

Petro-Canada

A Commitment to Caring



HIGHLIGHTS AND PERFORMANCE

(stated in millions of Canadian dollars, unless otherwise indicated)

| | 2003 | 2002 | 2001 |
|--|--------------------------|-------------------|-------------------|
| Financial and Operating Performance | | | |
| Earnings from operations ^{1,2} | 1 401 | 1 024 | 912 |
| Net earnings | 1 669 | 974 | 846 |
| Return on capital employed (per cent) | 18.9 | 13.9 | 14.8 |
| Total production before/after royalties (thousands of barrels of oil equivalent per day) ³ | 465/360 | 382/295 | 197/158 |
| Refined petroleum product sales (thousands of cubic metres per day) | 56.8 | 55.7 | 54.5 |
| Environment, Health & Safety Performance | | | |
| Total energy use (millions of gigajoules) | | | |
| Upstream | 40.8 ⁴ | 45.1 ⁵ | 18.7 ⁵ |
| Downstream | 63.5 | 63.3 ⁶ | 61.2 ⁶ |
| Greenhouse Gas Emissions ⁷ (kilotonnes per year) | 7 549 | 7 728 | 5 840 |
| National Pollutant Release Inventory Reported Releases and Transfers ⁸ (kilotonnes per year) | 2.8 | 1.5 | 0.8 |
| Environmental Investments | | | |
| Upstream | 113.9 | 99.0 | 76.6 |
| Downstream | 300.5 | 219.0 | 58.5 |
| Employee Recordable Injury Frequency ⁹ (per 200 000 person hours worked) | 0.69 | 0.94 | 1.14 |
| Social Performance | | | |
| Corporate donations (cash and in-kind contributions) | 15.0 | 6.1 | 6.1 |
| Employee volunteer grants (number of employees) | 430 | 403 | 339 |

- Earnings from operations are earnings before gains or losses on foreign currency translation and on disposal of assets.
- Refer to the non-GAAP measures disclosures on page 6 and footnotes 1 and 3 of the Management's Discussion and Analysis in the 2003 Annual Report.
- Natural gas production is converted using 6 000 cubic feet of gas for one barrel of oil. Total production includes Petro-Canada's equity interest production.
- 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations. Terra Nova's total energy use in 2003 decreased dramatically from 2002 due to decreased flaring volumes with the availability of gas injection wells and steady state operation in 2003.
- 2002 Upstream data includes North American Natural Gas, Terra Nova and MacKay River Oil Sands operations. 2001 Upstream total data includes North American Natural Gas only.
- Change from 2002 Report to the Community reflects final adjustment to the Edmonton refinery's total fuel gas used and final data from the Montreal and Oakville refineries and Mississauga Lubricants facility.
- 2003 data includes International, Downstream, Terra Nova, North American Natural Gas and MacKay River Oil Sands operations. 2002 data includes all of the above with the exception of International operations. 2001 Upstream total data includes North American Natural Gas only. Based on industry emissions methodologies used, Petro-Canada is reporting 100 per cent of emissions from all our operated facilities.
- Releases and Transfers exclude Criteria Air Contaminants and underground injection.
- ERIF is calculated based on estimated employee hours.

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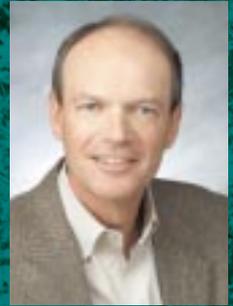
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The 2003 Annual Report
is available in the
Investor Centre at
www.petro-canada.ca.

A Letter to the Community

Strong operating results and a robust business environment enabled Petro-Canada to deliver a banner year in 2003. We continue to deliver on the commitments we've made to our shareholders. Financial success is important. But this year more than ever it's clear that integrity is the foundation on which our company reputation and future success are built.



The current business environment requires the highest level of ethics, business practices and regulatory compliance. At Petro-Canada, we are well positioned to meet this challenge. Our response has not been to change the way we do business. We haven't had to write a Code of Business Conduct because we've had one for 20 years. We haven't had to change our established company values. In fact, there's been little substantive change to how we conduct ourselves at Petro-Canada, other than responding to increased disclosure requirements and ensuring we keep up with changing regulations.

There's a very good reason why we've felt limited impact from the dramatic crisis in confidence in the corporate world. Quite simply, Petro-Canada has always maintained high standards of corporate responsibility.

As clichéd as this may sound, we do the right thing at Petro-Canada. We do the right thing by our shareholders, customers, neighbours and employees. We make doing the right thing a priority. We know the importance of maintaining our reputation as a principled company. Our reputation is as critical an asset to us as the refineries we operate and the wells that produce oil and natural gas.

Petro-Canada's strength in corporate responsibility goes beyond meeting legal and regulatory requirements. We invest actively in the communities where we live and operate, and we make every effort to be sensitive and responsive to the concerns of our stakeholders. Our community investments totalled \$15 million in 2003, including a couple of significant in-kind donations to educational institutions. We work hard to protect the environment and the safety of our employees and neighbours, and ensure that we maintain sound governance practices and open disclosure.

In this, our fourth annual Report to the Community, we show that we performed well, but we know there is more to be done. As Petro-Canada grows internationally, we will apply our high standards wherever we operate and stay true to our principles. Our oil sands growth plans significantly add to our greenhouse gas management challenge. The decision to close the Oakville refinery by the end of 2004 means we must support our employees and community during this transition. Our strength in corporate responsibility will help us as we face these challenges and others going forward.

This report presents our key performance measures and our commitment and contribution to the communities where we live and work. I also encourage you to review additional information about our efforts to be a responsible corporate citizen on our Web site at www.petro-canada.ca. We're proud of what we've achieved at Petro-Canada, and we're excited about the opportunities that are yet to come.

A handwritten signature in dark ink, appearing to read "Ron Brenneman". The signature is fluid and cursive, written over a light-colored background.

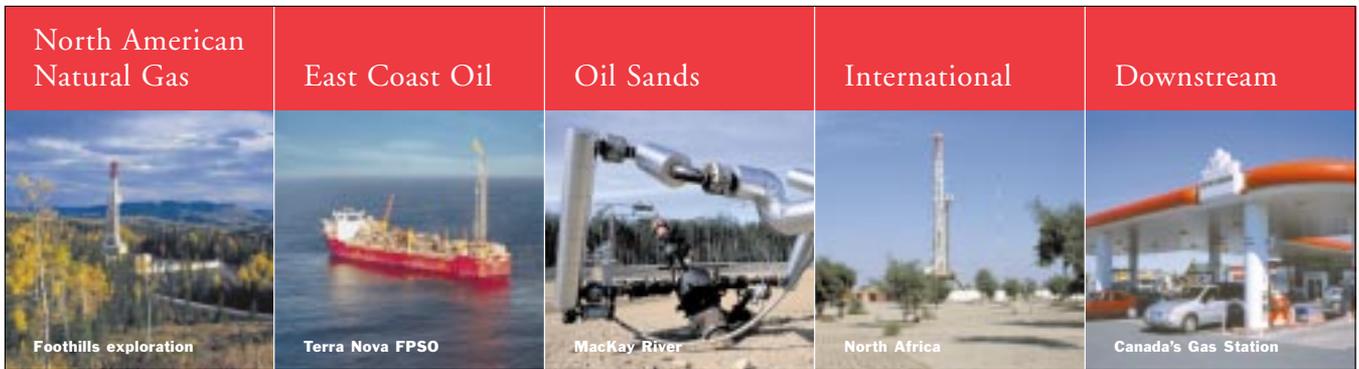
Ron Brenneman
President and Chief Executive Officer

About Petro-Canada



Scope of the Report

Petro-Canada's fourth annual Report to the Community continues to build on the company's disclosure on a wide range of environmental, economic and social measures that are important to our stakeholders. The report reflects the company's performance in 2003 on key environmental measures in the Canadian and international assets that Petro-Canada directly operates, and on our business practices and employees worldwide. Petro-Canada's directly operated international assets are located in Algeria, Tunisia, the United Kingdom and the Netherlands and comprise approximately 20 per cent of our total international assets. Petro-Canada seeks to be involved in joint ventures with companies that have a similar commitment to high standards of environmental and social performance. If available, reports on non-operated assets are reported by the operator.



North American Natural Gas

Business Description

- Explores for, produces and markets natural gas and associated liquids
- Among the larger producers in Western Canada
- Exploring in the Alberta Foothills, southeastern Alberta, west central Alberta, and northeastern British Columbia, and longer term in North American opportunity areas including the Mackenzie Delta and Corridor, offshore Nova Scotia and Alaska

What We're Doing – Highlights

- Implementation of an Aboriginal Relations Framework to enhance relationships with Aboriginal communities
- Participation in community-based multi-stakeholder groups in Sundre, Rimbey and Rocky Mountain House, Alberta
- 'Operating in Your Neighbourhood' stakeholder communication program
- Involvement in the Petroleum Career Employment Training program with selected First Nations communities in northeastern British Columbia areas of operations
- Involvement in the development and implementation of training programs in co-operation with Aurora College, Inuvik, Northwest Territories

East Coast Oil

Business Description

- Explores for, develops, produces and markets oil from offshore Newfoundland
- 34% interest in and operator of the Terra Nova oil field
- 20% interest in the Hibernia oil field
- 27.5% interest in the White Rose oil field under development
- Interests in other significant discoveries and exploration acreage

What We're Doing – Highlights

- Terra Nova Environmental Effects Monitoring Program
- Terra Nova Seabird Monitoring Program
- Petro-Canada's PureDrill brand of synthetic-base drilling fluid in use at Terra Nova, Hibernia and White Rose reduces environmental impact
- \$1.2 million pledged to Memorial University of Newfoundland and Labrador to fully fund Petro-Canada Hall at the School of Music
- Lead private sector partner with Learning Through the Arts, Kids Eat Smart (nutrition) Foundation, Easter Seals summer camp for children with disabilities and RCA Theatre Company

Oil Sands

Business Description

- 12% working interest in the Syncrude oil sands mining operation
- 100% working interest in the MacKay River *in situ* oil sands operation
- Interests in about 300 000 net acres of prospective *in situ* oil sands leases
- Converting the Edmonton refinery's conventional crude oil train to process oil sands feedstock exclusively

What We're Doing – Highlights

- The MacKay River facility is designed to recycle more than 90% of the water used
- Founding and funding member of the Athabasca Tribal Council/Athabasca Resources Developers Capacity Building Agreement

International

Business Description

- Explores for, develops, produces and markets oil and natural gas
- Production and exploration interests focused in three regions: Northwest Europe, North Africa/Near East, and Northern Latin America

What We're Doing – Highlights

- Business Integrity employee training to be undertaken in 2004 to address issues associated with doing business in an ethical manner around the world
- International operations under Total Loss Management standards
- Member of the World Business Council for Sustainable Development and participant in the United Nations Global Compact
- Petro-Canada subscribes to the International Code of Ethics for Canadian Business and the Universal Declaration of Human Rights

Downstream

Business Description

- Converts crude oil into refined products including gasoline, diesel, lubricants and asphalt
- Operates three refineries representing 17% of Canada's refining capacity
- Markets refined petroleum products and services through a nationwide network of retail and wholesale outlets
- Canada's second largest marketer of refined petroleum products with a 17% share of market
- Manufactures and markets high-quality specialty lubricants

What We're Doing – Highlights

- Partnering with Iogen Corp. to commercialize a process for producing fuel ethanol, an alternative fuel, from agriculture waste byproducts
- The Montreal Refinery and the Mississauga Lubricants Centre's blending and packaging operations, research and development facility, six domestic regional warehouses and a lubricant sales operation in Europe have an environmental management system in place that is certified to the ISO 14001 international standard. Progress made to certify Edmonton Refinery by year-end 2004
- Petro-Canada's high-quality base fluids and formulation expertise enables the company to manufacture lubricant products that are safer for workers and the environment
- Founding member of the Strathcona Industrial Association, an organization that focuses on maintaining and improving safety and environmental performance, and delivers community outreach initiatives in the Edmonton/Strathcona County region
- Pump decal consumer pricing communication program
- Reducing sulphur levels in our gasoline and diesel fuels



For more information about Petro-Canada's operations, see the Web site at www.petro-canada.ca.

INTRODUCTION TO THE REPORT

This is Petro-Canada's fourth annual Report to the Community, and this year you'll notice some changes to the report's format. The report is shorter than previous reports because much of the material that repeats from year to year, as well as new information about our efforts, is now on our Web site. We encourage you to check out the additional information at www.petro-canada.ca. You'll also notice that throughout this report, this icon  will let you know that if you want more information, you can turn to Petro-Canada's Web site.

For the first time, Petro-Canada is structuring the Report to the Community along the lines of the company's Principles for Investment and Operations. The principles stipulate that Petro-Canada conduct business in a highly principled manner guided by our Code of Business Conduct, our corporate values and standards, and the values and standards of the societies that host our operations.

The principles summarize our approach to Business Conduct, Environmental Protection, Working Conditions and Human Rights, and Community Participation. Tying the report to Petro-Canada's principles allows our stakeholders to assess the company's progress against our principles of responsible conduct.



*Petro-Canada's Principles
for Investment and
Operations are available at
www.petro-canada.ca.*

Business Conduct

We will:

- comply with all applicable laws and regulations;
- apply our Code of Business Conduct wherever we operate;
- not make illegal or improper payments or bribes;
- not participate in any corrupt business practices;
- conduct business operations with integrity;
- be sensitive to the cultures and expectations of our host countries and communities;
- seek contractors, suppliers and agents whose practices are consistent with these principles.

Continuous Improvement of Our Sustainability Reporting Processes

Petro-Canada is committed to accurate and full reporting of sustainability information and data to our stakeholders. In 2003 we started a process to periodically assess and continuously improve the quality of our sustainability data management and reporting processes. Teams of internal and external professionals will carry out these assessments.

In 2003, we engaged a team of sustainability reporting specialists from PricewaterhouseCoopers LLP (PwC) to assess processes and controls relating to the measurement, calculation, consolidation, and reporting of greenhouse gas emissions (GHG), and releases and transfers of National Pollutant Release Inventory (NPRI) Criteria Air Contaminants (CAC). PwC prepared a report, addressed to management, which provided us with constructive feedback on these processes and controls, and identified a number of opportunities for improvement.

We are developing action plans to respond to these improvement opportunities. Areas being addressed include the documentation of data management procedures, the level and accuracy of reporting required of business units, internal quality assurance and quality control procedures, and third-party verification of the GHG reductions achieved through energy efficiency projects. We believe these actions will further enhance the consistency and transparency of our reported GHG emissions and NPRI CAC data.

During the preparation of this 2003 Report to the Community, we engaged PwC to evaluate the reasonableness and consistency of selected sustainability information included in this report against supporting information and evidence which we provided to them. PwC communicated their findings to Petro-Canada's management, and these findings were addressed as we finalized the report. PwC's services did not constitute an audit of the sustainability data, and PwC did not express an opinion on the reported information.

Petro-Canada plans to continue to assess other sustainability information and data quality with PwC.

Code of Business Conduct

Petro-Canada updated the Code of Business Conduct early in 2004 to reflect the company's international scope and changes to privacy and disclosure requirements. Every employee, worldwide, is asked to read and sign off on the code, indicating that they understand and accept the ethical standards that all Petro-Canada employees and contractors are required to uphold. Employees in Canada review and sign off online, while International employees sign off as part of a broader Business Integrity training program rolled out in May 2004.

There are four new features in the updated code:

- The language has been changed to be applicable worldwide.
- A new confidential Ethics Hotline is available for employees to report any suspected accounting, audit or financial irregularities.
- A new policy for the prevention of improper payments, for example, accepting or giving inappropriate gifts.
- Provisions to protect the privacy of employees, customers, contractors and others who provide information to Petro-Canada.

John Borowski



Clapham development in the U.K. North Sea.



Petro-Canada's Code of Business Conduct.



Petro-Canada's Code of Business Conduct is available at www.petro-canada.ca.

Corporate Responsibility

At Petro-Canada, we understand that while we're in business to provide a competitive return to our shareholders, we will be judged by our environmental and societal contributions as well as our financial performance. At the same time, we must address stakeholder expectations of greater transparency, accountability and responsibility.

Corporate Governance

Petro-Canada strives to maintain the highest standards of corporate governance, with a focus on a strong and diligent Board of Directors and transparency for investors. We have solid governance and disclosure practices, a commitment to continuously improve them, and an ethical corporate culture.

Chief Compliance Officer

In November 2003, Petro-Canada's Board of Directors created the role of Chief Compliance Officer (CCO) to oversee and manage Petro-Canada's compliance activities. Alf Peneycad, Petro-Canada's Vice-President, General Counsel and Chief Compliance Officer, took on the role to ensure the company is compliant with all regulatory requirements, and the company and our employees are compliant with internal policies and procedures. In addition to ensuring compliance with governance obligations imposed on Petro-Canada by Canadian and U.S. legislation, in 2004 the CCO is finalizing and implementing a Policy for the Prevention of Improper Payments and heading up a team that is providing business integrity training to employees.

Business Integrity

In 2003, Petro-Canada developed and tested a new training program called 'The Way We Do Business: A Workshop on Business Integrity'. The purpose of the workshop is to ensure employees are aware of Petro-Canada's principles and policies and their obligations under Canadian and other applicable legislation, including the U.S. Foreign Corrupt Practices Act. The training program will be delivered to employees across the organization who are involved in international operations, contracting for services or products, stakeholder consultation with public officials and governments and business dealings.

As part of a review of existing processes in 2003, we became aware that some payments made with respect to one of our joint ventures might not comply with guidelines under the U.S. Foreign Corrupt Practices Act. In keeping with our principled approach to business and full disclosure, we voluntarily reported the matter to regulators and are co-operating fully with them. Through our process review and training program, we aim to make certain that all employees have clear guidance to ensure we maintain full compliance with these requirements.

Ethics Hotline

Petro-Canada established a confidential Ethics Hotline early in 2004 through which employees can report suspected accounting, audit or other financial irregularities if they're not comfortable reporting a matter directly to a Petro-Canada official. Employees can also use it to report other possible violations of the company's Code of Business Conduct or Policy for the Prevention of Improper Payments. The line is available 24 hours a day, seven days a week, and is operated by a third party.

Director of Corporate Responsibility

Early in 2004, Petro-Canada further demonstrated our commitment to corporate responsibility by appointing the company's first Director of Corporate Responsibility. Sharon Mulligan's task is to align Petro-Canada's worldwide strategic activities as they relate to environment, health, safety, stakeholder consultations, community involvement, human rights, external non-financial reporting and business ethics. She will be working with a newly created Corporate Responsibility Executive Steering Committee made up of nine vice-presidents and general managers of Petro-Canada operations across the organization to fulfill this mandate.

Web Site Redesign

In an effort to enhance the transparency of our corporate responsibility efforts, work is underway to redesign the Petro-Canada Web site to improve access to corporate responsibility content. Changes to the Web site will be phased in during 2004.



More information about Petro-Canada's Corporate Governance practices is available in the Investor Centre at www.petro-canada.ca.



Joëlle Opella

Alf Peneycad, Vice-President,
General Counsel and
Chief Compliance Officer.

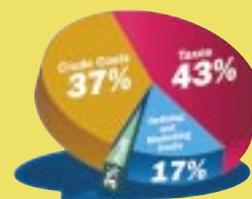


Joëlle Opella

Sharon Mulligan, Director of
Corporate Responsibility.

Consumer Pricing Communication

With gasoline prices nearing record highs, the cost of filling up the tank can cause considerable concern and frustration for many consumers. Petro-Canada has an ongoing commitment to help our valued customers better understand the components of gasoline pricing. One of our initiatives is the gasoline pricing decal placed on pumps at our retail stations across Canada. The pie-shaped decal is divided into four 'slices' that show the percentage of taxes, crude oil costs, refining and marketing costs and profits that make up the average Canadian price for a litre of gasoline. Using 2003 national average retail prices, petroleum companies like Petro-Canada impacted about 20 per cent of the retail pump price of gasoline, and Petro-Canada's profit only represented about 3 per cent (or 2 cents per litre) of the cost of a fill-up. Approximately 37 per cent of the pump price is the cost of crude oil, and almost half of the pump price (43 per cent) is the cost of tax. Petro-Canada sales receipts also highlight the tax component of the gasoline purchase, and customers can pick up a more detailed guide to gas pricing from all Petro-Canada retail locations.



Helping consumers understand gasoline prices.



More information about understanding gasoline prices is available at www.petro-canada.ca.

Customer Satisfaction Survey

Petro-Canada puts a high value on engaging our stakeholders and soliciting their feedback. In November 2003, Petro-Canada started an ongoing survey process called Guest Talk that monitors retail site-specific customer satisfaction and provides feedback on perceived fast and friendly service. Each month, a summary report and site specific reports are issued. The scorecard results allow our gas station locations to determine what they're doing well and where there are opportunities for improvement.



Jaelle Oerlik

Petro-Canada focuses on customer satisfaction.



The TLM policy, standards and self-assessment results are available at www.petro-canada.ca.

Total Loss Management

Petro-Canada introduced Total Loss Management (TLM) standards across the company in 1997 to provide clear and consistent operating requirements for all business unit leaders and employees. The setting of standards enables leaders to accurately and consistently identify and control risks.

Throughout 2003, a senior level committee guided the first stage revision of the TLM standards, updating four of the 10 elements in which corporate standards are maintained. Three others will be revised in 2004 and the balance in 2005. The 10 elements are:

- Leadership
- Health and safety
- Equipment integrity and reliability
- Contractor management
- Environmental Management Systems
- Employee capability and work practices
- Audits and inspections
- Stakeholder relations
- Security and emergency preparedness
- Event management

Each business unit or area, through a structured self-assessment process, evaluates implementation of Petro-Canada's TLM standards. Improvement opportunities are identified and incorporated into annual work plans for implementation. In addition, a team of employees from other facilities and/or external consultants conducts a major audit of each business unit or area every four years to assess compliance with the TLM policy and standards. In 2003, six TLM audits were completed, with results indicating a consistent, continued improvement in these businesses in complying with TLM standards. Audits were completed at the Oakville Refinery, the Western Region Retail and Wholesale division, northeast British Columbia Gas Plants, Customer Order Fulfillment division, Lubricants Distribution division, and MacKay River Oil Sands operation. Priority improvement opportunities were identified in each of these businesses, and action plans are being implemented.

Life-Cycle Value Assessment

Petro-Canada understands that to operate a sustainable business, we must carefully consider and balance economic growth, environmental stewardship and social progress. Life-Cycle Value Assessment (LCVA) is a business analysis and decision-making tool that combines environmental, health and social information for the full life cycle of a project with financial cost benefit information. In the past, the LCVA tool was generally used to review larger projects and focused on economic and environmental aspects. Recently, Petro-Canada has concentrated on enhancing the LCVA tool for broader use through awareness training and providing simple tools like checklists and scoping templates that are applicable to small- to medium-sized projects.



Information about recent steps taken to make the LCVA tool more available for broader use is at www.petro-canada.ca.

Environmental Protection



Young volunteers help with the cleanup of Topsail Beach, Newfoundland. Petro-Canada is the first corporate sponsor of Ocean Net, an ocean conservation organization based in Newfoundland and Labrador.

We will:

- conduct our activities consistent with sound environmental management and conservation practices;
- strive to minimize the environmental impact of our operations;
- work diligently to prevent any risk to community health and safety from our operations or our products;
- seek opportunities to transfer expertise in environmental protection to host communities through our operating, hiring, training and contracting practices.

Petro-Canada is committed to responsible environmental business practices. As a demonstrated industry leader in environmental protection, we work actively and co-operatively with our neighbours, governments, customers and other stakeholders to find solutions to environmental concerns. This commitment is reflected in our Code of Business Conduct, our Total Loss Management policy, our products and our community investment in support of environmental initiatives. We report here on some key measures of our performance.

Air Quality

Upstream Flaring

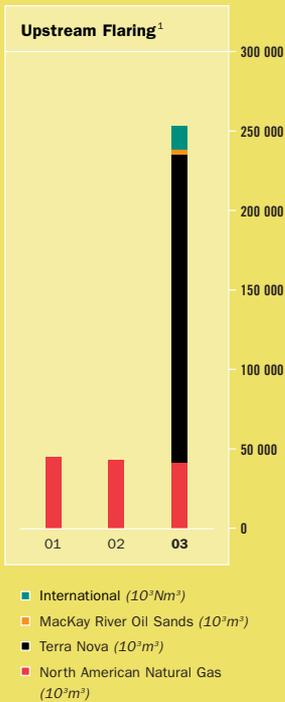
Petro-Canada recognizes that flaring is an issue of concern for some of our neighbours. We take these concerns seriously and are taking action. We take every step to ensure we meet all government regulations and guidelines. We support ongoing research to determine the impacts of flaring. Petro-Canada also extensively consults with stakeholders to understand their concerns.

Flaring includes all acid gas flares that burn hydrogen sulphide (H₂S) with fuel gas to ensure destruction of H₂S, testing of new wells, solution gas and emergency flares required as safety devices. The amount flared is reported to regulatory agencies where required.

The year 2003 is the first year that volumes for MacKay River Oil Sands, Terra Nova, and International operations are being reported. Flaring data for 2002 for MacKay River Oil Sands and Terra Nova operations were not included in the 2002 Report to the Community as flaring volumes were not representative of typical steady state operations due to start-up difficulties. Terra Nova flared more than expected volumes for steady state operations in 2003 due to intermittent compression shutdowns. Flaring volumes for our International operations in Algeria and the Netherlands were reported for the first time in 2003. The Algerian and Netherlands operations flared approximately 15 000 normal cubic metres.

Flaring from Petro-Canada's North American Natural Gas operations has consistently decreased in the last three years. There was a slight increase in operational flared volumes in 2003, due to some operational difficulties at a few facilities. Well test flaring volumes decreased in 2003 compared to 2002. A number of steps have been taken by engineering staff to minimize production test flaring on new well completions, such as tying into existing pipelines where applicable.

Petro-Canada's efforts are part of an industry-wide effort to reduce upstream flaring in Alberta. The Alberta Energy and Utilities Board (EUB) recently reported that in Alberta, solution gas flaring has been reduced by 70 per cent since 1996, and solution gas venting has been reduced by 38 per cent since 2000. The province's effort to limit flaring is being used for a worldwide model. The EUB continues to be a vital part of the World Bank's Global Flaring and Venting Voluntary Standard. EUB experts worked closely with the World Bank's Global Gas Flaring Reduction Partnership to assist in the development of the global Standard.



1 2002 flaring data for MacKay River Oil Sands and Terra Nova operations were not included due to start-up operational difficulties. Flaring volumes were not representative of typical steady state operations and were therefore excluded.

Downstream Flaring

Flaring is part of the safety system that is built into modern-day refineries. Flaring is required to ensure that process upsets such as power failures do not result in over-pressurization of process equipment. Petro-Canada attempts to minimize flaring to reduce the visual and light pollution impact that flaring has on the surrounding community, and as part of our energy conservation program.

All Petro-Canada refineries operate a flare gas recovery system that compresses the waste gases and returns them to the refinery fuel gas system. The system minimizes atmospheric emissions and reduces the refinery's operating expenses since the recovered gas is used as refinery fuel. To ensure maximum recovery, flare gas recovery system efficiency is monitored and optimized by operating staff and the energy efficiency co-ordinator. The system is not designed to recover gases during major refinery process upsets.

Sulphur Dioxide and Nitrogen Oxides

Petro-Canada emits sulphur dioxide (SO₂) and nitrogen oxides (NO_x) at our refineries and gas plants, Terra Nova and MacKay River Oil Sands operations and field compression equipment as a result of fuel combustion, flaring and sour gas processing. This year we are reporting emissions from our International production and drilling operations in Algeria, the Netherlands and the United Kingdom. These emissions can contribute to local air pollution and acid deposition.

Compared with 2002, the North American Natural Gas business unit experienced an increase in SO₂ emissions due to minor operational difficulties at a few facilities. Sulphur recovery systems are used in most gas plants to convert hydrogen sulphide (H₂S) in the inlet gas into saleable liquid or solid sulphur. Acid gas flaring produces carbon dioxide (CO₂) and SO₂. When sulphur recovery is in place, emissions of SO₂ are reduced significantly.

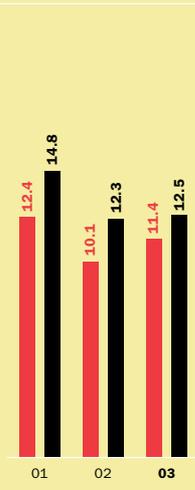
In the Downstream, SO₂ emissions increased slightly compared with the previous year primarily due to increased production from the Montreal refinery.

Petro-Canada reported an increase in NO_x emissions in 2003 due to additional reporting requirements from Environment Canada to the National Pollutant Release Inventory (NPRI) for field compression equipment, and the first year reporting to NPRI for the Terra Nova FPSO and MacKay River Oil Sands project. Field compression equipment contributed 47 per cent of the total NO_x emissions reported to NPRI.



The Petro-Canada Bird School is an innovative outdoor classroom that inspires an appreciation for the environment.

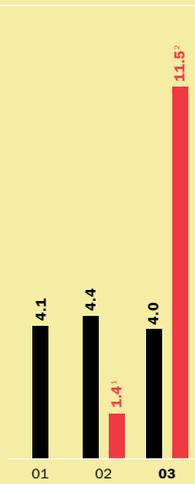
Sulphur Dioxide (SO₂) Emissions



■ Upstream¹ (kilotonnes)
 ■ Downstream (kilotonnes)

1 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations. 2002 total includes North American Natural Gas.

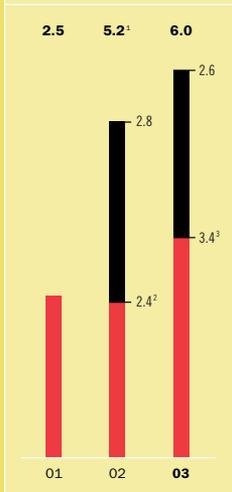
Nitrogen Oxides (NO_x) Emissions



■ Downstream (kilotonnes)
 ■ Upstream (kilotonnes)

1 2002 total includes North American Natural Gas.
 2 Due to changes in reporting requirements, 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations and field compressor stations.

Volatile Organic Compounds (VOC)



- Total Upstream and Downstream (excluding terminal operations) (kilotonnes)
- Terminal Operations (kilotonnes)

- 1 Change from 2002 Report to the Community reflects an amendment to include CS₂ as a VOC.
- 2 2002 Upstream and Downstream total includes North American Natural Gas and Downstream.
- 3 2003 Upstream and Downstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands, International and Downstream operations.

Volatile Organic Compounds

Petro-Canada estimates volatile organic compounds (VOC) emissions from our refineries, gas plants, Terra Nova, MacKay River Oil Sands and International (Algeria, Netherlands and U.K.) operations and field compression equipment. In addition, VOC emissions are reported from 11 terminal operations in Canada.

Sources of VOC included fugitive emissions (uncontrolled releases) from storage tanks, loading of product, dehydrators, flaring and combustion. VOC emissions contribute to ground-level air pollution. From 2002 to 2003, our reported VOC emissions increased by approximately 40 per cent, excluding VOC emissions from our terminals. The increase is primarily the result of the inclusion of carbon disulphide (CS₂) and carbonyl sulphide (COS) in Environment Canada's definition of VOC. COS and CS₂ are sulphur compounds that are predominant in upstream sulphur recovery plants. Our terminal VOC emissions are significant, contributing about 44 per cent of our total reported VOC emissions from all our Downstream and Upstream facilities. VOC from terminal operations decreased slightly in 2003 due to improvements in calculation methodology and slightly less volume in certain areas of the country.

In the Downstream, leak detection and repair programs are in place to accurately measure fugitive emissions from connections, valves and fittings in each refinery.

In 2003, Environment Canada changed the reporting requirements for VOC. If a facility releases in excess of 10 tonnes of VOC, speciation of the VOC is required (VOC consists of hundreds of substances, and Environment Canada has selected 60 substances that would require separate reporting if the 10-tonne threshold for total VOC is exceeded).

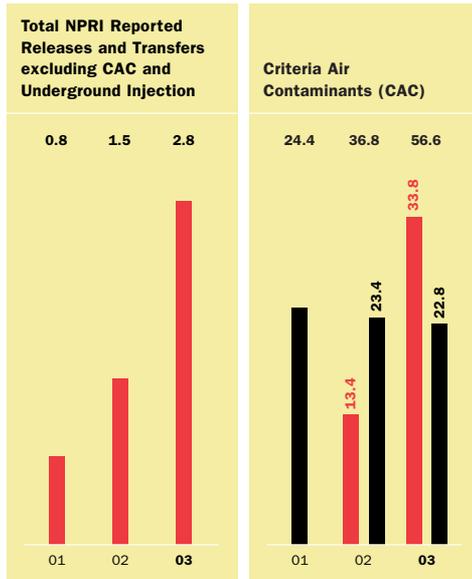
National Pollutant Release Inventory Emissions

Environment Canada's National Pollutant Release Inventory (NPRI) includes substances that are known to, or have the potential to, negatively affect health and the environment. In 1993, the NPRI started tracking trends in the releases and transfers of 178 substances. By 2003, approximately 310 substances were included in the list. Annual reporting is legally required for most Canadian facilities.

A number of changes were made to the NPRI in 2003. Some changes include the additional reporting of releases to air of the seven Criteria Air Contaminants (CAC) from all stationary combustion sources, regardless of employee thresholds. This change resulted in the reporting to NPRI of a significant number of North American Natural Gas compressor stations. In addition, 2003 was the first year that Terra Nova and MacKay River Oil Sands operations reported to NPRI as a result of meeting NPRI's reporting requirements. VOC speciation was added in circumstances where the reporting of total VOC exceeds 10 tonnes. As a result of these changes, a number of industry specific calculators were created to ensure a consistent approach. Petro-Canada was an active participant in the development of the specific VOC Speciation Calculators for the upstream and downstream.



Petro-Canada supports the Boundless Adventures Society dedicated to building the strengths of individuals and families.



- Total Upstream and Downstream (kilotonnes)
- Upstream¹ (kilotonnes)
- Downstream (kilotonnes)

- 1 2003 Upstream includes data from North American Natural Gas, Terra Nova and MacKay River Oil Sands operations and field compressor stations. 2002 total includes North American Natural Gas.

Under NPRI, releases are defined as discharges of substances within the boundary of the contiguous facility, and are subdivided into air, surface water, and land. Transfers are defined as movements of substances sent to off-site facilities for disposal or recycling.

Total releases reported, excluding CAC and underground injection, doubled in 2003 primarily due to additional reporting from Terra Nova and MacKay River Oil Sands and the releases from North American Natural Gas facilities of carbonyl sulphide (COS) and carbon disulphide (CS₂).

Starting in 2003, underground injection releases were reported in the NPRI as onsite disposal as opposed to onsite releases, which will reflect the total volume that was previously reported as total releases. Underground injection of substances is regulated and only used for licensed disposal wells that have been specifically designed to ensure there is no impact to human health or the environment. These wells place the substances into stable and contained geological formations at great depth (for example, greater than 1 200 metres at our Edmonton refinery).

Our underground injection releases increased by approximately 14 per cent in 2003 due to an increase in injection of ammonia, ethylene glycol, benzene, toluene and xylenes at the Edmonton refinery. The increase in the injection of those substances is mainly due to higher production. Ammonia from the facility, which totalled 2 318 tonnes in 2003, accounts for almost 91 per cent of underground injection tonnage.

Water

The upstream oil and gas industry uses surface and groundwater to help extract oil from the earth. Water protection and conservation are a high priority for Petro-Canada. Water is a valuable resource for all, and Petro-Canada recognizes that responsible water usage requires industry and citizens alike to be more judicious. Every year, Petro-Canada invests in water protection, recycling and/or conservation initiatives.

Salt-of-the-Earth Water Protection

Petro-Canada has tried and tested a successful solution based on solar energy to return produced water back to the environment. At well sites, solar energy is used to pump salt-contaminated surface water to a nearby steel chamber. Once in the chamber, the sun's rays heat the contaminated water until it evaporates, leaving behind salt crystals that can safely be returned to the earth. This technology has had very good results at Petro-Canada's former Eckville, Alberta site and, as a result, is being adapted and will be implemented at a selection of other locations.

Innovative Water Crossing

Petro-Canada is the first oil and gas company in Western Canada to use open-bottom or deck culverts to mitigate the damage that activity within or below the watercourse may cause to rivers and streams in remote areas. Culverts placed in the road grade allow water to pass from one side to the other. Until recently, they have been permanent structures, disturbing the habitats dependent on the natural environment. But now, in central Alberta, temporary open-bottom and deck culverts are placed over the stream, like a bridge, and can be taken down with reduced impact on the stream and its inhabitants.



A proud winner of the annual Western Canada Children's Art Contest with her work. The contest, held during Canadian Environment Week, awards prizes to employees' children for their works of art on an environmental theme.



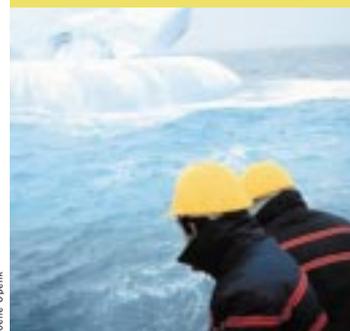
Learn more about why changes in NPRI levels occurred at www.petro-canada.ca.

Courtesy Komex Industries



Solar panels harness the sun's energy.

Jolie Opeltik



Supply vessel crew members admire an iceberg off Canada's East Coast.



Petro-Canada partners with Mount Royal College in Calgary and the Centre for Affordable Water and Sanitation Technology to provide simple and affordable BioSand water filters to developing countries.

Committed to Water Conservation

When residents of a central Alberta town approached Petro-Canada several years ago with concerns about the use of groundwater from nearby resources, Petro-Canada looked for a mutually beneficial solution. The company put in place a water conservation plan that protects fresh water resources in Garrington. Petro-Canada built a pipeline to divert water from the Clearwater River instead of taking it from local groundwater sources. This solution, although more costly, addressed community concerns and illustrated the company's commitment to being a good neighbour.

Petro-Canada monitors the level of the Clearwater River to ensure minimal impact on flow levels, and halts the removal of water if the flow rate dips below a certain point. As further evidence of our commitment to water conservation, Petro-Canada recently upgraded the Garrington facility to allow it to recycle water, using produced water from other local wells instead of fresh water in the processing process.

Refinery Discharges to Water

Wastewater at Petro-Canada facilities is processed and treated to meet provincial water quality standards and federal guidelines prior to discharge. Total suspended solids discharged to water continued to decrease in 2003 due to the installation of a Dissolved Air Flotation System at the Mississauga Lubricants facility and the improved operational efficiency of our wastewater treatment plants. Sulphides returned to normal levels in 2003; the increased level experienced in 2002 was the result of an upset at the Montreal plant.

Refinery Discharges to Water

| (tonnes) | 2003 | 2002 | 2001 |
|------------------------|--------------|-------|--------|
| Oil and grease | 13.67 | 13.15 | 16.11 |
| Total suspended solids | 79.80 | 93.18 | 111.66 |
| Ammonia | 32.64 | 31.25 | 33.47 |
| Sulphides | 0.387 | 0.779 | 0.220 |
| Phenol | 0.347 | 0.437 | 0.413 |

Spills

Reducing the number and volume of spills is an important priority for Petro-Canada. We report spills of crude oil, refined products, produced salt water and chemicals, regardless of cause. Spill events are investigated, the cause determined and actions implemented to minimize future risk. We have extensive systems in place to inspect and audit facilities used to transport oil and other products to ensure our preparedness in the event of a spill, including cleanup and restoration plans.

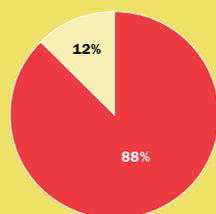
Spills over 1 m³

| (1 000 litres) | 2003 | 2002 | 2001 |
|-----------------------|------------|------|------|
| Business Unit | | | |
| Upstream ¹ | 69 | 28 | 39 |
| Downstream | 38 | 38 | 23 |
| Total | 107 | 66 | 62 |

¹ 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations.

2003 spills over 1 m³

(1 000 litres)



- 1 m³ to 20 m³
- More than 20 m³ to 1 000 m³

Petro-Canada makes it a priority to track all spills. All releases are captured in an internal database. Approximately 80 per cent of total releases are less than 1 000 litres. Most of the spill volume is recovered or captured in recovery systems designed for that purpose.

Petro-Canada employees have created a program, called Nothing Hits the Ground, that enforces a zero-tolerance spill policy. The key element of the policy is a belief that most leaks and spills are preventable. Preventive measures taken include using enviro-boxes at loading areas that surround joining pipelines to capture any fluid that may leak, and drip trays in areas where leaks are common. The program records all spills and leaks, regardless of volume, in a database that is used to determine trends and is incorporated into ongoing learnings about spill prevention. These measures have been used extensively throughout Petro-Canada's Upstream operations and have resulted in great success in protecting the environment from spills.

Biodiversity

Building Scallop Habitat

The Petro-Canada-operated Terra Nova oil development on the Grand Banks off Canada's East Coast is hundreds of kilometres away from Newfoundland's Placentia Bay, but it's having a positive impact on fish habitat in the area. Terra Nova is helping to build scallop habitat in the Monkstown/Paradise Sound area as part of the Fish Habitat Compensation Plan.

Petro-Canada identified the area in consultation with the Department of Fisheries and Oceans (DFO), local fishers, and area residents. Efforts to create scallop habitat on the sea floor there started in 1999.

Petro-Canada and DFO selected the site because young scallops were present, but the habitat was unable to support growth. Fertilized scallop eggs – called spat – move with the currents in the upper surface of the water, but at a certain point in their life cycle they need to settle to the sea floor. If they settle on habitat that supports them, they survive. If not, they die.

Scallop shells were distributed along the sea floor in an area measuring approximately 31,000 m² to serve as seed anchors for the young scallops. The first scallop spat was collected from spat collectors placed in the area and deposited on the placed shells.

Results are encouraging. The first monitoring program was completed in 2003, and there is evidence that scallops are settling in the new habitat. Petro-Canada, in consultation with DFO, will continue to monitor the site.

Product Quality

Petro-Canada provides a choice of products that meet consumers' environmental needs, including gasoline that helps to keep your engine cleaner, reduced sulphur in gasoline and diesel, and reduced benzene in gasoline. We also manufacture lubricants, drilling fluids and other oil-based products that offer better environmental performance.



Environmental monitoring.



Information about Petro-Canada's involvement in spill response organizations in Canada and internationally is available at www.petro-canada.ca.



More information about Petro-Canada's commitment to product quality is available at www.petro-canada.ca.

Energy

Energy Efficiency

Petro-Canada has committed to achieving ongoing improvements in energy efficiency of an average of one per cent per year to the year 2005, in each domestic business sector. Key components of these improvements include reduction in fuel consumption and the corresponding lowering of greenhouse gas emissions and operating costs. Although past reductions in CO₂ equivalent emissions have been impressive, future reductions will be more difficult and will come at a higher price. Increased demand for our products, production growth from new core areas in the frontiers, increased resource recovery costs, more energy intensive growth opportunities, and increased intensity of product refining all contribute to the challenge of managing our greenhouse gas emissions.

In 2003, Petro-Canada allocated approximately \$5.8 million in capital funds for energy efficiency projects. To enhance public awareness, we also fund a number of education projects related to energy efficiency and climate change.

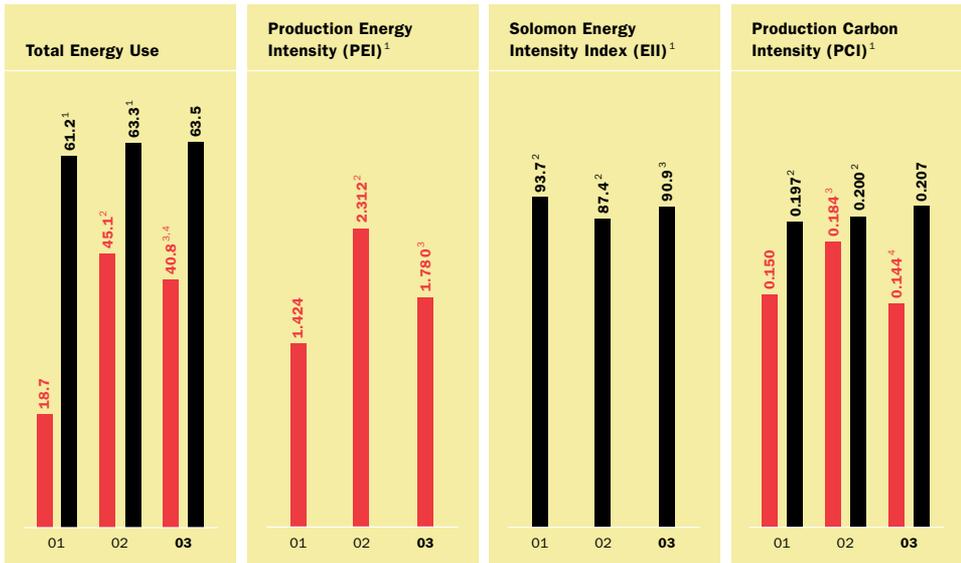


More information about Petro-Canada's energy efficiency initiatives is available at www.petro-canada.ca.



The Edmonton Refinery.

Roth & Hamberg



- Upstream (millions of gigajoules)
- Downstream (millions of gigajoules)

- 1 Change from 2002 Report to the Community reflects final adjustment to Edmonton refinery total fuel gas used and final data from Montreal and Oakville refineries and Mississauga Lubricants facility.
- 2 2002 Upstream total includes North American Natural Gas, Terra Nova and MacKay River Oil Sands operations and excludes International operations. Change from 2002 Report to the Community reflects adjustment to include Oil Sands.
- 3 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations.
- 4 Terra Nova's total energy use in 2003 decreased dramatically from 2002 due to decreased flaring volumes with the availability of more gas injection wells, fewer technical issues with gas compression, and reaching steady state operations.

- Upstream (GJ/m³oe)

- 1 This measure is only used in the Upstream sector and is a relative measure of the amount of energy used to the level of oil equivalent sales production. It is based on units of gigajoules per cubic metre of oil equivalent (GJ/m³oe).
- 2 Change from 2002 Report to the Community reflects final data, and includes North American Natural Gas, MacKay River Oil Sands and Terra Nova operations and excludes International operations.
- 3 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations. PEI for the North American Natural Gas portion of the Upstream remains within our average of one per cent per year over our five-year target for improvement. The 2003 PEI measure improved compared with 2002 because of steady state operation on the Terra Nova Floating Production Storage and Offloading vessel.

- Downstream

- 1 This index enables refiners to compare refinery energy efficiency performance against a typical refinery of the same size and complexity of crude oil processing. The index is used to measure the effectiveness of energy conservation. The lower the number, the more energy efficient the facility.
- 2 Change from 2002 Report to the Community reflects final adjustment to Edmonton refinery total fuel gas used and reflects final data from the Oakville and Montreal refineries and the Mississauga Lubricants facility.
- 3 The increased EII level in 2003 compared with 2002 was due in part to the August 2003 power outage in Ontario, which triggered shut-downs at the Oakville refinery and Mississauga lubricants plant, and an extended partial shutdown at the Mississauga plant following a fire on start-up from the power outage. The 2003 EII level is slightly above our target of 89.5 based on our target of one per cent improvement in energy efficiency from 2000 to 2005.

- Upstream (tonnes CO₂e/m³oe)
- Downstream (tonnes CO₂e/m³oe)

- 1 PCI is an indicator of greenhouse gas (GHG) emissions intensity. It is a measure of the amount of GHG emitted when a cubic metre of oil equivalent product sales volume is produced.
- 2 Change from 2002 Report to the Community reflects final adjustment to Edmonton refinery total fuel gas used and reflects final data from Oakville and Montreal refineries and Mississauga Lubricants facility.
- 3 2002 Upstream total includes North American Natural Gas, Terra Nova and MacKay River Oil Sands operations. Change from 2002 Report to the Community reflects final data and includes MacKay River Oil Sands.
- 4 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International operations.

Energy Efficiency and the Oil Sands

During the first two years of operation of the MacKay River Oil Sands project (2002-2003), the erratic nature of the Production Energy Intensity measure for an *in situ* oil sands project in start-up mode using new technology was apparent. In 2002, a significant amount of steam was injected into the wells to heat and mobilize the bitumen and prepare for the ramp-up to production. The first year of normal operation with a stabilized steam-to-oil ratio is expected to start mid-2004. This steam-assisted gravity drainage project is very dynamic in nature, as the ongoing drilling of new injection and production well pairs will cause constant fluctuations in energy consumption and oil production numbers. These will be constantly monitored and adjusted to optimally manage the project. We're actively seeking future energy efficiency improvements and have set an energy efficiency target of an average of one per cent per year once normal (steady state) operation is achieved.

Greenhouse Gas Emissions

Petro-Canada supports the Canadian government's efforts to develop an implementation plan to reduce greenhouse gas (GHG) emissions while protecting Canadian economic opportunity. The company supports an implementation plan that encourages investment in technological solutions in our own business.

The federal, provincial and territorial governments in Canada are in the process of establishing GHG reduction targets for industry and principles for domestic emissions trading. Through our primary industry associations – the Canadian Petroleum Products Institute for the downstream, and the Canadian Association of Petroleum Producers for the upstream – Petro-Canada is actively working with government to help define these targets and principles and develop practical approaches to regulation and trading regimes.

Greenhouse gases, primarily carbon dioxide (CO₂), are produced in the course of Petro-Canada's operations – largely through the combustion of fuels – including the production and processing of crude oil and natural gas, refining of oil into gasoline and other petroleum products, and the marketing of these products.

Petro-Canada has a strong record of improving energy efficiency and reducing emissions. Our energy saving investments and projects have eliminated over one million tonnes of annual emissions from our base businesses since 1990 – the equivalent of taking 150 000 cars off the road. Since 1996, we have reduced our total emissions, in spite of significant increases in production. In 2002, our GHG emissions rose mainly due to starting up Terra Nova operations, which is typical for bringing a major new production facility onstream. In 2003, our overall GHG emissions declined primarily due to steady state operations at Terra Nova, improved operations at MacKay River, and asset sales and additional decreased gas flaring volumes in the North American Natural Gas business.

In 2003, Petro-Canada's total GHG emission levels were only 9 per cent above 1990 levels, despite the fact that combined Upstream and Downstream production grew by 62 per cent over the same period. Our production increased in 2003 due to an additional four months of International operations and higher Terra Nova and MacKay River Oil Sands production.

We continue to achieve GHG emissions reductions in our base businesses (North American Natural Gas, Terra Nova, and Downstream), and we remain committed to our overall corporate goal of continuous annual improvement in energy efficiency for all our operations. We work with a broad spectrum of stakeholders to seek solutions to environmental issues and concerns, including the challenge of GHG levels.

Behind the Numbers

Terra Nova

GHG emissions data represent 100 per cent of the emissions and production from the Terra Nova project – even though Petro-Canada is only a 34 per cent working interest owner – to remain consistent with Voluntary Challenge & Registry recommended GHG reporting methodology. GHG emissions from Terra Nova in 2003 declined sharply from 2002 by approximately 37 per cent. This reduction is attributed to a decrease in flaring required with the availability of more gas injection wells, fewer technical issues with gas compression, and reaching steady state operations.

MacKay River Oil Sands

GHG emissions increased in 2003 because it was the project's first full year of operation. During the year, we achieved an improved production energy intensity level even though the project is very dynamic. The ongoing drilling of new injection and production well pairs will cause constant fluctuations in energy consumption and oil production numbers. These fluctuations are constantly monitored and adjusted to optimally manage the project. We are actively seeking future energy efficiency improvements and have set an energy efficiency target of an average of one per cent per year once normal (steady state) operation is achieved. The first year of normal operation (stabilized steam-to-oil ratio) is expected to start in mid-2004.



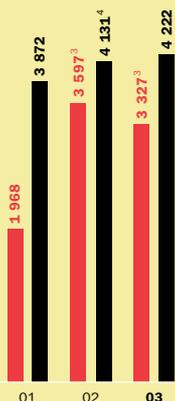
More information about Petro-Canada's oil sands energy efficiency and GHG emissions is available at www.petro-canada.ca.



Joëlle Orellik

An overview of the MacKay River Oil Sands central processing facility.

Greenhouse Gas Emissions^{1,2}



- Upstream (kilotonnes of CO₂ equivalent)
- Downstream (kilotonnes of CO₂ equivalent)

1 The total greenhouse gas emissions reported include indirect emissions, which are emissions from production of the amount of electrical power that was used in both the Upstream and Downstream. This is standard practice for Petro-Canada, and has been included in historical publications as well.

2 The methodology for quantification of GHG emissions is based on industry emissions methodologies, which includes reporting 100 per cent of the emissions for all Petro-Canada operated facilities. For Upstream emissions, the Canadian Association of Petroleum Producers Guide (April 2003) was used.

Emissions from Downstream operations (refining and marketing) were estimated using Task Force Guidelines for the Petroleum Sector (1995) developed by the Canadian Industry Program for Energy Conservation of the Canadian Petroleum Products Institute. International emissions were calculated with the guideline from the Netherlands Oil and Gas Exploration and Production Association and the International Association of Oil and Gas Producers guide.

3 2002 Upstream total includes North American Natural Gas, Terra Nova and MacKay River Oil Sands. 2003 Upstream total includes North American Natural Gas, Terra Nova, MacKay River Oil Sands and International. Petro-Canada sold the Willesden Green and Gilby West gas plants in late 2003. These asset sales and additional decrease in gas flaring volumes lowered Upstream total emissions compared with 2002.

4 Change from 2002 Report to the Community reflects final adjustment to Edmonton refinery total fuel gas used and final data from Oakville and Montreal refineries and Mississauga Lubricants facility.

International

The year 2003 marks the first year that Petro-Canada is reporting GHG emissions from International operations. We are reporting emissions from our producing upstream Netherlands and Algeria operations – where we directly operate – which are included in the total Petro-Canada Upstream reported numbers in 2003. As the operator of a field in the Dutch sector of the North Sea, we are monitoring developments of the European Union Emissions Trading Scheme. We are also closely following events in the emissions credit market that is emerging through the Clean Development Mechanism, although the uncertainty surrounding the Canadian regulatory framework means that investments in this area are uncertain and could be problematic.

Update: Voluntary Challenge & Registry

Petro-Canada has strongly supported the Voluntary Challenge & Registry (VCR), a non-profit partnership between industry and governments across Canada with a mission to promote voluntary action on GHG emissions. The company was among the first companies to join the VCR program. Following the federal government's decision to regulate the large final emitters group (which includes the oil and gas industry), the VCR Board has decided to wind down the partnership by the end of 2004. This in no way affects Petro-Canada's commitment to improve energy efficiency in our domestic operations and our commitment to report on these initiatives and our emissions.

The first deadline for mandatory GHG reporting to the Alberta government and federal government is October 31, 2004 and June 1, 2005 respectively. Petro-Canada will submit a GHG report to Alberta Environment for our 2003 calendar year emissions for facilities that released over 100 kilotonnes of CO₂ equivalent.

In 2003, Petro-Canada filed our ninth annual report to the VCR, detailing our action to reduce GHG emissions and improve energy efficiency for the year 2002. For the fifth year in a row, we received Gold Champion Level recognition for our Climate Change Progress Report. The report also received an Honourable Mention in the integrated oil and gas sector of the Leadership Awards for displaying extraordinary commitment, action and/or leadership in the voluntary reduction of GHG emissions. We have also been active participants in the VCR Champions in Action program, which has tested and implemented enhanced voluntary approaches and measures to accelerate early action to reduce GHG emissions.



Petro-Canada's 2003 Progress Report in Support of Canada's Voluntary Challenge & Registry (for the year 2002) and more information about the company's ongoing commitment to improve energy efficiency is available at www.petro-canada.ca.

Waste Management

Petro-Canada works to reduce wastes and their environmental impact through a program of measurement and management at various facilities. Petro-Canada's Upstream operations use a licensed program called Waste Tracker to track all reportable wastes. This program permits all waste to be defined and tracked according to provincial or federal criteria. It allows the user to establish a clear understanding of exact waste volumes generated at each site, whether it is a drilling site or gas plant, and also records the final disposal location.

In the Downstream, Petro-Canada participates in several recycling initiatives. These initiatives include the industry-sponsored effort to improve the collection and recycling of used motor oil from automobiles and commercial sources, and the refinery catalyst and refinery waste materials recycling programs.



More information about recycling programs, including how much material was recycled at Petro-Canada facilities, is available at www.petro-canada.ca.

Regulatory Compliance

In the Upstream, most exceedances occur due to operating difficulties. These may include low stack-top temperature on an incinerator, high SO₂ mass emissions, SO₂ concentration exceedances and ambient air violations resulting from wind and temperature conditions.

All operating upsets are taken very seriously at each facility to minimize any adverse environmental effects. Investigations are conducted for some exceedances resulting from operational difficulties to identify the root cause of the problem. Improvements to equipment or procedure may result from the findings.

In the Downstream, measures are in place to ensure that facilities comply with provincial environmental expectations and meet Petro-Canada's commitment to safely manage the impacts of our operations on the environment. These measures include ensuring worker competence, use of sound operating practices and continuous monitoring and stewardship.

| Compliance Exceedances | 2003 | 2002 | 2001 |
|-------------------------------|-------------|------|------|
| Upstream ¹ | 57 | 39 | 61 |
| Downstream | 28 | 17 | 16 |

¹ Upstream total includes North American Natural Gas, Terra Nova and MacKay River Oil Sands.

Environmental Enforcement Actions

Petro-Canada has not been the subject of any environmental enforcement actions in the past three years. The criterion for determining the occurrence of an environmental enforcement action is the year of an actual conviction. Any actions will therefore be recorded in the year the conviction took place, not the year the event took place.

Alternate Fuels

Although refined oil products and natural gas are likely to remain primary fuels for a considerable period of time, Petro-Canada understands that the world may move to a different energy mix as technologies change. Environmental concerns may lead to growing market demand for lower emission fuels. We're determined to remain a leading provider of energy in whatever form the public requires energy in the future. Petro-Canada is participating in the development of alternate fuels that may contribute to the reduction of greenhouse gas emissions.

A Petro-Canada partnership with Iogen Corporation, an Ottawa-based biotechnology company, achieved an important milestone in April 2004. Iogen became the first company to put cellulose ethanol (made from waste materials such as straw and wood chips) into commercial production. The first shipment went to Petro-Canada's Montreal refinery where it was blended into the fuel available at some Petro-Canada retail stations. All vehicles can use a blend of up to 10 per cent ethanol with gasoline. Iogen's research and the construction of a demonstration plant in Ottawa is supported by funding from private industry, including Petro-Canada, and the federal government.

Environmental Investments

In 2003, Petro-Canada's environmental capital and operating expenditures totalled \$414.4 million, compared with \$318.0 million in 2002 and \$135.1 million in 2001. Our environmental expenditures rose in 2003 as we prepared to meet new federal limits for sulphur in gasoline. Some of the expenditures include site remediation, environmental assessments, and pollution prevention. We expect environmental costs to remain high, as we continue to prepare to meet new federal limits for sulphur in gasoline and distillate, future fuel reformulation requirements, and tighter environmental standards for oil and gas production.

The environment is one of Petro-Canada's four community funding focus categories. In 2003, the company contributed over \$640,000 to environmental non-profit organizations across the country. With a focus on education, these contributions largely support groups engaged in public awareness and youth education.

Petro-Canada continues to explore opportunities to make additional investments that yield significant benefits to the environment, including energy-efficient co-generation. Construction of a 165-megawatt natural gas-fired co-generation power plant at the MacKay River Oil Sands site was completed in late 2003 and began commissioning in early 2004. The facility provides the steam demand necessary to recover bitumen through utilizing waste heat from power generation. The dual-purpose nature of the plant results in a substantial overall reduction in greenhouse gas emissions and energy usage.



Neil Vaislis

Iogen Corp. President Brian Foody and Petro-Canada Vice-President of Corporate Planning and Communications Andrew Stephens celebrate Iogen's first shipment of cellulose ethanol.

Working Conditions and Human Rights

We will:

- provide a healthy, safe and secure work environment;
- honour internationally accepted labour standards prohibiting child labour, forced labour and discrimination in employment;
- respect freedom of association and expression in the workplace;
- not be complicit in human rights abuses;
- support and respect the protection of human rights within our sphere of influence.



Joëlle Opertik

Petro-Canada employees at the Edmonton Refinery.

Valuing Diversity

Our employee population is becoming increasingly diverse. Women now comprise 27 per cent of our petroleum engineers, compared with an 11 per cent representation in Canada. As of 2004, three of Petro-Canada's 12 members of the Board of Directors are women.

As this diversity grows, we review our policies and procedures to ensure that our approach to valuing diversity and the prevention of discrimination and harassment is appropriate to maintain a respectful workplace that values people for their contribution to our business. A respectful workplace helps to attract and retain the best employees. The company has had no human rights complaints or convictions in any of the countries where we operate.

We are fully compliant and in good standing with the Canadian Federal Contractors Program. We are also active in a number of industry and community based initiatives aimed at ensuring that qualified applicants have appropriate access to employment opportunities in our workplaces.

Workforce Diversity

| (percentage, Canada) | 2003 | 2002 | 2001 |
|---------------------------|-------------|------|------|
| Women | 24.7 | 24.6 | 24.2 |
| Aboriginal Employees | 1.2 | 0.8 | 0.8 |
| Persons with Disabilities | 3.2 | 1.9 | 1.5 |
| Visible Minorities | 9.3 | 7.3 | 6.9 |



Joëlle Opertik

Petro-Canada employees at the MacKay River Oil Sands facility.

Employee Compensation and Benefits

Petro-Canada's total compensation program is fully competitive. We actively benchmark our industry and the marketplace to ensure that our compensation package allows us to attract and retain top quality employees. There is a growing linkage between pay and performance.

Bonus opportunities are tied to performance against targets related to company, business unit and, for salaried employees, individual measures. They can be taken in the form of cash or company shares at the employee's discretion. These opportunities along with other compensation and recognition programs reinforce alignment with business goals. Exceptional Contributor cash bonuses and stock option grants are also awarded to eligible employees making key contributions.

A full suite of employee benefits is provided, including health and dental care, disability coverage, a pension plan and life insurance. Canadian and U.K. employees have access to an Employee Assistance Program that offers counselling and other services for employees and their families. Canadian employees also have access to long-term savings, a fitness club subsidy and a health care spending account. We provide help to employees as they seek childcare, eldercare and retirement planning. Some employees have work arrangements that allow flexibility to attend to life's many demands.

Health and Safety

The safety and well-being of our employees and those working on our behalf is an absolute business priority for Petro-Canada. To support them and help create a work culture where health and safety are encouraged and valued, Petro-Canada designs safe work environments and practices and provides a wide range of training, programs and procedures.

Injury Frequency

Tracking the frequency of injuries is one way that Petro-Canada can measure our success at creating a healthy and safe workplace. There are several possible measures of injury frequency. The Employee Recordable Injury Frequency (ERIF) and the Contractor Recordable Injury Frequency (CRIF) are two of the primary measures. ERIF and CRIF are defined as the number of injuries incurred, by employees and contractors respectively, that are serious enough to warrant medical attention beyond basic first aid. The Employee Disabling Injury Frequency (EDIF) and the Contractor Disabling Injury Frequency (CDIF) are defined as those injuries severe enough to result in time away from work. (The EDIF and CDIF rates are also known in many industries as Lost Time Injury Frequency rates).

All injury frequency rates are calculated, reported and reviewed each month in each business unit. The business unit and overall corporate rates of injury frequency are reported monthly to the Executive Leadership Team, and quarterly to the Environment, Health and Safety Committee of the Board of Directors.

Our overall Employee Recordable Injury Frequency (per 200 000 person hours) decreased to 0.69 in 2003 from 0.94 in 2002. Contractor Recordable Injury Frequency decreased to 2.32 in 2003 from 3.22 in 2002.



1 ERIF and EDIF are calculated based on estimated employee hours.

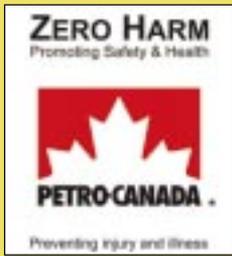


Joëlle Opeik

Environmental testing at the MacKay River Oil Sands site.



Safety checks at the Wildcat Hills gas plant near Cochrane, Alberta.



Zero Harm

Petro-Canada's initiative to nurture a Zero Harm safety culture made significant headway in 2003. Zero Harm was launched late in 2002 in response to the company's health and safety performance remaining at a plateau for the past few years. It was recognized that a change in thinking was required to change results.

Ongoing research into best-in-class performance demonstrates that Petro-Canada can achieve a health and safety culture in which occupational injury and illnesses are not considered acceptable or an unavoidable loss. The Zero Harm approach encompasses all types of injury and illness arising from the workplace, including everything from repetitive strain injuries caused by ergonomically incorrect work environments to time away from the job due to work-related stress. To demonstrate top management commitment to a safe work environment, Petro-Canada's Environment, Health and Safety Committee of the Board went on a safety tour of the Edmonton Refinery in 2003.

During 2003, a comprehensive Zero Harm strategy was developed with eight 'blueprint' documents guiding the company in making some key improvements. One of the blueprints outlines the need to improve the company's ability to enhance the sharing of knowledge by engaging employees and contractors in internal forums and learning events. Sponsored by Petro-Canada's Executive Leadership Team, the first Zero Harm Forum was held in Calgary late in 2003. It was attended by over 100 participants representing each area of Petro-Canada. The event provided a forum for the free exchange of ideas, the opportunity to learn about existing internal best-in-class practices, and the chance to discover the unique opportunities in each business unit to achieve the Zero Harm vision. Information was taken back to each business unit to share the knowledge from the event and set a course to improve the local safety culture.



Joelle Operik

At work at the Hanlan Robb gas plant in Alberta's foothills.

“This has been a leading edge initiative and one that will result in tangible outcomes including better safety performance. While Zero Harm is our ultimate goal I believe the creation of community and a new paradigm for a Petro-Canada culture is within our grasp. We must now focus more than ever on what we have initiated.”

SCOTT MEAKIN – SR. ADVISOR, BUSINESS PLANNING



Joelle Operik

On the job at the MacKay River Oil Sands facility.

“It is not often that a Union Rep. gets to participate in a remarkable forum of this nature. I went home more determined to do a much better job than I have done in the past. I now believe that the top levels of Petro-Canada put the highest priority on safety, but how do I get that message across to my peers? I will work on that. I learned a lot. Thank you so much.”

CLIFF KELSEY – ELECTRICIAN AND LOCAL CEP REPRESENTATIVE, BURRARD PRODUCTS TERMINAL

“We in the U.K. congratulate Petro-Canada on the tremendous organizational effort but importantly, the obvious value that content of the Zero Harm Forum provided to IBU participants. All have come back with a positive approach to the initiative and the outcomes will feature in our presentations on TLM next week in London.”

SAM DAVIDSON – MANAGER HSEQ, LONDON

Emergency Preparedness

Petro-Canada facilities regularly conduct exercises and drills to reinforce and verify our emergency response capabilities. These are called Tier I, Tier II and Tier III exercises, depending on the level of involvement by Petro-Canada’s senior management. A Tier III exercise, for example, includes executive participation.

At each facility, we carry out regular Tier I emergency drills to test the ability of operations to respond to emergency conditions. At the Tier II level in 2003, larger response management regional exercises were held in Ontario, St. John’s, Aberdeen, and with Oil Sands management in Calgary. A Tier III exercise was held by the Eastern Canada Major Emergency Team and the National Response Team at the Montreal Refinery. The Crisis Management Team, chaired by President and CEO Ron Brenneman and led by Crisis Manager Kathy Sendall (Senior Vice-President, North American Natural Gas), also staged an exercise in Calgary. All business and administrative units at Petro-Canada have been required to identify ‘business critical’ and ‘business necessary’ function, and to develop Business Continuity Plans in preparation for the possibility of business interruption. Several departments in the Calgary corporate office held a real time simulation in December 2003.



The safety and well-being of our employees and those working on our behalf is an absolute business priority for Petro-Canada.

English Presentations

Refine Opexik

Emergency Response in Action – Ontario Power Outage

One week after the massive power outage in Ontario in August 2003, there was a blast and fire at Petro-Canada's Lubricants manufacturing facility in Mississauga. An explosion occurred in the hydrogen process unit's compressor building when hydrogen escaped from a ruptured pipe. An emergency response team was immediately activated. Experienced and competent staff responded to the emergency, and the situation was quickly brought under control. The response was effectively co-ordinated with local authorities. The unit remained shut down until all necessary changes were implemented to ensure a safe startup. Petro-Canada is grateful that no one was injured during the incident.



Petro-Canada conducts regular exercises and drills to reinforce and verify our emergency response capabilities.

Human Rights

Petro-Canada supports the Universal Declaration of Human Rights and the principles of the UN Global Compact, reflected in our Principles for Investment and Operations. Petro-Canada has made progress in 2003 to incorporate these principles into our business practices. Our International Business Unit conducts country-specific risk assessments when evaluating business opportunities. These risk assessments include a variety of social considerations including the political environment, governance practices, use of security forces, human rights practices, labour practices, community participation and the reputation of business partners.

In 2004, a work team will be established to formalize Petro-Canada's commitment to human rights through a specific policy statement, supporting standards of practice and a monitoring and reporting mechanism. Employees can report human rights violations directly to senior management, or anonymously to our new Ethics Hotline, for investigation and follow-up.



Community Participation

We will:

- strive within our sphere of influence to ensure a fair share of benefits to stakeholders impacted by our activities;
- conduct meaningful and transparent consultation with all stakeholders;
- endeavour to integrate our activities with, and participate in, local communities as good corporate citizens.



© Official Mark of the Canadian Olympic Committee



More information about how Petro-Canada encourages communication with our stakeholders, including Aboriginal relations, is available at www.petro-canada.ca.



More information about Petro-Canada's commitment to community investment is available at www.petro-canada.ca.

Engaging our Stakeholders

At Petro-Canada, we believe it's important to build and maintain principled-based relationships with our stakeholders. We work towards this goal with an active and ongoing stakeholder consultation process based on open, two-way communication with a genuine interest in understanding stakeholder interests and concerns. We actively seek feedback during each stage of project development and ongoing operations. Open house events, face-to-face meetings, workshops, presentations, community newsletters and participation in various local and regional initiatives help inform and engage our stakeholders. Stakeholder interaction plans are developed for all operating areas and built into our business planning activities.

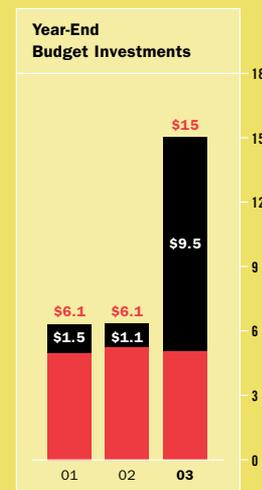
One Ocean

Petro-Canada is a key player in the implementation of One Ocean, which provides a neutral forum for the fishing and petroleum industries to communicate, exchange information and share opportunities. The One Ocean process is unique in the world. It exists to endorse co-operation, transparency and sustainable use of marine resources within the Canada-Newfoundland Offshore Petroleum Board's marine jurisdiction, encompassing over 1.8 million square kilometres.

Community Investment

As a responsible corporate citizen, Petro-Canada works hard to develop relationships of trust and respect and contribute to community well-being in the areas where we live and work. We are proud of our strong tradition of community support.

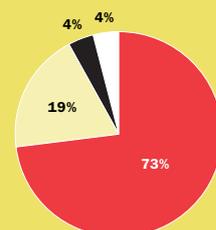
In 2003, Petro-Canada invested about \$15 million in 400 Canadian non-profit organizations in four sectors – education, environment, health and community services, and arts and culture. This included two unique in-kind contributions: we donated a corporate aircraft and avionics shop, valued at \$1.6 million, to the Southern Alberta Institute of Technology; and we turned over the Petro-Canada Research Laboratory, valued at \$6.9 million, to the University of Calgary. We also contributed \$630 000 to support Canada's Olympic team, including scholarships, the Excellence Fund and the Coaching Excellence Awards. Through our Volunteer Energy Program, we provided 430 grants of \$500 each to non-profit organizations supported by employees and retirees who give their time to the community. The total amount of grants, given out since 1992, surpassed the \$1 million mark in 2003.



■ In-Kind Contributions (millions)
■ Cash Contributions (millions)

2003 Budget

(cash and in-kind contributions)



■ Education
■ Health & Community Services
■ Arts & Culture
■ Environment



Petro-Canada engages in a wide variety of activities to contribute to community well-being and engage our stakeholders.

Economic Performance

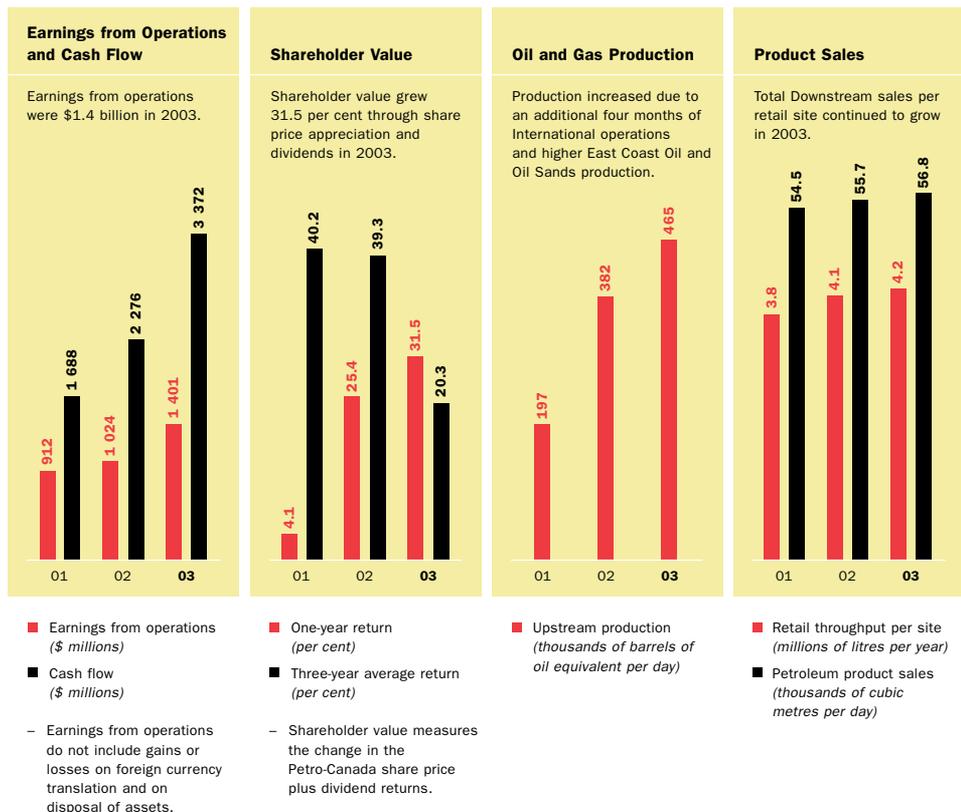
In 2003, Petro-Canada delivered exceptional financial results. The company reported earnings from operations of over \$1.4 billion – the highest in corporate history – and an operating return on capital employed of 16.1 per cent.

Petro-Canada's business activities generate wealth for all levels of government and create direct and indirect employment. In 2003, the company paid \$1 296 million in taxes. This included \$659 million of federal and provincial income taxes, \$64 million of property and other taxes, and \$573 million of foreign income taxes. The company also paid \$392 million in Canadian provincial royalties. Petro-Canada provided customers with over 20 billion litres of petroleum products, including gasoline, diesel fuels, asphalt and specialty lubricants.

At 2003 year-end, Petro-Canada employed 4 514 people in Canadian and international operations, and indirectly provided employment to thousands more through our marketing network and suppliers. We invested \$2 315 million in capital expenditures, 77 per cent of it in Canada and the remainder in our International operations.

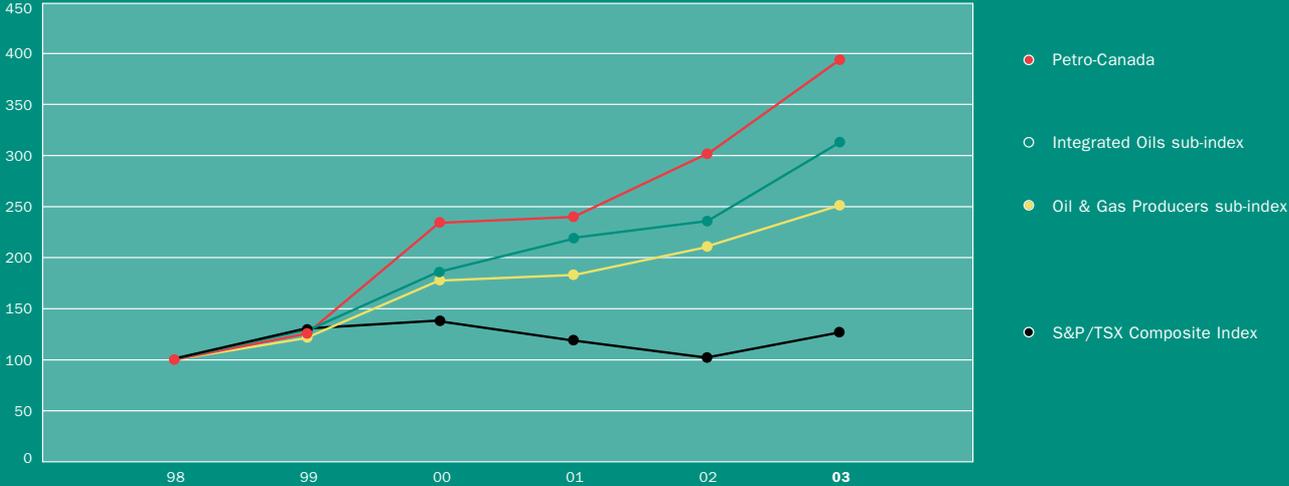


The 2003 Annual Report and details about the many economic factors and company initiatives that contributed to Petro-Canada's performance are available in the Investor Centre at www.petro-canada.ca.



FIVE-YEAR SHARE PRICE PERFORMANCE

Petro-Canada shares rose 293 per cent from year-end 1998 through 2003, rising 31 per cent in 2003 alone.



(December 31, 1998 = 100)
Changes in yearly closing values for Petro-Canada shares compared with the Toronto Stock Exchange (S&P/TSX Composite Index), the TSX Integrated Oils sub-index and the TSX Oil & Gas Producers sub-index.

How to Contact Us

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