Plover. We supported the recovery effort in 2001 by funding a portion of the third International Piping Plover Census.

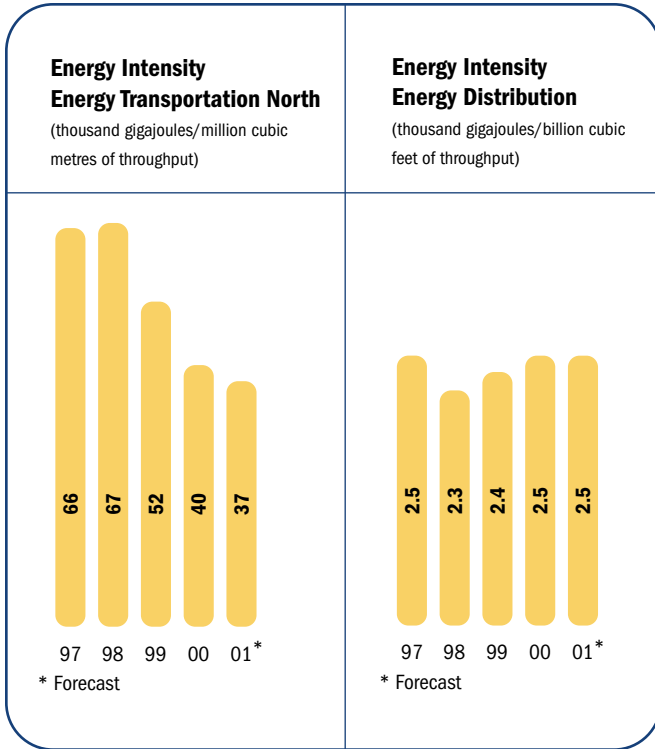
Enbridge International and its partners sponsor community reforestation programs in Colombia along the OCENSA pipeline right-of-way. To date, more than 1,200 hectares (3,000 acres) of trees have been planted.

### WATER MANAGEMENT

We continually evaluate our facilities and procedures to ensure adequate controls are in place to protect local water quality. We also follow strict operating practices to safely manage surface water run-off at major facilities and during pipeline construction.

We use water to hydrostatically test the integrity of new pipeline facilities before putting them into service. As well, we periodically need to hydrostatically test existing pipelines that have previously transported liquid petroleum or natural gas. We properly acquire, store and treat test water before returning it to water sources.

Last year, as a result of hydrostatic testing, our total water intake was approximately 177 million litres (38.9 million gallons).



**WASTE MANAGEMENT**

Most of Enbridge’s waste streams are non-hazardous and include packaging materials, paper, construction and demolition waste, scrap metals and hydrocarbon-contaminated soil. We have developed waste management programs at each of our locations to reduce the amount of non-hazardous waste.

Last year, Enbridge Consumers Gas generated approximately 470 tonnes of non-hazardous waste, a 50% decrease from 2000 levels. This decrease was largely due to completion of the company’s building renovation program and ongoing recycling programs. Approximately 8% of total waste was diverted from landfills by recycling materials such as paper, scrap metals and tires.

Energy Transportation North collected approximately 110 tonnes of recycled material, including office paper, aluminum and glass. The business also provided employees with information on waste reduction opportunities in the workplace and at home.

Our operations have programs and plans in place to safely manage and dispose of hazardous wastes. Within our energy transportation businesses, most hazardous waste consists of used lubricating oils and solvents. The majority of hazardous waste in Energy Distribution is used oils, vehicle antifreeze and odorant, which is added to natural gas in small quantities for public safety. These materials are removed and sent to an appropriate treatment or disposal facility.

Polychlorinated biphenyls (PCBs) are synthetic chemicals that were once used as insulating fluids in transformers and other electrical equipment. All PCB-containing equipment has been removed from the Energy Transportation North System, and approximately 80% of the PCB inventory has been sent to an approved facility for incineration.

**ENERGY USE**

Our liquid pipeline transportation systems in Canada and the United States primarily use electricity, while our natural gas gathering and transmission systems primarily use natural gas as fuel. Our Energy Distribution System in Ontario is powered by electricity and natural gas. Diesel fuel is used to drive pumps in remote locations along the Enbridge NW System.

We have continued to increase the efficient use of energy within our energy transportation and distribution systems. From 1997 to 2001, energy intensity in Energy Transportation North has improved 44% and has remained constant in Energy Distribution.

Since the cost of energy is among the largest expenses the company incurs, we continue to search for innovative approaches to conserving energy resources. Electricity use, for example, in our Enbridge Consumers Gas administrative and warehouse buildings in Ontario totaled 176,000 kilowatt-hours, a decrease of approximately 11% since 1998. Contributing factors were the installation of more efficient lighting and upgrades to air conditioning and heating equipment. Energy conservation measures during this period saved the company more than \$600,000 in operating costs.

The Incentive Tolling Settlement for Enbridge Pipelines provides commitments and incentives to reduce energy costs, and to year-end 2001 after-tax power cost savings totalled approximately \$5 million. Enbridge’s power consumption savings through efficiency initiatives were approximately 98 gigawatt-hours in 2001.



## DEMAND-SIDE MANAGEMENT

Energy efficiency is an effective way of reducing environmental impacts associated with the use of energy. In addition, doing more with less is an important means of enabling customers to save energy costs and to ensure valuable resources are used in a sustainable manner.

Enbridge Consumers Gas provides demand-side management (DSM) programs that encourage and enable customers to use energy more efficiently, including:

- the installation of energy conservation measures in the home
- customer rebates for energy-saving home heating equipment
- energy audits and incentives to encourage businesses to use energy-efficient technologies when replacing commercial equipment and retrofitting buildings
- financial incentives to encourage the adoption of energy-saving equipment in industrial facilities

In 2001, Enbridge Consumers Gas continued to expand its programs with energy-saving measures for the greenhouse industry and a construction heater program. These and other DSM programs resulted in gas savings during the year of approximately 94 million cubic metres of natural gas, or enough to supply 25,000 homes.

Preliminary estimates of 2001 results indicate that more than 2 million tonnes of CO<sub>2</sub> will be reduced over the lifetime of the programs together with NO<sub>x</sub> and sulphur oxide (SO<sub>x</sub>) emission reductions of 2,000 and 1,500 tonnes respectively.

## VEHICLE TRANSPORTATION

Our operations have two primary road transportation impacts: vehicle travel to facilities in our energy transportation and distribution businesses in Canada and the United States, and trucking services for natural gas liquids and petrochemical products in the United States. This report does not include figures for our trucking services business, which was acquired midway through last year.

In 2001, fleet vehicles in our energy transportation and distribution businesses in Canada and the United States traveled 46 million kilometres (29 million miles) and consumed 4.5 million litres (990,000 gallons) of gasoline. Operation of these vehicles produced an estimated 10,900 tonnes of CO<sub>2</sub> equivalent.

We continually review methods to improve fuel consumption by our vehicle fleets. Last year, Enbridge Consumers Gas encouraged efficiency measures such as reducing vehicle idling time and monitoring vehicle speeds to lower fuel consumption.

## HEALTH AND SAFETY PERFORMANCE



*The health and safety of our workers is paramount in the conduct of our business and is Enbridge's highest priority. We believe that all incidents and injuries are preventable and all employees are accountable for creating a safe and healthy workplace. Our goal is to have no incidents.*

### Safety statistics

Lost-time injury frequency (LTIF) and total recordable injury frequency (TRIF) are two measures of safety performance commonly used in industry.

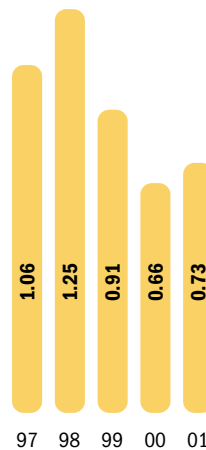
As the charts show, our employee LTIF rate has improved 31% since 1997 while our employee TRIF rate has improved 14% during the same period. Last year, our LTIF and TRIF rates increased 11% and 18% respectively from 2000 levels.

### Fatality

We deeply regret that, in 2001, a contractor company employee was fatally injured during construction of the Enbridge Gas New Brunswick System. This accident occurred during a rollover of heavy equipment. Both Enbridge and regulatory authorities investigated the incident. As a result of

#### Lost-time Injury Frequency

(employee lost-time injuries/  
200,000 hours worked)



the external regulatory investigation, no prosecutions resulted. The investigation led to recommendations regarding operator training and seatbelt use.

### Health and safety training and awareness

Our employees on average received approximately 12 hours of EH&S training during the year. This included new employee orientations, health and safety meetings, information on safety management processes, regulatory updates, driver safety training and emergency drills.

We also provided safety training to contractors involved in Phases II and III of our Terrace pipeline expansion programs, and in construction of the Enbridge Pipelines (Bamagas Intrastate) System in Alabama.

## Workplace safety

We continually look for new opportunities to enhance health and safety awareness and training for our employees and contractors.

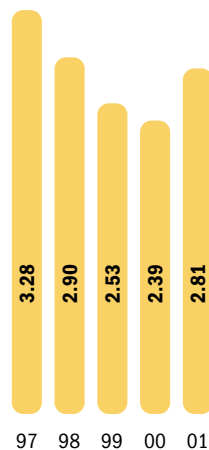
Since 2000, a team of employees has worked in Energy Transportation North to identify opportunities for improved safety performance. Last year, this led the business to adopt a new system of health and safety performance objectives. The system promotes safe behaviors in a range of activities, including regulatory compliance, health and wellness, assessment of workplace hazards and contractor safety.

In early 2002, we issued a report to employees on our performance against these objectives – indicating the substantial attainment of all objectives.

Energy Distribution's 10 regional Joint EH&S Committees are a forum for EH&S education and leadership among employees. A total of 80 committee members received workplace hazard training to update their knowledge of EH&S issues and to meet regulatory requirements under the Ontario Workplace Safety Insurance Board.

### Total Recordable Injury Frequency

(employee recordable injuries/  
200,000 hours worked)



Energy Transportation South views employee health and safety training as essential to promoting consistent EH&S practices throughout its diverse businesses. During the year, the business provided more than 700 hours of EH&S training to plant and pipeline employees. Approximately 100 field and trucking staff took part in classroom and computer-based training sessions on safety and environmental regulations and procedures.

## Ergonomics

Ergonomics involves the study of injuries resulting from excessive muscle force, repetitive work and physical stresses caused by the work environment. Effective ergonomic programs increase worker health and safety while contributing to productivity.

In 2001, Energy Transportation North introduced an ergonomic assessment process to better identify and prevent work-related issues among Edmonton office employees. The business also increased awareness of back injury risks and prevention through employee education campaigns.

## Safety awards

Enbridge received the following awards for health and safety performance:

- Enbridge Pipelines Inc. – Canadian Energy Pipeline Association Safety Award for the lowest recordable injury frequency rate for companies in its category.
- Enbridge Pipelines Inc. – Alberta Gas and Oil Pipeline Operators Safety Committee Occupational Health and Safety Award for no lost-time injuries.
- Enbridge Energy Partners, L.P. – State of Minnesota Governor's Occupational Safety and Health Award for no lost-time incidents.
- Enbridge Energy Partners, L.P. – American Petroleum Institute Safety Award for improved safety performance.
- Enbridge (U.S.) Inc.<sup>1</sup> – Minnesota Safety Council Award of Honor in Occupational Safety.
- Enbridge (U.S.) Inc. – Safety Council for West Michigan Award for improved incident rate and no lost-time injuries.
- Enbridge Consumers Gas – American Gas Association Leader Accident Prevention Award for a total Occupational Safety and Health Administration (OSHA) recordable injury and illnesses incidence rate below the industry average.

<sup>1</sup> Enbridge (U.S.) Inc. holds joint venture interests in various natural gas and liquid petroleum pipeline systems in the United States and operates Enbridge businesses in the U.S. through services agreements with our subsidiaries or partners.

## Health and safety report to employees – highlights

(% of Energy Transportation North departments achieving health and safety objectives)

- health and safety issues are discussed by management with staff each month (94%)
- at least one person from each local health and safety committee is trained in job hazard analysis (100%)
- job hazard analysis is completed and documented by regional and local offices (100%)
- quarterly health and wellness campaigns are conducted across Energy Transportation North (100%)
- inconsistencies between documented procedures and practices are identified by local EH&S committees (100%)
- interdepartmental safety inspections of field facilities and office departments are conducted (81%)
- safety training requirements are reviewed by safety coordinators (100%)
- contractor safety management training is completed by supervisors and others responsible for retaining contractors (86%)
- contractor safety management process is implemented for all significant contracts (93%)

Energy Distribution conducted more than 360 assessments to identify early symptoms of ergonomic injuries. Control measures were implemented to reduce injury risks, and ergonomics training was provided to 120 head office and warehouse employees.

### Employee health and wellness

Enbridge has numerous health service programs that encourage positive lifestyles and facilitate worker health and safety on and off the job. Key areas include:

- *early-return-to-work programs* – We have flexible programs that assist employees who are recovering from an injury, illness or surgery to return to work in a safe and timely manner.
- *Employee Voluntary Assistance Program* – Confidential and anonymous counseling services are offered to employees and their families for a broad range of personal issues.
- *lifestyle education* – We provide regular information campaigns and “lunch and learn” seminars throughout our operations on a variety of topics, including heart health, stress management, ergonomics and back health.

Last year, Enbridge Consumers Gas initiated a comprehensive worksite wellness program in Toronto. The program includes on-site physiotherapy services and the piloting of an employee fitness facility.

Employee absenteeism is an indicator of employee health and wellness. In 2001, Enbridge Consumers Gas partnered with Local 975 of the Communications, Energy and Paperworkers Union to create an attendance support program. A series of employee-management workshops were held to identify causes of employee absenteeism, and an action plan was developed.

### PIPELINE INTEGRITY

The maintenance of our pipeline system is a critical aspect of our business. This program helps to ensure our pipeline networks have the strength and operating fitness to do their job safely and reliably.

Most of our pipe, for example, is covered with a protective coating to minimize the potential for corrosion. Where feasible, we use sensitive in-line inspection tools to identify defects in the pipe and take appropriate remedial action. Using aircraft, land vehicles or foot patrols, we regularly survey our pipelines, and our control centre employees operate sophisticated pipeline control technologies to monitor our systems 24 hours a day, seven days a week.



In many parts of the continent, third-party damage from excavation activities is the leading cause of pipeline failure. To minimize this risk, we provide regular information to landowners, contractors and others about hazards and safe practices when working near our rights-of-way. In 2001, Enbridge Energy Partners was a founding member of the U.S. Common Ground Alliance, a joint effort of underground utility owners and contractors to improve excavation practices and avoid the risks to utility service and public and worker safety.

We also support the development of sound policies and regulations that maintain pipeline integrity and contribute to public safety and awareness. In late 2000, the U.S. Office of Pipeline Safety issued rules for liquids pipelines defining “high consequence areas” – unusually environmentally sensitive areas, highly populated regions and navigable waterway crossings that could be affected in the event of a pipeline incident.

In 2001, we mapped these areas along the Lakehead, North Dakota and Toledo pipeline systems. This information will be used to develop even more comprehensive integrity management plans. We are applying a similar risk-based approach to the Enbridge Pipelines System, although not a regulatory requirement in Canada.

## EMERGENCY PREPAREDNESS

Enbridge has developed comprehensive emergency preparedness plans for each of our systems and facilities. These plans are adapted to the specific needs of the individual areas, and are coordinated with the activities of local emergency response agencies.

Following the acquisition of Midcoast Energy Resources in 2001, the development of these plans is well under way in Energy Transportation South and is expected to be fully in place during 2002.

In addition to planning emergency procedures, training and practice are an integral part of our emergency response preparedness. During the year, our emergency response teams conducted 48 emergency preparedness exercises in Canada and the United States. These ranged from tabletop exercises, where employees discussed responses to various scenarios, to full-scale deployment drills using equipment to practice oil spill containment, recovery and cleanup in various terrains.

One deployment exercise simulated the release of crude oil from our pipeline near Bad River, Wisconsin, and involved participation from local fire, police and wildlife conservation departments. Another exercise on the Mackenzie River near Fort Simpson, Northwest Territories, tested boom deployment equipment and the use of a Rolligon, a large amphibious vehicle designed for muskeg terrain.

Enbridge International has a 45% interest in the industry consortium, Sociedad Williams Enbridge y Compania (SWEC). This consortium carries out annual land and on-water emergency response preparedness exercises near the Jose Terminal in Venezuela. As further protection, SWEC is an associate corporate member of the Clean Caribbean Cooperative, which provides prompt mobilization and response to large spills. This cooperative also provides specialized oil spill response training to OCENSA pipeline staff in Colombia.

## COMMUNITY RELATIONS



*“We’re Enbridge. In partnership with our communities, we deliver more than energy; we deliver on our commitment to enhance the quality of life in our communities by supporting programs in health, education, social services and the environment. Together with our employees we have the energy to make a difference.”*

By supporting communities where Enbridge has a presence, we foster stakeholder relationships, encourage community spirit and involvement by employees, and help to create vibrant, healthy places for employees and neighbors to live. Our goals are to provide long-term positive results for the greatest number of people, and to support the efforts of non-profit organizations that build communities.

### Community investment

Our community investment program supports not-for-profit organizations through financial contributions and human resources. Last year, our program invested \$3 million in charitable and non-profit organizations in Canada and the United States. A portion of this was allocated to EH&S programs and initiatives.

In addition to the examples noted on page 13, significant contributions included:

- joining with the Ontario government in sponsoring the Energy and Environment Conference in Toronto, a public forum focusing on government policy on environmental and energy issues.
- sponsoring the Baxter Energy Trail near Ottawa in partnership with the Rideau Valley Conservation Foundation. Through outdoor interpretative panels, the trail provides information

to student groups and the public about energy and the importance of energy efficiency and conservation.

- funding the U.S. Nature Conservancy’s programs in Minnesota and Illinois to help their goal of preserving open space and habitat in areas close to our pipeline facilities.
- participating in the City of Toronto’s second annual Smog Summit to increase public awareness of local actions and opportunities to improve air quality.
- being a founder and major corporate sponsor of the Action By Canadians (ABC) Program, a national public education initiative designed to engage and encourage Canadians to make informed decisions about their personal energy use.
- supporting the development of the Duluth, Minnesota-based Great Lakes Aquarium, one of the continent’s few fresh water research centres.

Enbridge Consumers Gas and Cornwall Electric, together with the City of Cornwall and other companies, sponsored the Community Safety Workshop to inform contractors of the hazards and precautions when working near utilities. Approximately 200 people attended the annual workshop.

Outside of North America, Enbridge International and its partners support investments each year in local communities. These investments include environmental education for children, emergency awareness and response programs, and infrastructure development.

### Environmental initiatives

In 2001, funding was provided through the Enbridge Environmental Initiative Program (EIP) to 37 grassroots community projects along our pipeline rights-of-way in Canada. Some of these projects included construction of a wildlife viewing platform and interpretive signs in Hay River, Northwest Territories; tree planting in Morden, Manitoba; and the purchase of environmental learning resource materials for schools in Alberta, Saskatchewan and the Northwest Territories.

With the help of EIP funding, the Inuvik Recycling Society in Inuvik, Northwest Territories, constructed a residential collection depot and launched a “blue bag” recycle program to divert recyclables from landfills. Inuvik Gas also donated volunteer resources to the project.

The Toronto and Region Conservation Association's (TRCA) Environmental Day provides more than 2,500 students per day from across the Greater Toronto Area and York Region with an opportunity to appreciate and learn about wildlife at the Bruce's Mill Conservation Park. Enbridge Consumers Gas supports this event on a yearly basis, and funds raised enable the TRCA to continue programming for conservation. This initiative also supports wildlife habitat and wetlands protection and restoration.

### Public consultation

We strive to foster positive and constructive relationships with our stakeholders along our rights-of-way and near our facilities, including landowners, indigenous peoples, communities, governments, and environmental and other interest groups. Effective public consultation programs, based on sincere efforts to address issues and build trust, lead to increased understanding between Enbridge and stakeholders and contribute to our long-term business success.

#### Significant public consultation activities in 2001 included:

- consulting with landowners and tenants for Phases II and III of the Terrace pipeline expansion program in Canada and the United States. Through open houses, public hearings, face-to-face meetings and mailings, we informed stakeholders about our projects and their impacts and worked with them to address concerns. A portion of the project passes through tribal lands

near Cass Lake, Minnesota belonging to the Leech Lake Band of Ojibwe. Enbridge consulted with tribal staff, completed environmental assessments and developed cultural and environmental resource measures to avoid unnecessary long-term impacts on the area.

- holding open houses in northern Alberta to review plans for the construction of the MacKay River and Christina Lake pipeline projects, and in Louisiana meeting with local emergency planning committees to raise awareness of a new propylene pipeline.
- conducting three open houses for natural gas pipeline expansion projects in Uxbridge, Welland and Brampton, Ontario. Issues and concerns resulting from these public consultations were successfully addressed and incorporated into pipeline design.

### Relations with indigenous peoples

Enbridge is committed to building long-term, mutually beneficial relationships with indigenous communities throughout its operations. To foster these relationships, the company's Aboriginal Relations Council developed an indigenous peoples policy. This policy, formally adopted by the company in early 2002, focuses our efforts on five strategic areas: public consultation; respect for traditional ways; education and economic opportunities; cross-cultural training; and community investment.

We believe that energy development needs to involve and benefit indigenous communities living close to or affected by our activities. As part of public consultation for Phase II of the Terrace pipeline expansion program in Saskatchewan, we worked with the North Battleford Tribal Council to address environmental issues and to support capacity-building in the community.

We extend this same philosophy to our projects in Canada's North, as the owner and operator of the Enbridge NW System and through our investment in Inuvik Gas. Construction of the Inuvik Gas Project from 1997 to 1999, for example, provided \$9.3 million to local Inuvialuit businesses.

In 2001, we contributed \$100,000 to the Northern Alberta Institute of Technology's Students Awards Program to attract and support students of indigenous ancestry from the Yukon, Northwest Territories and Nunavut.

## SUMMARY OF PERFORMANCE INDICATORS

### ENERGY TRANSPORTATION NORTH<sup>1</sup>

	1997	1998	1999	2000	2001
<b>Operations</b>					
Deliveries (thousands of barrels/day) <sup>2, 3</sup>	2,083	2,136	2,023	2,164	2,196
Barrel miles (billions) <sup>3, 4</sup>	771	771	696	743	699
Length of right-of-way (miles)	5,560	5,679	6,054	5,974	5,987
Number of employees	1,144	1,205	1,209	1,178	1,164
<b>EH&amp;S management</b>					
Major incidents <sup>5</sup>	12	9	8	3	5
Regulatory notifications <sup>6</sup>	0	3	2	0	1
EH&S fines and penalties (thousands of dollars) <sup>7</sup>	0	313	162	0	0
EH&S professionals (full-time)	19	22	22	22	23
<b>Environmental performance</b>					
Greenhouse gas emissions <sup>8</sup>					
Total emissions (thousand tonnes of CO <sub>2</sub> equivalent)	1,159	1,114	862	749	817 <sup>9</sup>
Emissions per unit throughput (thousand tonnes of CO <sub>2</sub> equivalent/million cubic metres of throughput)	10.39	9.87	7.56	5.84	5.46 <sup>9</sup>
Energy <sup>8</sup>					
Energy use (thousand gigajoules)	7,300	7,500	5,900	5,100	5,500 <sup>9</sup>
Energy intensity (thousand gigajoules/million cubic metres of throughput)	66	67	52	40	37 <sup>9</sup>
Reportable spills <sup>3, 10</sup>					
Number of spills	49	39	54	43	27
Spill volume (barrels)	21,800	9,830	28,760	7,480	25,670
Spill volume per unit throughput (barrels/million barrels of throughput)	28.67	12.61	38.95	9.46	32.03
Waste					
Recycled material (tonnes) <sup>8, 11</sup>	n/a	48	96	96	110 <sup>9</sup>
<b>Health and safety<sup>12</sup></b>					
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked)	0.24	0.09	0.00	0.09	0.34
Employee lost-time injury severity (days lost/200,000 hours worked)	1.38	1.53	0.00	0.09	1.36
Employee total recordable injury frequency (recordable injuries/200,000 hours worked) <sup>13</sup>	1.54	1.19	1.10	1.04	1.19
Absenteeism (days absent/employee)	2.96	2.93	3.44	3.26	3.13
Preventable motor vehicle incident frequency (incidents/million kilometres driven) <sup>14</sup>	1.93	0.68	1.09	1.40	1.73

n/a = not available

1 Unless otherwise noted, data covers Enbridge Pipelines Inc., Enbridge Energy Partners, L.P., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc., Enbridge Pipelines (North Dakota) Inc., Enbridge Pipelines (Athabasca) Inc., and Enbridge Pipelines (Toledo) Inc.

2 1 barrel = 0.159 cubic metres or 42 U.S. gallons.

3 Includes Enbridge Pipelines Inc., Enbridge Energy Partners, L.P., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc., Enbridge Pipelines (North Dakota) Inc., and Enbridge Pipelines (Toledo) Inc.

4 Barrel miles are the number of barrels delivered multiplied by the distance traveled in miles.

5 Major incidents are EH&S events that result in a critical employee injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.

6 Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.

7 EH&S fines and penalties are levied against the company as a result of regulatory citations. Fines and penalties in a particular year often relate to activities in prior years. Reported in Canadian dollars.

8 Includes Enbridge Pipelines Inc., Enbridge Pipelines (NW) Inc., Enbridge Pipelines (Saskatchewan) Inc. and Enbridge Pipelines (Athabasca) Inc.

9 2001 data is projected. Data not yet available.

10 Reportable spills are any spill reportable to a regulatory jurisdiction.

11 Includes office paper, aluminum, glass, metal and newspaper. Materials such as wax, waste oil, rags and batteries are recycled but not tracked.

12 Health and safety statistics refer only to Enbridge employees.

13 Includes lost-time and medical aid injuries.

14 Motor vehicle incident frequency rates do not include incidents that occurred at office locations in Edmonton, Alberta and Duluth, Minnesota, because mileage is not tracked for these locations.



# SUMMARY OF PERFORMANCE INDICATORS

## ENERGY TRANSPORTATION SOUTH<sup>1</sup>

	2001
<b>Operations</b>	
Gas transmission volumes (billion cubic feet/day) <sup>2</sup>	4
Deliveries (barrels/day) <sup>3</sup>	4,500
Barrel miles <sup>4</sup>	180,000
Length of right-of-way (miles)	2,400
Length of pipeline (miles) <sup>5</sup>	4,100
Number of employees <sup>6</sup>	337
<b>EH&amp;S management</b>	
Major incidents <sup>7</sup>	3
Regulatory notifications <sup>8</sup>	4
EH&S fines and penalties (thousands of dollars) <sup>9</sup>	46
EH&S professionals (full-time)	1
<b>Environmental performance<sup>10</sup></b>	
Greenhouse gas emissions	
Total emissions (thousand tonnes of CO <sub>2</sub> equivalent)	n/a
Emissions per unit throughput (thousand tonnes of CO <sub>2</sub> equivalent/million cubic metres of throughput)	n/a
Energy	
Energy use (thousand gigajoules)	n/a
Energy intensity (thousand gigajoules/million cubic metres of throughput)	n/a
Reportable spills <sup>11</sup>	
Number of spills <sup>12</sup>	5
Spill volume (barrels)	310
Spill volume per unit throughput (barrels/million barrels of throughput)	n/a
Waste	
Recycled material (tonnes)	n/a
<b>Health and safety<sup>13</sup></b>	
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked)	2.40
Employee lost-time injury severity (days lost/200,000 hours worked)	29.19
Employee recordable injury frequency (recordable injuries/200,000 hours worked) <sup>14</sup>	5.63
Absenteeism (days absent/employee)	n/a
Preventable motor vehicle incident frequency (incidents/million kilometres driven)	1.23

n/a = not available

1 Unless otherwise noted, data covers Enbridge Midcoast, including Dufour Petroleum, the trucking and marketing company for Energy Transportation South. Data does not include Enbridge East Texas (formerly Koch Midstream) or Enbridge Northeast Texas (formerly Sulphur River). Enbridge East Texas was acquired in December 2001; therefore, this company's statistics did not have an impact on Enbridge totals in 2001 and were not available for this report. In 2001, the majority of the company's safety efforts, including Workers' Compensation, were managed through a third-party for Enbridge Midcoast.

2 Reflects aggregate throughput capacity of the Enbridge Midcoast System of gas gathering and transmission pipelines.

3 1 barrel = 0.159 cubic metres or 42 U.S. gallons.

4 Barrel miles are the number of barrels delivered multiplied by the distance traveled in miles. The total for Energy Transportation South reflects 40 miles of crude oil pipeline.

5 Includes 40 miles of crude oil pipeline. The remainder is pipeline for natural gas transmission and gathering.

6 Reflects employees as of December 31, 2001. Data does not include Enbridge East Texas and Enbridge Northeast Texas.

7 Major incidents are EH&S events that result in a critical employee injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.

8 Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.

9 EH&S fines and penalties are levied against the company as a result of regulatory citations. Fines and penalties in a particular year often relate to activities in prior years. Reported in U.S. dollars.

10 Due to different regulatory requirements and business needs, Energy Transportation South currently does not track some corporate environmental performance indicators. These are identified as "n/a." A key priority of this business operation is full compliance with existing regulatory requirements. The company's management system provides accountability for achieving this performance. The company is currently reviewing future EH&S reporting requirements with senior management.

11 Reportable spills are any spill reportable to a regulatory jurisdiction.

12 Includes liquid spills from gas transmission and crude oil pipelines.

13 Health and safety statistics refer only to Enbridge employees.

14 Includes lost-time and medical aid injuries.

## SUMMARY OF PERFORMANCE INDICATORS

### ENERGY DISTRIBUTION<sup>1</sup>

	1997	1998	1999	2000	2001
<b>Operations</b>					
Gas distribution volumes (billion cubic feet) <sup>2</sup>	428	397	402	421	427
Length of pipeline (thousand kilometres) <sup>3</sup>	25.6	26.8	28.5	28.7	29.2
Number of employees	4,200	4,122	4,000	1,681 <sup>4</sup>	1,780
<b>EH&amp;S management</b>					
Major incidents <sup>5</sup>	2 <sup>6</sup>	1 <sup>7</sup>	0	0	0
Regulatory notifications <sup>8</sup>	0	0	0	0	4
EH&S fines and penalties (thousands of dollars) <sup>9</sup>	0	0	0	0	0
EH&S professionals (full-time) <sup>10</sup>	14	13	14	11	12
<b>Environmental performance</b>					
Greenhouse gas emissions <sup>11</sup>					
Total emissions (thousand tonnes of CO <sub>2</sub> equivalent) <sup>12</sup>	366	353	356	353	348 <sup>13</sup>
Emissions per unit throughput (thousand tonnes of CO <sub>2</sub> equivalent/billion cubic feet of throughput)	0.86	0.89	0.88	0.83	0.82
Energy					
Energy use (thousand gigajoules)	1,000	900	1,100	1,100	1,100
Energy intensity (thousand gigajoules/billion cubic feet of throughput)	2.5	2.3	2.4	2.5	2.5
Reportable spills <sup>14</sup>					
Number of spills (gas)	5	3	0	0	1
Number of spills (liquid)	1	1	1	5	1
Spill volume (litres of liquid)	100	100	1,600	6,000 <sup>15</sup>	5
Spill volume per unit throughput (litres of liquid/billion cubic feet of throughput)	0.23	0.25	3.9	14.2	0.01
Waste					
Waste to off-site disposal					
Total non-hazardous waste (tonnes)	3,611	2,670	1,705	978 <sup>16</sup>	469
Total liquid Ontario Ministry of Environment registrable waste (thousand litres)	60	51	41	39 <sup>17</sup>	46
Total solid Ontario Ministry of Environment registrable waste (kilograms)	45	3,430	403,455	150,000 <sup>17</sup>	38,000 <sup>18</sup>
Recycled material (tonnes) <sup>19</sup>	400	600	600	500	40
<b>Health and safety<sup>20</sup></b>					
Employee lost-time injury frequency (lost-time injuries/200,000 hours worked)	1.33	1.61	1.17	0.95	0.62
Employee lost-time injury severity (days lost/200,000 hours worked)	10.52	9.41	9.05	8.61	6.98
Employee total recordable injury frequency (recordable injuries/200,000 hours worked) <sup>21</sup>	3.86	3.44	2.94	3.07	3.29
Absenteeism (days absent/employee)	8.40	6.43	7.53	5.14	4.86
Preventable motor vehicle incidents frequency (incidents/million kilometres driven)	2.46	3.02	2.98	1.71	2.13

n/a = not available

1 Includes the overall distribution system of Enbridge Consumers Gas, Gazifère Inc., Tecumseh Gas Storage Operations, Niagara Gas Transmission and St. Lawrence Gas Company, Inc.

2 Source: Enbridge Inc. 2001 Annual Report.

3 Kilometres of pipeline on which Enbridge Consumers Gas pays tax.

4 Due to the unbundling of the company in 2000, this figure is only for Enbridge Consumers Gas.

5 Major incidents are EH&S events that result in a critical employee injury or fatality, significant regulatory enforcement action or significant adverse impact to the environment.

6 Explosions in Toronto and Hull, Quebec. Minor injuries were sustained.

7 Carbon monoxide (CO) poisoning resulting in two deaths as a result of a squirrel's nest blocking the chimney. As a result of the incident, the City of Toronto passed a bylaw requiring CO detectors in all dwelling units containing fuel-burning appliances.

8 Regulatory notifications are formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.

9 EH&S fines and penalties are levied against the company as a result of regulatory citations. Fines and penalties in a particular year often relate to activities in prior years. Reported in Canadian dollars.

10 Includes nursing staff in the company's Wellness Centre in Toronto and vehicle safety trainers.

11 Data for Enbridge Consumers Gas from 2001 VCR Update reports.

12 Data excludes customer emissions and includes indirect emissions.

13 2001 data projected from 2001 VCR Update reports.

14 Reportable spills are any spill reportable to a regulatory jurisdiction.

15 Spill volume mostly due to a bentonite spill that resulted from directional drilling.

16 Reduction mostly due to completion of the refurbishment of Enbridge Consumers Gas office facilities.

17 Estimated.

18 Majority of waste consists of contaminated soil encountered during construction projects.

19 Includes wood pallets, tires, scrap metal, office paper and plastic pipe.

20 Health and safety statistics refer only to Enbridge employees. Data includes all Energy Distribution business areas with the exception of Tecumseh Gas Storage Operations.

21 Includes lost-time and medical aid injuries.

## GLOSSARY

**Carbon dioxide (CO<sub>2</sub>) equivalent** – radiant forcing (warming effect) of a greenhouse gas that occurs in the atmosphere relative to the same amount of CO<sub>2</sub>.

**Energy intensity** – measure of environmental efficiency, defined as the amount of energy used per unit of throughput on energy transportation and distribution systems.

**Fines and penalties** – penalties levied against the company as a result of regulatory citations. Fines and penalties in a particular year often relate to activities in prior years.

**Gate stations** – point of entry for gas leaving the transmission system into the local distribution system.

**Greenhouse gas emission intensity** – measure of environmental efficiency, defined as the amount of greenhouse gas emissions per unit of energy delivered on energy transportation and distribution systems.

**Greenhouse gases** – group of gases, such as carbon dioxide and methane, which trap radiant energy and cause a warming of the Earth's atmosphere.

**Hydrogen sulphide** – naturally occurring toxic gas with a strong odor.

**Hydrostatic testing** – process involving the use of water to test new or existing pipeline facilities for leaks and to prove their structural strength under safe, controlled conditions. Through this process, water is drawn from nearby water sources. The pipe or tank is then filled with water and brought up to high pressure. After testing is completed, the water is treated and discharged according to regulatory requirements.

**Lost-time injury frequency** – number of work-related injuries that result in employees missing regularly scheduled work shifts per 200,000 hours worked.

**Major incidents** – EH&S incidents that result in a critical employee injury or fatality, significant regulatory enforcement action, a liquid spill in excess of 100 barrels, or significant adverse impact to the environment.

**Nitrogen oxides** – group of nitrogen- and oxygen-based compounds produced by combustion processes. Nitrogen oxides contribute to ground-level ozone and acid rain.

**Offsets** – domestic or international actions, apart from a company's normal operations, that can reduce, absorb or avoid greenhouse gases.

**Petajoule** – unit of energy equivalent to 1 million gigajoules.

**Regulatory notification** – formal written notification by regulators that Enbridge may not be adhering to the law, regulation or permit requirements. Examples of notifications include formal warnings, enforcement actions, summons and charges, notices of violation, and stop and control orders. Notifications do not include field inspection reports or other informal communications. Notifications may result in fines or penalties.

**Sulphur dioxide** – gas formed by the burning of fossil fuels, such as coal, fuel oil and diesel fuel, that contain small amounts of sulphur. Sulphur dioxide emissions can result in the acidification of soils and lakes.

**Total recordable injury frequency** – measure of job-related injuries per 200,000 hours worked. The indicator includes both medical aid and lost-time injuries.

**Volatile organic compounds** – gases and vapors contained in hydrocarbon fuels. Volatile organic compounds react with nitrogen oxides in the presence of sunlight to produce ground-level ozone, a component of smog.



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### **ABOUT THIS REPORT**

This 2002 report discusses Enbridge's environment, health and safety achievements and challenges during 2001. Where appropriate, information on 2002 activities has also been included. The report includes statistical data for our Energy Transportation and Energy Distribution business groups in Canada and the United States.

Enbridge invites public comment on this report.

To share your comments,  
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