

# Our Commitment to the Future

- **Renewable Energies and Energy Efficiency**
- **Environmental Protection and Quality of Life**
- **Social Commitment**
- **High-Quality, Customer-Driven Service**
- **Human Resources Development**
- **Contribution to the Québec Economy**

By adopting an approach that emphasizes renewable energies, energy efficiency and technological innovation, Hydro-Québec integrates the three dimensions of sustainable development into its activities and takes every possible step to meet the needs of the present and of generations to come.

# Our Commitment to the Future

## Renewable Energies and Energy Efficiency

- Ensure an energy future focused on renewables
- Contribute to the fight against global warming
- Be an agent of change in energy efficiency

### Hydropower

We invested \$1.4 billion in developing Québec's hydropower potential in 2008. Some examples:

- Romaine complex (Côte-Nord): we filed the environmental impact statement and took part in the public hearings.
- Construction: work proceeded on the Eastmain-1-A/Sarcelle/Rupert project (Nord-du-Québec), and Chute-Allard and Rapides-des-Cœurs developments (Mauricie).

We invested \$491 million in optimizing the generating fleet. Some examples:

- Generating station refurbishment: refitting of Outardes-4 (Côte-Nord) and La Tuque (Mauricie).

### Wind power

- The Régie de l'énergie approved 15 contracts signed by Hydro-Québec for the purchase of 2,005 MW of wind power generated in Québec. The wind farms will come on stream between 2011 and 2015.

### New renewable energies

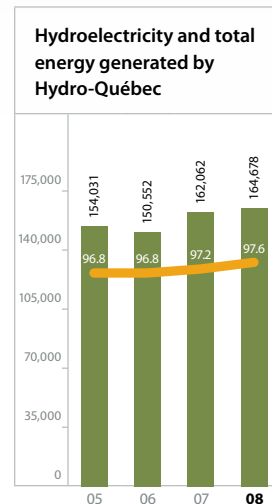
- We purchased 1,439 GWh of energy generated by biomass and waste reclamation.
- We contributed to research on hydrokinetic energy (power generated by ocean currents and tides) and salinity gradient power.

### Energy efficiency

- Energy Efficiency Plan: savings of 1.1 TWh were achieved in 2008, bringing total savings to 76% of the 2009 target of 4.5 TWh.
- Go with the Flow campaign: 230 communities have participated since the program was launched in 2007. Hydro-Québec provides financial support for community projects proposed by municipalities in exchange for their help promoting the ENERGY WISE Home Diagnostic.
- Introduction of the RECYC-FRIGO Environnement™ program: nearly 66,500 old refrigerators and freezers were recovered for recycling in an environmentally responsible way.

**11 TWh in energy savings by 2015.**

**3,500 MW of wind capacity to be integrated by 2015.**



Eastmain-1-A/Sarcelle/Rupert: \$2.9 billion in economic spinoffs for Québec from 2007 to 2012, including \$640 million for the host region.

- Total net energy generated (GWh)
- Hydroelectricity/total net energy generated (%)

# Environmental Protection and Quality of Life

- Reduce the environmental footprint of our projects and activities
- Integrate our facilities with the environment
- Improve our sustainable practices

**Only 0.5%**

of GHG emissions in Québec are produced by the electricity industry.

**43 times less CO<sub>2</sub>**

is produced by Hydro-Québec's generating fleet compared with the average for Canada and the U.S.

## Reduction of greenhouse gas (GHG) emissions

- GHG emissions from Eastmain 1 reservoir (Nord-du-Québec) totaled 214,000 t CO<sub>2</sub> eq. in 2008, a decline of 44% from 2007 and 76% compared to 2006. Three years after reservoir impoundment, gross CO<sub>2</sub> emissions are comparable to those from natural aquatic environments. For more details, go to: [www.eastmain1.org/en](http://www.eastmain1.org/en)
- Outaouais substation: 105,354 tonnes of excavated material was stored on-site and reused for grading and other earthwork, thereby avoiding 7,000 truck trips.
- *Allégo* initiative: we gradually expanded this program introduced in 2005 to encourage employees to use carpooling, public transit, cycling and walking to get to work. Only 37% of Hydro-Québec employees usually commute to work in single-occupant cars.

## Biodiversity protection

- Péribonka development (Saguenay–Lac-Saint-Jean): a borrow pit used during construction was turned into 40 hectares of wetlands, and the reservoir was stocked with 100,000 lake trout eggs.

## Land use

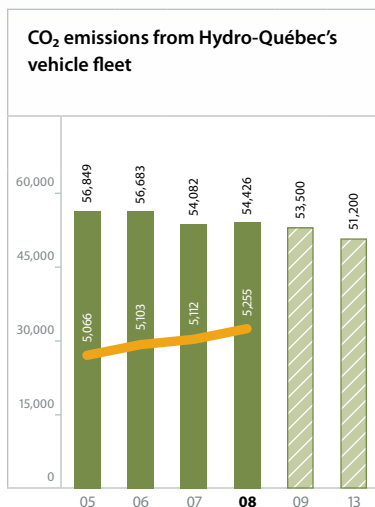
- We signed 25 agreements allowing our rights-of-way to be used for other purposes such as roads, green spaces, and park-and-ride facilities.

## Sustainable practices

- We saved 8.1 GWh by updating the lighting fixtures and heating, ventilation and air-conditioning systems in several of our buildings, and 1.2 GWh by adjusting the temperature settings in five administrative buildings—a measure that will be extended to all buildings in 2009. Total savings: 9.3 GWh, or the consumption of 544 households that heat with electricity.
- We cut our consumption of fine paper by 87 tonnes, saving the equivalent of 13,000 trees and 18 million litres of water. The fine paper used by Hydro-Québec is made of 100% postconsumer fibre, FSC-certified and not bleached with chlorine.

## Preserving heritage

- We conducted archaeological digs for several projects, including the Eastmain-1-A/Sarcelle/Rupert development, where we uncovered remains dating back 4,650 years.



- Total CO<sub>2</sub> emissions from the vehicle fleet (tonnes)
- Total number of vehicles
- ▨ Target (tonnes)

Protecting biodiversity: great horned owls in an artificial nest erected near Hydro-Québec telecommunications facilities.

**On the cover:** The 230-kV line that will be used for energy interchanges with Ontario.

# Social Commitment

- Invest in communities
- Promote consensus for our projects
- Develop a safety and security culture

## Communities

- We signed 18 agreements designed to harmonize our operations with activities in host communities. For example, we offer funding for local initiatives and access to our properties for various uses.
- We provided communities affected by our transmission projects with \$178,800 in financial assistance for initiatives to enhance the biophysical and human environments (Integrated Enhancement Program).

## Aboriginal communities

- We signed agreements with three Innu communities affected by the Romaine project, for the establishment of funds for economic, environmental, social and cultural projects.
- Spinoffs of \$310 million went to Aboriginal companies or workers, under contracts or procurement of goods and services.

## Fondation Hydro-Québec pour l'environnement

- We committed \$1.3 million to 20 projects in 12 different regions of Québec.

## Donations and sponsorships

- \$25.9 million was distributed, including a contribution of \$3.5 million to United Way/Centraide, which also received \$3.2 million from Hydro-Québec employees, pensioners and directors.

## \$8.9 million for universities

in contributions, commitments and funding for research projects and chairs.



Protection of the Manicouagan tidal flats, a project that received a \$49,900 grant from the Fondation Hydro-Québec pour l'environnement.

# High-Quality, Customer-Driven Service

- Customize our programs to satisfy all our customers
- Support customers who are having difficulties

## Time-of-use rate option

- We launched a pilot project offering a rate option based on time and season of use in Trois-Rivières, Saint-Jean-sur-Richelieu, Sept-Îles and Val-d'Or.

## Promotion of online services

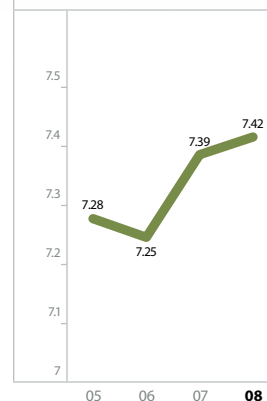
- Over 85,000 customers signed up for online billing in 2008. This brings to 275,000 the number of customers no longer receiving a paper bill.

**3.3 million customers**

**21,909 payment arrangements**

were reached with low-income customers for a total of \$149.5 million.

Combined customer satisfaction index (scale of 10)



● Combined satisfaction index for categories other than large-power customers

# Human Resources Development

- Develop our employees' skills
- Prepare a reliable, competent succession
- Be a modern, diversified company

### Workforce

- We hired 1,252 new employees, 66% of whom were under age 35.
- Internships were offered to 170 university students and 35 college students.

### Working environment

- Seven collective agreements, covering 91% of unionized employees, were renewed before they expired.
- Employees can participate in chat sessions with the President and Chief Executive Officer on the company's intranet site. Examples of topics discussed in 2008: the Romaine project and the refurbishment project for Gentilly-2 generating station.

### Training

- 16,329 Hydro-Québec employees participated in at least one training activity in 2008, including sustainability workshops.

**75% of employees**

have a good or excellent understanding of the concept of sustainability.

# Contribution to the Québec Economy

- Drive regional development
- Develop business partnerships
- Maintain our technological leadership

### Spinoffs

- Procurement of goods and services totaled \$2.66 billion, with 89% going to Québec companies.
- Industrial tourism: we received 133,800 visitors at Hydro-Québec facilities and various jointly operated sites.

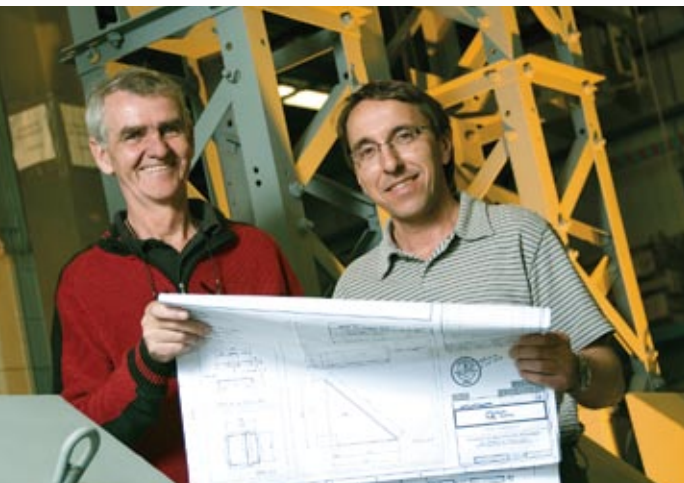
### Innovation and technological partnerships

- We continued to develop management tools for balancing hydro and wind power, as well as models for simulating the behavior of wind turbines and wind farms connected to the Hydro-Québec grid.
- An agreement was signed by Hydro-Québec subsidiary TM4 and Indian automaker Tata Motors for the supply of about 100 leading-edge electric motors.

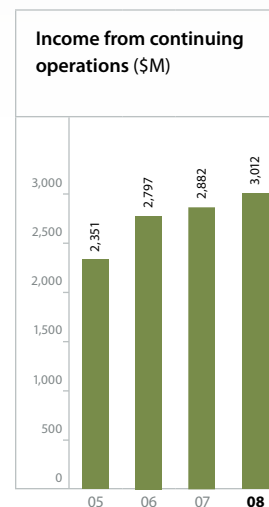
### Financial performance

- Dividends declared for 2008: \$2,252 million.
- Net electricity exports: 8% of sales volume and 32% of income from continuing operations.

**Annual budget of \$100 million**  
for Hydro-Québec's research institute.



A Hydro-Québec TransÉnergie unit earned a *Mérite de l'environnement et du développement durable* award for an initiative to recycle steel structures.



■ Income from continuing operations

The Québec government passed the *Sustainable Development Act* in 2006. In 2008, Québec's *Government Sustainable Development Strategy* put this law into concrete terms, setting benchmarks to guide the actions of government departments, agencies and corporations.

In response to the government strategy, Hydro-Québec has drawn up the *Sustainable Development Action Plan 2009–2013*. Because Hydro-Québec has been applying sustainable development principles for many years, both our day-to-day management and our infrastructure projects are already imbued with a culture of sustainability. Nevertheless, as the action plan indicates, we plan to harmonize our efforts with those of the government to ensure environmental protection, social progress and economic development.

SUSTAINABLE DEVELOPMENT ACTION PLAN 2009–2013	
Action	Target
<b>Action 1:</b> Implement hydropower projects and contribute to the development of wind power.	<ul style="list-style-type: none"> <li>■ Increase output by close to 10 TWh and capacity by 1,056 MW by completing projects already in progress.</li> <li>■ Carry out the Romaine project.</li> </ul>
<b>Action 2:</b> Increase the capacity of existing hydroelectric generating stations.	<ul style="list-style-type: none"> <li>■ Optimize three existing stations to increase peak capacity by 54 MW.</li> </ul>
<b>Action 3:</b> Step up energy efficiency initiatives.	<ul style="list-style-type: none"> <li>■ Achieve savings of 11 TWh by 2015.</li> </ul>
<b>Action 4:</b> Continue to provide help to low-income customers.	<ul style="list-style-type: none"> <li>■ Increase the number of payment arrangements with low-income customers.</li> </ul>
<b>Action 5:</b> Reduce GHG emissions from transportation.	<ul style="list-style-type: none"> <li>■ Raise the vehicle fleet GHG emission reduction target from 5% to 10% compared to 2005.</li> </ul>
<b>Action 6:</b> Promote reduction at source, reuse and recycling.	<ul style="list-style-type: none"> <li>■ Improve the performance of administrative centres, substations and generating stations in terms of reduction at source and reclaiming of 10 types of residual materials, excess goods and residual hazardous materials by 2013.</li> </ul>
<b>Action 7:</b> Establish specifications for sustainable procurement.	<ul style="list-style-type: none"> <li>■ Implement sustainable specifications for five more commonly used products by 2013.</li> </ul>
<b>Action 8:</b> Inform and educate employees regarding sustainability and the company's approach. Help employees learn to take sustainability principles into account in their daily activities.	<ul style="list-style-type: none"> <li>■ Educate 80% of employees by 2011, ensuring that 50% of that number have enough knowledge to incorporate these principles into their daily activities.</li> </ul>
<b>Action 9:</b> Improve vegetation control methods on the distribution system to better protect biodiversity.	<ul style="list-style-type: none"> <li>■ By the end of 2013, incorporate specific biodiversity reinforcement guidelines into 90% of planned vegetation control operations.</li> </ul>
<b>Action 10:</b> Organize sustainable events and promote responsible management of events sponsored by Hydro-Québec.	<ul style="list-style-type: none"> <li>■ Integrate, on average, 75% of the measures defined as sustainable when managing selected events organized by Hydro-Québec, by 2013.<sup>a)</sup></li> </ul>

a) Twenty-five measures have been defined, covering all aspects of managing sustainable events.



To find out more about sustainable development at Hydro-Québec,

consult our Web site and the online version of the *Sustainability Report 2008*.

[www.hydroquebec.com/sustainable-development](http://www.hydroquebec.com/sustainable-development)

