

moving forward

Overview of the Sustainability Report 2004



Hydro-Québec, one of North America's major producers of green energy, celebrated its 60th anniversary in 2004. We opt for sustainable energy choices. We generate clean, renewable energy and encourage wise consumption.

Hydro-Québec acts responsibly on a daily basis. All our activities, from planning and research through to construction and operations, have the color of sustainable development.

The Nature of Our Electricity

Hydroelectricity: Our First Choice

Hydro-Québec uses water to generate 96% of its output. Hydroelectricity contributes very little to greenhouse gas emissions. According to a 2004 publication prepared in collaboration with 25 international partners, emissions from northern reservoirs are 35 to 70 times lower, per terawatthour, than those from thermal generating stations.

In 2004, work progressed on a number of hydroelectric developments, and construction began on the Péribonka project in the Saguenay–Lac-St-Jean region.



Managing Demand Through Conservation

Hydro-Québec has several initiatives under way to encourage energy conservation by residential, agricultural, commercial and industrial customers.

Launched in 2004, the ENERGY WISE campaign promotes energy efficiency in all customer categories. Responsible consumption will help conserve natural resources.

Diversifying Our Generating Options

Hydro-Québec plans to use wind power as an additional source of energy supply. We accepted bids from two independent private producers for a total of 990 MW. Between now and 2012, wind projects will generate regional spinoffs estimated at \$1.9 billion.

We also issued a call for tenders for the supply of 350 MW of electricity from cogeneration.



Integrating Our Systems Into the Environment

With a transmission system measuring 32,487 km and a distribution system totaling 107,423 km, we are a significant presence throughout the province. Major advances were made in transmission in 2004. One example is the 120-kV Lafontaine-Paquin line: its high-performance-concrete structures blend into the landscape and cost 15% less than tubular steel towers.

The Color of Our Commitment

Working With Communities

Local and regional communities, social and economic organizations, and citizens' groups are among our prime partners. About 40 agreements were signed with such groups in 2004. One of them deals with the management of forest resources along parts of rights-of-way by the Cellule d'aménagement des Coteaux (Abitibi-Témiscamingue region). Another covers biodiversity enhancement in Baie-Comeau in collaboration with the Amis du boisé de la pointe Saint-Gilles (North Shore region).



Preserving Water and Biodiversity

Hydro-Québec works to preserve and enhance species and aquatic resources as part of our projects and at our facilities. For example, at Mitis-1 and Mitis-2 generating stations in the Lower St. Lawrence region, we installed traps for capturing salmon smolts and releasing them downstream. As well, bluebird nesting boxes were installed on distribution poles in the Québec City region to encourage the species to return to the area; not so long ago, this species was considered endangered.

Public Health and Safety

Hydro-Québec educates the general public about the safe use of electricity. For example, we participated in exhibitions held by Québec's occupational health and safety board (CSST), produced a CD-ROM containing information for delivery equipment operators and promoted safety in a fun way on our website.



Taking Action for Youth

Hydro-Québec endeavors to introduce young people to science and help them learn about hydroelectricity. In 2004, it presented a program entitled *Eau bleue = Énergie verte* (Blue Water = Green Energy) to 2,700 elementary and secondary students in Greater Montréal. Other products for young people included *Envirovolt*, an activity kit for children at science day camps.

Sustainable Development, Our Reality



Eastmain-1 Project

Construction period	Installed capacity	Number of dikes, plus dam
2002–2007	480 MW	33

The *Nadoshtin Agreement* signed by the Crees and Hydro-Québec in 2002 is intended to preserve the Aboriginal way of life and facilitate project construction. The Crees have been actively involved in the project, in both the study and construction stages.

In 2004, the project generated an average of 1,824 jobs; 12% of the workforce on the site were Crees, and another 12% came from the Abitibi-Témiscamingue region.



Ottawa River Watershed

Watershed area	Generating stations	Total installed capacity
146,334 km ² , with 92,203 km ² in Québec	13, with 9 on the Ottawa River	1,858 MW

Over the years, we have introduced various measures to protect the environment and promote joint watershed management. For example, in 2004 we maintained an instream flow at the Rapides-des-Quinze spillway to offset fish habitat loss caused by spillway reconstruction.



Fortuna Hydroelectric Development

Installed capacity	Number of employees	Customer base
300 MW	95	Provides nearly 40% of the country's electricity

As co-owners with El Paso in the Fortuna generating facility in Panama, we set up a social and economic development support program for local communities, particularly Aboriginal ones. Nearly \$1 million has been contributed to various projects, such as building an emergency room, providing educational materials to elementary schools and helping create small reforestation companies.



Energy Efficiency Plan 2005–2010

312,375 ENERGY WISE Home Diagnostic questionnaires completed	172 GWh in energy savings (target: 189 GWh)
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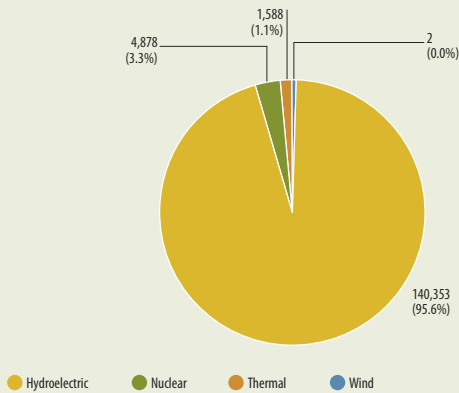
Under our Energy Efficiency Plan, we will invest \$1 billion to encourage customers to save 3 TWh by 2010—the equivalent of the annual consumption of 180,000 homes.

The investment planned will help create jobs in various sectors and promote the emergence of energy efficiency expertise.

Some Statistics

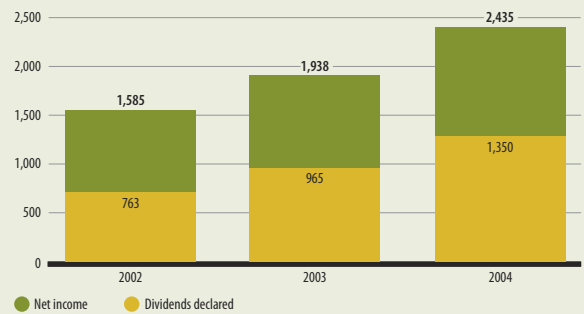
Hydro-Québec operates 53 hydroelectric generating stations with a total installed capacity of 31,622 MW. Hydropower makes up 96% of our output.

Electricity generated by Hydro-Québec – 2004 (GWh)



Net income was \$2.4 billion and dividends of \$1.35 billion were declared. This will bring the dividends paid since 1998 to our shareholder, the Québec government, to \$5.3 billion.

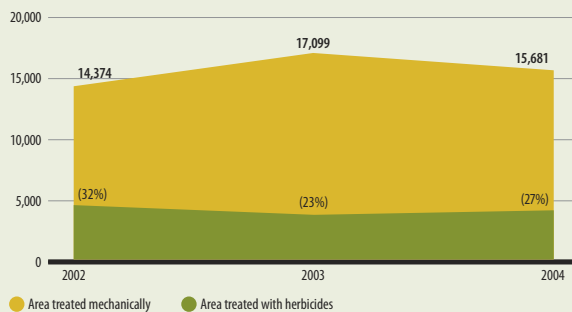
Net income* and dividends declared (\$M)



* Data for 2002 and 2003 have been restated further to the retroactive effect of the accounting standards governing foreign currency translation and asset retirement obligations.

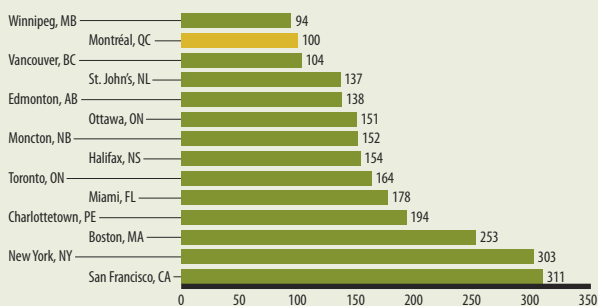
In vegetation control, herbicides are used only when absolutely necessary.

Vegetation control along transmission lines (ha)



Hydro-Québec's residential electricity rate remains one of the lowest in North America. For a typical consumption of 1,000 kWh per month, Montréal ranks second among major North American cities.

Comparative index of electricity prices – Residential customers*



* Rates in effect on April 1, 2004 (before taxes)

Hydro-Québec stimulates regional economies by supporting direct and indirect job creation, procuring goods and services, and paying taxes to local communities.

Hydro-Québec's contribution to regional economies

	2002	2003	2004
Average workforce (person-years)	21,393	21,819	22,183
School and municipal taxes (\$M)	35.9	32.7	33.6
Procurement of goods and services (\$M)	1,649	2,127	2,246
Direct jobs sustained by procurement activities (person-years)	12,250	15,199	14,918

Reduce, reuse, recycle, reclaim... dispose

- Over 853,000 mailings were avoided with the online billing and payment plan.
- 8,340 tonnes of metal were recovered and recycled.
- Nearly 5.2 million litres of insulating mineral oil was decontaminated and reused (97% reuse rate).
- The glass covers from meters were recycled, preventing the disposal in landfill of 26 tonnes of waste material.

Hydro-Québec subsidiary TM4 designed, built and developed the drivetrain system for the Peugeot Quark concept vehicle. ▼



▲ The Fondation Hydro-Québec pour l'environnement provided funding to 16 new projects, including the protection and enhancement of Mont Wright conservation park (Québec City region) with its old-growth forest.

Four undergrounding projects totaling 3.9 km were approved as part of the government's undergrounding program, including 1.3 km in the town of Saint-Jérôme (Laurentians region). ▼



Under our Integrated Enhancement Program, \$1.7 million in funding was provided to 29 initiatives, including the creation of a rest area in the municipality of Béthanie (Montérégie region). ▼



◀ Some 98% of the employees whose work has an impact on the environment are governed by an ISO 14001–certified environmental management system.

▶ Working with the e7, we took part in the environmental assessment of a planned 2.7-MW wind farm in the Galápagos Islands (Ecuador). The goal is to protect birds, particularly the Galápagos petrel, a threatened species.



▲ The \$520-million, 230-MW Rocher-de-Grand-Mère generating station was inaugurated (Mauricie region).