Clean energy to power us all

Annual Report
2018

Hydro Québec

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COVER

Daniel-Johnson dam, located in the Côte-Nord region, celebrated its 50th anniversary in 2018. It is the world's largest multiple-arch-and-buttress dam.

All significant events up to February 15, 2019, are reflected in this report.

HYDRO-QUÉBEC IN FIGURES

Net income
$3,192 million
in 2018

Net electricity sales
208.9 TWh
including 36.1 TWh in exports

Residential rate
7.13¢/kWh
the lowest in North America

Public satisfaction index
93%

More than 99% of Hydro-Québec's power output is clean and renewable.

The hydropower generated by our run-of-river and reservoir facilities offers an ideal solution for North America in its efforts to reduce GHG emissions while ensuring a secure supply of electricity. The CO_2 equivalent produced per kilowatthour of power generation amounts to only 6 grams for run-of-river plants and 17 grams for reservoir plants. As a result, the GHG emissions rate of our generating fleet is among the lowest of any facilities that use the main generating options, whether continuous or intermittent (nuclear, wind, photovoltaic solar, thermal).

JACYNTHE CÔTÉ
CHAIR OF
THE BOARD

I am honored to join Hydro-Québec's Board of Directors at this critical juncture. It is a time when the company is called upon to play a leading role in climate action and the energy transition in Québec, while continuing to drive sustainable economic development—two goals that are 100% compatible.

Hydro-Québec delivered a strong financial performance in 2018. With net income of $3,192 million, up 12% over 2017, the company will pay its shareholder an even larger dividend than last year—a contribution that benefits all Quebecers. Once again this year, in accordance with its strategic priorities, the company kept its rate increase below the level of inflation.

The steady growth in export revenue demonstrates yet again the importance of leveraging this activity, not only for the company's profitability but also to fight climate change beyond our borders.

Since my arrival, I have witnessed the sweeping transformation in customer services initiated by Management. By putting customers at the very heart of its business strategy, Hydro-Québec is boldly reaffirming its leading role as a public utility present across Québec.

I would be remiss if I did not mention the impressive engagement and creativity of Hydro-Québec employees and their commitment to providing top-notch service to Quebecers. The quality, drive and exemplary contribution of the organization's people are key assets that will empower the company to take on the challenges ahead without breaking stride.

The Board that I chair will be both dynamic and meticulous in fulfilling its role. It will provide the requisite leadership and carry out its responsibilities with the efficiency demanded by a large organization like Hydro-Québec. But above all, the Board will be mindful of exercising its decision-making power in the best interests of all Quebecers.

ÉRIC MARTEL
PRESIDENT AND CHIEF EXECUTIVE OFFICER

The past year was remarkable in more ways than one: net income rose to $3,192 million, net exports reached a record level of 36.1 TWh, the partial sale of TM4 yielded a gain of $277 million and we signed contracts to sell 9.45 TWh to electric distribution companies in Massachusetts over a 20-year period. These agreements are evidence that our green, renewable hydropower offers a tangible solution for reducing greenhouse gas emissions and ensuring security of supply in the U.S. Northeast. What's more, sales in most of our customer categories in Québec continued to grow.

We can credit the solid contribution made by our employees, along with increasingly effective, prudent management, for these positive outcomes. They're the product of both strict cost control and a business strategy that includes seizing every opportunity in a constantly changing business environment.

Above all else, these accomplishments also demonstrate that in making customers the focus of everything we do, we've been able to live up to their expectations, as is amply illustrated by our 93% public satisfaction rate. It's equally noteworthy that, for the fourth year in a row, we've upheld our commitment that residential rate increases will not exceed inflation.

I want to draw attention to our determined efforts during the year to make occupational health and safety an intrinsic corporate value, one where we all work together to ensure everyone's protection. Our new statement of OHS principles stresses agency, contribution and buy-in on the part of each individual to build a true culture of prevention in order to eliminate hazards at source so that all can do their jobs safely.

As a major player on the North American energy scene, we're faced with upheavals that are disrupting the industry. Our continued strong

leadership will enable us to take maximum advantage of the sea change currently under way. To do this, we need to speed up the digital transformation that will support our business strategies. This means investing in infrastructure and equipment so we can roll out new solutions and services, while maintaining support for all our core operations and improving overall performance.

In view of these ambitious goals, the sustained commitment of our employees is critical. As the 2018 employee engagement survey attests, 85% say they are motivated, supported by the Management team, and driven by a determination to perform to new levels. The signing of seven collective agreements is another important factor. It establishes a positive work atmosphere and generates productivity gains that will lead to even better service for customers.

Hydro-Québec received a number of distinctions in 2018, including the Corporate Knights award recognizing it as the best corporate citizen in Canada, in particular for the proportion of women on our Board of Directors, pay equity and the fact that our energy is more than 99% clean.

The Technological Vision 2035 we recently adopted opens up brand-new prospects. It identifies our technology targets and the avenues that will take us there. Based on this vision, we've produced portfolios of innovation projects focused on our customers, our assets and the power system of the future. These projects will diversify our product and service offering and usher in a new era of electrification, one that will provide our customers with a unique opportunity to contribute to the decarbonization of the Québec economy. In the same vein, we intend to maintain and enhance our position as a world leader in battery materials.

Net income totaled $3,192 million

Net electricity exports reached a historic volume of 36.1 TWh

Public satisfaction rose to 93%

On an entirely different note, I'd like to share the impressive results of the 2018 Hydro-Québec employees' and pensioners' Centraide campaign: nearly $6.2 million. The amount raised has grown steadily over the past four years.

In 2019, we'll be celebrating Hydro-Québec's 75th anniversary. I'm profoundly aware of the legacy we've been left by the women and men who, since 1944, have played a role in building this company, a national treasure that's highly esteemed both at home and abroad. We're carrying on their work by completing the Romaine hydroelectric complex and the Chamouchouane–Bout-de-l'Île transmission project, while ensuring the long-term operability of all the generating stations, lines and substations that make up our wealth.

With a keen sense of the responsibilities I've taken on, I will continue to lead a company that has been close to Quebecers' hearts since the very beginning of its long and fascinating history.

OUR MANAGEMENT TEAM

Seated, from left to right: Éric Martel, President and Chief Executive Officer; David Murray, Chief Operating Officer, Hydro-Québec and President, Hydro-Québec Production; Élise Proulx, Vice President – Communications and Government Affairs. Standing, from left to right: Nathalie Dubois, Vice President – Human Resources; Pierre Gagnon, Executive Vice President – Corporate and Legal Affairs and Chief Governance Officer; Réal Laporte, President, Hydro-Québec Innovation, équipement et services partagés and President and Chief Executive Officer, Société d'énergie de la Baie James; Marc Boucher, President, Hydro-Québec TransÉnergie; Éric Filion, President, Hydro-Québec Distribution; Jean-Hugues Lafleur, Executive Vice President and Chief Financial and Risk Officer.

A company focused on customer needs

As a leader of the energy transition, Hydro-Québec is evolving into more than just a power utility: it's becoming a provider of services that zero in on customer lifestyle. More than ever before, customers are foremost in everything we do. Precisely targeting the expectations of electricity consumers, both now and in the longer term, is also what will enable us to get through the shakeups that are transforming the energy industry.

We reviewed our practices in order to ensure prompt, optimal, personalized handling of complaints. Special efforts led to the establishment of a multidisciplinary team to address the irritants that cause complaints and to resolve them right at the source. So far, the results have been remarkable: the number of complaints received in 2018 dropped by more than 50% from 2015.

One of the expectations we've heard from customers is to receive advance notice when vegetation control is planned near their home. To address this, we launched a pilot project to inform people of the dates and times when our tree pruners will be working in their area.

We're also carrying out several pilot projects involving our research institute, including the Lac-Mégantic microgrid, which provides an opportunity for customers to play an active role in developing new energy solutions tailored to their needs.

The chat feature, our Facebook page and our Twitter accounts have broadened access to our customer services, enabling us to handle over 109,000 inquiries and messages in 2018.

93%

OVERALL PUBLIC SATISFACTION

In 2018, 93% of survey respondents said they were "very satisfied" or "somewhat satisfied" with Hydro-Québec. The rate was 91% in 2016 and 92% in 2017. We're keeping up our efforts to better meet customer expectations by enhancing our services and improving our ways of communicating.

Evolving our app

The new version of the Hydro-Québec mobile app, available since April 2018, is useful in many ways. Customers can now manage their accounts anytime, receive alerts when they use more power than anticipated (if they're on the Equalized Payments Plan), monitor their hourly electricity use, view and pay bills, and receive personalized status updates during an outage. They can also log in using fingerprint or facial recognition on enabled devices.

Encouraging greater use of online services

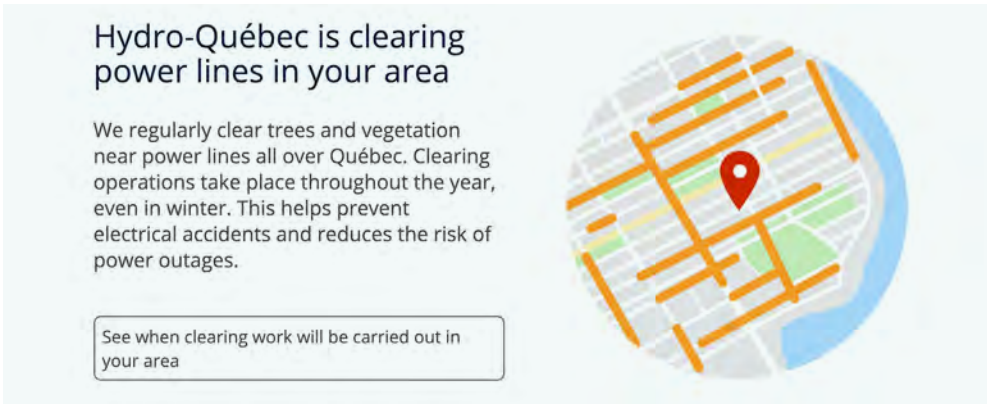
More than 41% of our customers are signed up for Online Billing. A number of promotional campaigns, combined with the strike at Canada Post, contributed to this outcome. As a result, we're now printing 13 million fewer bills each year. And, as of April 1, 2018, we eliminated the administration charge for customers who use the self-service option to report a change of address.

Reaching more customers

From October 4 to November 25, 2018, Hydro-Québec posted a series of humorous short videos on Facebook to illustrate the importance of electricity and promote our products and services. They cover a variety of topics: electricity in everyday life, the consumption profile, energy efficiency, the mobile app and Online Billing. The videos are very popular and have been viewed over 3.5 million times.

Supporting energy performance

As TeamMTL's lead sponsor, Hydro-Québec attended the Solar Decathlon 2018 in Dezhou, China, to support the team and their competition entry, the Deep Performance Dwelling. It was a unique opportunity for Hydro-Québec researchers to network with academics, with a view to achieving a better understanding of our residential customers' future needs.



Among the initiatives taken to consolidate a customer-focused culture, we held a Customer Experience Week from October 1 to 5. As part of our campaign encouraging employees to be Hydro-Québec ambassadors, we also set up a telephone line to help them facilitate customer access to the company. In addition, the distribution control center and a customer relations center in Montréal held open houses.

As always, we're adapting our rates to the energy and economic context, so as to encourage our customers to better manage their electricity use.

87 seconds

AVERAGE CALL WAIT TIME AT OUR CUSTOMER RELATIONS CENTERS

We've reduced our average call wait time over the past few years. This improvement can be credited to measures taken to enhance customer service and confirms our efficiency gains in this area.

New dynamic pricing

To expand our customers' rate options and have new solutions available for dealing with winter peak periods, Hydro-Québec is proposing to add two opt-in dynamic rate formulas for residential and small-power business customers, available as of December 2019.

Subject to the approval of the Régie de l'énergie, dynamic pricing would enable participating customers to lower their bills by changing their energy habits. And Hydro-Québec could cut its costs during winter peaks.

INCREASE IN THE CONSUMER PRICE INDEX AND THE COST OF VARIOUS CONSUMER GOODS IN QUÉBEC OVER THE PAST 20 YEARS

Source: Statistics Canada

Assisting low-income households

For many years, Hydro-Québec has been making it easier for low-income households to stay on top of their electricity bills. For example, we've modified our collection procedures and energy efficiency initiatives to fit their situation.

In 2018, we ran two pilot projects involving improvements to payment arrangements for low-income customers. Given the positive results, we started to offer more flexible arrangements to these customers and undertook to set up a support center to facilitate access to the various services and programs designed for them. We're also continuing to work with Transition énergétique Québec to determine the best ways to reach these customers, for example through additional measures such as free refrigerator replacement under the Éconologis program.

For the fourth year in a row, our rate filing with the Régie de l'énergie met our commitment that rate increases will be no higher than inflation.

86%

CALL SERVICE LEVEL AT OUR CUSTOMER RELATIONS CENTERS

The proportion of calls answered in less than 180 seconds remained steady in 2018, exceeding the target of 85% set at the start of the year.

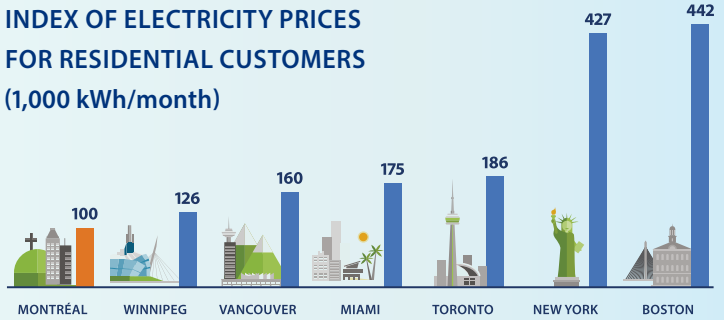
Meeting commitments

We applied to the Régie de l'énergie for a rate adjustment of 0.8%, effective April 1, 2019, for all residential customers and most business customers. If the application is approved, the result will be an increase of $0.23 per month for an apartment heated with electricity and $1.60 for a midsize house.

Supporting energy efficiency

In November 2018, to streamline the experience for both customers and partners, Hydro-Québec launched new, more flexible and more productive energy efficiency programs for business customers. Program enhancements include personalized support in the pre-project stages and greater automation of financial assistance estimation tools.

INDEX OF ELECTRICITY PRICES FOR RESIDENTIAL CUSTOMERS (1,000 kWh/month)



Our residential rates are the lowest in North America. Electricity prices are nearly twice as high in Toronto, and four times higher in New York.

These initiatives contribute to the objectives set out in the 2018–2023 energy transition master plan of Transition énergétique Québec. They concentrate largely on reducing power demand and developing innovative energy solutions. Hydro-Québec intends to continue its demand response efforts with a view to balancing supply and demand during winter months.

In November 2018, Hydro-Québec Distribution received the highest accolade from the Prix performance Québec awards—a Grande Mention in the public-sector category—at the Salon MPA best business practices fair. This world-class recognition is equivalent to Japan's Deming Prize or the Malcolm Baldrige National Quality Award in the U.S.A. The jury studied our business practices and compared them with internationally acknowledged best practices.

We launched a number of initiatives designed to bring about evolutionary change in the company and turn our employees into ambassadors of continuous improvement.

2,740
complaints

COMPLAINTS

The number of complaints continued to decline in 2018, reflecting the improvements we've made in our interactions with customers.

Restoring service

A storm cell and powerful westerly winds shook Québec on September 21, causing many outages. The Outaouais, Abitibi-Témiscamingue and Laurentides regions were the most severely affected. Exceptionally violent winds wrought major damage, especially in the Gatineau area, where tornados formed. At the height of the disturbance, nearly 165,000 customers were without power. Despite the scope of the damage, 95% of affected customers had their power back within 42 hours, thanks to our diligent repair crews.

At the end of November, gusts of up to 120 km/h knocked out power in the Îles-de-la-Madeleine and damaged the transmission and distribution systems there, as well as the underwater fiber-optic cables connecting the islands to Gaspé. At the peak of the storm, close to half of our island customers had lost power. Thanks to our sustained efforts and commitment, power was restored to 95% of affected customers within 72 hours, despite the severity of the damage.

Lending a hand

In March, Hydro-Québec answered the SOS from utilities in New York and Massachusetts hit by Winter Storm Riley. Many of our employees pitched in to help our neighbors to the south. No fewer than 290 workers went on the mission, which lasted over two weeks, one of our longest ever. Our line crews worked ceaselessly to restore power as soon as possible, earning kudos from the American utilities. They were impressed by the number of personnel and their dedication, and applauded Hydro-Québec for its generosity and civic-mindedness.

Our line crews got right to work in the Gatineau area, hard-hit in the fall by tornados that caused extensive damage.

After a major snowstorm in March, many Hydro-Québec employees helped restore power in New York and Massachusetts.

Continuously improving

In 2018, we carried out several improvement and transformation initiatives designed to guide the company towards evolutionary change that is integrated, participatory and iterative. Their purpose is to foster a culture of everyday efficiency and productivity.

As an energy transition leader, Hydro-Québec supports the development of all renewables according to the needs of its customers and the territory it serves.

88%

SIMPLE SERVICE CONNECTIONS

This indicator measures the percentage of simple service connections completed within 10 business days. The slight decrease seen in 2018 is mainly due to more frequent weather events that caused service interruptions and forced us to extend the connection lead time in some cases.

Advancing the energy transition

To help the Îles-de-la-Madeleine transition to clean energy and reduce greenhouse gas (GHG) emissions, we decided to connect the archipelago to the main system in the Gaspésie region via an underwater link, scheduled for commissioning in 2025. The thermal power plant that currently supplies the islands will be kept as a backup to ensure reliable service and uphold Hydro-Québec's commitment to preserve local jobs. In partnership with the community, Hydro-Québec will also set up a microgrid incorporating innovative energy solutions to support the islands' energy transition.

A 6-MW wind power purchase contract approved by the Régie de l'énergie will reduce annual GHG emissions from the Îles-de-la-Madeleine generating station by about 13%. Commissioning of the wind farm is slated for 2020.

Generating power in the North

A pilot project involving the installation of 69 solar panels in the village of Quaqtaq, Nunavik, is helping us learn a great deal about the use of this kind of equipment in northern Québec in terms of engineering, construction and procurement, as well as metering, commissioning and determining cost-effectiveness. We're now better prepared to develop and launch initiatives to switch off-grid systems to renewables.

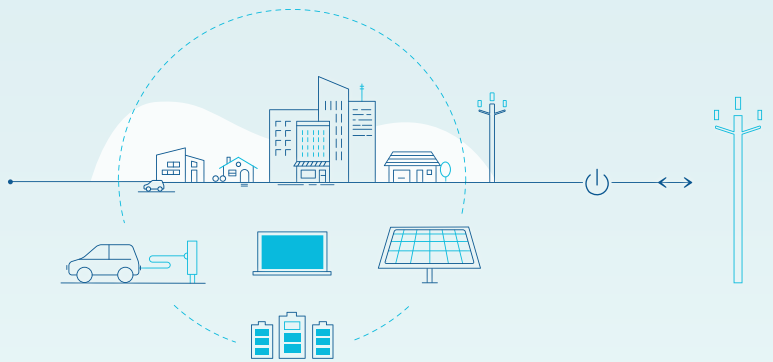
We also installed batteries in Quaqtaq to test them in actual operating conditions in a northern environment. They will first be tried out as a means of meeting capacity needs. A storage system like this could help with Quaqtaq's transition to a smart grid. In addition, it would facilitate the integration of more renewable energy throughout the coming stages in the conversion of the local power system.

Building a new generating station

We commenced the draft-design phase for a new generating station in Tasiujaq, Nunavik, to replace the thermal power plant, which has reached the end of its useful life. Project approvals and preparation of building performance specifications are scheduled for 2019.

The microgrid center in Lac-Mégantic, which was inaugurated in July, promotes and showcases an innovative project that's the result of a partnership between Hydro-Québec and the municipality. The planned microgrid will allow us to assess how the latest technologies for residential and commercial buildings—solar panels, batteries, smart-home systems and charging stations—could be offered as new services to our customers and help lower their electricity bill. It reflects Hydro-Québec's role in creating energy solutions, while at the same time laying the groundwork for the municipality's future.

EXAMPLE OF MICROGRID



We're testing new technologies, integrating new energy sources and diversifying our offering of products and services as we constantly strive to do things differently.

88%

WORK COMPLETED BY DATE FIRST GIVEN TO CUSTOMER

The percentage of cases where technical services were completed by the date first given to the customer was up from 85% in 2017 to 88% in 2018.

Integrating renewables

To maximize the integration of renewable energy in off-grid villages, we're working to upgrade and automate the thermal plants currently supplying their power. In 2018, work at Kangiqsujuaq and Kangiqsualujjuaq generating stations was completed.

Talks are under way with representatives of the communities of Obedjiwan and Inukjuak to assess scenarios for integrating renewable energy. Collaboration with the two communities continued throughout the year.

Supporting ecodistricts

Hydro-Québec supports ecodistrict projects, a number of which got off the ground in 2018. These mixed-use green neighborhoods will incorporate innovative technologies such as a district energy system delivering heating and cooling. In addition to stimulating electricity sales and facilitating demand response on the Hydro-Québec grid, they will support a lower-carbon lifestyle and enable significant energy savings for their residents.

Optimizing system reliability

To optimize system reliability and quality of service, Hydro-Québec is continuing its efforts to target maintenance needs by identifying grid components that fail recurrently or present a high probability of failure.

Theft detection

For the past few years, we've been running a pilot project to detect electricity theft by analyzing data from communicating meters (analytical detection). In June 2017, we joined forces with the Sûreté du Québec to launch Operation Ampère. The aim was to investigate potential cases of electricity theft that the pilot project team had detected through analytics in two regions of Québec. In 2018, 122 cases were confirmed thanks to the new methods. We will continue our efforts to protect our revenue and combat all forms of this crime.

For the third year in a row, Hydro-Québec garnered an award in the prestigious OCTAS competition held by Réseau ACTION TI. The OCTAS are an outstanding opportunity for Québec-based companies to shine and be recognized by their peers for innovative, creative IT projects. The company won the OCTAS in the public-sector category for its power theft detection solution, which uses smart-meter data analytics to detect irregularities such as electricity theft and defective meters.

Hydro-Québec will oversee the rollout of hundreds of fast-charge stations and ensure the long-term availability of this public service without impacting electricity rates.

1,600 fast-charge stations

EXPANDING THE ELECTRIC VEHICLE CHARGING NETWORK

The 1,600 fast-charge stations to be installed by Hydro-Québec over the next 10 years will boost EV ownership in the province.

Championing e-mobility

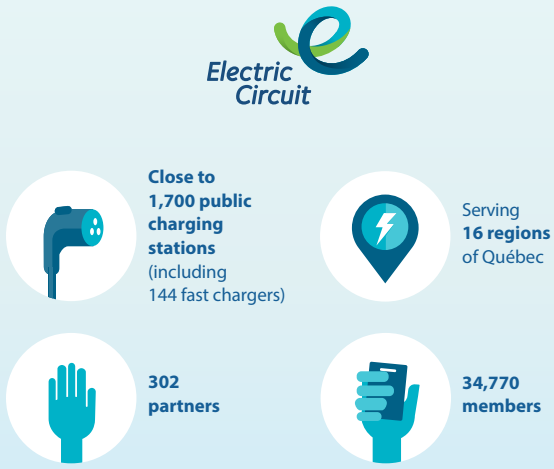
As an energy transition leader, Hydro-Québec actively supports Québec government efforts to electrify transportation. We applauded the National Assembly's adoption of a bill to establish a public fast-charging service for electric vehicles (EVs), an initiative with no financial impact on the government or our customers.

Deploying a public fast-charge service

The *Act to promote the establishment of a public fast-charging service for electric vehicles* was passed by the National Assembly on June 15, 2018, part of the Québec government's efforts to reduce motor vehicle GHG emissions. Under the legislation, the government may set the rates for fast-charge service, and the Régie de l'énergie, in setting electricity rates, may consider the revenue needed by Hydro-Québec to operate the service.

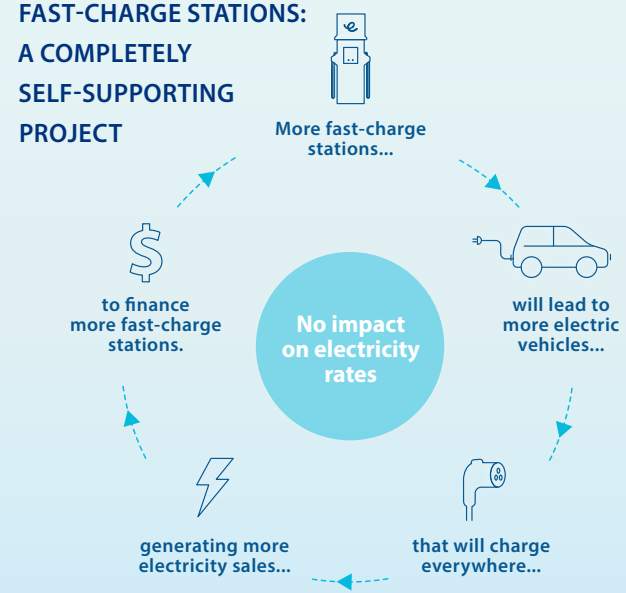
Expanding the Electric Circuit

The Electric Circuit continued to gain ground in 2018, with over 1,700 charging stations now in service. In the six years since its launch, the Electric Circuit has deployed fast-charge highway corridors and expanded its facilities to meet the growing demand from EV drivers, whose numbers are on the rise. Following a public tendering process for renewal of a contract to supply 50-kW stations, two-year contracts were awarded to AddÉnergie and ABB.



This solution allows Hydro-Québec to align its e-mobility initiatives not just with government aims and policies, but also with customer concerns. Since the cost will essentially be paid for by home charging sales, expanding the fast-charge network will have no impact whatsoever on electricity consumers. The addition of 1,600 fast-charge stations over the next decade will also generate the kind of consumer confidence needed to stimulate EV sales in Québec.

ADDING MORE FAST-CHARGE STATIONS: A COMPLETELY SELF-SUPPORTING PROJECT



A long-term business strategy

The year 2018 was marked by a number of milestones in terms of our growth strategy. The high point was being selected by Massachusetts to help it meet its clean energy needs in what will be the biggest long-term sales contract in our history. Agreements have already been signed with Massachusetts electricity distributors. Also noteworthy was the forging of a strategic partnership that will secure the growth of TM4 while keeping Québec at the cutting edge of electric drive systems.

These successes resulted from the steady, structured execution of our business strategy combined with careful analysis of each opportunity within a changing business environment.

For a number of years now, our approach to markets in the U.S. Northeast has centered on helping our partners achieve their environmental targets while maintaining their system reliability criteria. We also see to it that our proposals create value. Our innovative response to the Massachusetts request for proposals will bring rewards for many years to come.

Our hydroelectricity is the top choice in the U.S. Northeast for reducing GHG emissions and ensuring security of electricity supply.

9.45 TWh

CLEAN ENERGY

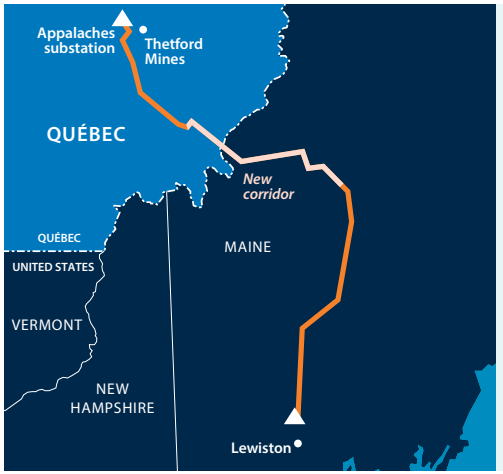
Massachusetts will have 9.45 TWh of clean energy for 20 years starting in 2022, thanks to agreements its electricity distributors have signed with Hydro-Québec in a major deal that will greatly reduce the state's CO_2 emissions.

A major sales contract with New England

In early 2018, following a tendering process for 9.45 TWh of clean energy, Massachusetts authorities selected Hydro-Québec's proposal from among the 46 bids received.

This will be the biggest long-term sales contract in our history. It will ensure 20 years of stable income for the company, starting in 2022.

Hydro-Québec will supply power to Massachusetts every hour of the year for the term of the contract. The state's Department of Energy Resources estimates that these deliveries will cut GHG emissions in Massachusetts by more than 36 million tonnes of CO_2 equivalent—roughly comparable to taking 413,000 cars off the road. Our clean energy will contribute to meeting the goals set out in the Massachusetts *Global Warming Solutions Act* (GWSA) and reducing emissions in all of New England.



About the NECEC project

In Québec, construction of a 320-kV DC tie line running some 100 km between Appalaches substation near Thetford Mines and a connection point on the Québec/Maine border.

In the U.S., construction of a 230-km overhead line—the New England Clean Energy Connect (NECEC)—from the Québec/Maine border to Lewiston. About 1 km will be undergrounded to accommodate a protected area of the Kennebec River.

Initially, Massachusetts had selected the Northern Pass Transmission project to deliver Québec hydropower to its distribution networks. However, after New Hampshire authorities denied the U.S. proponent a permit to build the line, Massachusetts opted instead for the New England Clean Energy Connect (NECEC), a project developed by Central Maine Power. Our hydroelectricity was therefore the state's first and second choice.

Getting Québec power to Massachusetts entails several contracts for energy sales and transmission services. These were negotiated and signed during the first half of 2018.

A number of regulatory steps must be completed before electricity delivery can begin in 2022:

- The electricity sales contract must be approved by the Massachusetts Department of Public Utilities.
- Permits for the transmission lines in both Québec and Maine must be obtained.

In selling a 55% equity interest in TM4 to Dana, Hydro-Québec has fostered the growth of its subsidiary while keeping Québec at the cutting edge of electric drive systems.

$277 million

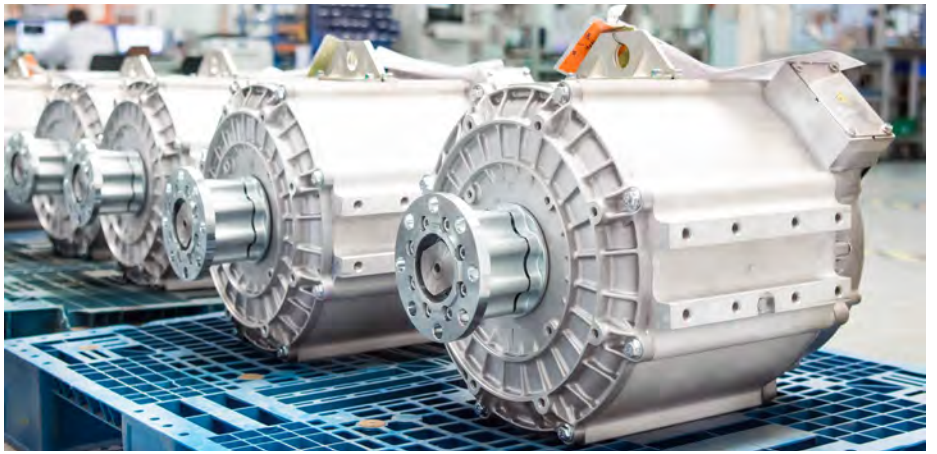
AN IDEAL PARTNER

Global industry leader Dana Incorporated has become the majority shareholder of TM4, which develops, manufactures and markets electric and hybrid powertrain systems. Hydro-Québec's gain on this transaction amounted to $277 million.

Hydro-Québec teams up with Dana Incorporated

With transportation electrification on the rise, we began 2018 with a rigorous process to identify the winning conditions that would let TM4 attain its full business potential. The chosen solution was to integrate TM4 into the development strategy of Dana, a well-established industry player with a global footprint.

On June 22, Hydro-Québec and Dana Incorporated announced they would be partnering in TM4. Under the agreement, TM4—a subsidiary founded by Hydro-Québec in 1998 and today employing 130 at its Boucherville plant—became Dana's supplier of electric motors, power inverters and controllers, while Dana, in turn, became TM4's majority shareholder. Hydro-Québec maintains a 45% interest along with veto rights regarding governance and strategic decisions.



TM4's plant develops, manufactures and markets hybrid powertrain systems for an extensive range of vehicles.

TM4 now develops, manufactures and markets electric and hybrid powertrain systems for Dana and its partners—an arrangement that affirms its expertise in the field. Dana, for its part, is now the market's sole supplier capable of producing all core components of a fully integrated e-drive (gearboxes, motors, inverters and thermal management).

TM4's expertise in electric motors and inverters is a good complement to Dana's operations.

Thanks to Dana's international reach, TM4 will be able to expand its operations, access markets quickly and become a global industry leader without sacrificing its brand integrity. Hydro-Québec has succeeded in its aim to secure its subsidiary's growth while generating economic benefits for Québec.

Dana's global presence will boost the standing of TM4's Boucherville facility, strengthening its position as a center of excellence in electric motor and inverter development.

Corporate transformation in a changing industry

To help the company adapt and evolve in a constantly changing environment, we encourage our employees and managers to adopt and sustain new practices and innovative behaviors. Pivotal to this is our commitment to implement diversified change management strategies. For example:

- Analyzing how changes impact human resources and identifying gaps where tailored measures could be applied
- Establishing communication and training strategies that foster employee engagement and strengthen our union relations
- Transformation project management that promotes company-wide synergies
- Adapting key HR processes (hiring procedures, performance assessments, managerial support/training programs, etc.) to reinforce behaviors in line with our new expectations

In 2018, our employees got a chance to provide feedback on our corporate transformation and change management practices through the survey *Notre énergie, notre engagement*.

In our relations with the unions that represent our workforce, we aim for lasting partnerships and cooperation grounded in trust and credibility.

3.1%

SKILLS UPGRADING

In 2018, Hydro-Québec dedicated 3.1% of its total payroll to developing its human resources. For example, 329 managers received leadership development training.

Collective agreement renewal

For many years now, we have emphasized partnership and cooperation in our relations with our employee unions. Ongoing, open and direct communication has been vital to the collective agreement renewal process. In this context, the unions proved receptive to our high expectations regarding team flexibility and work schedules. Bringing about change posed challenges, yet we succeeded in agreeing on new provisions that address the concerns of both parties. We also streamlined our hiring process, which means we can fill positions more quickly while limiting needless staff transfers. Lastly, the terms of our pension plan were modified in keeping with the company's financial performance requirements.

Seven collective agreements were renewed in December, attesting to a positive working climate.

Employee experience

Establishing a strong customer focus is one of the pillars of our business strategy. With this in mind, in 2018 we undertook to transform the employee experience at Hydro-Québec. We want to improve the experience for employees and managers alike, both on the job and at significant career junctures. Doing so will heighten employee engagement, in turn creating a climate where our staff are motivated to provide even better customer service. All our teams are encouraged to take every opportunity to fine-tune our work processes, not only as an everyday practice but also as part of initiatives having an impact on the company's development.

We encourage each and every team member to provide input on improving our processes.

Measuring employee engagement

Hydro-Québec's emergence as an energy transition leader hinges on the engagement of its entire workforce. That's why we implemented a new employee engagement survey to help us determine our collective potential for success. The sustainable engagement index shows the extent to which employees are motivated, receive support from Management and are driven to succeed. We scored 85% in 2018, based on the answers of 16,011 employees, or 79% of our workforce. Teams across the company are springing into action, taking their cue from organizations that outperform in this regard.

New performance indicators support decision making and ensure better integration of financial processes into HR practices.

19,904 employees

A CHANGING WORKFORCE

At the end of 2018, Hydro-Québec had 19,904 permanent and temporary employees. The year saw 920 people retire while 174 permanent and 1,283 temporary employees were hired.

Strengthening leadership

Since 2017, Hydro-Québec has fostered professional development among its managers through "Leader Hydro-Québec", a four-day program led by seasoned company managers and covering four key topics. Some 40 managers have collaborated in the program since its launch.

Optimizing our hiring, orientation and onboarding processes

Today's changing labor market is prompting us to review our staffing methods and make them more scalable and flexible. To achieve the desired improvements, we created a target process that enhances the experience for both candidates and new hires, specifically with regard to recruitment and onboarding. New employees will thus be able to contribute to the company as of day one.

Organizational synergy

We continue to seek greater synergy in the support we provide to our managers across Québec and in our HR activities. The organizational structures that once hindered cooperation have given way to a more collective approach to achieving company targets. Below are some examples of synergies that have emerged from pooling our resources and expertise:

- After a concerted effort to support strategic decision making by implementing performance indicators, financial processes are now better integrated into HR practices.
- New collaborative networks have brought our HR teams closer, making it easier for them to develop effective tools to support our workforce planning strategy.
- Simple management support initiatives are being tested in two Hydro-Québec divisions. These consist in providing managers across all structural units with timely support for any HR-related matters they may encounter.

Our "Leader Hydro-Québec" program is a leadership development initiative.

Health and safety: A unifying commitment

Hydro-Québec is committed to achieving a shift in occupational health and safety (OHS) so that this fundamental value becomes part of its DNA. Backed by the management teams, this continuous improvement process empowers individuals to act and relies on their contribution and commitment. It means embedding OHS management in project design, planning and execution, and actively managing the company's safety performance.

In line with our new Statement of Occupational Health and Safety Principles, we intend to do whatever it takes to protect the people who work with us. We're keeping this promise by implementing the initiatives announced in the Health and Safety Action Plan 2017–2020.

In 2018, our efforts to this end concentrated more specifically on the 26 departments most exposed to health and safety hazards. The representatives of those departments made a commitment to the OHS shift and to their role as its ambassadors.

Our approach to occupational health and safety management fosters new ideas by instilling a mindset of continuous improvement in the area of risk management.

9,000+ people

TIME OUT

In 2018, over 9,000 people took time out for an important talk with their managers to familiarize themselves with the new company-wide Statement of Occupational Health and Safety Principles.

Health and Safety Action Plan

The company's Health and Safety Action Plan 2017–2020 serves as a guide for the shift begun in 2017. It has four components:

1. **Vision and leadership –** Create a shared vision supported by strong leadership.
2. **Risk management –** Identify hazards and develop effective control strategies.
3. **OHS management approach –** Foster courage and empowerment by valuing everyone's contribution.
4. **Performance –** Support individual and organizational performance.

A number of initiatives announced in the plan were launched in 2018.

Management of PSIs

The Action Plan also sets out measures to improve our practices in the investigation and analysis of potentially serious incidents (PSIs). These measures include:

- Defining performance indicators
- Reporting every PSI
- Striking a joint investigation committee for every PSI
- Enabling managers to determine the immediate and root causes, as well as appropriate preventive measures

The lessons learned will be disseminated company-wide, with a view to continuous improvement focusing on prevention.

Statement of principles

Drafted in collaboration with over 400 employees and union partners, the Statement of Occupational Health and Safety Principles is a cornerstone of the shift that Hydro-Québec has undertaken, a comprehensive statement that describes the unifying OHS culture we're striving for. Here is one of its key assertions: "Hydro-Québec is committed to deploying all necessary resources in order to place occupational health and safety at the heart of its operations. We recognize that a true culture of prevention can only be implemented if the same values are shared throughout the company."

We ran an intensive campaign to promote the implementation of our Health and Safety Action Plan 2017–2020, both on our jobsites and in our buildings.

Our OHS Action Plan establishes individual and organizational performance indicators based on hazard control behaviors and competencies.

26 departments targeted

EXPOSURE TO HAZARDS

The representatives of the departments most exposed to health and safety hazards are committed to building an OHS culture.

Hazard control pilot projects

OHS hazard control pilot projects were carried out by five crews from different divisions in Saint-Jérôme, Saint-André-d'Argenteuil, Montréal, Saguenay and Sept-Îles. Their aim was to demonstrate that the management system already in place can be used to identify, report, assess and control health and safety hazards before and during work.

The projects, designed around the principles of continuous improvement and involving situations conducive to learning, improved the teams' abilities and interpersonal skills in managerial proximity. We're using the results as a basis for a reflection on the best way to implement our new OHS approach across the company.

Everyday health and safety

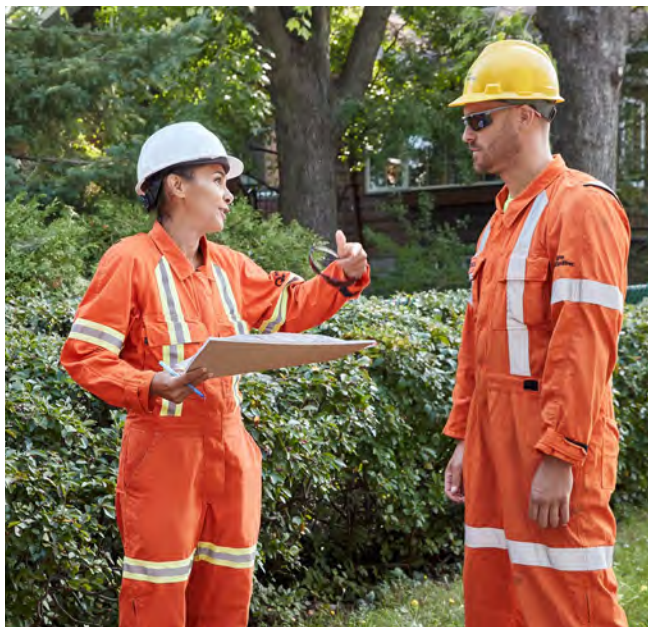
In September 2018, the accident rate at Hydro-Québec was the same as in 2017, with no improvement in the indicator. The company therefore developed action plans to reduce slips and falls in parking lots in winter, factors related to musculoskeletal disorders, as well as accidents involving moving vehicles, with a view to achieving a rate of 1.00 by 2021. The rate was 2.01 in 2018.

Since spring 2018, the company has been paying more attention to PSIs in order to prevent their recurrence. A new indicator was introduced in this regard.

Field observation program

Field observation tours, which have long been a managerial duty, are among the hazard control strategies in the company's Health and Safety Action Plan 2017–2020, which emphasizes daily management and managerial proximity. This strategy is now clearly structured and sets out a common direction. To increase the presence of managers of all levels on the ground, we completed 23,300 observations of operating sites in 2018. Managers had the help of standardized tools and were accompanied by prevention advisors.

Our OHS Action Plan emphasizes daily management and managerial proximity, as evidenced by the constant presence of a prevention advisor at the Judith-Jasmin substation jobsite.



A prevention advisor reviews safety measures with one of our distribution system lineworkers.

With our OHS Action Plan, we can devise effective hazard control strategies at every stage of a project, from design to execution.

10,000+ jobsite tours

BEST PRACTICES

Jobsite safety observations by managers in 2018 were opportunities to recognize best practices in OHS.

Improving jobsite health and safety

Hydro-Québec Innovation, équipement et services partagés developed an action plan to transform the OHS culture on all our jobsites. We want to maintain an exemplary workplace and aspire to be recognized as an OHS leader in the Québec construction industry.

Adopting the most stringent OHS standards

- We tightened controls for the main risks of serious accidents.
- Management uses proactive indicators to improve jobsite safety management.
- We continuously benchmark our performance.

Exercising visible, exemplary leadership

- Our managers are OHS ambassadors: they play an active role in the field and carried out over 10,000 jobsite observations in 2018.

Embedding hazard control in the project lifecycle

- Hazards were assessed at various stages of design in 15 projects, leading to the development of action plans to reduce jobsite hazards starting in 2019.

Working with contractors and unions

- We collaborate closely with construction contractors and labor unions to achieve common OHS targets on jobsites.
- Working groups were set up with line and substation construction contractors.
- Contractual obligations in all major agreements now include OHS criteria.

Recognizing and addressing jobsite hazards and risks

- Many of our OHS management tools were strengthened to make workers more vigilant about hazards and to improve control measures.

On our jobsites, safety coordinators and workers hold a meeting at the start of every shift to discuss the day's OHS issues.

Learning from incidents

- We transfer lessons learned from PSIs more quickly and systematically, with a view to eliminating them altogether.

Building a true culture of prevention requires adhering to common values and eliminating hazards at source so that everyone can do their job safely.

5 pilot projects

PILOT PROJECTS

As part of our Health and Safety Action Plan 2017–2020, we've launched five pilot projects addressing issues of leadership, OHS management practices, hazard control, and safety performance.

Award-winning health and safety innovations

At La Grande-4 generating station, we needed to consolidate the rock walls and add membranes. To do this, workers were drilling holes manually and were consequently exposed to numerous hazards. The dams and civil engineering structures drilling and grouting team of the Direction – Production in Saguenay–Lac-Saint-Jean devised an aerial work basket equipped with a multidirectional drill, a dust collection system and a fall prevention system. For developing this remarkable innovation, the team was awarded an occupational health and safety award for the Saguenay–Lac-Saint-Jean region, in the Innovation category. This honor qualifies it as a finalist in the 2019 occupational health and safety awards gala of the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), which will be held in the provincial capital.

An award also went to a second health and safety project: a soundproof booth designed at the Shawinigan machine shop. The winner in the Innovation category of the regional health and safety award finals for the Mauricie and Centre-du-Québec region, the booth improves safety in areas where a SCOMPI robot is used for grinding operations. It also greatly enhances the quality of the shop environment by reducing noise and minimizing dust, which is aspirated at source by a collection system.

First response

Members of the company's emergency response organization (ERO) and first responders in two buildings, where 1,500 employees work, participated in safety exercises. Situations were simulated—respiratory arrest, allergic reaction, etc.—so that practices could be analyzed. The simulations also enabled the ERO team to update their knowledge and skills in emergency response by practising technical interventions and procedures.

An aerial work basket with a built-in multidirectional drill, designed by the Direction – Production team in Saguenay–Lac-Saint-Jean, will be a finalist at the CNESST national OHS awards gala.

Innovating for a sustainable future

The electricity industry is transitioning. Rather than simply consuming electricity, tomorrow's customers will be able to generate, store and resell it, turning from consumers into "prosumers."

In this context, the Institut de recherche d'Hydro-Québec (IREQ) has worked closely with the divisions to develop our Technological Vision 2035, which sets out our technology-related goals and the means to attain them in the form of innovation portfolios grouped around three main pillars: our customers, our assets and tomorrow's power system.

The projects that ensue will help pave the way to a new era of electrification in Québec, one in which our customers can bank on decarbonization, renewable energy and electric vehicles.

As the cornerstones of our operations, our facilities and infrastructure must evolve to incorporate new technologies, particularly smart connectivity, advanced functionality and adaptive solutions. Building on digital technologies, automation and artificial intelligence, our projects will lay the groundwork for the integrated and flexible smart grid of the future. This grid, capable of drawing on big data, will provide real-time monitoring of our facilities and of equipment at customers' premises—and will interact with customers as well.

Hydro-Québec's Technological Vision 2035 includes exploring avenues to decarbonization, paving the way to a new era of electrification in Québec.

Over $**110** million

RESEARCH CENTER

Hydro-Québec is the only power utility in North America with a research center the size of IREQ. Each year, the company invests some $110 million in IREQ's projects.

Toward a decarbonized economy

We're actively working toward a new era of electrification in Québec, and in this the contributions of our research institute, IREQ, are key. Already our researchers are exploring how the conversion outlined in our Technological Vision 2035 might be achieved. This entails assessing various options for reducing the Québec economy's carbon footprint. Replacing fossil fuels with clean, renewable and affordable energy is a prime example; another possible solution is to use electricity to generate carbon-neutral alternatives like hydrogen.

A multidisciplinary team of researchers and division representatives assessed the strategic, technological and financial relevance of hydrogen—particularly clean hydrogen produced without fossil fuels—to determine our positioning on this form of energy. We studied hydrogen-based technologies and uses around the world and identified emerging markets. The research will continue in 2019, but it seems likely that clean hydrogen will contribute to deep decarbonization in Québec, at least in the mid-term.

Distributed energy

Distributed energy resources—self-generation by customers connected to the grid, energy storage, demand-side management and other behind-the-meter solutions—are gaining ground worldwide, and Hydro-Québec is keeping pace in this area. Some of our initiatives, like the Lac-Mégantic and Quaqtaq projects, incorporate these technologies so that we can fine-tune our knowledge of them. In parallel, a team at our energy technologies laboratory, the Laboratoire des technologies de l'énergie or LTE, is evaluating the various types of distributed energy resources. To date, the team has examined energy storage systems, inverters, photovoltaic panels, home energy management systems and the Internet of Things—all with the end goal of being able to offer our customers new products and services.

We're conducting home automation testing in a "home of the future" near the LTE in Shawinigan.

As shown by these solar panels at the LTE, we're studying various aspects of customer on-site generation using renewables.

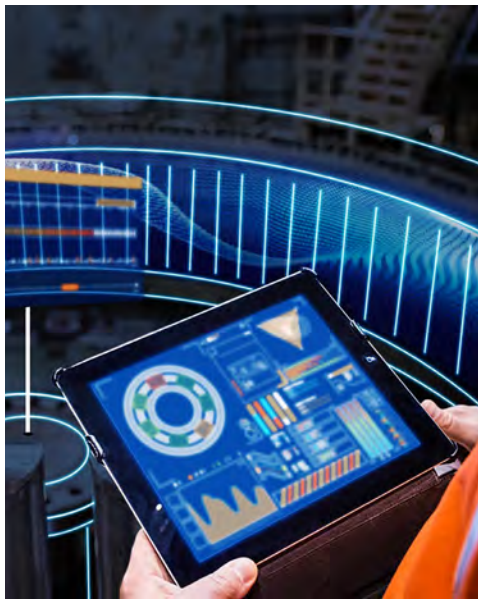
The mission of the Center of Excellence in Transportation Electrification and Energy Storage is to maintain and enhance Québec's global leadership in the field of battery materials.

Over **70** projects

With an innovation portfolio of over 70 projects, IREQ's technological offering is constantly advancing.

Digital twin: Shedding insights on the grid

Digital twins—digital replicas of physical objects, systems or industrial processes—offer numerous possibilities for predictive maintenance and infrastructure optimization. Cited by Gartner Consulting as one of 2018's top 10 technology trends, the digital twin is a key feature of Hydro-Québec's Technological Vision 2035, particularly regarding new approaches to infrastructure maintenance and operation. IREQ worked with other units of Hydro-Québec Innovation, équipement et services partagés and with Hydro-Québec Production to develop digital twins of generating units.

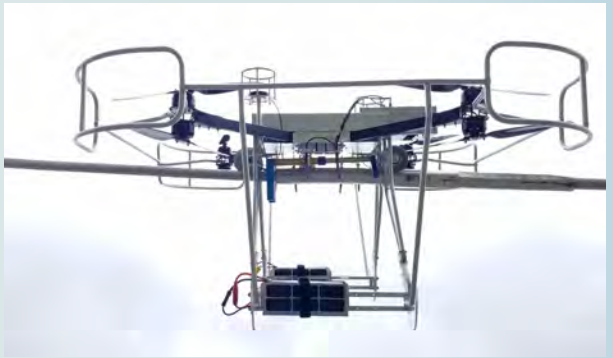


Distance control via cellular link

An IREQ project on alternative telecommunications solutions aims to integrate smart technologies into the distribution grid and will help us meet the energy transition challenges arising from distributed generation and microgrids. The project has already yielded one technology: distance control for automated devices through cellular links. This technology is already in use in the overhead system and will be gradually incorporated into the underground system.

Center of Excellence

Inaugurated on March 23, 2018, the Center of Excellence in Transportation Electrification and Energy Storage (CETEES) is a research cluster for Hydro-Québec's battery materials R&D. The Center signed a memorandum of understanding with Singapore-based NanoBio Lab to establish a joint laboratory for battery nanomaterials development. It also signed two agreements with Nouveau Monde Graphite (NMG): one, an R&D collaboration agreement to optimize NMG's graphite for use in lithium-ion batteries; the other, a licensing agreement allowing NMG to use Hydro-Québec's graphite-related technologies.



Aerial robotics: A world first

An IREQ team specializing in robotics for transmission line inspection and maintenance has partnered with Hydro-Québec TransÉnergie to achieve a world first: using a drone to measure the electrical resistance of splice sleeves on two live conductors. Not only can LineDrone approach lines rated up to 315 kV, but it can also land on and travel over the conductors without being affected by either electromagnetic fields or the arcing caused by potential bonding. The drone pilot uses the device's onboard vision system to conduct the delicate operation of landing on a cable. What's more, LineDrone can measure electrical resistance through LineOhm, an ohmmeter also developed by IREQ.

Toward the digital transformation

To support its business strategies, Hydro-Québec is accelerating its digital transformation, a shift that is critical for positioning the company as a global energy transition leader. This has led to the creation of an ICT (information and communication technologies) roadmap focused on integrating analytics, automation, cloud computing and mobility into Hydro-Québec's core activities. Advanced solutions, new tools, efficient services—enhancing our operations with these and other tangible developments means first investing in the right technological framework, namely, the infrastructure and components that will optimize and significantly accelerate the adoption of new solutions and services, thus shortening the payback period. For instance, we're planning to expand our use of cloud-computing services to benefit from their flexibility access the latest innovations on the market, though without infringing on the company's security and privacy safeguards. We're also paving the way for tomorrow's smart grid by standardizing our infrastructure so that it can support new applications and systems while ensuring functional separation and power system security.

Each day, our teams put their skills and know-how to work on technological solutions that help modernize Hydro-Québec and improve its performance.

835 sites

TELECOMMUNICATIONS

All communications related to real-time power system control, protection and monitoring are transmitted through the 835 telecommunications sites in Hydro-Québec's network.

Updating IT infrastructure

We're currently rolling out infrastructure and services that will converge the outputs from our various data systems so they can be used to inform our business strategies. We're also laying the technological groundwork to develop applications that will help automate solutions development and ensure a user-friendly customer experience. Lastly, we're continuing to update our office environment by making mobility features and collaborative IT tools available to our employees.

Dynamic pricing tools

In 2019, Hydro-Québec will offer new dynamic pricing options that will help customers save money by curtailing their electricity use or shifting some of their consumption to off-peak hours. The new options will require a suite of online tools—a self-serve savings simulator, a rate sign-up interface, an electricity use tracker and so on—which are currently in development.

The modernization of our mobile radiocommunications helps guarantee the safety of our crews in the field.

Satisfaction survey

Hydro-Québec has introduced Web-based and mobile solutions for tracking customer satisfaction. Automated surveys that provide insights into Web navigation and usage trends let us continuously improve our customer service and see how our satisfaction rate compares with that of similar organizations.

An evolving telecommunications network

In 2018, we began modernizing our mobile radiocommunications systems—vital to the safety of our field crews—by replacing the terminals and equipment that make up the core of this service. Our telecommunications experts also contributed to major projects like Chamouchouane–Bout-de-l'Île, as well as extending the service life of microwave links such as the Moiré–Churchill Falls link.

Our digital transformation will yield significant productivity gains and help position us as a leader in the global energy transition.

20 petabytes

DATA

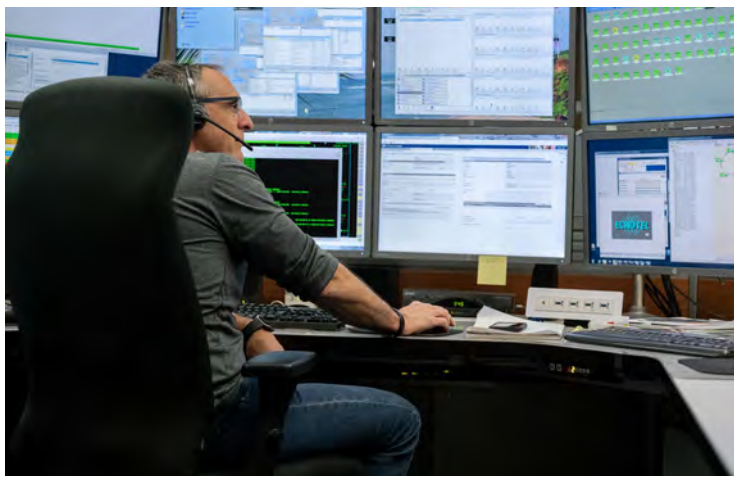
Hydro-Québec has a total of 20 petabytes of administrative and operational data stored in its data centers and transmitted over its telecom infrastructure.

Modernizing the ICT service center

Given the importance of office tools, the Internet and IT applications in our day-to-day productivity, we've introduced additional channels of technical support to save time. Now, employees can email an IT analyst, get chat support or schedule an appointment without having to wait on the phone. They can also enjoy automated ticket tracking and personalized notifications when computer systems are down. These improvements are part of our program to enhance the user experience.

Data optimization

Hydro-Québec wants to be able to use its data to feed its indicators, plan maintenance work and better respond to customer needs. We're now developing an analytical platform to support data governance, along with several related solutions that will be added to it in the coming year. At the same time, we worked on powerful analytical tools, in particular the solution for energy theft detection, which garnered an OCTAS award from Réseau ACTION TI.



Information and communication technologies are at the heart of power system optimization and service reliability.

Cybersecurity

We continue to make every effort to protect our facilities, systems and customer data. Once again, our operations during the year were guided in this respect by the action plan to improve our ICT security posture and by an awareness program for our employees and suppliers.

Facilities that generate and deliver green, renewable energy

To supply clean, renewable electricity, help fight climate change and contribute to building a greener, stronger economy, we rely on a generating fleet of 63 hydroelectric facilities and one of North America's most extensive transmission systems, with more than 34,000 km of lines. Over the years, we've built new generating stations, lines and substations to optimize the way we meet demand and supply our customers, while always opting first for hydropower.

Today, men and women are still hard at work planning, managing and executing projects to build or refurbish our generating and transmission assets. Whether at the Romaine jobsite, on the Chamouchouane–Bout-de-l'Île project, in an existing generating station, on a power line being upgraded or in a substation, these builders work to maintain a steady supply of energy for both domestic and export markets. In cooperation with host communities, we offer high-quality, cost-effective solutions that apply best practices in social and environmental acceptability.

By maximizing the value of the energy we sell on wholesale markets, we grow our income and ensure our profitability.

36.1 TWh

GREEN ENERGY

Exports of green energy to neighboring markets—New England, New York State, Ontario and New Brunswick—totaled 36.1 TWh in 2018, a new record.

Romaine-4 construction

The teams building the Romaine-4 facility encountered some difficult geological conditions. At the powerhouse, they had to adapt the work to particularly friable bedrock in order to ensure the workers' safety and the structures' durability. Hydro-Québec conducted an in-depth review of its occupational health and safety program following the death of a worker in late 2016. The changes made to our work processes and methods marked the beginning of a major shift for all the company's employees. The spillway and intake have now been excavated, and excavation on the powerhouse cavern will be finished in June 2019. Work continued on construction and sealing of the dam, as well as on the substation and the Romaine-4–Montagnais transmission line. Given the progress made in the last few months, reservoir filling is expected to take place in 2020 and the generating station, substation and line should go into operation in 2021.

Grouping our procurement needs—a new approach that creates value—is key to achieving our business objectives.

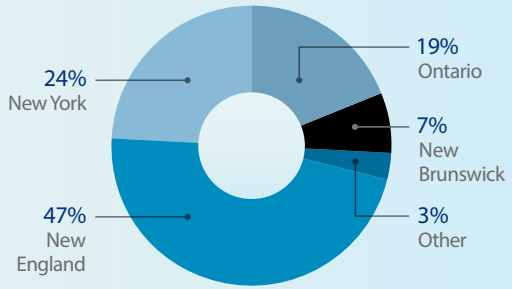
The site employed close to 1,000 workers in 2018, half of them from the Côte-Nord region. Between 2009 and 2017, work on the Romaine complex generated economic spinoffs of over $5.5 billion for Québec.

Procurement of goods and services

Our many different activities entail all kinds of procurement needs. Every year, we purchase a substantial volume of goods and services, thereby contributing to the province's economy. In 2018, our purchases in Québec totaled $2,619 million.

RECORD VOLUME OF NET EXPORTS

In 2018, Hydro-Québec Production exported a record volume of green energy—36.1 TWh—to neighboring markets. The resulting profits totaled $744 million and accounted for 23% of the company's net income.



The energy transition opens up a new era of electrification in Québec that will hinge on converting our off-grid systems and integrating new generating options.

63
power plants

HYDROELECTRIC FACILITIES

Our fleet of 63 hydroelectric generating stations has a total installed capacity of 36,767 MW. This represents a major market advantage for customers seeking a supply of clean, renewable energy.

A prestigious award

Hydro-Québec garnered the 2018 Corporate Award from the Canadian Dam Association in recognition of our contributions and involvement, as well as our efforts to promote the advancement of knowledge about dams and dam safety.

Vision of tomorrow's hydroelectric development

Based on comparative analyses of the hydropower market, our vision of the hydroelectric development of the future comprises 20 guiding principles.

These principles focus mainly on:

- optimizing facility operation and ensuring long-term operability
- using data analytics to anticipate problems
- using market-sourced technologies
- making the digital shift through integrated equipment
- developing our human resources
- eliminating potential hazards, whether to health and safety or the to environment

More advanced protections and controls

A demonstration project at Saint-Chrysostome and Kildare substations marked a major milestone for Hydro-Québec in the rollout of new technology for its transmission facilities. The project involved replacing the substations' protections and controls with devices that use new digital technologies compliant with International Electrotechnical Commission standard IEC 61850.

This approach allows us to test new industry standards, advance our substation automation practices as part of the grid's overall technological evolution, and expand our expertise in technology convergence.

Stepped-up maintenance

As part of our transmission asset sustainment strategy, we continued to step up our maintenance effort in order to prevent forced outages due to aging equipment. The additional outlays for maintenance, authorized by the Régie de l'énergie in response to our rate application, reduce the need to replace equipment, which in turn enables us to keep our rate increases at or below the forecast level of inflation.

Tests conducted at Saint-Chrysostome substation in connection with a demonstration project for deployment of new digital technologies.

Grouping procurement needs

Rollout of our strategic procurement process continued. Under this new, value-creating approach, we analyzed some 40 categories of expenditure. Our evaluation covered the divisions' future needs, total cost of ownership, changing market conditions and innovations by suppliers. Various strategies, such as opening up tenders or awarding contracts to a larger number of suppliers, grouping the divisions' needs and reviewing specifications, help achieve the company's objectives.

Our strategic procurement approach, which creates value and helps us achieve our business objectives, is grounded in an analysis of some 40 categories of expenditure.

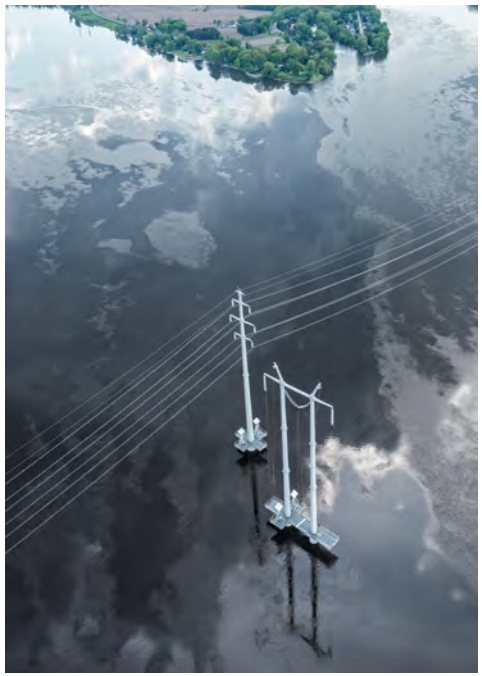
34,361 km

TRANSMISSION SYSTEM

Our transmission system comprises 34,361 km of lines, 532 substations, and interconnections that allow power interchanges with grids in the Atlantic provinces, Ontario and the U.S. Northeast.

735-kV Chamouchouane–Bout-de-l'Île project

Work proceeded on Chamouchouane–Bout-de-l'Île, one of the largest transmission projects of the last few decades. It has two main components: construction of about 400 km of 735-kV lines between Chamouchouane substation in the Saguenay–Lac-Saint-Jean region and the Montréal metropolitan loop; and construction of a new 735-kV substation, Judith-Jasmin, in Terrebonne (Lanaudière region). The project will improve the reliability of the main transmission system, reinforce supply to the Montréal area and help meet strong demand growth in Montréal's north shore suburbs. The economic spinoffs for Québec are estimated at $1.1 billion, a figure that covers all the construction contracts and almost all procurement.



A line in the Chamouchouane–Bout-de-l'Île project at the Rivière des Prairies crossing in northeast Montréal.

In 2018, we worked with contractors to review our processes and implement best practices in jobsite accident prevention.

From Saguenay–Lac-Saint-Jean to Montréal, more than 800 people specialized in environment, safety, or tower assembly and erection pooled their efforts to meet the challenges posed by this ambitious project. Nearly 90% of work on the lines is complete. The 735-kV section of Judith-Jasmin substation was commissioned during the year, and the work should be finished in 2019.

Milestone anniversaries for some of our generating stations old and new

Paugan	90 years
Shawinigan-3	70 years
Beaumont	60 years
Première-Chute	50 years
Outardes-2	40 years
Brisay and Laforge-1	25 years
Chute-Allard and Rapides-des-Cœurs	10 years
Sarcelle	5 years

Paugan generating station (226 MW) on the Rivière Gatineau, not far from the town of Low in the Outaouais region, has been in operation since 1928—that's 90 years! It stands as a testament to the care we take to ensure the long-term operability of our generating facilities.

Our Integrated Enhancement Program, the Fondation Hydro-Québec pour l'environnement, our donations and sponsorships, and our contribution to Centraide are just some of the ways we demonstrate our commitment to the community.

Nearly $6.2 million

CENTRAIDE

The 2018 Hydro-Québec employees' and pensioners' Centraide campaign raised nearly $6.2 million. The amount raised has increased every year for the past four years.

Support for municipalities and regions

Under our Integrated Enhancement Program (IEP), established in 1985, communities that host new transmission infrastructure receive funding made up of an amount allocated per kilometre of new transmission line as well as an amount based on the surface area of any new substation. This funding goes to local or regional initiatives related to municipal, community or recreational infrastructure, community development or the environment. In 2018, the IEP supported 22 local or regional initiatives, for a total of $3.3 million invested directly in communities.

Industry involvement

Hydro-Québec contributes to the promotion and recognition of hydropower through its involvement in national and international organizations, including the Generation Energy Council. In June 2018, the Council filed a report intended to guide the development of Canadian energy policy, which identifies four pathways for the energy transition: energy efficiency, clean power, renewable fuels and cleaner hydrocarbons. In another initiative designed to promote sustainable electricity use, in November Hydro-Québec, Enel and the Global Sustainable Electricity Partnership launched an e-bus project in Lima, Peru.

Illumination of a promenade in the heart of Les Escoumins, part of the Villages-relais network. This initiative was included in the town's action plan and met a need expressed by local citizens and organizations. It was made possible by IEP funding granted to the municipality for the series compensation project at Bergeronnes substation.

Donations and sponsorships

Hydro-Québec attaches great importance to Québec's economic, social and cultural vitality. During the year we were active in community assistance, education and health, and also sponsored cultural, environmental, socioeconomic, scientific and sports events. We proudly supported a wide range of organizations in every region of the province, including the Fondation Tel-Jeunes, Fondation de l'Université du Québec à Chicoutimi, Douglas Institute Foundation, Village en chanson de Petite-Vallée, Maison du développement durable (Center for Sustainable Development), Fédération québécoise des municipalités, Québec Aboriginal Science and Engineering Association and the Défi sportif AlterGo organization. Altogether, some 600 organizations received approximately $19 million in funding. Further details are available at www.hydroquebec.com/donations-sponsorships.

Corporate citizen

Hydro-Québec received the Corporate Knights award recognizing it as the best corporate citizen in Canada. Hydro-Québec stood out in several regards, including the proportion of women on our Board of Directors, pay equity, and the fact that our energy is more than 99% clean.

This Management's Discussion and Analysis should be read in conjunction with the consolidated financial statements of Hydro-Québec and the notes thereto. The financial information and tabular amounts presented herein are expressed in Canadian dollars, unless otherwise indicated. The consolidated financial statements take into account the decisions handed down by the Régie de l'énergie with respect to the transmission and distribution of electricity.

This analysis, and especially the Outlook section, contains statements based on estimates and assumptions concerning future results and the course of events. Given the risks and uncertainties inherent in any forward-looking statements, Hydro-Québec's actual future results could differ from those anticipated. Finally, the information contained herein takes into account any significant event that occurred on or before February 15, 2019, the date of approval of this Annual Report by Hydro-Québec's Board of Directors.

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2018 at a Glance

In 2018, net exports accounted for 17% of sales volume and generated 23% of the company's net income.

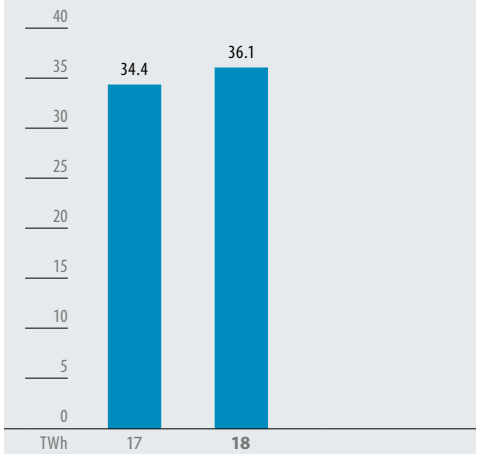
In 2018, Hydro-Québec posted net income of $3,192 million, a $346-million or 12% increase compared to 2017. This marked increase is mainly due to the sale, during the second quarter, of a majority interest in its subsidiary TM4 to the multinational company Dana Incorporated. It is also attributable to a larger volume of electricity supplied by Hydro-Québec Production on the Québec market.

Given these results, Hydro-Québec will be able to pay a dividend of $2,394 million to the Québec government, its sole shareholder. This constitutes the second-largest dividend in its history.

STRATEGIC PARTNERSHIP

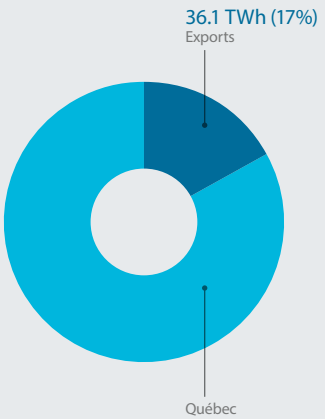
In June 2018, Hydro-Québec reached an agreement with Dana under which it sold to Dana a 55% equity interest in TM4. The gain on this transaction amounted to $277 million. The partnership created is part of a strategy aimed at seizing growth opportunities outside Québec in a number of ways, including acquisitions or equity stakes, more exports and the commercialization of innovations.

Net Electricity Exports



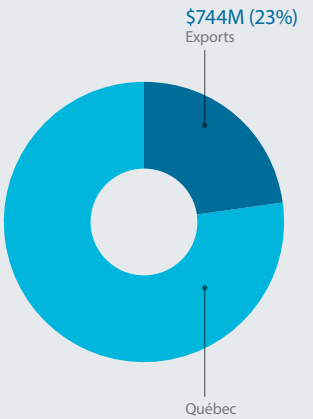
Net Electricity Sales in 2018

208.9 TWh



Net Income in 2018

$3,192M



SOLID PERFORMANCE IN QUÉBEC

On the Québec market, electricity supplies provided by Hydro-Québec Production to Hydro-Québec Distribution increased by $153 million over the previous year. This growth is mainly due to the impact of temperatures, which were colder in 2018 than in 2017 during certain months.

UNPRECEDENTED EXPORT VOLUME

In 2018, net electricity exports reached a historic volume of 36.1 TWh and contributed $744 million to net income. As a result of an effective sales strategy, the smooth operation of generation and transmission facilities and high runoff, net exports increased by 1.7 TWh over the previous record, set in 2017.

SUSTAINED INVESTMENTS THROUGHOUT QUÉBEC

Hydro-Québec's investments totaled $3,402 million in 2018. Most of this amount was allocated to large-scale development projects in the generation and transmission segments, as well as to major refurbishment projects to maintain and improve the quality of the company's assets.

The main projects under way include the construction and connection of the Romaine hydroelectric complex (1,550 MW) in the Côte-Nord region. Three of the four reservoir generating stations in this complex, with 1,305 MW of total installed capacity, are already in operation. On the last jobsite—Romaine-4 generating station (245 MW), scheduled to be brought on stream in 2021—excavation of the water intake and spillway was completed in 2018 and excavation of the generating station cavern is continuing, along with construction of the switchyard. Romaine-3 generating station (395 MW) was commissioned in fall 2017 and put to good use shortly thereafter, both to help meet Québec demand during peak consumption periods in winter 2017–2018 and for export purposes.

Work also continued on the 735-kV Chamouchouane–Bout-de-l'Île project, which will enhance the reliability of the main transmission system, reinforce energy supply to the Montréal region and meet demand growth in the city's north shore suburbs. The project has two components: first, deployment of 735-kV lines extending approximately 400 km between Chamouchouane substation, in the Saguenay–Lac-Saint-Jean region, and the Montréal metropolitan loop, as well as the rerouting of a short segment of 735-kV line to Bout-de-l'Île substation, in Montréal; and, second, construction of 735/120/25-kV Judith-Jasmin substation in Terrebonne, in the Lanaudière region. The substation's 735-kV section and the rerouted line segment were completed, commissioned and integrated into the metropolitan loop in 2018, and the other facilities will follow in 2019.

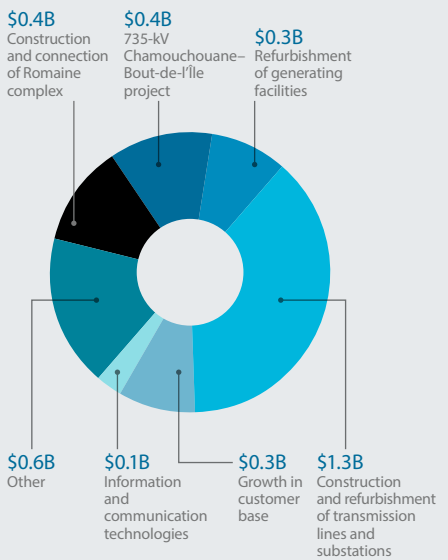
The company also carried out several projects in all its business segments to ensure the long-term operability of its facilities and optimize their performance.

A SUBSTANTIAL CONTRIBUTION TO THE QUÉBEC GOVERNMENT'S REVENUE

For a sixth consecutive year, Hydro-Québec's contribution to the Québec government's revenue exceeded $4 billion, totaling $4.5 billion. This substantial contribution, which includes the company's net income, water-power royalties, the public utilities tax, guarantee fees related to debt securities, and contributions to various government funds and agencies, benefits all Quebecers, as do the economic spinoffs of Hydro-Québec's operations throughout the province.

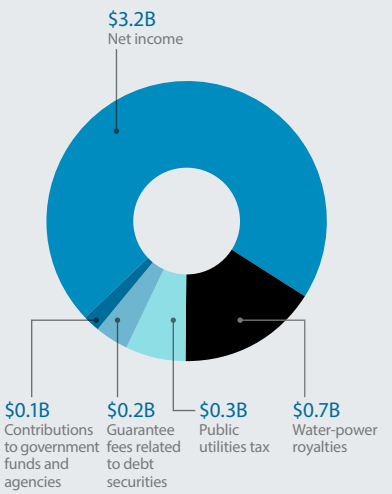
Investments in Québec in 2018

$3.4B



Hydro-Québec's Contribution to the Québec Government's Revenue for 2018

$4.5B



Consolidated Results

NET INCOME

Hydro-Québec recorded net income of $3,192 million in 2018, a $346-million increase over the $2,846 million posted the previous year. This growth is mainly due to the recognition of a $277-million gain on the partial sale of the subsidiary TM4. In addition, on the Québec market, electricity supplies provided by Hydro-Québec Production to Hydro-Québec Distribution increased by $153 million compared to 2017, mainly as a result of temperature variances. Net electricity exports rose by 1.7 TWh to a historic high of 36.1 TWh, but the positive impact of this volume growth was offset by the impact of the lower average export price obtained.

REVENUE

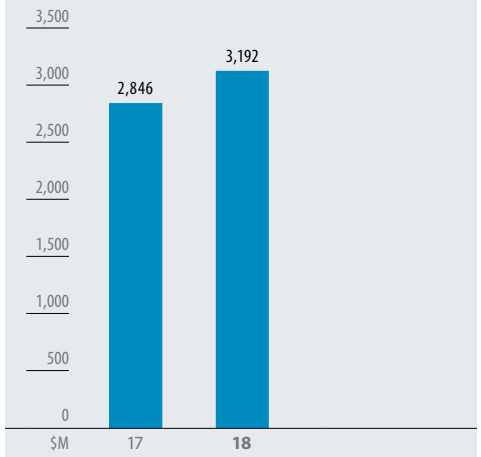
Revenue[1] totaled $14,370 million, compared to $13,468 million the previous year. Revenue from ordinary activities was $14,062 million compared to $13,603 million in 2017, a $459-million increase resulting from growth of $451 million in electricity sales. In Québec, electricity sales rose by $371 million to $12,134 million, while on external markets, they reached $1,731 million, an increase of $80 million. Revenue from other activities increased by $443 million over 2017.

Three main factors explain the $371-million increase in electricity sales in Québec. First, temperatures had a positive impact of $246 million. This impact was most pronounced in January and October, when temperatures were 2°C and 3°C, respectively, below climate normals in 2018, whereas they had been more than 3°C above the normals in 2017. For these two months alone, temperatures resulted in additional sales of $232 million compared to the previous year. Second, demand grew in the residential segment and in the commercial, institutional and small industrial segment, particularly because of the strength of the economy, an increase in housing starts, and the company's market development initiatives aimed in part at attracting new data centers to the province. However, this growth was offset by the negative impact of an ongoing labor conflict at a large aluminum smelter in the Centre-du-Québec region, which began in January 2018 and led to a reduction in electricity sales to large industrial customers compared to the previous year. Third, the April 1, 2017 and 2018 rate adjustments resulted in a $41-million increase in revenue. Rates are determined by the Régie de l'énergie on a basis that allows for recovery of the cost of service plus a reasonable return on the rate base.

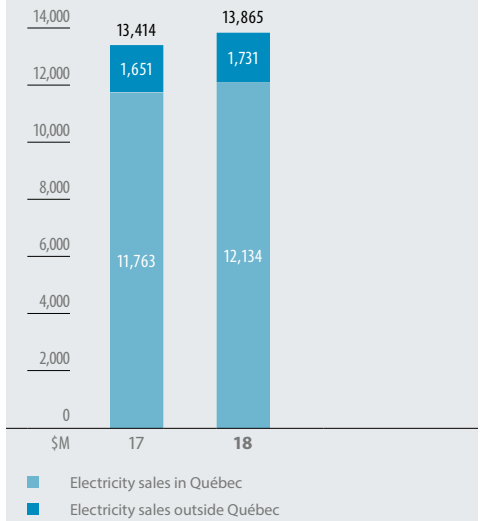
Revenue from electricity sales on markets outside Québec amounted to $1,731 million, compared to $1,651 million in 2017. This $80-million increase is due to volume growth in electricity exports by Hydro-Québec Production.

Revenue from other activities increased by $443 million. This significant growth is basically due to two factors. First, the sale to Dana of a 55% interest in TM4 as part of a strategic partnership generated a $277-million gain. Second, there was a $192-million change, compared to 2017, in the net amounts recognized as earnings variances as well as variances between the actual revenue and costs for certain items and the forecasts in the rate filings, particularly on account of the amortization of variances from previous years. The impact of this factor was partially offset by an increase in the regulatory liability recognized under the earnings-sharing mechanism, which amounted to $120 million in 2018, compared to $45 million in 2017. Under the earnings-sharing mechanism, which was implemented in 2017, Hydro-Québec TransÉnergie and Hydro-Québec Distribution share with customers any surplus over and above their respective rates of return authorized by the Régie de l'énergie. The overall amount recognized for 2018 will reduce the April 1, 2020 rate adjustment, while the amount recognized for 2017 will reduce the April 1, 2019 rate adjustment.

Net Income



Electricity Sales



1. Following the adoption of a new accounting standard, Revenue now includes revenue from ordinary activities, almost entirely composed of electricity sales, as well as revenue from other activities. The prior year's data have been reclassified to conform to the presentation adopted in the current year.

EXPENDITURE

Total expenditure was $8,466 million in 2018, compared to $8,109 million in 2017.

Operational expenditure totaled $2,843 million, a $179-million increase compared to the $2,664 million recorded in 2017. This increase is partly the result of the impact of inflation and salary indexing as well as growth in activities, due in particular to the commissioning of Romaine-3 generating station in September 2017, development of the transmission system, and the larger number of customer accounts. Moreover, Hydro-Québec's resolve to maintain service quality and reliability for all customers led it to step up its maintenance activities in 2018, especially in the transmission segment. Finally, weather events were more frequent and more intense than in the previous year, leading to a greater number of power outages.

In the line item Other components of employee future benefit cost, created following the 2017 adoption of an amendment to an accounting standard, a credit amount of $340 million was recognized in 2018, which is comparable to the $322 million recognized in 2017.

Electricity and fuel purchases totaled $2,167 million, a $162-million increase compared to $2,005 million in 2017. This change is mainly due to a $145-million increase in Hydro-Québec Distribution's electricity purchases from third parties. The division's wind energy supplies increased by 1.4 TWh or $115 million, particularly as a result of the commissioning of two new wind farms during the first quarter of 2018.

Depreciation and amortization expense amounted to $2,685 million, comparable to the $2,686 million recorded in 2017. The $73-million increase in depreciation of property, plant and equipment resulting from the commissioning of Romaine-3 generating station in fall 2017, among other things, was partially offset by a $54-million decrease in amortization of intangible assets, due primarily to the fact that the amortization of Hydro-Québec Distribution's customer information system ended at the beginning of 2018.

Taxes were $1,111 million, compared to $1,076 million in 2017, essentially as a result of a $17-million increase in the company's financial contribution to Transition énergétique Québec for energy efficiency programs and initiatives, as well as a $14-million rise in the public utilities tax due to an increase in the tax base, itself attributable to growth in the net value of taxable assets. Waterpower royalties reached $705 million, comparable to the $701 million recorded in 2017.

Financial expenses totaled $2,712 million in 2018, a $199-million increase compared to $2,513 million in 2017. This change is due to four main factors: the impact of the 2017 and 2018 borrowing programs; higher interest rates; a $34-million decrease in capitalized financial expenses, essentially related to the commissioning of Romaine-3 generating station in September 2017; and the partial redemption, in the fourth quarter, of a debt maturing in 2020 and bearing interest at a rate of 11%. This redemption mitigated the credit risk associated with short-term investments while also reducing future refinancing requirements.

	2018	2017
OPERATIONS AND DIVIDEND ($M)		
Revenue	**14,370**	13,468
Income before financial expenses	**5,904**	5,359
Net income	**3,192**	2,846
Dividend	**2,394**	2,135
BALANCE SHEETS ($M)		
Total assets	**76,989**	75,769
Property, plant and equipment	**64,966**	63,990
Long-term debt, including current portion and perpetual debt	**46,335**	45,259
Equity	**21,209**	19,755
FINANCIAL RATIOS		
Return on equity (%)[a]	**14.0**	12.9
Capitalization (%)[b]	**31.8**	30.7
Profit margin (%)[c]	**22.2**	21.1
Interest coverage[d]	**2.18**	2.13
Self-financing (%)[e]	**63.9**	66.6

a) Net income divided by average equity for the year less average accumulated other comprehensive income for the year.

b) Equity divided by the sum of equity, long-term debt, current portion of long-term debt, perpetual debt, borrowings and derivative instrument liabilities, less derivative instrument assets and sinking fund.

c) Net income divided by revenue.

d) Sum of income before financial expenses and net investment income divided by interest on debt securities.

e) Cash flows from operating activities less dividend paid, divided by the sum of cash flows from investing activities, excluding net change in short-term investments and sinking fund, and repayment of long-term debt.

Cash and Capital Management

OPERATING ACTIVITIES

Cash flows from operating activities totaled $5.3 billion in 2018, compared to $5.6 billion in 2017. These funds were used to pay the dividend for 2017 and to finance a large portion of the investment program, among other things.

INVESTING ACTIVITIES

In 2018, Hydro-Québec invested $3.4 billion in property, plant and equipment and intangible assets, compared to $3.8 billion in 2017. Of the total, $1.3 billion was allocated to development projects and $2.1 billion to maintaining or improving the quality of assets.

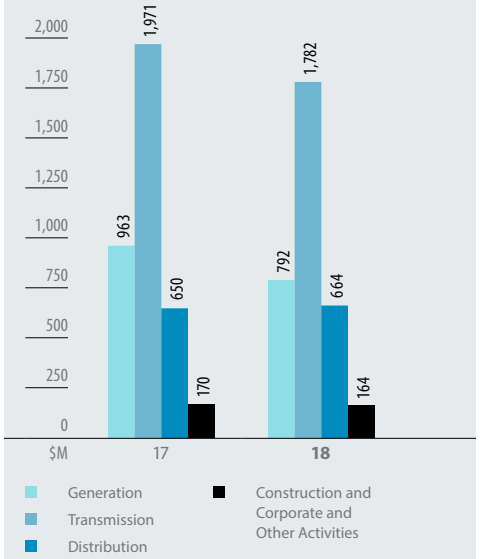
Hydro-Québec Production's investments totaled $792 million, of which $386 million went to development activities, mainly the ongoing construction of the Romaine hydroelectric complex, and $406 million to asset maintenance and improvement, such as refurbishment work at Robert-Bourassa and Beauharnois generating stations.

Capital spending at Hydro-Québec TransÉnergie totaled $1,782 million. Of this amount, $614 million was used to connect new generating facilities to the grid and increase transmission capacity. Examples of this include the ongoing 735-kV Chamouchouane–Bout-de-l'Île project, which alone accounted for $368 million in 2018, as well as the connection of the Romaine complex, which accounted for $32 million. Another $1,168 million was allocated to transmission asset sustainment and reliability projects, especially equipment replacement and facility modernization. In this connection, the division invested $83 million in ongoing work on the architecture development plan for the 315-kV system on the island of Montréal.

Hydro-Québec Distribution invested $664 million, mainly to handle its growing customer base and ensure the long-term operability of the distribution system.

The engineering, construction and refurbishment projects of Hydro-Québec Production and Hydro-Québec TransÉnergie are executed by Hydro-Québec Innovation, équipement et services partagés and Société d'énergie de la Baie James.

Investments in Property, Plant and Equipment and Intangible Assets by Segment



FINANCING ACTIVITIES

In 2018, Hydro-Québec made three bond issues maturing in 2055 on the Canadian capital market, at an average cost of 3.06%.

These issues raised a total of $1.8 billion. The proceeds were used to support part of the investment program and to refinance maturing debt.

SOURCES OF FINANCING

Type of financing	Amount authorized by the Board of Directors	Market	Outstanding as at December 31, 2018
Operating credit lines	C$ or US$1,000 million[a]		–
Credit facility[b]	US$2,000 million[c]		–
Commercial paper[b]	US$3,500 million or equivalent in C$	United States or Canada	C$8 million
Medium-term notes[b]	US$3,000 million or equivalent in other currencies C$20,000 million or equivalent in US$	United States Canada	US$340 million[d] C$13,078 million[d]

a) Of this amount, available balances of US$200 million and $276 million in Canadian or U.S. dollars are covered by operating credit line agreements with the financial institutions concerned.

b) Guaranteed by the Québec government.

c) Includes a US$750-million swing loan.

d) Corresponds to net proceeds from the issuance of medium-term notes.

CREDIT RATINGS

	2018			2017		
	Commercial paper	Long-term debt	Outlook/ Trend	Commercial paper	Long-term debt	Outlook/ Trend
U.S. agencies						
Moody's	**P-1**	**Aa2**	**Stable**	P-1	Aa2	Stable
S&P Global Ratings	**A-1+**	**AA–**	**N/A[a]**	A-1+	AA–	N/A[a]
Fitch Ratings	**F1+**	**AA–**	**Stable**	F1+	AA–	Stable
Canadian agency						
DBRS	**R-1 (middle)**	**A (high)**	**Stable**	R-1 (middle)	A (high)	Stable

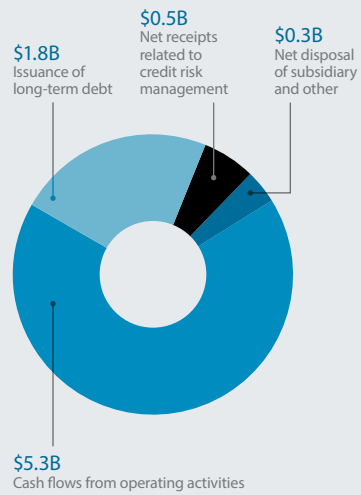
a) S&P Global Ratings does not provide an outlook for Hydro-Québec's credit rating. However, it has given a "stable" outlook to the Québec government, Hydro-Québec's shareholder and guarantor, after upgrading the government's credit rating from A+ to AA– in 2017.

DIVIDEND AND CAPITALIZATION

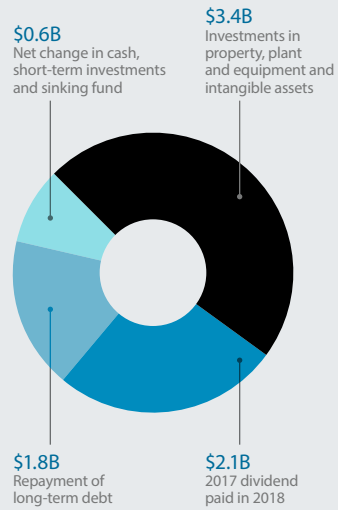
The dividend payable to the Québec government for 2018 is $2,394 million. Once this dividend is factored in, the capitalization rate was 31.8% as at December 31, 2018.

Under the *Hydro-Québec Act*, the dividend cannot exceed 75% of net income. Moreover, the Québec government may not declare, in respect of a given year, a dividend in an amount that would have the effect of reducing the capitalization rate to less than 25% at the end of the year.

Sources of Funds in 2018



Uses of Funds in 2018

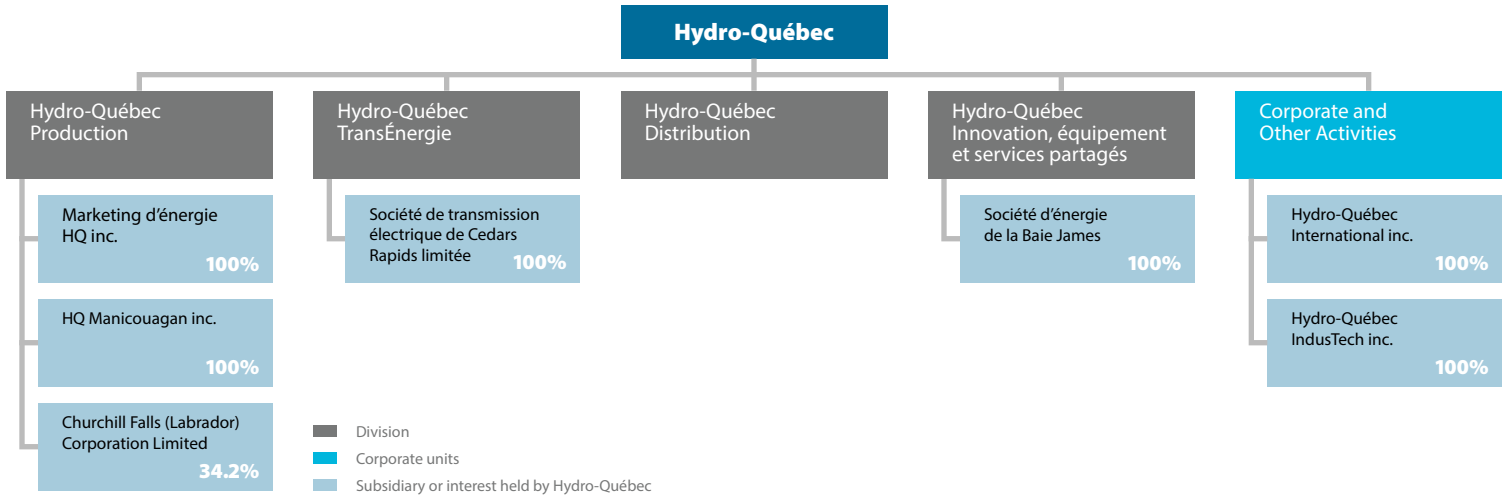


Segmented Results

OPERATING SEGMENTS

As in 2017, Hydro-Québec had four operating segments in 2018, namely Generation, Transmission, Distribution and Construction, as well as activities grouped under Corporate and Other Activities.

The organization chart on the right presents Hydro-Québec's principal first-tier interests:



GENERATION

Hydro-Québec Production operates and develops Hydro-Québec's generating facilities. It generates electricity for the Québec market and exports power to wholesale markets in northeastern North America.

TRANSMISSION

Hydro-Québec TransÉnergie operates and develops Hydro-Québec's power transmission system. It markets system capacity and manages power flows throughout Québec.

DISTRIBUTION

Hydro-Québec Distribution operates and develops Hydro-Québec's distribution system and ensures the supply of electricity to the Québec market. It also carries on activities related to electricity sales in Québec, provides customer services and promotes energy efficiency.

CONSTRUCTION

Hydro-Québec Innovation, équipement et services partagés and Société d'énergie de la Baie James (SEBJ) design, build and refurbish generating and transmission facilities, mainly for Hydro-Québec Production and Hydro-Québec TransÉnergie.

The following tables present information on segment results and assets:

						2018
Segmented financial information ($M)	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Hydro-Québec
Revenue[a]	**6,704**	**3,517**	**12,209**	**2,141**	**2,159**	**14,370**
Net income	**1,998**	**554**	**362**	**–**	**278**	**3,192**
Total assets	**32,994**	**23,288**	**13,976**	**44**	**6,847**	**76,989**[b]

						2017
Segmented financial information ($M)	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Hydro-Québec
Revenue[a]	6,516	3,307	11,701	2,480	1,752	13,468
Net income	1,948	554	333	–	11	2,846
Total assets	32,944	22,494	13,677	39	6,768	75,769[b]

a) Segment data include revenue from both external and intersegment customers as presented in Note 20 to the consolidated financial statements, whereas Hydro-Québec's revenue figure reflects the intersegment eliminations and adjustments presented in that same note.

b) This figure reflects the intersegment eliminations and adjustments presented in Note 20 to the consolidated financial statements.

Note: Some of the prior year's data have been reclassified to conform to the presentation adopted in the current year.

Generation

2018 AT A GLANCE	
Revenue	**$6.7B**
Net income	**$1,998M**
Contribution of net exports to net income	**$744M**
Customers (% of revenue from electricity sales)	
Hydro-Québec Distribution	**74%**
Other	**26%**
Sales volume	
Hydro-Québec Distribution	**161.9 TWh**
Other	**36.5 TWh**
Property, plant and equipment as at December 31 (including work in progress)	**$31.1B**
Investments in property, plant and equipment and intangible assets	**$792M**

Under the *Act respecting the Régie de l'énergie*, Hydro-Québec Production is required to provide Hydro-Québec Distribution with a base volume of up to 165 TWh of heritage pool electricity annually and may also compete for contracts under Hydro-Québec Distribution's open tendering process. It sells electricity on wholesale markets as well.

The division's generating fleet includes 63 power plants, 28 large reservoirs with a combined storage capacity of 176.5 TWh, 681 dams and 98 control structures.

OPERATING RESULTS

Hydro-Québec Production posted net income of $1,998 million in 2018, a $50-million increase compared to the previous year. Net electricity exports earned $1,575 million, the same amount as in 2017 and one of the division's best-ever performances in this regard. In terms of volume, net exports reached a historic level in 2018. As a result of an effective sales strategy, optimal management of generating and transmission facilities, and high runoff, they totaled 36.1 TWh, a 1.7-TWh increase over the previous record, set in 2017. Net electricity sales to Hydro-Québec Distribution amounted to $5,010 million, a $153-million increase mainly due to temperature variances. Depreciation and amortization and financial expenses increased by $14 million and $77 million, respectively.

ELECTRICITY SALES IN QUÉBEC

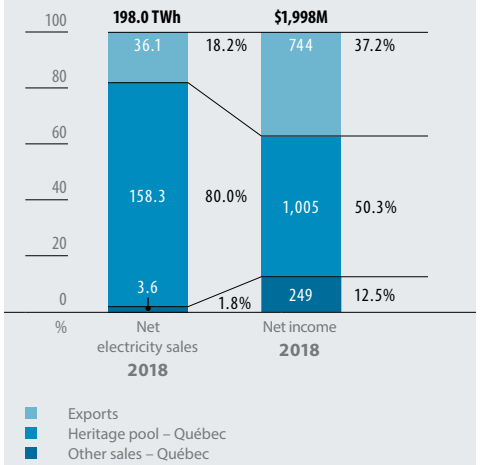
SALES TO HYDRO-QUÉBEC DISTRIBUTION

The volume of electricity sales to Hydro-Québec Distribution was 161.9 TWh in 2018, compared to 159.2 TWh in 2017. Revenue from these sales rose by $153 million from the $4,857 million posted in 2017, partly on account of a greater supply volume, which in turn resulted in particular from temperature variances, mainly in January and October. The increase is also attributable to indexing of the heritage pool price in accordance with the *Act respecting the Régie de l'énergie*.

NET ELECTRICITY EXPORTS

Net electricity exports generated $1,575 million in 2018, the same amount as in 2017. Their volume reached a historic high of 36.1 TWh, a 1.7-TWh increase over the previous year. The impact of this volume increase was offset, however, by the effect of the lower average export price obtained.

Net Electricity Sales and Net Income of Hydro-Québec Production, by Market



DEPRECIATION AND AMORTIZATION

Depreciation and amortization expense stood at $819 million in 2018, a $14-million increase compared to $805 million the previous year, mainly due to the commissioning of the two units at Romaine-3 generating station in September 2017.

FINANCIAL EXPENSES

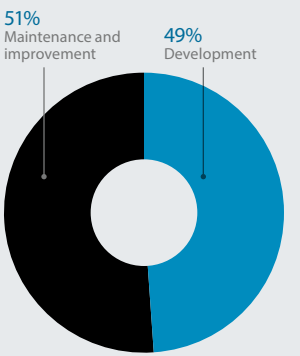
Financial expenses totaled $1,250 million in 2018, compared to $1,173 million in 2017. This change is partly the result of a reduction in capitalized financial expenses, mainly due to the commissioning of the two units at Romaine-3 generating station.

INVESTING ACTIVITIES

Investments in property, plant and equipment and intangible assets totaled $792 million in 2018. Of this amount, $386 million went toward development activities, mainly the continued construction of the Romaine hydroelectric complex.

Hydro-Québec Production also invested $406 million in asset sustainment and optimization. Ongoing work included refurbishment at Robert-Bourassa and Beauharnois generating stations.

Breakdown of 2018 Investments by Hydro-Québec Production



Transmission

2018 AT A GLANCE	
Revenue	$3.5B
Net income	$554M
Customers (% of revenue)	
Hydro-Québec Distribution *(native-load transmission service)*	83%
Hydro-Québec Production and other North American wholesalers *(point-to-point transmission services)*	12%
Other	5%
Property, plant and equipment as at December 31 (including work in progress)	$23.1B
Investments in property, plant and equipment and intangible assets	$1,782M

Hydro-Québec TransÉnergie operates and develops Hydro-Québec's power transmission system, one of the most extensive in North America. It markets system capacity and manages power flows throughout Québec, offering non-discriminatory access to its system to all market players in compliance with applicable regulatory requirements.

The division's operations are regulated by the Régie de l'énergie.

RATE CASES

For 2018, the revenue authorized by the Régie de l'énergie for transmission rate-setting purposes totaled $3,341 million, namely $2,940 million for native-load transmission and $401 million for short- and long-term point-to-point transmission services. These amounts represent increases of $81 million and $12 million, respectively, compared to 2017.

For 2019, Hydro-Québec TransÉnergie filed an application with the Régie de l'énergie requesting revenue of $3,487 million, namely $3,073 million for native-load transmission and $414 million for short- and long-term point-to-point transmission services. The Régie's decision regarding this application is expected in the first quarter of 2019.

OPERATING RESULTS

Hydro-Québec TransÉnergie's net income amounted to $554 million in 2018, the same as in 2017. The $81-million increase in revenue from native-load transmission service was offset by a $90-million increase in financial expenses.

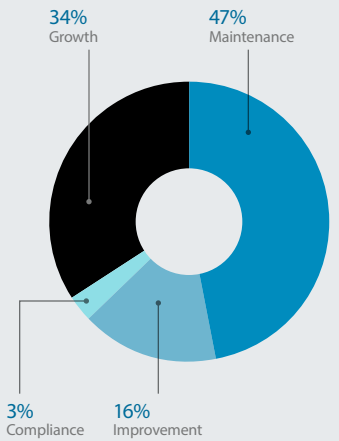
Since 2017, transmission rates have been subject to an earnings-sharing mechanism approved by the Régie de l'énergie, under which Hydro-Québec shares with customers any surplus during the year over and above the division's authorized rate of return. In 2018, Hydro-Québec TransÉnergie recognized a regulatory liability of $14 million in this connection, compared to $27 million the previous year.

INVESTING ACTIVITIES

In 2018, Hydro-Québec TransÉnergie invested $1,782 million in property, plant and equipment and intangible assets, namely $614 million for growth projects and $1,168 million for asset sustainment and reliability projects. The purpose of growth projects is to connect new generating facilities to the grid and to increase transmission capacity in response to higher load demand or new customer requests. Asset sustainment and reliability projects involve keeping facilities in good operating condition, maintaining and improving service quality and complying with the legal and regulatory requirements for operating a power transmission system.

In the growth category, Hydro-Québec TransÉnergie invested $368 million in 2018 in continuing the Chamouchouane–Bout-de-l'Île project: $278 million for the deployment of 735-kV lines extending approximately 400 km between Chamouchouane substation, in the Saguenay–Lac-Saint-Jean region, and the Montréal metropolitan loop, as well as the rerouting of a short segment of 735-kV line to Bout-de-l'Île substation, in Montréal, and $90 million for the construction of 735/120/25-kV Judith-Jasmin substation in the Lanaudière region (these amounts also include the project component related to transmission system sustainment and reliability). The division allocated a further $32 million to ongoing work, especially construction of Romaine-4 substation, to connect the Romaine complex as part of the expansion of the transmission system in the Minganie region.

Breakdown of 2018 Investments by Hydro-Québec TransÉnergie



Finally, it continued to integrate the output from wind farms built in response to the calls for tenders issued by Hydro-Québec Distribution, for a total investment of $167 million.

In the asset sustainment and reliability category, Hydro-Québec TransÉnergie invested $83 million (including the growth component) in various activities involved in the architecture development plan for the 315-kV system on the island of Montréal. It also allocated $35 million to the installation of 735-kV and 315-kV shunt reactors in the Laurentides, Chaudière-Appalaches and Côte-Nord regions, as well as $33 million to reinforce the Sherbrooke regional system (including the growth component).

Distribution

2018 AT A GLANCE	
Revenue	$12.2B
Net income	$362M
Segments (% of revenue from electricity sales)	
Residential	46%
Commercial, institutional and small industrial	33%
Large industrial	18%
Other	3%
Property, plant and equipment as at December 31 (including work in progress)	$10.1B
Investments in property, plant and equipment and intangible assets	$664M
Rate increase effective April 1, 2018 (excluding Rate L)	0.3%

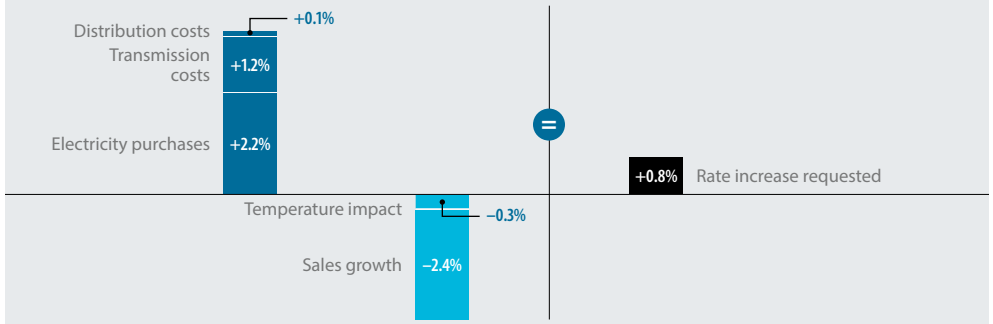
Hydro-Québec Distribution provides electricity to the Québec market and delivers reliable power and quality services to its customers with a view to efficiency and sustainable development. In this context, it also promotes energy efficiency among its customers.

The division's activities are regulated by the Régie de l'énergie, which has exclusive jurisdiction to set electricity rates. These rates are established in such a way as to permit service cost recovery and a reasonable return on the rate base. Since January 1, 2018, rates have been subject to performance-based regulation (PBR), which will apply for an initial period of four years. Under PBR, rates for the 2018–2019 rate year were set using the cost of service method, whereas the rates for the three following years will be determined using a parametric formula. PBR applies in addition to the earnings-sharing mechanism implemented in 2017.

RATE CASES

In March 2018, the Régie de l'énergie authorized an average increase of 0.3% in all Hydro-Québec electricity rates except the large-power industrial rate (Rate L), which remained unchanged. In accordance with the *Act respecting the Régie de l'énergie*, the indexing of the price of heritage pool electricity does not apply to Rate L customers. The new rates went into effect on April 1, 2018.

2019–2020 Rate Adjustment Application

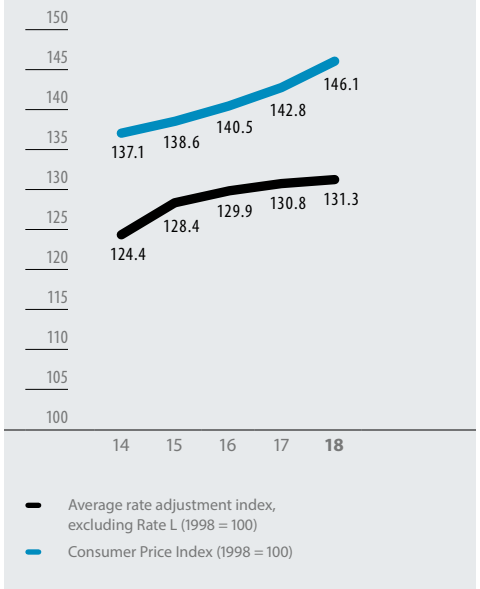


In July, Hydro-Québec Distribution filed an application with the Régie for a 0.8% rate adjustment for all customers except those at Rate L, for which the requested adjustment is 0.2%. The new rates would take effect on April 1, 2019. The main reasons for the 0.8% adjustment are the higher cost of electricity purchases; the impact of investments in the high-voltage transmission system and Hydro-Québec TransÉnergie's maintenance activities, which will ensure secure, reliable service; and the increase in certain distribution costs. Other factors, such as electricity sales growth resulting partly from the market development strategy, the impact of the temperature variances in the winters of 2016–2017 and 2017–2018, and the sharing of 2017 earnings with customers, limited the requested increase.

The cumulative average rate adjustment index for 1998 to 2018 is 131.3, while the Consumer Price Index for the same period is 146.1.

The Régie de l'énergie's ruling on the rate application is expected in the first quarter of 2019.

Average Rate Adjustment Index and Consumer Price Index



SUPPLYING THE QUÉBEC MARKET

Hydro-Québec Distribution depends on various sources to supply the Québec market, mainly the heritage pool of 165 TWh, which it purchases from Hydro-Québec Production. It also issues short- and long-term calls for tenders.

For requirements of less than three months, the division may also buy electricity directly on the market, without tendering, under an authorization granted by the Régie de l'énergie. For unforeseen needs that cannot be met otherwise, it relies on a framework agreement with Hydro-Québec Production that covers the period from January 1, 2017, to December 31, 2019. The Régie de l'énergie approved this agreement in September 2016.

In November 2018, Hydro-Québec Distribution filed a second progress report on the Electricity Supply Plan 2017–2026 with the Régie de l'énergie. This follow-up provided an updated demand forecast for the Québec market and outlined the events that have influenced supply planning and the division's actions since the first progress report was filed in October 2017.

Finally, Hydro-Québec Distribution is continuing its efforts to promote energy efficiency. Among other things, it has developed an integrated offer based on an educational approach that encourages customers to make lasting changes in their habits. In addition, the division constantly adjusts its programs according to market needs and the company's requirements, and ensures that its initiatives are in line with those of its various partners.

OPERATING RESULTS

Hydro-Québec Distribution posted net income of $362 million in 2018, or $29 million more than the $333 million recorded in 2017. Revenue from electricity sales increased by $371 million on account of three main factors: the impact of temperatures, especially in January and October, when they were significantly colder than in 2017; higher baseload demand in the residential segment and the commercial, institutional and small industrial segment; and the rate adjustments of April 1, 2017 and 2018. In addition, the change in net amounts recognized as earnings variances as well as variances between the actual revenue and costs for certain items and the forecasts in the rate filings had a positive impact of $81 million on revenue from other activities. Electricity purchases, the related transmission costs and fuel purchases were $414 million higher because of an increase in supplies purchased from Hydro-Québec Production and from third parties, as well as a rise in transmission costs incurred with Hydro-Québec TransÉnergie. Depreciation and amortization expense decreased by $55 million, whereas financial expenses increased by $30 million.

ELECTRICITY SALES IN QUÉBEC

Electricity sales revenue reached $12,134 million, a $371-million increase over 2017 mainly due to temperature variances, higher baseload demand in the residential segment and the commercial, institutional and small industrial segment, as well as the rate adjustments of April 1, 2017 and 2018.

Sales volume totaled 172.8 TWh compared to 170.7 TWh in 2017, an increase of 2.1 TWh. First, temperature variances led to a 3.3-TWh or $246-million increase in electricity sales. These variances were most pronounced in January and October, when temperatures were 2°C and 3°C, respectively, below climate normals in 2018, whereas they had been more than 3°C above the normals in 2017. For these two months alone, temperatures resulted in additional sales of $232 million compared to the previous year. Second, baseload demand grew in the residential segment and in the commercial, institutional

ELECTRICITY SALES IN QUÉBEC BY SEGMENT

	Sales volume			Sales revenue		
	2018	2018–2017 change		**2018**	2018–2017 change	
Market segment	TWh	TWh	%	$M	$M	%
Residential	**69.5**	3.4	5.1	**5,591**	306	5.8
Commercial, institutional and small industrial	**47.7**	1.9	4.1	**4,016**	143	3.7
Large industrial	**50.3**	(3.4)	(6.3)	**2,196**	(92)	(4.0)
Other	**5.3**	0.2	3.9	**331**	14	4.4
Total	**172.8**	2.1	1.2	**12,134**	371	3.2

FACTORS IN THE 2018–2017 CHANGE IN SALES BY SEGMENT

	Volume effects					Price effects			**Total**
	Baseload demand		Temperatures		**Total**	Rate adjustments	Other	**Total**	
Market segment	TWh	$M	TWh	$M	$M	$M	$M	$M	$M
Residential	0.8	73	2.6	205	**278**	22	6	**28**	**306**
Commercial, institutional and small industrial	1.3	90	0.6	37	**127**	16	–	**16**	**143**
Large industrial	(3.4)	(160)	–	–	**(160)**	1	67	**68**	**(92)**
Other	0.1	6	0.1	4	**10**	2	2	**4**	**14**
Total	(1.2)	9	3.3	246	**255**	41	75	**116**	**371**

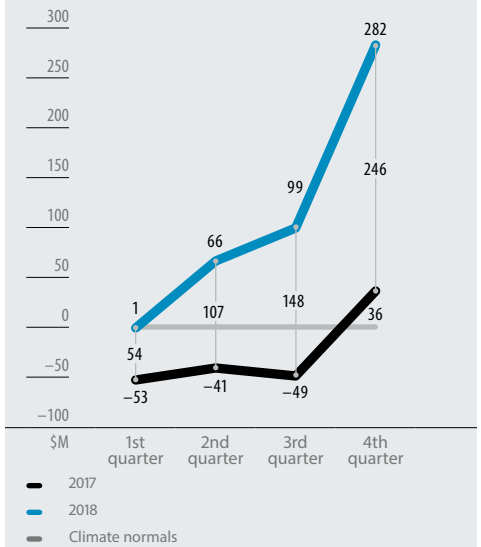
and small industrial segment because of the strength of the Québec economy, an increase in housing starts and the company's market development initiatives. However, growth in these segments' baseload demand was offset by a shortfall resulting from a labor conflict at a large aluminum smelter in the Centre-du-Québec region. The combined effect of these factors led to a 1.2-TWh decrease in baseload demand compared to 2017.

REVENUE FROM OTHER ACTIVITIES

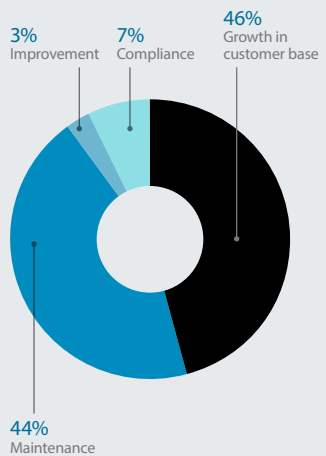
With regard to revenue from other activities, the change compared to 2017 in net amounts recognized as earnings variances as well as variances between the actual revenue and costs for certain items and the forecasts in the rate filings was $81 million, particularly because of the amortization of variances from previous years. The impact of this factor was partially offset by an increase in the regulatory liability recognized under the earnings-sharing mechanism, which amounted to $106 million in 2018, compared to $18 million in 2017. Under the earnings-sharing mechanism, which was approved by the Régie de l'énergie and implemented in 2017, Hydro-Québec shares with customers any surplus over and above the division's authorized rate of return.

Variances from Climate Normals—Montréal and Québec

Cumulative Impact of Temperatures Compared to Normals



Breakdown of 2018 Investments by Hydro-Québec Distribution



ELECTRICITY PURCHASES, TRANSMISSION COSTS AND FUEL PURCHASES

Electricity purchases, the related transmission costs and fuel purchases increased by $414 million compared to 2017. First, supplies purchased from Hydro-Québec Production increased by $153 million under the combined effect of temperatures and the indexing of the heritage pool price in accordance with the *Act respecting the Régie de l'énergie*. In addition, supplies from third parties rose by $145 million on account of a $115-million, or 1.4-TWh, increase in wind power purchases, mainly due to the commissioning of two new wind farms at the beginning of 2018. Finally, costs incurred for native-load transmission provided by Hydro-Québec TransÉnergie increased by $81 million.

DEPRECIATION AND AMORTIZATION

Depreciation and amortization expense totaled $697 million, compared to $752 million the previous year. This $55-million decrease is mainly due to the fact that amortization of the customer information system ended at the beginning of 2018.

INVESTING ACTIVITIES

In 2018, Hydro-Québec Distribution's investments in property, plant and equipment and intangible assets totaled $664 million.

Of this amount, $304 million was allocated to handling growth in the Québec customer base, including $219 million for customer connections. The division also invested $295 million in asset sustainment.

Construction

2018 AT A GLANCE	
Volume of activity	**$2.1B**
Main customers	
Hydro-Québec Production	**30%**
Hydro-Québec TransÉnergie	**66%**

The Construction segment consists of activities related to projects carried out by Hydro-Québec Innovation, équipement et services partagés[1] and by Société d'énergie de la Baie James (SEBJ).

Hydro-Québec Innovation, équipement et services partagés is responsible for construction and refurbishment projects throughout Québec, except in the territory governed by the *James Bay and Northern Québec Agreement* (JBNQA). SEBJ builds generating facilities in the territory governed by the JBNQA (north of the 49th parallel) and may also carry out certain projects elsewhere in Québec and outside the province.

As engineering, construction and environmental specialists, Hydro-Québec Innovation, équipement et services partagés and SEBJ offer Hydro-Québec Production and Hydro-Québec TransÉnergie a variety of services needed for draft-design studies, impact assessments and other undertakings in the context of energy-related projects. These services include technical and scientific surveys, planning, cost estimates and cost control, design, architecture, geomatics and quality control.

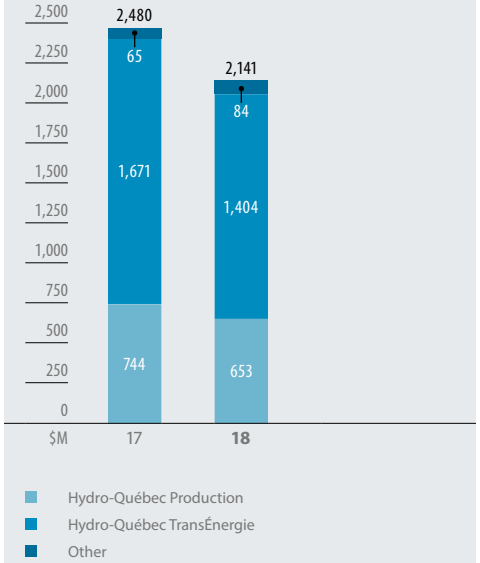
VOLUME OF ACTIVITY

Hydro-Québec Innovation, équipement et services partagés and SEBJ carried out projects worth a total of $2,141 million in 2018, compared to $2,480 million the previous year. The high volume is attributable to several large-scale projects. Work done for Hydro-Québec Production totaled $653 million, compared to $744 million in 2017, while work done for Hydro-Québec TransÉnergie totaled $1,404 million, compared to $1,671 million.

MAIN PROJECTS

In the area of power generation, Hydro-Québec Innovation, équipement et services partagés continued construction of the Romaine hydroelectric complex, as well as refurbishment of units at Beauharnois generating station and upgrading of station services at Carillon generating station. The division also completed refurbishment of a fourth unit at Robert-Bourassa generating station. For Hydro-Québec TransÉnergie, ongoing mandates included the 735-kV Chamouchouane–Bout-de-l'Île project, where the 735-kV section of Judith-Jasmin substation was completed, the substation integrated into the Montréal metropolitan loop, and a short segment of 735-kV line rerouted to Bout-de-l'Île substation. Connection of the Romaine complex also advanced, particularly the construction of Romaine-4 substation. At the same time, the division worked on upgrading various facilities in the main transmission system while pursuing other projects to increase transmission capacity.

Breakdown of Construction Segment Activities



1. The activities of the Direction principale – Centre de services partagés, Direction principale – Approvisionnement stratégique and Direction principale – Institut de recherche d'Hydro-Québec, as well as of the Center of Excellence in Transportation Electrification and Energy Storage, are included under Corporate and Other Activities.

Corporate and Other Activities

The Corporate and Other Activities heading includes all corporate activities, as well as the Vice-présidence – Technologies de l'information et des communications, Vice-présidence – Développement des affaires, Direction principale – Centre de services partagés, Direction principale – Approvisionnement stratégique, Direction principale – Institut de recherche d'Hydro-Québec, Direction principale – Filiales d'Hydro-Québec, Center of Excellence in Transportation Electrification and Energy Storage, and Direction principale – Amélioration continue et planification stratégique d'entreprise.

RESULTS

Corporate and Other Activities recorded net income of $278 million in 2018, an increase of $267 million compared to the $11 million recorded in 2017, due to the partial sale of the subsidiary TM4, which generated a gain of $277 million.

CORPORATE ACTIVITIES

Corporate activities consist of the Groupe – Direction financière et du risque, Groupe – Affaires corporatives et juridiques et gouvernance, Vice-présidence – Communications et affaires gouvernementales, Vice-présidence – Ressources humaines, and Direction – Santé et sécurité.

The Groupe – Direction financière et du risque is responsible for all of the company's financial functions, specifically including accounting, control, treasury, budget planning, financing and relations with Hydro-Québec bondholders and rating agencies, taxation, risk management, preparation of financial statements and reports, as well as pension plan and pension fund management. As at December 31, 2017, the date of the most recent actuarial valuation, the pension plan showed a funding surplus of $6.6 billion, which means that the assets held on that date were sufficient to cover future pension costs as well as the stabilization provision established under the requirements of the *Supplemental Pension Plans Act*. The pension plan's funding ratio was 135.7% at that time.

The Groupe – Affaires corporatives et juridiques et gouvernance provides administrative support to the company's Board of Directors and the boards of Hydro-Québec subsidiaries, as well as legal services, advice and opinions to the entire company. It negotiates, drafts and reviews the contracts and agreements required in the course of the company's operations and protects its interests in business matters and disputes, including court cases and matters involving regulators such as the Régie de l'énergie. It also develops strategies and guidelines and provides advisory services in the areas of corporate affairs, governance and ethics, access to information, the environment and sustainable development, as well as document management.

The Vice-présidence – Communications et affaires gouvernementales develops strategies and provides support and advisory services in the areas of communications and public affairs, as well as relations with governments, communities and partner organizations. It is also tasked with monitoring Hydro-Québec's corporate image and reputation.

The Vice-présidence – Ressources humaines develops strategies, guidelines, frameworks, corporate programs and objectives in matters pertaining to human resources management, labor relations, compensation and employee benefits, organizational performance, as well as training and skills development. It also makes sure that Management can count on optimum conditions regarding human resources. Moreover, it is responsible for all measures to ensure the protection of personnel and third parties as well as the security of Hydro-Québec's facilities and assets, including information and communication technologies.

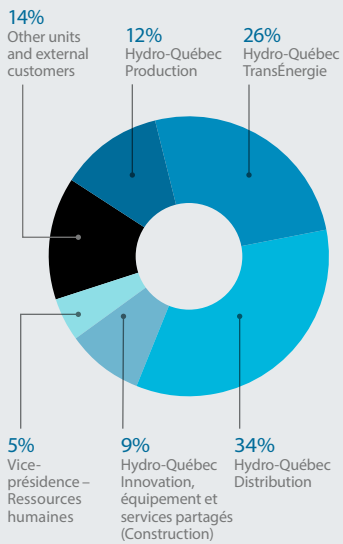
The Direction – Santé et sécurité[1] is in charge of occupational health and safety, one of the company's top priorities. Its mission is to foster a culture of prevention predicated on managers taking a proactive approach, showing strong leadership and engaging daily with health and safety risks and issues, as well as adherence to common values at all levels of the workforce. To do so, it develops strategies and provides advisory services pertaining to the prevention of accidents and illness, and promotes best practices in health and safety.

VICE-PRÉSIDENCE – TECHNOLOGIES DE L'INFORMATION ET DES COMMUNICATIONS

The Vice-présidence – Technologies de l'information et des communications[1] designs, builds, deploys, operates and evolves the company's information and telecommunications networks, systems, applications and infrastructure. As part of its mandate, it implements an integrated vision with respect to governance, architecture, development and operations, with particular attention to cybersecurity. It also develops leading-edge technology solutions designed to increase the company's productivity and facilitate its digital transformation, including increased automation of the grid and the company's processes, big data analysis, mobility and cloud computing.

This unit's volume of activity totaled $706 million in 2018, compared to $645 million in 2017.

Breakdown of 2018 Activities: Vice-présidence – Technologies de l'information et des communications



1. This structural unit reports to Hydro-Québec's Chief Operating Officer.

INVESTING ACTIVITIES

In 2018, the investments of the Vice-présidence – Technologies de l'information et des communications totaled $105 million and were allocated to maintaining asset quality.

VICE-PRÉSIDENCE – DÉVELOPPEMENT DES AFFAIRES

The mandate of the Vice-présidence – Développement des affaires is to prospect for business opportunities and act on them so that Hydro-Québec can not only increase its operating revenue and income from markets outside Québec, but also play a leading role in the global energy transition. In concrete terms, the unit is constantly on the lookout for potential international investments in the form of acquisitions, equity stakes or long-term partnerships that will leverage the company's expertise in hydroelectric generation and power transmission. In addition, it is actively involved in developing the company's export markets by highlighting the benefits of Québec hydropower, and it supports Hydro-Québec's initiatives in transportation electrification, for example by piloting the expansion of the Electric Circuit in Québec and neighboring markets.

DIRECTION PRINCIPALE – CENTRE DE SERVICES PARTAGÉS AND DIRECTION PRINCIPALE – APPROVISIONNEMENT STRATÉGIQUE

The Direction principale – Centre de services partagés[1] offers services pertaining to real estate management and materials management, as well as transportation and other specialized services, in order to contribute to the company's performance. The Direction principale – Approvisionnement stratégique[1] provides procurement guidelines, products and services to the entire company, in line with best practices.

These two units' combined volume of activity amounted to $514 million in 2018, compared to $480 million in 2017.

DIRECTION PRINCIPALE – INSTITUT DE RECHERCHE D'HYDRO-QUÉBEC

The Direction principale – Institut de recherche d'Hydro-Québec (IREQ)[1] develops and adapts leading-edge technology solutions according to the company's business requirements and objectives. It provides technical assistance to the divisions and also carries out innovation projects to support their operations and ensure Hydro-Québec's long-term development.

DIRECTION PRINCIPALE – FILIALES D'HYDRO-QUÉBEC

The primary mandate of the Direction principale – Filiales d'Hydro-Québec,[2] set up in 2018, is to guide research and development work on battery materials and energy storage systems in collaboration with the Center of Excellence in Transportation Electrification and Energy Storage. It also markets the technologies developed by the Center of Excellence.

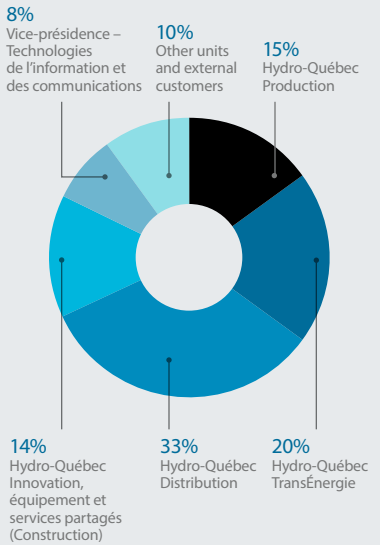
CENTER OF EXCELLENCE IN TRANSPORTATION ELECTRIFICATION AND ENERGY STORAGE

The Center of Excellence in Transportation Electrification and Energy Storage (CETEES)[1] conducts research and development on battery materials.

DIRECTION PRINCIPALE – AMÉLIORATION CONTINUE ET PLANIFICATION STRATÉGIQUE D'ENTREPRISE

The Direction principale – Amélioration continue et planification stratégique d'entreprise[2] is tasked with fostering a customer-focused culture. To this end, it develops motivating strategies for enhancing process efficiency and service quality, while progressively deploying a company-wide management system that will help managers and employees address shortcomings, identify problems and implement solutions for reaching and sustaining ambitious levels of customer service and operational efficiency. It also coordinates the preparation and updating of the Strategic Plan and all related work.

Breakdown of 2018 Activities: Direction principale – Centre de services partagés and Direction principale – Approvisionnement stratégique



1. This structural unit reports to the President of Hydro-Québec Innovation, équipement et services partagés.
2. This structural unit reports to Hydro-Québec's Chief Operating Officer.

Outlook

For 2019, Hydro-Québec is targeting net income of $2.7 billion.

The company plans to invest approximately $3.7 billion in 2019, most of which will be allocated to the operations of Hydro-Québec TransÉnergie ($1.5 billion), Hydro-Québec Production ($1.1 billion) and Hydro-Québec Distribution ($0.8 billion). More than 60% of the total amount will be earmarked for facility maintenance and improvements. The remainder will go toward growth and development activities.

The 2019 borrowing program is set at $3.5 billion. The funds raised will be used to support a large part of the investment program and to refinance maturing debt.

Hydro-Québec Production will continue its work on the Romaine complex jobsites in the course of developing Québec's hydroelectric potential. Three of the four generating stations in this major project, namely Romaine-2, Romaine-1 and Romaine-3, were commissioned in 2014, 2015 and 2017, respectively, and Romaine-4 should follow in 2021. At the same time, the division will continue investing to ensure the long-term operability of its facilities and optimize their output. For instance, refurbishment is under way at Robert-Bourassa and Beauharnois generating stations.

Hydro-Québec TransÉnergie will devote a large part of its investments to erecting transmission lines, in particular some 400 km of 735-kV lines that will connect Chamouchouane substation, in the Saguenay–Lac-Saint-Jean region, to the Montréal metropolitan loop, with commissioning scheduled for 2019. In addition, it will continue connecting the Romaine complex, in the Minganie region, and building 315/25-kV Patriotes substation, in the Basses-Laurentides region. The division will also continue to invest in upgrading and modernizing its facilities to ensure the reliability and long-term operability of its transmission assets and maintain service quality. Some examples of this include the projects to replace the grid control systems, special protection systems, and substation protections and controls, as well as the ongoing work on the architecture development plan for the 315-kV system on the island of Montréal.

Hydro-Québec Distribution will continue to deliver reliable power and high-quality services to all Quebecers. It will make further investments to better meet customer needs, including connecting the Côte-Nord region communities of La Romaine and Unamen Shipu, currently served by an off-grid system. The division will also pursue projects to maintain and improve the quality of its facilities, such as replacing the distribution grid control systems.

Integrated Business Risk Management

Hydro-Québec applies an integrated business risk management process as part of its ongoing activities. This process is supported by various control, communication and assessment mechanisms that enable it to ensure dynamic monitoring of risk developments.

The company's structural units, namely the divisions and corporate units, are central to the process. As part of their ongoing activities, they manage the risks to which they are exposed and reassess them on a regular basis, daily in some cases. In concrete terms, each structural unit must identify and assess its main risks and then develop and apply mitigation measures to ensure that residual risks are at a level acceptable to Hydro-Québec. The structural units report monthly on their risk management and monitoring activities to the Management Committee, which then acts as a risk management committee to provide overall monitoring of business risks. This approach makes it possible to create a consolidated portfolio of residual business risks during the annual planning process. The consolidated portfolio is presented to the Board of Directors with the Business Plan, which includes a sensitivity analysis indicating the impact of certain risks on projected net income.

INTEGRATED BUSINESS RISK MANAGEMENT PROCESS

	Annually	Monthly
	Business Plan	
Structural units	• Identification of each structural unit's risks and validation by the manager reporting to the President and Chief Executive Officer • Development or updating of the structural unit's portfolio of residual business risks	Report on the monitoring of each structural unit's portfolio of residual business risks
Corporate Management[a]	Review of the company's consolidated portfolio of residual business risks, risk map and probability of attaining projected net income	Review of the consolidated monthly report on the monitoring of the company's portfolio of residual business risks
Board of Directors	**Audit Committee** Analysis of the company's integrated process for managing residual business risks **Financial Affairs, Projects and Technologies Committee** Analysis of the company's consolidated portfolio of residual business risks, risk map and probability of attaining projected net income **Board of Directors** Review of the company's consolidated portfolio of residual business risks, risk map and probability of attaining projected net income	

a) Acting as the risk management committee, with the Executive Vice President and Chief Financial and Risk Officer as Chief Risk Officer.

FINANCIAL RISKS

In the course of its operations, Hydro-Québec carries out transactions that expose it to certain financial risks, such as market, liquidity and credit risk. Systematic monitoring and the adoption of strategies that include the use of derivative instruments considerably reduce exposure to such risks and their impact on the company's results.

To manage market and credit risk, a team of specialists that is independent of the units carrying out the transactions constantly monitors a number of indicators related to financial and energy transactions, recommends strategies and applies controls aimed at reducing risk.

MARKET RISK

Hydro-Québec's results are subject to three main types of market risk: currency risk, interest rate risk and risk associated with energy and aluminum prices. Fluctuations in the Canadian dollar's exchange rate relative to the U.S. dollar affect revenue from sales denominated in U.S. dollars, as well as the cost of U.S. dollar–denominated debt. Interest rate fluctuations affect financial expenses and pension costs. Finally, energy price fluctuations affect revenue from wholesale markets, while aluminum price fluctuations have an impact on revenue from special contracts with certain large industrial customers in Québec.

The three types of market risk are the subject of active integrated management based mainly on the use of derivative financial instruments. The purpose of such management is to limit the impact of market risk on Hydro-Québec's results, according to strategies and criteria established based on the company's risk tolerance. In addition, market risk over the medium and long term is mitigated by the offsetting effect between the impact of a general increase or decrease in interest rates on financial expenses, on the one hand, and the impact of such an increase or decrease on pension costs, on the other.

Hydro-Québec's pension costs are also subject to the risk of fluctuation in the fair value of investments held in the pension fund portfolio. To manage this risk, the company relies on asset diversification and on investment management strategies that include the use of derivatives.

LIQUIDITY RISK

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with its financial liabilities. This type of risk may translate into difficulties accessing sources of financing for its investment program.

Hydro-Québec's liquidity risk is mitigated by several factors, including substantial cash flows from operating activities, access to a preauthorized standby credit facility and a diversified portfolio of highly liquid financial instruments.

CREDIT RISK

Credit risk is the risk that a counterparty may not meet its contractual obligations. Hydro-Québec is exposed to credit risk related to receivables through ongoing electricity sales in Québec. These sales are billed at rates that provide for cost recovery according to terms approved by the Régie de l'énergie. The company is also exposed to credit risk related to the cash equivalents, short-term investments and derivative instruments traded with financial institutions and other issuers and, to a lesser extent, with North American energy companies under Hydro-Québec Distribution supply contracts and Hydro-Québec Production energy transactions on markets outside Québec.

Exposure to credit risk is mitigated by the implementation of limits and frameworks for risk concentration and level of exposure by counterparty. To ensure compliance with such limits and frameworks, Hydro-Québec takes a proactive approach based on various controls and monitoring reports. These enable it to react quickly to any event that could have an impact on the financial position of its counterparties. In addition, the company generally does business with counterparties that have a high credit rating. It also enters into agreements to keep the market value of the main portfolios of derivative instruments below a predetermined threshold.

REGULATORY RISKS

Hydro-Québec is exposed to regulatory risks because, under the *Act respecting the Régie de l'énergie*, its activities related to electricity transmission and distribution are regulated. The decisions handed down by the Régie may therefore affect the results of Hydro-Québec TransÉnergie and Hydro-Québec Distribution. In particular, the Act stipulates that rates are determined on a basis that allows for recovery of the cost of service and provides a reasonable return on the rate base.

Various measures have been put in place to reduce the impact of regulatory risks on these two divisions' results. These measures include submitting complete and well-argued files to the Régie de l'énergie and maintaining a constructive dialogue with the Régie and the intervenors, particularly during working sessions.

OPERATIONAL RISKS

GENERATION

One of the principal uncertainties that Hydro-Québec faces relates to natural water inflows. Hydro-Québec Production must ensure that it is able to meet its commitments to supply an annual base volume of up to 165 TWh of heritage pool electricity to Hydro-Québec Distribution and fulfill its contractual obligations. In concrete terms, this means being able to cover a natural inflow deficit of 64 TWh over two consecutive years, and 98 TWh over four consecutive years. To manage this risk, the division applies a variety of mitigation measures and closely monitors them. It therefore manages its reservoir storage on a multiyear basis and maintains an adequate margin between its generating capacity and its commitments. This allows the division to compensate for variations in runoff, replenish its reserves or take advantage of business opportunities. Hydro-Québec regularly reports to the Régie de l'énergie on the generating capacity and energy reserve of Hydro-Québec Production.

In addition to runoff uncertainties, Hydro-Québec Production's export activities on wholesale markets are subject to market risk and the risk of unavailability of generating and transmission equipment. Market risk results from fluctuations in energy prices on markets outside Québec, and is mitigated by ongoing monitoring of trends in wholesale markets and the use of hedging derivative instruments. The risk of unavailability of generating and transmission equipment is mitigated through maintenance and upgrade programs.

Hydro-Québec Production is also exposed to risk arising from variances between forecast and actual temperatures and market demand in Québec. Such variances have an impact on the division's electricity sales to Hydro-Québec Distribution and may affect the volume available for its export sales.

The risks related to Hydro-Québec Production's export activities are quantified in an integrated fashion by a team of specialists that is independent of the unit carrying out the transactions. This team sees to the application of controls, presents daily reports to Senior Management and ensures compliance with the limits approved by Management and the Board of Directors.

TRANSMISSION

Several factors, such as extreme weather events and equipment failure, may cause service interruptions or result in the unavailability of part of the transmission system. The multifaceted strategy adopted by Hydro-Québec TransÉnergie to prevent these problems includes implementing the standards of the North American Electric Reliability Corporation (NERC) as well as measures to maintain and reinforce its transmission facilities and ensure that assets continue to operate smoothly throughout their useful lives. It is worth noting in this regard that Hydro-Québec TransÉnergie's Direction – Contrôle des mouvements d'énergie (system control unit) is Reliability Coordinator for transmission systems in Québec, a role it was assigned by the Régie de l'énergie in 2007.

Hydro-Québec TransÉnergie must provide adequate transmission capacity to supply Hydro-Québec Distribution and other customers, while also ensuring transmission system security and reliability. To do so, it applies optimal management of the annual peak load and invests in modernizing its transmission facilities based on an asset management model. It has also undertaken major projects to replace the grid control systems, special protection systems, and substation protections and controls.

DISTRIBUTION

The main risk to which Hydro-Québec Distribution is exposed relates to continuity of service. To maintain power quality, the division makes ongoing investments in its system to modernize and automate it and enhance its security. It also relies on vegetation control, the implementation of an asset maintenance program and a strategy for asset renewal, as well as compliance with applicable standards for overhead and underground systems. To reduce the duration of service interruptions, the vast majority of which are caused by adverse weather conditions, the division has adopted new technologies for rapid detection of outages, faster service restoration and remote management of certain incidents.

Even under normal weather conditions, economic and market factors cause fluctuations in demand, which impact Hydro-Québec Distribution's results. When demand is lower than the forecasts presented in the rate filing, the division cannot recover from customers all the costs related to power distribution and the cost of transmission through the Hydro-Québec TransÉnergie system. To counter the impact of this risk, the division constantly fine-tunes its method of forecasting demand for electricity.

CONSTRUCTION

One of the key risks that Hydro-Québec Innovation, équipement et services partagés must deal with is occupational health and safety (OHS) on its jobsites. In 2017, the division initiated a significant transformation in this regard, with the ambition of becoming a model for health and safety in Québec's construction industry. To this end, it developed an OHS action plan in line with the corporate one and teamed up with the other divisions to achieve a common goal: provide a safe, healthy and respectful work environment.

Pressure on construction project costs is another risk to which the division is constantly exposed. This pressure is due to such factors as the rising cost of labor in the construction industry, higher prices for certain materials or products, and factors that affect project schedules (late deliveries, poor quality, work stoppages).

To meet its commitments and continue to apply high safety and quality standards, the division has implemented a number of measures to reduce its risk exposure. Specifically, it closely monitors project schedules, costs and the main deliverables, an approach that enables it to ensure that projects are progressing as planned or to take any necessary corrective action. It also maintains ongoing relations with the relevant organizations and government departments to stay abreast of future amendments to laws and regulations that could affect projects. In addition, it develops procurement strategies that promote competition, secure long-term supplies and continuity of expertise in its markets, and it adjusts its project completion strategies according to economic conditions, in consultation with its customers.

Finally, trade agreements between Québec and Ontario and between Canada and the European Union may affect Hydro-Québec's procurement processes, particularly regarding security, confidentiality of information and how requirements are defined.

CORPORATE AND OTHER ACTIVITIES

OCCUPATIONAL HEALTH AND SAFETY

Hydro-Québec has always maintained very high OHS standards. However, in light of the recommendations made by the consulting firm that the company engaged in 2017 to analyze its OHS practices, it made a commitment to review its procedures and do more than simply meet its legal obligations in this regard, both on jobsites and company-wide. Moreover, it decided to go further and do its utmost to ensure that occupational health and safety becomes a fundamental value for all its personnel and subcontractors.

For this reason, Hydro-Québec launched several concrete initiatives that will continue over the coming years. These initiatives are intended to build a culture of prevention based on everyone's commitment and cooperation. The transformation under way relies on sound behaviors and shared values, unifying leadership and increased manager presence on the ground, as well as optimizing the company's ability to identify risks, implement effective means of control and learn from any health and safety–related incidents.

SAFETY OF INDIVIDUALS AND SECURITY OF ASSETS AND REVENUE

The physical safety of individuals (employees, suppliers and the public) and the security of the company's assets, as well as cybersecurity, are key concerns for Hydro-Québec. To manage these issues, the company relies on a multidisciplinary team of experts who continuously monitor its facilities, systems and information and telecommunications networks, anticipate and analyze threats, maintain a close watch on related risks, regularly assess the mitigation measures in place and deploy new strategies based on changes in the business environment and emerging trends in security. Hydro-Québec's model of protection is based on anticipation, detection, deterrence, response and recovery. It is also rooted in an integrated security culture that relies on cooperation and awareness on the part of the company's managers and employees, as well as internal and external partners.

Protection of the company's revenue is another major challenge. In the coming years, Hydro-Québec will pay special attention to electricity theft, intellectual property infringement and attempts to compromise the power grid, particularly through cyberattacks. A new analytical method for detecting electricity theft, increased security at strategic facilities including research centers, as well as continued surveillance by the corporate ICT (information and communication technologies) security monitoring center in collaboration with partners are just a few examples of the methods being implemented to reduce these risks.

In addition, Hydro-Québec has a corporate emergency response plan to ensure the continuity of its operations and its mission in case of an exceptional event. The corporate plan integrates the structural units' emergency response plans and activities with the aim of strengthening and improving coordination of the efforts of all internal and external responders, including public authorities.

BUSINESS DEVELOPMENT AND INVESTMENT OUTSIDE QUÉBEC

In keeping with the strategies set out in the *Strategic Plan 2016–2020*, Hydro-Québec has undertaken to expand its operations on markets outside Québec with a view to enhancing its profitability. The growth avenues it is exploring involve developing its export markets, commercializing its technological innovations and building partnerships, making acquisitions or acquiring interests outside Québec. To successfully implement its international expansion projects, the company adopted a business opportunity analysis process that will enable it to identify the related risks and manage them proactively.

ENVIRONMENT

Environmental protection and conservation are also among Hydro-Québec's main priorities. In 2018, the company's management system, which has an environmental component, was certified to ISO 14001:2015. Furthermore, every year, the company reviews its management of environmental risks and issues and provides an overview in its Sustainability Report.

CLIMATE CHANGE

Given the extent to which climate change could affect its operations, Hydro-Québec decided, in late 2018, to develop a plan to address this issue. The actual and anticipated impacts of climate change, as well as the measures taken by the company to meet the related challenges and reduce greenhouse gas emissions in Québec, are presented in its Sustainability Report.

MANAGEMENT'S REPORT ON FINANCIAL INFORMATION

Hydro-Québec's consolidated financial statements and all additional financial information contained in this Annual Report are the responsibility of Management and are approved by the Board of Directors. The consolidated financial statements have been prepared by Management in accordance with United States generally accepted accounting principles and take into account the decisions handed down by the Régie de l'énergie with respect to the transmission and distribution of electricity. They include amounts determined based on Management's best estimates and judgment. Financial information presented elsewhere in the Annual Report is consistent with the information provided in the consolidated financial statements.

Management maintains an internal control system whose objective is to provide reasonable assurance that financial information is relevant and reliable and that Hydro-Québec's assets are appropriately recorded and safeguarded. In particular, this system includes Hydro-Québec's policies and directives, and involves communicating Hydro-Québec's rules of ethics and Code of Conduct to employees, to ensure the proper management of resources and the orderly conduct of business, in compliance with the applicable laws and regulations. An internal auditing process allows evaluation of the sufficiency and effectiveness of controls, as well as of Hydro-Québec's policies and directives. Recommendations ensuing from this process are submitted to Management and the Audit Committee.

The Board of Directors approves the corporate governance rules. It assumes its responsibility for the consolidated financial statements through its Audit Committee, composed solely of independent directors, who do not hold full-time positions within Hydro-Québec or in one of its subsidiaries. The Audit Committee is responsible for recommending the consolidated financial statements to the Board of Directors for approval. The Audit Committee meets with Management, the independent auditors and the Internal Auditor to discuss the results of their audits and the resulting findings with respect to the integrity and the quality of Hydro-Québec's financial reporting as well as its internal control system. The independent auditors and the Internal Auditor have full and unrestricted access to the Audit Committee, with or without Management present.

The 2018 and 2017 consolidated financial statements have been audited jointly by the Auditor General of Québec, KPMG LLP and Ernst & Young LLP.

/s/ Jacynthe Côté
Chair of the Board

/s/ Éric Martel
President and Chief Executive Officer

/s/ Jean-Hugues Lafleur
Executive Vice President and
Chief Financial and Risk Officer

Montréal, Québec
February 15, 2019

INDEPENDENT AUDITORS' REPORT

To the Minister of Finance of Québec:

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

OPINION

We have audited the consolidated financial statements of Hydro-Québec ("the Group"), which comprise the consolidated balance sheets as at December 31, 2018 and 2017, and the consolidated statements of operations, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2018 and 2017, and its consolidated results of operations and its consolidated cash flows for the years then ended in accordance with United States generally accepted accounting principles ("U.S. GAAP").

BASIS FOR OPINION

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OTHER INFORMATION

Management is responsible for the other information. Other information comprises:

- The information, other than the consolidated financial statements and our auditors' report thereon, included in the Annual Report.
- The information, other than the consolidated financial statements and our auditors' report thereon, included in a document likely to be entitled *Annual Report – Form 18-K*.

Our opinion on the consolidated financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained the Annual Report prior to the date of this auditors' report. If, based on the work we have performed on the other information included in this Annual Report, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditors' report. We have nothing to report in this regard.

The document likely to be entitled *Annual Report – Form 18-K* is expected to be made available to us after the date of the auditors' report. If, based on the work we will perform on the other information included in this document, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with U.S. GAAP, and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, Management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

As required by the *Auditor General Act* (CQLR, c. V-5.01), we report that, in our opinion, except for the changes in accounting policies described in Note 2 to the consolidated financial statements, these principles have been applied for the year ended December 31, 2018, on a basis consistent with the preceding year.

The engagement partners from KPMG LLP and from Ernst & Young LLP on the audit resulting in this independent auditors' report are respectively André Dugal and Laurent Liagre.

/s/ KPMG LLP[1]

/s/ Ernst & Young LLP[2]

/s/ Guylaine Leclerc, FCPA auditor, FCA
Auditor General of Québec

Montréal, Québec
February 15, 2019

1. FCPA auditor, FCA, public accountancy permit No. A110618
2. CPA auditor, CA, public accountancy permit No. A129122

CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended December 31 In millions of Canadian dollars	Notes	2018	2017
Revenue	20	**14,370**	13,468
Expenditure			
Operations		**2,843**	2,664
Other components of employee future benefit cost	18	**(340)**	(322)
Electricity and fuel purchases		**2,167**	2,005
Depreciation and amortization	4	**2,685**	2,686
Taxes	5	**1,111**	1,076
		8,466	8,109
Income before financial expenses		**5,904**	5,359
Financial expenses	6	**2,712**	2,513
Net income		**3,192**	2,846

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Years ended December 31 In millions of Canadian dollars	Notes	2018	2017
Net income		**3,192**	2,846
Other comprehensive income	16		
Net change in items designated as cash flow hedges	15	**215**	(271)
Net change in employee future benefits	18	**469**	(387)
Translation differences in financial statements of foreign operations		**3**	(2)
		687	(660)
Comprehensive income		**3,879**	2,186

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS

As at December 31 In millions of Canadian dollars	Notes	2018	2017
ASSETS			
Current assets			
Cash and cash equivalents		**1,335**	537
Short-term investments		**884**	1,112
Accounts receivable and other receivables	15	**2,713**	2,487
Derivative instruments	15	**72**	69
Regulatory assets	3	**203**	133
Materials, fuel and supplies		**264**	228
		5,471	4,566
Property, plant and equipment	7	**64,966**	63,990
Intangible assets	8	**877**	871
Investments	9	**1,022**	890
Derivative instruments	15	**121**	19
Regulatory assets	3	**3,863**	4,747
Other assets	10	**669**	686
		76,989	75,769
LIABILITIES			
Current liabilities			
Borrowings		**8**	8
Accounts payable and accrued liabilities		**2,135**	2,439
Dividend payable	16	**2,394**	2,135
Accrued interest		**914**	895
Asset retirement obligations	11	**62**	65
Derivative instruments	15	**80**	187
Regulatory liabilities	3	**80**	78
Current portion of long-term debt	12	**3,151**	1,183
		8,824	6,990
Long-term debt	12	**42,910**	43,825
Asset retirement obligations	11	**811**	799
Derivative instruments	15	**28**	22
Regulatory liabilities	3	**714**	478
Other liabilities	13	**2,219**	3,649
Perpetual debt	14	**274**	251
		55,780	56,014
EQUITY	16		
Share capital		**4,374**	4,374
Retained earnings		**18,741**	17,972
Accumulated other comprehensive income		**(1,906)**	(2,591)
		21,209	19,755
		76,989	75,769
Commitments and contingencies	19		

The accompanying notes are an integral part of the consolidated financial statements.

On behalf of the Board of Directors,

/s/ Geneviève Brouillette
Member of the Audit Committee

/s/ Jacynthe Côté
Chair of the Board

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Years ended December 31 In millions of Canadian dollars	Notes	Share capital	Retained earnings	Accumulated other comprehensive income	Total equity
Balance as at December 31, 2017		**4,374**	**17,972**	**(2,591)**	**19,755**
Adjustments related to a change in accounting policy	**2**	**–**	**(29)**	**(2)**	**(31)**
Net income		**–**	**3,192**	**–**	**3,192**
Other comprehensive income	**16**	**–**	**–**	**687**	**687**
Dividend	**16**	**–**	**(2,394)**	**–**	**(2,394)**
Balance as at December 31, 2018		**4,374**	**18,741**	**(1,906)**	**21,209**
Balance as at December 31, 2016		4,374	17,261	(1,931)	19,704
Net income		–	2,846	–	2,846
Other comprehensive income	16	–	–	(660)	(660)
Dividend	16	–	(2,135)	–	(2,135)
Balance as at December 31, 2017		4,374	17,972	(2,591)	19,755

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31 In millions of Canadian dollars	Notes	2018	2017
Operating activities			
Net income		**3,192**	2,846
Adjustments to determine net cash flows from operating activities			
Depreciation and amortization	4	**2,685**	2,686
Amortization of premiums, discounts and issue expenses related to debt securities		**203**	190
Deficit of net cost recognized with respect to amounts paid for employee future benefits		**(146)**	(200)
Gain on partial sale of a subsidiary	9	**(277)**	–
Other		**118**	255
Regulatory assets and liabilities		**(57)**	137
Change in non-cash working capital items	17	**(420)**	(336)
		5,298	5,578
Investing activities			
Additions to property, plant and equipment		**(3,292)**	(3,647)
Additions to intangible assets		**(110)**	(107)
Partial sale of a subsidiary, net of cash transferred		**160**	–
Net change in short-term investments and sinking fund	10	**215**	492
Other		**70**	15
		(2,957)	(3,247)
Financing activities			
Issuance of long-term debt		**1,828**	1,207
Repayment of long-term debt		**(1,778)**	(1,417)
Cash receipts arising from credit risk management		**3,737**	4,964
Cash payments arising from credit risk management		**(3,200)**	(5,596)
Net change in borrowings		**(18)**	(8)
Dividend paid		**(2,135)**	(2,146)
Other		**13**	(31)
		(1,553)	(3,027)
Foreign currency effect on cash and cash equivalents		**10**	(10)
Net change in cash and cash equivalents		**798**	(706)
Cash and cash equivalents, beginning of year		**537**	1,243
Cash and cash equivalents, end of year		**1,335**	537
Supplementary cash flow information	17		

The accompanying notes are an integral part of the consolidated financial statements.

Years ended
December 31, 2018 and 2017

Amounts in tables are in millions of Canadian dollars, unless otherwise indicated.

Under the provisions of the Hydro-Québec Act, *Hydro-Québec is mandated to supply power and to pursue endeavors in energy-related research and promotion, energy conversion and conservation, and any field connected with or related to power or energy. Hydro-Québec is required, in particular, to supply a base volume of up to 165 TWh a year of heritage pool electricity for the Québec market, as set out in the* Act respecting the Régie de l'énergie. *As a government corporation, Hydro-Québec is exempt from paying income taxes in Canada.*

Note 1 Significant Accounting Policies

Hydro-Québec's consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP").

Management is of the opinion that these consolidated financial statements present fairly, in all material respects, the consolidated financial position of Hydro-Québec.

Management has reviewed events occurring until February 15, 2019, the date of approval of these consolidated financial statements by the Board of Directors, to determine whether circumstances warranted consideration of events subsequent to the balance sheet date.

REGULATION

The *Act respecting the Régie de l'énergie* grants the Régie de l'énergie (the "Régie") exclusive authority to determine or modify the rates and conditions under which electricity is transmitted and distributed by Hydro-Québec. Hydro-Québec's electricity transmission and distribution activities in Québec are therefore regulated. Under this legislation, rates are set by reasoned decision of three commissioners after public hearings. The Act also stipulates that rates are set on a basis that allows for recovery of the cost of service and provides a reasonable return on the rate base. The Transmission Provider's rates are set according to a method based solely on the cost of service. In the case of the Distributor, since January 1, 2018, its rates have been subject to performance-based regulation, which will apply for an initial period of four years. Under this type of regulation, the rates for the 2018–2019 rate year were set using the cost of service method, while those for the following three years will be set according to a parametric formula.

Moreover, the rates of the Transmission Provider and the Distributor are subject to an earnings-sharing mechanism.

Under U.S. GAAP, it is acknowledged that rate regulation may affect the timing of the recognition of certain transactions in the consolidated results, giving rise to the recognition of regulatory assets and liabilities, which Hydro-Québec considers it is likely to recover or settle subsequently through the rate-setting process.

When the Transmission Provider or the Distributor determines that certain costs incurred may likely be recovered in future rates, such costs are deferred and recognized as assets. When it is probable that the Transmission Provider or the Distributor will be required to reimburse customers, or when costs have been recovered but will be incurred in the future, a liability is recognized. The balances of these assets and liabilities are amortized over the recovery periods approved by the Régie.

The risks and uncertainties related to regulatory assets and liabilities are monitored and assessed from time to time. When Hydro-Québec deems that the net carrying amount of a regulatory asset or liability is no longer likely to be taken into account in establishing future rates, a loss or gain is recognized in the results for the period during which the judgment is made.

SCOPE OF CONSOLIDATION

The consolidated financial statements include the accounts of Hydro-Québec and its subsidiaries as well as those of variable interest entities where Hydro-Québec is the primary beneficiary. All intercompany balances and transactions are eliminated at the time of consolidation.

Investments over which Hydro-Québec has joint control or significant influence are accounted for on an equity basis. These investments are initially recognized at cost, and their carrying amount is increased or decreased by an amount equal to Hydro-Québec's share of the changes in their net assets after the date of acquisition. Hydro-Québec's share of the results of these investments is recognized in results. Dividends received are applied against the carrying amount of the investments.

USE OF ESTIMATES

The preparation of financial statements in accordance with U.S. GAAP requires that Management make estimates and assumptions that affect the amounts recognized as assets and liabilities, the disclosures regarding contingent assets and liabilities at the date of the consolidated financial statements and the amounts recognized as revenue and expenditure for the years at issue. The estimates relate, among other things, to revenue, which includes estimated amounts for electricity delivered but not billed; the carrying amount of regulatory assets and liabilities; fair value measurements of financial instruments; the useful life of property, plant and equipment and intangible assets for calculating the depreciation and amortization expense; as well as cash flows, the expected timing of payments, and the discount rates used to determine asset retirement obligations and employee future benefit liabilities. These rates are based on economic and actuarial assumptions. Actual results could differ from those estimates and such differences could be significant.

REVENUE

Hydro-Québec supplies the Québec market with electricity and also sells power on wholesale markets in Canada and the United States. Substantially all revenue from ordinary activities is derived from electricity sales contracts with customers. These sales are recognized over time, based on the electricity delivered and the amount that Hydro-Québec is entitled to charge customers in accordance with regulated rates or contractual provisions.

FOREIGN CURRENCY TRANSLATION

Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rate in effect at the balance sheet date, whereas non-monetary items denominated in foreign currencies are translated at the historical exchange rate. Revenue and expenditure arising from foreign currency transactions are translated into Canadian dollars at the exchange rate in effect at the transaction date. The exchange gains or losses resulting from the translation of monetary items are included in results.

NOTE 1
SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The financial statements of foreign operations whose functional currency is not the Canadian dollar are translated according to the current rate method. Under this method, assets and liabilities are translated into Canadian dollars at the exchange rate in effect at the balance sheet date, whereas revenue and expenditure are translated at the average exchange rate in effect during the period. The exchange gains or losses resulting from the translation of the financial statements of these foreign operations are presented in Other comprehensive income.

FINANCIAL INSTRUMENTS

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include investments with a maturity of three months or less from the date of acquisition.

SHORT-TERM INVESTMENTS

Short-term investments, classified as available-for-sale debt securities, consist of money market instruments with a maturity of more than three months from the date of acquisition and are recognized at fair value. Changes in fair value are recorded in Other comprehensive income until they are realized, at which time they are reclassified to results. Revenue from these investments, calculated using the effective interest method, is recognized in results.

RECEIVABLES – ACCOUNTS RECEIVABLE

Accounts receivable are recognized at the amount invoiced, net of the allowance for doubtful accounts. This allowance is based on the status of customer files and the recovery experience for each age group of accounts. Receivables are written off during the period in which the accounts are deemed uncollectible.

OTHER RECEIVABLES AND FINANCIAL LIABILITIES

Other receivables presented under Accounts receivable and other receivables, long-term bonds held in the sinking fund, which are presented in Other assets, less any impairment losses, as well as borrowings, financial liabilities presented under Accounts payable and accrued liabilities, the dividend payable, accrued interest, long-term debt, financial liabilities presented under Other liabilities, and perpetual debt, are measured at amortized cost using the effective interest method. Amortized cost includes issue expenses as well as premiums and discounts, if applicable. Interest is recognized in results.

DERIVATIVE INSTRUMENTS

Derivative instruments are recognized at fair value at the balance sheet date. Changes in fair value are recognized in results for the period in which they occur, except in the case of derivative instruments designated as hedges in a cash flow hedging relationship. The net balances of derivative instruments that are transacted with the same counterparty, that are the subject of an enforceable master netting arrangement, net of cash received or paid under collateral exchange agreements, and that meet the conditions for set-off are presented on the balance sheet.

As part of its integrated business risk management, Hydro-Québec uses derivative instruments to manage its market risk, consisting of currency risk, interest rate risk and risk resulting from fluctuating energy and aluminum prices. It applies cash flow or fair value hedge accounting to eligible hedging relationships that it designates as hedges, and formally documents these relationships. Among other things, this process involves associating derivative instruments with specific assets or liabilities on the balance sheet, or with probable anticipated transactions. Hydro-Québec ensures that hedging relationships are highly effective in hedging the designated risk exposure initially and then monthly thereafter. In addition, for hedges of anticipated transactions, it assesses the probability of the occurrence of those transactions designated as hedged items at least on a quarterly basis.

In the case of a cash flow hedge, changes in the fair value of an instrument designated as a hedge are recognized under Other comprehensive income. Such amounts are reclassified to results, under the line item affected by the hedged item, during the periods in which the hedged item affects results. If a derivative instrument no longer satisfies hedging conditions, if it has expired or is sold, terminated or exercised, or if Hydro-Québec cancels its designation as a hedging item, hedge accounting ceases to be applied on a prospective basis. Gains and losses previously accumulated in Other comprehensive income continue to be deferred and are later reclassified to results during the same periods as the hedged item. If the hedged item ceases to exist or if it becomes likely that the hedged anticipated transactions will not occur, the deferred gains or losses are immediately reclassified to results.

In the case of a fair value hedge, changes in the fair value of the derivative instrument are recognized in results under the line item affected by the hedged item. Offsetting changes in the fair value of the hedged item attributable to the hedged risk are recognized as adjustments to this item's carrying amount and are offset against results.

Cash flows attributable to derivative instruments designated as hedges are presented in the statement of cash flows based on the same classification as the hedged item.

Hydro-Québec assesses its contracts to determine if they meet the definition of a derivative or if they include an embedded derivative, which must be separated from its host contract. If such is the case, the contract or the embedded derivative is recognized at fair value on the balance sheet.

All futures or forward contracts on non-financial items that can be settled on a net basis and whose price is closely tied to the non-financial item bought or sold are recorded at the settlement date if there is a probability of receipt or delivery in accordance with expected requirements.

NOTE 1
SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

FAIR VALUE

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In accordance with the applicable standards, Hydro-Québec classifies the fair value measurements of assets and liabilities according to a three-level hierarchy, based on the type of inputs used in making these measurements:

- Level 1: Quoted prices (unadjusted) on active markets for identical assets or liabilities that Hydro-Québec can access at the measurement date;
- Level 2: Inputs other than quoted prices included within Level 1 that are observable either directly or indirectly; and
- Level 3: Unobservable inputs.

MATERIALS, FUEL AND SUPPLIES

Inventories of materials, fuel and supplies are valued at the lower of cost and net realizable value. Cost is determined by the weighted average cost method.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are carried at cost, which comprises materials, labor, other costs directly related to construction activities, and financial expenses capitalized during construction. Property, plant and equipment also include draft-design costs for projects whose technical feasibility has been demonstrated, whose profitability has been estimated, and for which Management deems that it will in all likelihood have the necessary resources for completion. The present value of retirement obligations related to property, plant and equipment, as well as that of agreements with local communities concerned by certain investment projects that fall within the definition of a liability, are added to the carrying amount of the property, plant and equipment at issue. Moreover, contributions from third parties are applied against the cost of the related property, plant and equipment.

Property, plant and equipment are depreciated over their useful life, using the straight-line method, starting in the month following the date of commissioning. The depreciation periods for the principal categories of property, plant and equipment are as follows:

Hydraulic generation	40–120 years
Thermal generation	15–50 years
Transmission substations and lines	30–85 years
Distribution substations and lines	25–70 years
Other property, plant and equipment	5–50 years

When property, plant and equipment are retired, their cost, net of accumulated depreciation and salvage value, is recognized in the results for the year.

Maintenance and repair costs are recognized in results when incurred.

LEASES

Capital leases, which have the effect of transferring substantially all the risks and benefits incident to ownership of the leased property to Hydro-Québec, are presented in Property, plant and equipment. They are recognized on their effective date at the fair value of the leased property or, if it is lower, at the present value of the minimum lease payments. Capital leases are amortized over the useful life of the asset or over the term of the lease, if it is less.

Payments under operating leases, where the lessor does not transfer substantially all the risks and benefits incident to ownership of property, are recognized in results throughout the term of the lease.

INTANGIBLE ASSETS

Intangible assets are recognized at cost.

The cost of internally developed computer software is capitalized when it meets capitalization criteria. The related financial expenses are capitalized during the development period.

Intangible assets with an indefinite useful life are not amortized. These assets are tested for impairment annually or more frequently if events indicate a potential impairment loss. Any amount by which the carrying amount exceeds the fair value is recognized in results for the period in which the impairment is determined.

Intangible assets with a finite useful life, such as software and licences, are amortized over their useful life according to the straight-line method. The amortization period for these assets varies from 3 to 24 years.

CAPITALIZED FINANCIAL EXPENSES

Financial expenses capitalized in property, plant and equipment under construction and in internally developed computer software are determined on the basis of the cost of debt and recognized as a deduction from financial expenses in the consolidated results. Capitalized financial expenses related to rate-regulated transmission or distribution activities also take into account the return on equity of the activities concerned. The portion that corresponds to return on equity is included in Revenue in the consolidated results.

IMPAIRMENT OF LONG-LIVED ASSETS

Hydro-Québec reviews the carrying amount of its property, plant and equipment and its amortizable intangible assets whenever events or changes in circumstances indicate that the expected undiscounted net cash flows could be lower than the carrying amount of the property and assets. An impairment loss corresponding to the amount by which the carrying amount exceeds fair value is recognized, if applicable.

NOTE 1
SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

EMPLOYEE FUTURE BENEFITS

Hydro-Québec offers all its employees a contributory pension plan based on final pay (the "Pension Plan"), as well as other post-retirement benefits and post-employment benefits (collectively, the "Other plans"). All Hydro-Québec's employee future benefit plans are defined-benefit plans.

PENSION PLAN AND OTHER POST-RETIREMENT BENEFITS

The Pension Plan is a fully funded contributory plan that provides pension benefits based on the number of years of service and an average of the best five years of earnings. These benefits are indexed annually based on a rate which is the greater of the inflation rate, up to a maximum of 2%, and the inflation rate less 3%.

The other post-retirement benefits are provided by group life, medical and hospitalization insurance plans, which are contributory plans with contributions adjusted annually.

Hydro-Québec accounts for its obligations under the Pension Plan and other post-retirement benefits after deducting the fair value of their respective assets.

Benefit costs and obligations under the Pension Plan and other post-retirement benefits provided in exchange for current service are calculated according to the projected benefit method prorated on years of service. They are determined using a discount rate and are based on Management's best estimates, in particular concerning the expected return on plan assets, salary escalation, the increase in health care costs, and employees' retirement ages. Plan assets are measured at fair value at the balance sheet date.

In order to establish the benefit costs and its obligations under the Pension Plan and other post-retirement benefits, Hydro-Québec has adopted the following policies:

- Discount rates used to determine the projected benefit obligations and to estimate the current service cost and the interest on obligations are based on the interest rate curve on the measurement date, namely December 31, of high-quality Canadian corporate bonds. These discount rates take into account the amount and different payment maturity dates of the projected benefit obligations for each plan.
- Actuarial gains and losses are initially recognized in Other comprehensive income. Thereafter, amortization of actuarial gains or losses is recognized under Other components of employee future benefit cost if the unamortized net actuarial gain or loss at the beginning of the year exceeds 10% of the value of the projected benefit obligations or 10% of the market-related value of the plan assets, whichever is greater. The amortization corresponds to the excess divided by active employees' average remaining years of service.
- Past service costs (credits) arising from amendments to the Pension Plan and other post-retirement benefits are initially recognized in Other comprehensive income. Thereafter, they are amortized under Other components of employee future benefit cost using the straight-line method over periods not exceeding active employees' average remaining years of service.
- The expected return on Pension Plan assets is based on a market-related value determined by using a five-year moving average value for equity securities and by measuring other asset classes at fair value.

The current service cost component of net plan costs for the year is recognized as an operational expenditure, net of the amount capitalized in assets.

Interest on obligations, expected return on plan assets, amortization of net actuarial loss and amortization of past service costs (credits) are recognized under Other components of employee future benefit cost. These components are not capitalized in assets.

The unamortized balances of net actuarial losses and of past service costs (credits) recognized in Accumulated other comprehensive income for employee future benefits to be recovered in future rates are recognized as a regulatory asset.

POST-EMPLOYMENT BENEFITS

Post-employment benefits are under non-contributory salary insurance plans, which pay short- and long-term disability benefits. Most of these plans are not funded, with the exception of the long-term disability plan, which is fully funded.

The post-employment benefit cost and obligation are recognized at the time of the event giving rise to the obligation to pay benefits. The cost of these benefits is recognized in results for the period. Actuarial gains and losses are accounted for in the same way as for the Pension Plan and other post-retirement benefits, the only difference being that the amortization period is determined based on the average remaining years of disability.

ASSET RETIREMENT OBLIGATIONS

Hydro-Québec accounts for asset retirement obligations in the period in which the legal obligations with respect thereto arise, provided that a reasonable estimate of their fair value can be made. The corresponding costs of asset retirement are added to the carrying amount of the related long-lived asset and are amortized over its useful life. In subsequent years, any change due to the passage of time is recognized as an operational expenditure (i.e., an accretion expense) for the current year, and the corresponding amount is added to the carrying amount of the liability. Changes resulting from revisions to the timing or the amount of the undiscounted cash flows are recognized as an increase or decrease in the carrying amount of the liability arising from asset retirement obligations, and the corresponding amount is added to the carrying amount of the related asset or deducted up to a maximum of its carrying amount, with any excess then being recognized in results. When the asset reaches the end of its useful life, any change is immediately recognized in results. The actual costs incurred to settle asset retirement obligations are applied against liabilities. During the final settlement of such an obligation, the difference between the balance of the obligation and the actual cost incurred is recognized as a gain or a loss in results.

The cash flows required to settle asset retirement obligations are estimated on the basis of studies that use various assumptions concerning the methods and timing to be adopted for the retirement. Hydro-Québec periodically reviews the measurement of these obligations in light of the underlying assumptions and estimates, potential technological advances, and changes in applicable standards, laws and regulations.

NOTE 1
SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

AGREEMENTS WITH LOCAL COMMUNITIES

Hydro-Québec has entered into various agreements with the local communities concerned by certain investment projects. The amounts under these agreements are recognized in Long-term debt if they fall within the definition of a liability, and the offsetting item is recognized in Property, plant and equipment. The recognized amounts are determined by discounting the future cash flows related to these agreements. The discount rate used is the interest rate on Hydro-Québec bonds at the date of initial recognition. Subsequently, in the case of agreements with indexed cash flows, the cash flows are subject to an annual re-estimate that can result in a change in the discount rate.

RELATED PARTY TRANSACTIONS

In the normal course of business, Hydro-Québec sells electricity and enters into other business transactions with its sole shareholder, the Québec government, and its agencies, as well as with other government corporations. These transactions are measured at the exchange amount.

In addition, as a government corporation, Hydro-Québec provides the Québec government with financial data prepared in accordance with International Financial Reporting Standards so that it can prepare its consolidated financial statements.

Note 2 Changes to Accounting Policies

RECENT CHANGES

HEDGE ACCOUNTING

On January 1, 2018, Hydro-Québec early adopted Accounting Standards Update ("ASU") 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, issued by the Financial Accounting Standards Board ("FASB"). This ASU amends the requirements related to hedging relationships in order to simplify the application of hedge accounting and improve the transparency of information provided in the financial statements regarding an entity's risk management activities.

ASU 2017-12 was applied on a modified retrospective basis. For cash flow hedging relationships, its adoption led to the nonrecognition of the ineffective portion of existing relationships in results. As at January 1, 2018, this change resulted in a $2-million increase in retained earnings and an equivalent decrease in accumulated other comprehensive income. Moreover, the ASU simplifies the application of hedge accounting for fair value hedges, which translated into a $31-million increase in long-term debt and an equivalent decrease in retained earnings. Prior-year figures have not been restated.

STATEMENT OF CASH FLOWS

On January 1, 2018, Hydro-Québec adopted ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. This ASU clarifies how certain items are presented and classified in the statement of cash flows. It was applied on a full retrospective basis and did not have an impact on Hydro-Québec's consolidated financial statements.

FINANCIAL INSTRUMENTS

On January 1, 2018, Hydro-Québec adopted ASU 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU provides guidance on the recognition and measurement of financial assets and financial liabilities. It was applied on a modified retrospective basis and did not have an impact on Hydro-Québec's consolidated financial statements.

REVENUE

On January 1, 2018, Hydro-Québec adopted Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers*. This ASC provides guidance on the recognition of revenue at the time that goods or services are transferred to a client, for an amount that reflects the payment which the entity expects to receive in exchange for the goods or services. ASC 606 was applied on a modified retrospective basis to contracts not yet completed as at January 1, 2018, and it did not have a material impact on Hydro-Québec's consolidated financial statements.

INTANGIBLE ASSETS

On September 1, 2018, Hydro-Québec early adopted ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU specifies that an entity must apply the guidance for internally developed software to determine whether the implementation costs incurred in a cloud computing arrangement (hosting arrangement) that is a service contract must be recognized as an operational expenditure or deferred and amortized over the term of the arrangement. It was applied on a prospective basis and did not have a material impact on Hydro-Québec's consolidated financial statements.

NOTE 2
CHANGES TO ACCOUNTING POLICIES (CONTINUED)

STANDARDS ISSUED BUT NOT YET ADOPTED

LEASES

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This ASU provides guidance on lease definition, recognition and presentation and requires the recognition of assets and liabilities by lessees for all operating and finance leases with a term of more than 12 months.

In January 2018, the FASB issued ASU 2018-01, *Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842*. This ASU provides a practical expedient to not evaluate under ASC 842, *Leases*, existing or expired easement agreements as at the date this standard is adopted, namely January 1, 2019, and which were not previously accounted for as leases under ASC 840, *Leases*. Furthermore, it requires that easement agreements be analyzed under ASC 842 before applying the guidance set forth in ASC 350, *Intangibles—Goodwill and Other*, to determine whether they meet the definition of a lease.

In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*. This ASU offers entities an additional transition method allowing the cumulative effect of initially applying ASC 842 to be recognized as an adjustment to the opening balance of retained earnings as at the adoption date of the standard, namely January 1, 2019. It also specifies that, under certain conditions, lessors may apply a practical expedient allowing them not to separate lease and nonlease components in a contract.

These ASUs will be applied on a modified retrospective basis to the financial statements for interim and annual periods beginning on or after January 1, 2019. Hydro-Québec intends to apply the practical expedient to not evaluate its easement agreements and maintain the classification for leases evaluated under ASC 840. It also plans to opt for the additional transition method proposed by ASU 2018-11. Hydro-Québec is completing its analysis and considers that the adoption of these ASUs will lead to an immaterial increase in assets and liabilities as at January 1, 2019.

FINANCIAL INSTRUMENTS

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU provides new guidance on the impairment of financial assets that are not accounted for at fair value in results. It will be applied on a modified retrospective basis to the financial statements for interim and annual periods beginning on or after January 1, 2021. Hydro-Québec is currently examining the impact of this ASU on its consolidated financial statements.

Note 3 Regulation

RATES

TRANSMISSION

Hydro-Québec's power transmission rates for 2018 and 2017 were determined in Régie decisions D-2018-035 and D-2017-049, effective January 1, 2018, and January 1, 2017, respectively. The authorized return on the rate base was set at 7.0% in 2018 and 6.80% in 2017, assuming a capitalization with 30% equity.

DISTRIBUTION

Hydro-Québec's electricity rates for the rate years beginning on April 1, 2018, and April 1, 2017, respectively, were determined in decisions D-2018-030 and D-2017-034, in which the Régie authorized increases of 0.3% and 0.7% for all rates except Rate L, which remained unchanged in 2018, but for which an increase of 0.2% was authorized in 2017. The authorized return on the rate base was set at 7.08% in 2018 and 6.90% in 2017, assuming a capitalization with 35% equity.

The following information describes the impact on the consolidated financial statements of the regulatory accounting policies and practices adopted by Hydro-Québec in accordance with the Régie's decisions with respect to its rate-regulated activities.

REGULATORY ASSETS AND LIABILITIES

	Expected years of amortization	2018	2017
Regulatory assets			
Employee future benefits	As of 2019	**2,880**	3,667
Costs related to a suspension agreement	2019–2022	**473**	482
Costs related to energy efficiency initiatives	2019–2028	**472**	572
Costs related to the project involving the replacement of PK type circuit breakers	2019–2021	**76**	99
Variances related to electricity supplies[a]	2019	**37**	–
Variances in pension cost[a]	2019–2020	**12**	2
Revenue variances related to climate conditions[a]		**–**	3
Other	2019–2047	**116**	55
		4,066	4,880
Less			
Current portion		**203**	133
		3,863	4,747
Regulatory liabilities			
Depreciation of property, plant and equipment	2019–2115	**375**	351
Revenue variances related to climate conditions[a]	2019–2024	**179**	4
Earnings variances to be shared with customers[a]	2019–2020	**167**	45
Variances related to amendments to ASC 715, *Compensation—Retirement Benefits*[a]	2019	**6**	42
Variances related to electricity supplies[a]	2020	**4**	40
Variances in pension cost[a]	2020	**2**	40
Other	2019–2022	**61**	34
		794	556
Less			
Current portion		**80**	78
		714	478

a) The offsetting item is recognized under Revenue in the consolidated statements of operations.

Regulatory assets and liabilities are not included in the rate base, except in the case of costs related to energy efficiency initiatives.

NOTE 3
REGULATION
(CONTINUED)

EMPLOYEE FUTURE BENEFITS

The unamortized balances of net actuarial losses and of past service costs (credits) to be recovered in future rates are recognized as a non-interest-bearing regulatory asset, which is amortized when the unamortized balances are reclassified as a cost component of employee future benefits.

COSTS RELATED TO A SUSPENSION AGREEMENT

The Régie authorized an agreement regarding the temporary suspension of deliveries from a generating station in 2014. The offsetting entry for the financial liability recorded for this agreement was recognized as a non-interest-bearing regulatory asset, and the adjustments related to subsequent changes in this liability are also recognized in this asset. The costs related to the suspension agreement are recovered in the rates on an annual basis, according to the amounts billed.

COSTS RELATED TO ENERGY EFFICIENCY INITIATIVES

Eligible costs incurred with regard to energy efficiency initiatives are recognized as a regulatory asset and bear interest at the rate of return authorized by the Régie on the rate base until such time as they are included in the rate base and amortization begins.

COSTS RELATED TO THE PROJECT INVOLVING THE REPLACEMENT OF PK TYPE CIRCUIT BREAKERS

The eligible expenses incurred as of April 11, 2016, as part of the project involving the replacement of PK type circuit breakers are recognized as a regulatory asset and bear interest at the rates prescribed by the Régie.

VARIANCES RELATED TO ELECTRICITY SUPPLIES

Variances in volume and price between actual electricity supplies and those forecast in rate filings and recognized by the Régie for electricity rate-setting purposes are accounted for as a regulatory asset or a regulatory liability, as the case may be. These variances result from climate conditions, among other things. They bear interest at the rates prescribed by the Régie until such time as amortization begins.

VARIANCES IN PENSION COST

Variances between the pension cost recognized and the cost forecast in the rate filings for power transmission and distribution rate-setting purposes are recognized as a regulatory asset or a regulatory liability, as the case may be. They bear interest at the rates prescribed by the Régie until such time as amortization begins.

REVENUE VARIANCES RELATED TO CLIMATE CONDITIONS

Variances between the Distributor's actual transmission and distribution revenue and the forecast revenue in rate filings, which is based on climate normals, are recognized as a regulatory asset or a regulatory liability, as the case may be. They bear interest at the rates prescribed by the Régie until such time as amortization begins.

DEPRECIATION OF PROPERTY, PLANT AND EQUIPMENT

Prior to July 10, 2015, the useful life of property, plant and equipment was limited to 50 years for rate-setting purposes. Since then, this limit no longer applies, provided that the weighted average useful life of all property, plant and equipment of the Transmission Provider, on the one hand, and of the Distributor, on the other hand, does not exceed 50 years. The differences in the depreciation expense resulting from the application of useful lives limited to 50 years for rate-setting purposes until July 9, 2015, were recognized as a non-interest-bearing regulatory liability and are amortized at the same rate as the property, plant and equipment concerned.

EARNINGS VARIANCES TO BE SHARED WITH CUSTOMERS

An earnings-sharing mechanism applied since 2017 provides for earnings variances to be shared with customers. Under this mechanism, any return in excess of the authorized returns of the Transmission Provider and the Distributor is shared equally with customers for the first 100 basis points and is split 75/25 in their favor for any portion of the variance exceeding 100 basis points. These amounts bear interest at the rates prescribed by the Régie until such time as amortization begins.

VARIANCES RELATED TO AMENDMENTS TO ASC 715, *COMPENSATION—RETIREMENT BENEFITS*

Variances arising from the application by the Transmission Provider and the Distributor of amendments to ASC 715, *Compensation—Retirement Benefits*, early adopted by Hydro-Québec on January 1, 2017, are recognized as a regulatory liability. Such amounts bear interest at the rates prescribed by the Régie until such time as amortization begins.

NOTE 3
REGULATION
(CONTINUED)

OTHER REGULATORY PRACTICES

The compensation granted by the Québec government for the 1998 ice storm was applied against the cost of newly constructed property, plant and equipment. It is amortized over the remaining useful life of the retired assets, using the straight-line method of depreciation.

Financial expenses are capitalized in property, plant and equipment under construction related to rate-regulated activities according to the authorized rates of return on the rate bases. Set using methods approved by the Régie, these rates take into account a component associated with the cost of the debt and a component associated with the return on equity. The component associated with return on equity totaled $56 million in 2018 and $53 million in 2017.

The cost of dismantling retired and replaced transmission assets for which no asset retirement obligation was recognized is added, net of the salvage value, to the cost of the newly constructed assets. The cost of restoring sites associated with replaced assets is also added to the cost of newly constructed assets.

Finally, contributions received for relocation or modification projects relating to certain transmission grid assets are recorded in a separate account and applied against property, plant and equipment. These contributions are amortized over the average useful life of assets for each project, using the straight-line method.

Note 4 Depreciation and Amortization

	2018	2017
Property, plant and equipment	**2,299**	2,226
Intangible assets[a]	**121**	175
Regulatory assets and liabilities	**198**	176
Retirement of capital assets	**67**	109
	2,685	2,686

a) For the period from 2019 to 2023, amortization of intangible assets that have already been recognized should be as follows: $90 million in 2019, $62 million in 2020, $41 million in 2021, $22 million in 2022 and $16 million in 2023.

Note 5 Taxes

	2018	2017
Water-power royalties[a]	**705**	701
Public utilities tax[b]	**298**	284
Municipal, school and other taxes[c]	**108**	91
	1,111	1,076

a) Water-power royalties payable to the Québec government totaled $699 million in 2018 ($695 million in 2017), including a balance due of $5 million as at December 31, 2018 ($83 million as at December 31, 2017).

b) The public utilities tax is payable to the Québec government.

c) Including two amounts payable to the Québec government in 2018, namely $53 million under the *Act respecting Transition énergétique Québec* ($36 million in 2017), of which a balance of $2 million was outstanding as at December 31, 2018 (nil as at December 31, 2017), and $15 million under the *Act to establish the Northern Plan Fund* ($15 million in 2017), which was outstanding as at December 31, 2018 and 2017.

Note 6 Financial Expenses

	2018	2017
Interest on debt securities	**2,741**	2,532
Net exchange (gain) loss	**(6)**	10
Guarantee fees related to debt securities[a]	**215**	217
	2,950	2,759
Less		
Capitalized financial expenses	**169**	203
Net investment income	**69**	43
	238	246
	2,712	2,513

a) Guarantee fees related to debt securities are charged at a rate of 0.5% and are paid to the Québec government.

Note 7 Property, Plant and Equipment

	2018				2017			
	In service	Accumulated depreciation	Under construction	Net carrying amount	In service	Accumulated depreciation	Under construction	Net carrying amount
Generation								
Hydraulic	48,254	18,894	1,329	**30,689**	47,957	18,154	917	30,720
Other	1,180	835	41	**386**	1,207	862	23	368
	49,434	19,729	1,370	**31,075**	49,164	19,016	940	31,088
Transmission								
Substations and lines	32,761	12,718	1,828	**21,871**	31,587	12,172	1,699	21,114
Other	2,636	1,553	127	**1,210**	2,557	1,485	98	1,170
	35,397	14,271	1,955	**23,081**	34,144	13,657	1,797	22,284
Distribution								
Substations and lines	15,039	7,044	366	**8,361**	14,612	6,760	361	8,213
Other	3,563	1,916	113	**1,760**	3,490	1,822	100	1,768
	18,602	8,960	479	**10,121**	18,102	8,582	461	9,981
Other	1,455	870	104	**689**	1,375	868	130	637
	104,888[a]	43,830[a]	3,908	**64,966**	102,785[a]	42,123[a]	3,328	63,990

a) As at December 31, 2018, the cost and accumulated depreciation of property, plant and equipment in service under capital leases amounted to $1,034 million and $250 million, respectively ($896 million and $205 million as at December 31, 2017).

Note 8 Intangible Assets

	2018			2017		
	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount
Amortizable						
Software, licences and other	2,051	1,658	**393**	1,972	1,571	401
Unamortizable						
Easements and other			**484**			470
			877			871

Additions consisting of internally developed software totaled $90 million in 2018 ($87 million in 2017).

Note 9 Investments

	2018	2017
At equity		
Société en commandite Hydroélectrique Manicouagan (60.0%)[a, b]	**594**	601
Churchill Falls (Labrador) Corporation Limited (34.2%)[b]	**278**	264
TM4 Inc. (45% in 2018, 100% in 2017)	**135**	–
	1,007	865
Other	**15**	25
	1,022	890

a) This investment includes the unamortized excess of the purchase price over the underlying net carrying amount of the assets of Société en commandite Hydroélectrique Manicouagan ("SCHM") as at the acquisition date, which consisted of unamortizable intangible assets of $282 million and amortizable assets of $241 million as at December 31, 2018 (respectively, $282 million and $252 million as at December 31, 2017).

b) In 2018, electricity purchases from SCHM and Churchill Falls (Labrador) Corporation Limited ["CF(L)Co"] totaled $81 million and $97 million, respectively ($81 million and $96 million in 2017).

PARTIAL SALE OF A SUBSIDIARY

On June 22, 2018, Hydro-Québec sold 55% of the shares of its subsidiary TM4 Inc. ("TM4") to an independent third party for a cash consideration of $165 million. As a result of this transaction, Hydro-Québec ceased to consolidate TM4, and the 45% interest retained was measured at fair value. A $277-million gain on the partial sale of TM4, including $125 million resulting from the fair value measurement of the interest retained, was recognized in Revenue. The investment in TM4 is now accounted for using the equity method.

Note 10 Other Assets

	Notes	2018	2017
Sinking fund[a]	12	**650**	605
Government reimbursement for the 1998 ice storm[b]	15	**–**	66
Other		**19**	15
		669	686

a) The sinking fund, allocated to repaying the long-term debt, consists of bonds issued by the Québec government, including primarily long-term bonds maturing in 2021 and 2026 as well as short-term bonds presented in Short-term investments, which totaled $75 million as at December 31, 2018 ($126 million as at December 31, 2017). In 2018, short-term investments in this fund were replaced by long-term bonds of $50 million ($605 million in 2017).

b) Since the Québec government will pay the full amount no later than October 15, 2019, the reimbursement was reclassified as a current asset in Accounts receivable and other receivables as at December 31, 2018.

Note 11 Asset Retirement Obligations

Liabilities arising from asset retirement obligations relate to the costs of dismantling the Gentilly-2 facilities, the removal of spent nuclear fuel resulting from their operation, and the dismantling of thermal generating stations and certain fuel tanks and transmission substations.

The aggregate carrying amount of the asset retirement obligations is as follows:

	2018				2017			
	Dismantling of Gentilly-2 facilities[a]	Removal of spent nuclear fuel[a]	Dismantling of other assets	Total	Dismantling of Gentilly-2 facilities[a]	Removal of spent nuclear fuel[a]	Dismantling of other assets	Total
Balance, beginning of year	463	261	140	**864**	468	248	144	860
Liabilities incurred	–	–	12	**12**	–	–	14	14
Accretion expense	25	16	4	**45**	25	15	4	44
Liabilities settled	(25)	(1)	(9)	**(35)**	(30)	(2)	(24)	(56)
Revision of estimated cash flows and expected timing of payments	–	(17)	4	**(13)**	–	–	2	2
Balance, end of year	463	259	151	**873**	463	261	140	864
Less								
Current portion	48	5	9	**62**	41	8	16	65
	415	254	142	**811**	422	253	124	799

a) The Canadian Nuclear Safety Commission requires a financial guarantee to secure performance of Hydro-Québec's obligations with regard to the cost of dismantling the Gentilly-2 facilities and the removal of spent nuclear fuel. This guarantee consists of investments held by the Hydro-Québec Trust for Management of Nuclear Fuel Waste, as well as an irrevocable financial guarantee of up to $685 million from the Québec government.

The following table presents the discount rates used to determine the carrying amount of the asset retirement obligations, which correspond to the credit-adjusted risk-free rates:

%	Dismantling of Gentilly-2 facilities	Removal of spent nuclear fuel	Dismantling of other assets
Initial recognition of obligations	6.4	6.4	Between 1.1 and 4.6
Subsequent recognition of obligations	Between 4.3 and 5.7	Between 3.1 and 5.7	Between 0.8 and 4.6

HYDRO-QUÉBEC TRUST FOR MANAGEMENT OF NUCLEAR FUEL WASTE

Under the *Nuclear Fuel Waste Act* ("NFWA"), which came into force in 2002, the owners of nuclear fuel waste in Canada were required to set up a management organization, the Nuclear Waste Management Organization, and each of them was required to establish a trust fund to finance the cost of long-term management of its nuclear fuel waste.

In April 2009, the Government of Canada approved a formula for financing the costs of the approach adopted for long-term nuclear fuel waste management. The amounts deposited in the trust funds can only be used to finance the implementation of this approach.

Hydro-Québec has made all the payments required under the NFWA. As at December 31, 2018, the investments held in the Hydro-Québec trust fund were composed of debt securities issued by Hydro-Québec, the fair value of which totaled $167 million ($163 million as at December 31, 2017).

The Hydro-Québec Trust for Management of Nuclear Fuel Waste is considered a variable interest entity of which Hydro-Québec is the primary beneficiary.

Note 12 Long-Term Debt

Long-term debt is mainly composed of bonds, medium-term notes and other debts, including liabilities under agreements entered into with local communities. The following table presents a breakdown of the debt, including the current portion, at amortized cost, by currency at the time of issue and at the time of repayment. Currency swaps traded for purposes of managing currency risk related to long-term debt were taken into account in determining the percentages of debt by currency at the time of repayment.

	2018				2017			
			At time of issue	At time of repayment			At time of issue	At time of repayment
	In Canadian dollars and other currencies	At closing exchange rates as at the balance sheet date	%	%	In Canadian dollars and other currencies	At closing exchange rates as at the balance sheet date	%	%
Canadian dollars[a, b]	38,016	**38,016**	**83**	**100**	37,607	37,607	84	100
U.S. dollars	5,707	**7,789**	**17**	**–**	5,704	7,142	16	–
		45,805	**100**	**100**		44,749	100	100
Plus								
Adjustment for fair value hedged risk		**256**				259		
		46,061				45,008		
Less								
Current portion		**3,151**				1,183		
		42,910				43,825		

a) Including non-interest-bearing debts other than bonds and medium-term notes whose present value was $1,543 million as at December 31, 2018 ($1,482 million as at December 31, 2017).

b) Certain debts carry sinking fund requirements. This fund, presented in Short-term investments and Other assets, totaled $725 million as at December 31, 2018 ($731 million as at December 31, 2017).

The amortized cost, at the balance sheet date, of the tranches of long-term debt maturing over the 2019–2023 period is as follows: $3,151 million in 2019, $2,256 million in 2020, $2,426 million in 2021, $3,407 million in 2022 and $7 million in 2023.

NOTE 12
LONG-TERM DEBT
(CONTINUED)

INTEREST RATES

The following table presents interest rates on bonds and medium-term notes, which take into account contractual rates, premiums, discounts and issue expenses, as well as the effect of forward contracts and swaps traded to manage long-term risks related to debt. As at December 31, 2018, the variable-rate portion of the bonds and notes totaled 9.3% (12.0% as at December 31, 2017).

%			2018	2017
Maturity	Canadian dollars	U.S. dollars	Weighted average	Weighted average
1–5 years	9.10	9.03	**9.08**	8.29
6–10 years	4.49	8.30	**8.20**	8.24
11–15 years	5.42	10.07	**8.31**	7.62
16–20 years	5.93	–	**5.93**	5.63
21–25 years	5.11	–	**5.11**	5.11
26–30 years	4.89	–	**4.89**	4.89
31–35 years	4.47	–	**4.47**	4.47
36–40 years	3.28	–	**3.28**	3.46
41–45 years	6.53	–	**6.53**	6.53
Weighted average	4.83	9.32	**5.08**	5.22

CREDIT FACILITY AND LINES OF CREDIT

Hydro-Québec has an undrawn credit facility of US$2,000 million, including a US$750-million swing loan, which will expire in 2023. Any related debt securities will bear interest at a rate based on the London Interbank Offered Rate ("LIBOR"), except for the swing loan, which is at the U.S. base rate. Hydro-Québec also has access to operating lines of credit, which are renewed automatically in the absence of notice to the contrary and bear interest at the prime rate. As at December 31, 2018, the available balances on these lines of credit were US$200 million and $276 million in Canadian or U.S. dollars (US$200 million and $243 million in Canadian or U.S. dollars as at December 31, 2017).

Note 13 Other Liabilities

	Note	2018	2017
Employee future benefit liabilities	18	**1,726**	3,127
Accounts payable		**493**	522
		2,219	3,649

Accounts payable include a $354-million financial liability ($358 million as at December 31, 2017) related to an agreement regarding the temporary suspension of deliveries from a generating station. The current portion, presented under Accounts payable and accrued liabilities, totaled $119 million as at December 31, 2018 ($124 million as at December 31, 2017). This financial liability, including the current portion, represented a discounted amount of $473 million as at December 31, 2018 ($482 million as at December 31, 2017). It included an outstanding amount, payable in U.S. dollars, of $25 million (US$19 million) as at December 31, 2018 ($24 million, or US$20 million, as at December 31, 2017). As at December 31, 2018, the effective rate of this liability was 1.85% (1.35% as at December 31, 2017).

Note 14 Perpetual Debt

Perpetual notes in the amount of $274 million (US$201 million) as at December 31, 2018, and of $251 million (US$201 million) as at December 31, 2017, bear interest at LIBOR, plus 0.0625%, as calculated semiannually. As at December 31, 2018 and 2017, the rates applicable to the perpetual notes were 2.7% and 1.6%, respectively.

The perpetual notes are redeemable at Hydro-Québec's option. In 2018, no tranche was redeemed. In 2017, a tranche of $23 million (US$17 million) was redeemed on the secondary market and then canceled. Forward contracts are used to mitigate the currency risk associated with the perpetual debt.

Note 15 Financial Instruments

In the course of its operations, Hydro-Québec carries out transactions that expose it to certain financial risks, such as market, liquidity and credit risk. Exposure to such risks and the impact on results are reduced through careful monitoring and implementation of strategies that include the use of derivative instruments.

MARKET RISK

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of changes in market prices. Hydro-Québec is exposed to three main types of market risk: currency risk, interest rate risk and risk associated with energy and aluminum prices. Active integrated management of these three types of risk aims to limit exposure to each risk and reduce their overall impact on results.

MANAGEMENT OF LONG-TERM RISK

MANAGEMENT OF RISK ASSOCIATED WITH DEBT

Currency risk and interest rate risk – Hydro-Québec uses forward contracts and currency swaps to manage the currency risk associated with long-term debt and perpetual debt, as well as forward contracts and interest rate swaps to modify long-term exposure to interest rate risk. When designated as hedging items, these derivative instruments are recognized as cash flow hedges or fair value hedges, depending on the risk hedged. The impact on results of foreign currency hedging transactions and those associated with debt interest rates is recognized in Financial expenses.

The following table presents the notional amounts, expressed in Canadian dollars and foreign currencies, of forward contracts and swaps used to manage long-term risk:

	2018[a]	2017[a]
Forward contracts		
Canadian dollars	**(1,000)**	(70)
U.S. dollars	**204**	202
Swaps		
Canadian dollars	**(6,844)**	(6,938)
U.S. dollars	**5,730**	5,730

a) Figures in parentheses represent amounts to be paid.

MANAGEMENT OF SHORT-TERM RISK

Currency risk – Hydro-Québec uses forward contracts to manage its foreign currency risk exposure over the short term. When designated as hedging items, these derivative instruments are recognized as cash flow hedges. The impact of currency risk hedging transactions on results is recognized in the line item affected by the hedged item, namely Revenue, Electricity and fuel purchases, or Financial expenses. In this context, Hydro-Québec traded foreign currency sales contracts for which the notional amount of open positions as at December 31, 2018, totaled US$1,800 million (US$885 million as at December 31, 2017).

Interest rate risk – Hydro-Québec uses forward rate agreements and interest rate swaps to manage short-term interest rate risk. When designated as hedging items, these derivative instruments are recognized as cash flow hedges. The impact on results of transactions to hedge short-term interest rate risk is recognized in the line item affected by the hedged item, namely Financial expenses.

Price risk – Hydro-Québec uses mainly commodity futures and swaps to manage risk resulting from fluctuations in energy and aluminum prices. When designated as hedging items, these derivative instruments are recognized as cash flow hedges. The impact on results of transactions to hedge the risk related to energy and aluminum prices is recognized in the line item affected by the hedged item, namely Revenue or Electricity and fuel purchases. In this context, Hydro-Québec traded electricity futures and swaps for which open positions as at December 31, 2018, totaled 23.2 TWh (22.5 TWh as at December 31, 2017), natural gas futures for which open positions as at December 31, 2018, totaled 0.4 million MMBtu (0.5 million MMBtu as at December 31, 2017), petroleum product swaps for which open positions as at December 31, 2018, totaled 9.1 million litres (no open positions as at December 31, 2017), as well as aluminum swaps for which open positions as at December 31, 2018, totaled 240,825 tonnes (410,125 tonnes as at December 31, 2017).

NOTE 15
FINANCIAL INSTRUMENTS
(CONTINUED)

LIQUIDITY RISK

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with its financial liabilities.

Hydro-Québec's exposure to this risk is reduced by significant cash flows from operating activities; a diversified portfolio of highly liquid or readily convertible instruments traded with high-quality counterparties; preauthorized sources of financing; the ability to access capital markets; the diversification of financing sources; and management of the volume of floating-rate debt and debt repayable in foreign currency.

Moreover, as at December 31, 2018, $43,971 million in long-term debt, perpetual debt and borrowings, net of the sinking fund ($42,942 million as at December 31, 2017) was guaranteed by the Québec government.

CREDIT RISK

Credit risk is the risk that one party to a financial asset will fail to meet its obligations.

Hydro-Québec is exposed to credit risk related to accounts receivable and other receivables, which arises primarily from its day-to-day electricity sales in and outside Québec. It is also exposed to credit risk related to cash and cash equivalents, short-term investments and the sinking fund, as well as to derivative instruments traded with financial institutions. Credit risk is limited to the carrying amount of the related assets presented on the balance sheet, which approximates fair value.

ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

Exposure to credit risk from electricity sales is limited due to Hydro-Québec's large and diverse customer base. Management believes that Hydro-Québec is not exposed to a significant credit risk, particularly because sales in Québec are billed at rates that allow for recovery of costs based on the terms and conditions set by the Régie. Moreover, Hydro-Québec holds as collateral customer deposits totaling $132 million ($124 million as at December 31, 2017), of which $46 million ($35 million as at December 31, 2017) is recognized in Accounts payable and accrued liabilities and $86 million ($89 million as at December 31, 2017) in Other liabilities.

The value of accounts receivable and other receivables, net of the related allowance for doubtful accounts, is presented in the following table:

	2018	2017
Accounts receivable[a]	**2,124**	2,030
Other receivables[b]	**589**[c]	457
	2,713[d]	2,487[d]

a) Including unbilled electricity deliveries, which totaled $1,390 million as at December 31, 2018 ($1,496 million as at December 31, 2017).

b) Including a $139-million financial guarantee ($118 million in 2017) covering certain derivative instruments held at year end.

c) Including the government reimbursement for the 1998 ice storm, which totaled $66 million as at December 31, 2018. The corresponding amount as at December 31, 2017, is presented in Other assets.

d) Including US$255 million (US$284 million in 2017) translated at the exchange rate in effect at the balance sheet date.

The allowance for doubtful accounts amounted to $241 million as at December 31, 2018 ($239 million as at December 31, 2017).

OTHER FINANCIAL ASSETS

In order to reduce its exposure to credit risk associated with cash and cash equivalents, short-term investments, the sinking fund and derivative instruments, Hydro-Québec deals with a number of issuers and financial institutions with high credit ratings, most of which are Canadian. In addition, it applies policies to limit risk concentration as well as various monitoring programs and sets credit limits for each counterparty. Through prior agreements, it can also limit the market value of the main derivative instrument portfolios. Any variation in market value beyond the agreed-upon limit results in a cash receipt or payment. As at December 31, 2018, substantially all counterparties dealing with Hydro-Québec had a credit rating of A or higher, and none of them had defaulted on their obligations to Hydro-Québec.

NOTE 15
FINANCIAL INSTRUMENTS
(CONTINUED)

FAIR VALUE

FAIR VALUE OF DERIVATIVE INSTRUMENTS

The following table presents the fair value of derivative instruments by type and depending on whether they are designated as fair value hedges or cash flow hedges, or not designated as hedges:

	2018				2017			
	Derivatives designated as fair value hedges	Derivatives designated as cash flow hedges	Derivatives not designated as hedges[a]	Gross amounts of derivatives recognized[b]	Derivatives designated as fair value hedges	Derivatives designated as cash flow hedges	Derivatives not designated as hedges[a]	Gross amounts of derivatives recognized[b]
Assets								
Contracts – Currency risk	–	1,280	14	**1,294**	–	769	51	820
Contracts – Interest rate risk	372	2	–	**374**	420	3	2	425
Contracts – Price risk	–	159	49	**208**	–	8	61	69
	372	1,441	63	**1,876**	420	780	114	1,314
Liabilities								
Contracts – Currency risk	–	(162)	(116)	**(278)**	–	(266)	(251)	(517)
Contracts – Interest rate risk	–	(55)	–	**(55)**	–	–	–	–
Contracts – Price risk	–	(104)	(13)	**(117)**	–	(267)	(24)	(291)
	–	(321)	(129)	**(450)**	–	(533)	(275)	(808)
Total	372	1,120	(66)	**1,426**	420	247	(161)	506

a) These derivative instruments are mainly traded as part of Hydro-Québec's risk management. As at December 31, 2018, $(116) million was in consideration of amounts received or disbursed [$(210) million as at December 31, 2017] with respect to agreements to limit the market value of the main portfolios of derivative instruments. These agreements arise from frameworks applied by Hydro-Québec to reduce its credit risk exposure and limit risk concentration.

b) Fair value measurements of derivative instruments are Level 2 measurements. These measurements are obtained by discounting future cash flows, which are estimated on the basis of the spot rates, forward rates or forward prices (foreign exchange rates, interest rates, and energy or aluminum prices) in effect on the balance sheet date and take into account the credit risk assessment. The valuation techniques make use of observable market data.

NOTE 15
FINANCIAL INSTRUMENTS
(CONTINUED)

The impact of offsetting derivative instruments is presented in the table below:

	2018				2017			
	Gross amounts of derivatives recognized	Gross amounts offset[a]	Cash (received) paid as collateral[b]	Net amounts presented on the balance sheet	Gross amounts of derivatives recognized	Gross amounts offset[a]	Cash (received) paid as collateral[b]	Net amounts presented on the balance sheet
Assets								
Current	217	(97)	(48)	**72**	143	(68)	(6)	69
Long-term	1,659	(215)	(1,323)	**121**	1,171	(527)	(625)	19
	1,876	(312)	(1,371)	**193**	1,314	(595)	(631)	88
Liabilities								
Current	(350)	240	30	**(80)**	(509)	321	1	(187)
Long-term	(100)	72	–	**(28)**	(299)	274	3	(22)
	(450)	312	30	**(108)**	(808)	595	4	(209)
Total	1,426	–	(1,341)	**85**	506	–	(627)	(121)

a) The gross amounts of derivatives offset are related to contracts traded according to International Swaps and Derivatives Association ("ISDA") guidelines and constituting enforceable master netting arrangements. Such master netting arrangements apply to all derivative instrument contracts traded over the counter.

b) Cash amounts offset are amounts received or paid under collateral exchange agreements signed in compliance with ISDA guidelines.

Moreover, although certain derivatives cannot be offset for lack of enforceable master netting arrangements, margin calls may result in amounts received from or paid to clearing agents, based on the fair value of the instruments concerned. As at December 31, 2018, $129 million receivable from clearing agents in consideration of net cash payments was included in Accounts receivable and other receivables ($111 million as at December 31, 2017), while $10 million payable to clearing agents in consideration of net cash receipts was included in Accounts payable and accrued liabilities (nil as at December 31, 2017).

NOTE 15
FINANCIAL INSTRUMENTS
(CONTINUED)

The impact of derivative instruments on results and other comprehensive income is presented in the tables below. It should be noted that most derivative instruments traded are designated as cash flow hedges or fair value hedges and therefore reduce the volatility of results. Derivative instruments which are not designated as hedges, but which nonetheless provide an economic hedge for at-risk opposite positions, also reduce the volatility of results. The sensitivity of results is thus limited to net exposure to unhedged risks.

	2018			
	Losses (gains) on derivatives designated as fair value hedges	Losses (gains) on derivatives designated as cash flow hedges		Losses (gains) on derivatives not designated as hedges
	Recognized in results	Recognized in Other comprehensive income[a]	Reclassified from Other comprehensive income to results	Recognized in results
Contracts – Currency risk	–	(590)	(651)[b]	(84)
Contracts – Interest rate risk	40	47	4[c]	1
Contracts – Price risk	–	(142)	177[d]	24
	40[c, e]	**(685)**	**(470)**[e]	**(59)**[e, f]
Impact of hedged items on results	**(34)**		**472**	**86**

	2017				
	Losses (gains) on derivatives designated as fair value hedges	Losses (gains) on derivatives designated as cash flow hedges			Losses (gains) on derivatives not designated as hedges
	Recognized in results	Effective portion recognized in Other comprehensive income	Ineffective portion recognized in results	Effective portion reclassified from Other comprehensive income to results	Recognized in results
Contracts – Currency risk	–	473	(1)[b]	443[b]	29
Contracts – Interest rate risk	117	(6)	–	3[c]	(5)
Contracts – Price risk	–	177	10[d]	(73)[d]	(48)
	117[c, e]	644	9	373[e]	(24)[e, f]
Impact of hedged items on results	(113)			(373)	(36)

a) Following the adoption of ASU 2017-12, the amounts for 2018 include the ineffective portion of the hedging relationships, which was previously presented in results.

b) In 2018, no amount was recognized in Revenue [$(70) million in 2017], whereas $(651) million was recognized in Financial expenses ($512 million in 2017).

c) These amounts were recognized in Financial expenses.

d) These amounts were recognized in Revenue.

e) In 2018, the items Revenue, Electricity and fuel purchases, and Financial expenses totaled $14,370 million, $2,167 million and $2,712 million, respectively ($13,468 million, $2,005 million and $2,513 million in 2017).

f) These instruments are essentially related to integrated risk management transactions. The impact of these instruments on results is recognized in the line item affected by the managed risk. Therefore, in 2018, $41 million was recognized in Revenue [$(36) million in 2017)], $(9) million in Electricity and fuel purchases [$(14) million in 2017] and $(91) million in Financial expenses ($26 million in 2017).

In 2018, Hydro-Québec reclassified a net loss of $2 million from Accumulated other comprehensive income to results after having discontinued cash flow hedges (nil in 2017).

As at December 31, 2018, Hydro-Québec estimated the net amount of losses presented in Accumulated other comprehensive income that would be reclassified to results in the next 12 months to be $13 million ($203 million as at December 31, 2017).

As at December 31, 2018, the maximum period during which Hydro-Québec hedged its exposure to the variability of cash flows related to anticipated transactions was three years (two years as at December 31, 2017).

NOTE 15
FINANCIAL INSTRUMENTS
(CONTINUED)

FAIR VALUE OF OTHER FINANCIAL INSTRUMENTS

Fair value measurements for other financial instruments are Level 2 measurements. Fair value is obtained by discounting future cash flows, based on rates observed on the balance sheet date for similar instruments traded on capital markets.

The fair value of cash equivalents, receivables – accounts receivable, other receivables and financial liabilities approximates their carrying amount because of the short-term nature of these financial instruments, except for the items presented in the table below:

	2018		2017	
	Carrying amount	Fair value	Carrying amount	Fair value
Long-term debt[a]	**46,061**[b]	**59,876**	45,008[b]	61,271
Perpetual debt	**274**	**252**	251	204

a) Including the current portion.

b) Including an amount of $2,000 million ($1,829 million in 2017) for debts subject to a fair value hedge, which resulted in an adjustment of $350 million ($359 million in 2017) in connection with the hedged risk for existing hedging relationships and of $(94) million [$(100) million in 2017] for discontinued relationships.

Note 16 Equity

SHARE CAPITAL

The authorized share capital consists of 50,000,000 shares with a par value of $100 each, of which 43,741,090 shares were issued and paid up as at December 31, 2018 and 2017.

RETAINED EARNINGS

Under the *Hydro-Québec Act*, the dividends to be paid by Hydro-Québec are declared once a year by the Québec government, which also determines the terms and conditions of payment. For a given year, the dividend cannot exceed the distributable surplus, equal to 75% of net income. This calculation is based on the consolidated financial statements. However, in respect of a given year, no dividend may be declared in an amount that would have the effect of reducing the capitalization rate to less than 25% at the end of the year. All or a portion of the distributable surplus that has not been subject to a dividend declaration may no longer be distributed to the shareholder as a dividend.

For 2018, the dividend is $2,394 million ($2,135 million for 2017).

ACCUMULATED OTHER COMPREHENSIVE INCOME

		2018				2017			
	Note	Cash flow hedges	Employee future benefits	Translation differences	Accumulated other comprehensive income	Cash flow hedges	Employee future benefits	Translation differences	Accumulated other comprehensive income
Balance, end of prior year		(406)	(2,186)	1	**(2,591)**	(135)	(1,799)	3	(1,931)
Adjustments related to a change in accounting policy	2	(2)	–	–	**(2)**	–	–	–	–
		(408)	(2,186)	1	**(2,593)**	(135)	(1,799)	3	(1,931)
Other comprehensive income before reclassifications		685	351	3	**1,039**	(644)	(485)	(2)	(1,131)
Amounts reclassified to results		(470)	118	–	**(352)**	373	98	–	471
Other comprehensive income		215	469[a]	3	**687**	(271)	(387)[a]	(2)	(660)
Balance, end of current year		(193)	(1,717)	4	**(1,906)**	(406)	(2,186)	1	(2,591)

a) Other comprehensive income includes the change in the employee future benefit regulatory asset, which totaled $(787) million in 2018 ($545 million in 2017).

Note 17 Supplementary Cash Flow Information

	2018	2017
Change in non-cash working capital items		
Accounts receivable and other receivables	**(132)**	(490)
Materials, fuel and supplies	**(41)**	(9)
Accounts payable and accrued liabilities	**(223)**	203
Accrued interest	**(24)**	(40)
	(420)	(336)
Investing activities not affecting cash		
Increase in property, plant and equipment and intangible assets	**119**	77
Interest paid	**2,219**	2,084

Note 18 Employee Future Benefits

The projected benefit obligations, valued by independent actuaries, and the assets of employee future benefit plans, at fair value, are valued as at December 31 of each year. The most recent actuarial valuation of the Pension Plan for funding purposes was as at December 31, 2017. The next valuation is required to be as at December 31, 2018.

CHANGES IN PROJECTED BENEFIT OBLIGATIONS AND IN PLAN ASSETS, AT FAIR VALUE

	Pension Plan		Other plans	
	2018	2017	**2018**	2017
Projected benefit obligations				
Balance, beginning of year	**26,400**	24,003	**1,582**	1,471
Current service cost	**505**	430	**49**	44
Employee contributions	**196**	179	**–**	–
Benefit payments and refunds	**(1,034)**	(999)	**(74)**	(72)
Interest on obligations	**837**	792	**51**	49
Actuarial (gain) loss	**(1,793)**	1,995	**(148)**	90
Balance, end of year	**25,111**	26,400	**1,460**	1,582
Plan assets, at fair value				
Balance, beginning of year	**24,706**	22,935	**88**	83
Actual return on plan assets[a]	**541**	2,316	**2**	–
Employee contributions	**196**	179	**–**	–
Contributions by Hydro-Québec	**279**	275	**18**	18
Benefit payments and refunds	**(1,034)**	(999)	**(12)**	(13)
Balance, end of year	**24,688**	24,706	**96**	88
Funded status – Plan deficits	**423**	1,694	**1,364**	1,494
Presented as:				
Accounts payable and accrued liabilities	**–**	–	**61**	61
Other liabilities	**423**	1,694	**1,303**	1,433

a) Administrative and management expenses billed to the Pension Plan by Hydro-Québec amounted to $18 million in 2018 ($16 million in 2017).

As at December 31, 2018, accumulated benefit obligations under the Pension Plan totaled $23,550 million ($24,706 million as at December 31, 2017). Unlike projected benefit obligations, accumulated benefit obligations do not take into account the salary escalation rate assumption.

PENSION PLAN ASSETS

Investments and their associated risks are managed in accordance with the Hydro-Québec Pension Fund Investment Management Policy (the "Investment Policy"), which is approved every year by the Board of Directors. These risks include market risk, credit risk and liquidity risk. The Investment Policy provides for diversification of benchmark portfolio securities in order to maximize the expected return within an acceptable risk interval that takes into account the volatility of the Pension Plan's surplus or deficit. Additional frameworks define the approval process for each type of transaction and establish rules governing the active management of the different portfolios as well as credit risk management. Compliance with the Investment Policy and the additional frameworks is monitored on a regular basis. The Investment Policy allows the use of derivative instruments such as forward contracts, options and swaps.

The target allocation of Pension Plan investments, as established by the Investment Policy in effect as at December 31, 2018, was as follows:

%	Target allocation
Fixed-income securities	38
Equities	46
Alternative investments[a]	16
	100

a) Alternative investments include real estate investments, private equity investments and commercial mortgages.

NOTE 18
EMPLOYEE FUTURE BENEFITS (CONTINUED)

The fair value of net Pension Plan investments as at December 31, according to the fair value hierarchy and based on the type of securities, was as follows:

	2018				2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash	192	–	–	**192**	200	–	–	200
Short-term investments[a]	–	1,559	–	**1,559**	–	343	–	343
Bonds[a, b]	242	6,567	–	**6,809**	1,076	7,277	–	8,353
Listed shares	9,438	–	–	**9,438**	10,553	–	–	10,553
Real estate investments[a, c]	–	40	3,303	**3,343**	233	68	2,856	3,157
Private equity investments[d]	–	–	826	**826**	–	–	573	573
Hedge funds[e]	470	2,103	–	**2,573**	392	981	–	1,373
Derivative instruments – Assets[f]	1	252	–	**253**	–	63	–	63
Derivative instruments – Liabilities[f]	(24)	(301)	–	**(325)**	(7)	(41)	–	(48)
Other	58	20	–	**78**	19	153	–	172
	10,377	10,240	4,129	**24,746**[g]	12,466	8,844	3,429	24,739[g]

a) The fair value of Level 2 short-term investments, bonds and real estate investments is essentially measured by discounting net future cash flows, based on the current market rate of return.

b) Pension Plan assets include securities issued by Hydro-Québec, as well as by the Québec government and some of its agencies, for a total of $957 million ($846 million in 2017).

c) The fair value of Level 3 real estate investments is measured by independent appraisers. The main method used to determine the fair value of these investments is discounting future cash flows. This method is based on observable and unobservable inputs, in particular the discount rate and future cash flows.

d) The fair value of private equity investments is measured by various techniques including future cash flow discounting or using data such as earnings multiples or the price of recent comparable transactions.

e) Hedge funds are measured at the values provided by the fund managers, which are determined on the basis of the fair value of the underlying investments or of the net asset value.

f) Level 2 derivatives are measured using the market closing prices of the underlying products or by discounting net future cash flows.

g) The fair value of investments does not take into account the net amount of payables and receivables, which is an amount payable of $58 million ($33 million in 2017).

A reconciliation of the opening and closing balances of Level 3 investments is presented in the table below:

	2018			2017		
	Real estate investments	Private equity investments	Total	Real estate investments	Private equity investments	Total
Balance, beginning of year	2,856	573	**3,429**	2,703	360	3,063
Acquisitions and disposals	149	121	**270**	74	152	226
Realized net gains	4	2	**6**	6	2	8
Unrealized net gains	294	130	**424**	73	59	132
Balance, end of year	3,303	826	**4,129**	2,856	573	3,429

In 2018 and 2017, there was no reclassification between Level 3 and Levels 1 and 2.

OTHER PLAN ASSETS

Other plan assets as at December 31, 2018, were composed of bonds issued by Hydro-Québec for a total of $87 million ($83 million as at December 31, 2017), as well as cash amounting to $9 million ($5 million as at December 31, 2017). Bonds are classified at Level 2 in the fair value hierarchy.

NOTE 18
EMPLOYEE FUTURE
BENEFITS (CONTINUED)

PLAN COSTS

NET COST COMPONENTS RECOGNIZED FOR THE YEAR

	Pension Plan		Other plans	
	2018	2017	**2018**	2017
Current service cost	**505**	430	**49**	44
Other components of employee future benefit cost				
Interest on obligations	**837**	792	**51**	49
Expected return on plan assets	**(1,533)**	(1,422)	**(3)**	(3)
Amortization of net actuarial loss	**275**	222	**30**	26
Amortization of past service costs (credits)	**7**	11	**(4)**	(5)
Actuarial loss on long-term disability plan	**–**	–	**–**	8
	(414)	(397)	**74**	75
Net cost recognized for the year	**91**	33	**123**	119

COMPONENTS OF OTHER COMPREHENSIVE INCOME FOR THE YEAR

	Pension Plan		Other plans	
	2018	2017	**2018**	2017
Actuarial (gain) loss	**(801)**	1,101	**(147)**	85
Amortization of net actuarial loss	**(275)**	(222)	**(30)**	(26)
Amortization of past service (costs) credits	**(7)**	(11)	**4**	5
Total (increase) decrease in Other comprehensive income	**(1,083)**	868	**(173)**	64
Less				
(Decrease) increase in the employee future benefit regulatory asset	**(678)**	509	**(109)**	36
Net (increase) decrease in Other comprehensive income	**(405)**	359	**(64)**	28

COMPONENTS OF ACCUMULATED OTHER COMPREHENSIVE INCOME

	Pension Plan		Other plans	
	2018	2017	**2018**	2017
Unamortized net actuarial loss	**4,302**	5,378	**291**	468
Unamortized past service costs (credits)	**25**	32	**(21)**	(25)
Aggregate of amounts recognized in Accumulated other comprehensive income	**4,327**	5,410	**270**	443
Less				
Employee future benefit regulatory asset	**2,710**	3,388	**170**	279
Net amount recognized in Accumulated other comprehensive income	**1,617**	2,022	**100**	164

For 2019, the amortization of the net actuarial loss and the past service costs (credits) in the net cost recognized for the year should amount to $91 million and $7 million, respectively, for the Pension Plan, and to $16 million and $(5) million, respectively, for the Other plans.

NOTE 18
EMPLOYEE FUTURE
BENEFITS (CONTINUED)

SIGNIFICANT ACTUARIAL ASSUMPTIONS

The following actuarial assumptions, used to determine the projected benefit obligations and net cost recognized for the plans, result from a weighted average.

	Pension Plan		Other plans	
	2018	2017	**2018**	2017
Projected benefit obligations				
Rate at end of year (%)				
Discount rate – Projected benefits	**3.91**	3.42	**3.95**	3.43
Salary escalation rate[a]	**3.24**	3.10	**–**	–
Net cost recognized				
Rate at end of prior year (%)				
Discount rate – Current service cost	**3.47**	3.94	**3.45**	3.89
Discount rate – Interest on obligations	**3.19**	3.33	**3.24**	3.39
Expected long-term rate of return on plan assets[b]	**6.50**	6.50	**2.32**	3.37
Salary escalation rate[a]	**3.10**	3.14	**–**	–
Active employees' average remaining years of service	**13**	13	**12**	12

a) This rate takes salary increases into account as well as promotion opportunities while in service.

b) The expected long-term rate of return on the Pension Plan assets is the average of the expected long-term return on the various asset classes, weighted according to their respective target weightings, plus a rebalancing, diversification and active management premium, net of expected management and administrative fees.

As at December 31, 2018, health care costs were based on an annual growth rate of 5.00% for 2019. According to the assumption used, this rate will increase on a linear basis to reach 6.50% in 2022 and subsequently decrease to a final rate of 4.50% in 2037. A change of 1% in this annual growth rate would have had the following impact in 2018 and 2017:

	1% increase		1% decrease	
	2018	2017	**2018**	2017
Impact on current service cost and interest cost on projected benefit obligations for the year	**10**	5	**(7)**	(3)
Impact on projected benefit obligations at end of year	**108**	121	**(85)**	(94)

BENEFITS TO BE PAID IN NEXT 10 YEARS

	Pension Plan	Other plans
2019	1,098	68
2020	1,146	70
2021	1,193	72
2022	1,240	74
2023	1,286	77
2024–2028	7,128	424

In 2019, Hydro-Québec expects to make contributions of $259 million and $19 million, respectively, to the Pension Plan and the Other plans.

Note 19 Commitments and Contingencies

COMMITMENTS

ELECTRICITY PURCHASES

On May 12, 1969, Hydro-Québec signed a contract with CF(L)Co whereby Hydro-Québec undertook to purchase substantially all the output from Churchill Falls generating station, which has a rated capacity of 5,428 MW. In 2016, this contract was automatically renewed for a further 25 years in accordance with the contract provisions. On June 18, 1999, Hydro-Québec and CF(L)Co entered into a contract to guarantee the availability of 682 MW of additional power until 2041 for the November 1 to March 31 winter period.

As at December 31, 2018, Hydro-Québec was also committed under contracts to purchase electricity from other power producers. Based on the renewal clauses, the terms of these contracts extend through 2052. Hydro-Québec had also undertaken to purchase power transmission rights.

On the basis of all these commitments, Hydro-Québec expects to make the following payments over the coming years:

2019	1,841
2020	1,900
2021	1,911
2022	1,941
2023	2,068
2024 and thereafter	25,838

INVESTMENTS

As part of its development projects and activities aimed at maintaining or improving the quality of its assets, Hydro-Québec plans to invest approximately $3.9 billion in property, plant and equipment and intangible assets per year in Québec over the period from 2019 to 2023.

CONTINGENCIES

GUARANTEES

In accordance with the terms and conditions of certain debt securities issued outside Canada, Hydro-Québec has undertaken to increase the amount of interest paid to non-residents in the event of changes to Canadian tax legislation governing the taxation of non-residents' income. Hydro-Québec cannot estimate the maximum amount it might have to pay under such circumstances. Should an amount become payable, Hydro-Québec has the option of redeeming most of the securities in question. As at December 31, 2018, the amortized cost of the long-term debts concerned was $3,314 million ($3,289 million as at December 31, 2017).

LITIGATION

In the normal course of its development and operating activities, Hydro-Québec is sometimes party to claims and legal proceedings. Management is of the opinion that an adequate provision has been made for these legal actions. Consequently, it does not foresee any significant adverse effect of such contingent liabilities on Hydro-Québec's consolidated results or financial position.

Among other ongoing actions, some Indigenous communities have instituted proceedings against the governments of Canada and Québec, as well as against Hydro-Québec, based on demands concerning their ancestral rights. In particular, the Innus of Uashat mak Mani-Utenam are demanding $1.5 billion in damages resulting from various activities carried out on land they claim as their own. Hydro-Québec is challenging the legitimacy of these claims.

As well, in November 2006 the Innus of Pessamit reactivated an action brought in 1998, aimed at obtaining, among other things, the recognition of ancestral rights related to Québec lands on which certain hydroelectric generating facilities of the Manic–Outardes complex are located. This community is claiming $500 million. Hydro-Québec is challenging the legitimacy of this claim. In 2015, the Superior Court granted a motion in which the Innus of Pessamit requested a stay of proceedings. In November 2017, the parties agreed on a new timetable for the resumption of proceedings, allowing the Innus of Pessamit until June 2019 to have expert assessments prepared for them to file. A case management conference will then be convened.

Note 20 Segmented Information

Hydro-Québec carries on its activities in the four reportable business segments defined below. The non-reportable business segments and other activities are grouped together under Corporate and Other Activities for reporting purposes.

Generation: Hydro-Québec Production operates and develops Hydro-Québec's generating facilities. It provides Hydro-Québec Distribution with an annual base volume of up to 165 TWh of heritage pool electricity, and can participate in that division's calls for tenders in a context of free market competition. In addition, it sells electricity and engages in arbitrage transactions on external markets.

Transmission: Hydro-Québec TransÉnergie operates and develops Hydro-Québec's power transmission system. It markets system capacity and manages power flows throughout Québec.

Distribution: Hydro-Québec Distribution operates and develops Hydro-Québec's distribution system and ensures the supply of electricity to the Québec market. It also engages in activities related to selling electricity in Québec, delivering customer services and promoting energy efficiency.

Construction: Hydro-Québec Innovation, équipement et services partagés and Société d'énergie de la Baie James ("SEBJ") design, build and refurbish generating and transmission facilities, mainly for Hydro-Québec Production and Hydro-Québec TransÉnergie. Hydro-Québec Innovation, équipement et services partagés is responsible for projects throughout Québec, except in the territory governed by the *James Bay and Northern Québec Agreement* ("JBNQA"). SEBJ builds generating facilities in the territory governed by the JBNQA (north of the 49th parallel) and may also carry out certain projects elsewhere in Québec or outside the province.

Corporate and Other Activities: The corporate units help the business segments carry out their operations.

The amounts presented for each segment are based on the financial information used to prepare the consolidated financial statements. The accounting policies used to calculate these amounts are as described in Note 1, Significant Accounting Policies, and Note 3, Regulation.

Intersegment transactions related to electricity sales are recorded based on the supply and transmission rates provided for by the *Act respecting the Régie de l'énergie*. The Act sets a supply rate for an annual base volume of up to 165 TWh of heritage pool electricity for the Québec market.

Intersegment products and services are measured at full cost, which includes all costs directly associated with product or service delivery.

Most of Hydro-Québec's revenue is from Québec, and substantially all its property, plant and equipment are related to its Québec operations. In 2018, revenue from outside Québec amounted to $1,767 million, with $1,231 million originating from the United States ($1,773 million and $1,368 million, respectively, in 2017).

NOTE 20
SEGMENTED
INFORMATION
(CONTINUED)

The following tables present information related to results, assets and investing activities by segment:

	2018						
	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Intersegment eliminations and adjustments	Total
Revenue							
External customers	1,792	130	12,124	1	323	–	**14,370**[a]
Intersegment customers	4,912	3,387	85	2,140	1,836	(12,360)	**–**
Depreciation and amortization	819	1,030	697	5	134	–	**2,685**
Financial expenses	1,250	953	480	(1)	35	(5)	**2,712**
Net income	1,998	554	362	–	278	–	**3,192**
Total assets	32,994	23,288	13,976	44	6,847	(160)	**76,989**
Investments in property, plant and equipment and intangible assets affecting cash	792	1,782	664	10	154	–	**3,402**

a) Including $308 million from sources other than contracts with customers, of which $(241) million relate to alternative revenue programs involving certain regulatory assets and liabilities.

	2017						
	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Intersegment eliminations and adjustments	Total
Revenue							
External customers	1,790	10	11,621	1	46	–	13,468
Intersegment customers	4,726	3,297	80	2,479	1,706	(12,288)	–
Depreciation and amortization	805	998	752	4	127	–	2,686
Financial expenses	1,173	863	450	–	32	(5)	2,513
Net income	1,948	554	333	–	11	–	2,846
Total assets	32,944	22,494	13,677	39	6,768	(153)	75,769
Investments in property, plant and equipment and intangible assets affecting cash	963	1,971	650	13	157	–	3,754

Note 21 Comparative Information

Some of the prior year's data have been reclassified to conform to the presentation adopted in the current year. In particular, the financial assets and liabilities related to regulated activities, which were formerly integrated into Other liabilities and Accounts receivable and other receivables, are now classified as regulatory assets and liabilities. This reclassification led to increases of $9 million in current regulatory assets, $30 million in long-term regulatory assets, $78 million in current regulatory liabilities and $112 million in long-term regulatory liabilities.

CONSOLIDATED FINANCIAL INFORMATION

$M	2018	2017	2016	2015	2014
OPERATIONS					
Revenue	**14,370**	13,468	13,339	13,754	13,652
Expenditure					
Operations	**2,843**	2,664	2,671	2,559	2,400
Other components of employee future benefit cost	**(340)**	(322)	(233)	(32)	(34)
Electricity and fuel purchases	**2,167**	2,005	1,866	1,938	1,968
Depreciation and amortization	**2,685**	2,686	2,597	2,713	2,593
Taxes	**1,111**	1,076	1,045	980	975
	8,466	8,109	7,946	8,158	7,902
Income before financial expenses	**5,904**	5,359	5,393	5,596	5,750
Financial expenses	**2,712**	2,513	2,532	2,449	2,425
Net income	**3,192**	2,846	2,861	3,147	3,325
DIVIDEND	**2,394**	2,135	2,146	2,360	2,535
BALANCE SHEET SUMMARY					
Total assets	**76,989**	75,769	75,167	75,199	73,108
Long-term debt, including current portion and perpetual debt	**46,335**	45,259	45,909	45,983	44,752
Equity	**21,209**	19,755	19,704	19,475	17,961
INVESTMENTS AFFECTING CASH					
Property, plant and equipment and intangible assets	**3,402**	3,754	3,460	3,440	3,815
FINANCIAL RATIOS					
Return on equity (%)[a]	**14.0**	12.9	13.4	15.3	16.6
Capitalization (%)[b]	**31.8**	30.7	30.5	30.1	28.9
Profit margin (%)[c]	**22.2**	21.1	21.4	22.9	24.4
Interest coverage[d]	**2.18**	2.13	2.16	2.20	2.23
Self-financing (%)[e]	**63.9**	66.6	58.8	82.8	56.4

a) Net income divided by average equity for the year less average accumulated other comprehensive income for the year.

b) Equity divided by the sum of equity, long-term debt, current portion of long-term debt, perpetual debt, borrowings and derivative instrument liabilities, less derivative instrument assets and sinking fund.

c) Net income divided by revenue.

d) Sum of income before financial expenses and net investment income divided by interest on debt securities.

e) Cash flows from operating activities less dividend paid, divided by the sum of cash flows from investing activities, excluding net change in short-term investments and sinking fund, and repayment of long-term debt.

Note: Certain comparative figures in the Five-Year Review have been reclassified to conform to the presentation adopted in the current year.

OPERATING STATISTICS

	2018	2017	2016	2015	2014
GWh					
Electricity sales					
In Québec, by segment					
Residential	**69,566**	66,111	65,065	66,558	68,074
Commercial, institutional and small industrial	**47,659**	45,816	45,483	45,335	45,189
Large industrial	**50,252**	53,699	53,635	54,200	55,738
Other	**5,337**	5,077	5,062	5,170	5,222
	172,814	170,703	169,245	171,263	174,223
Outside Québec					
Canada/U.S.	**36,524**	34,935	32,744	29,864	26,624
Total electricity sales	**209,338**	205,638	201,989	201,127	200,847
$M					
Revenue from electricity sales					
In Québec, by segment					
Residential	**5,591**	5,285	5,155	5,222	5,162
Commercial, institutional and small industrial	**4,016**	3,873	3,842	3,774	3,657
Large industrial	**2,196**	2,288	2,265	2,350	2,389
Other	**331**	317	311	316	308
	12,134	11,763	11,573	11,662	11,516
Outside Québec					
Canada/U.S.	**1,731**	1,651	1,626	1,700	1,629
Total revenue from electricity sales	**13,865**	13,414	13,199	13,362	13,145
As at December 31					
Number of customer accounts					
In Québec, by segment					
Residential	**3,994,491**	3,958,300	3,924,992	3,890,956	3,857,782
Commercial, institutional and small industrial	**317,608**	316,430	314,816	319,294	317,671
Large industrial	**185**	184	183	181	183
Other	**4,630**	4,582	4,550	4,290	4,214
Total customer accounts	**4,316,914**	4,279,496	4,244,541	4,214,721	4,179,850

OPERATING STATISTICS (CONTINUED)

	2018	2017	2016	2015	2014
MW					
Installed capacity					
Hydroelectric	**36,767**	36,767	36,366	36,370	36,100
Thermal	**543**	542	542	542	543
Total installed capacity	**37,310**[a]	37,309	36,908	36,912	36,643
GWh					
Total energy requirements[b]	**230,795**	226,824	223,143	222,172	222,045
MW					
Peak power demand in Québec[c]	**38,319**	38,204	36,797	37,349	38,743
km					
Lines (overhead and underground)					
Transmission	**34,361**[d]	34,479	34,292	34,272	34,187
Distribution	**224,659**	224,033	221,843	220,920	219,793
Total lines (overhead and underground)	**259,020**	258,512	256,135	255,192	253,980

a) In addition to the generating capacity of its own facilities, Hydro-Québec has access to almost all the output from Churchill Falls generating station (5,428 MW) under a contract with Churchill Falls (Labrador) Corporation Limited that will remain in effect until 2041. It also purchases all the output from 41 wind farms (3,876 MW) and 7 small hydropower plants (107 MW) and almost all the output from 8 biomass and 4 biogas cogeneration plants (272 MW) operated by independent power producers. Moreover, 992 MW are available under long-term contracts with other suppliers.

b) Total energy requirements consist of kilowatthours delivered within Québec and to neighboring systems.

c) The 2018 figure was valid on February 15, 2019.The values indicated reflect demand at the annual domestic peak for the winter beginning in December, including interruptible power. The 2018–2019 winter peak occurred at 8:00 a.m. on January 22, 2019.

d) 34,089 km of lines operated by Hydro-Québec TransÉnergie and 272 km by Hydro-Québec Distribution.

OTHER INFORMATION

	2018	2017	2016	2015	2014
%					
Rate increase as at April 1[a]	**0.3**	0.7	0.7	2.9	4.3
As at December 31					
Total number of employees[b]					
Permanent	**16,960**	17,338	17,282	17,475	17,793
Temporary	**2,944**	2,448	2,270	2,319	2,250
	19,904	19,786	19,552	19,794	20,043
%					
Representation of target groups					
Women	**28.8**	28.9	28.7	29.0	29.4
Other[c]	**8.9**	8.1	7.7	7.4	6.8

a) Excluding Rate L.

b) Excluding employees of subsidiaries and joint ventures.

c) Self-reported members (men and women) of the following groups: Indigenous peoples, ethnic minorities, visible minorities and people with disabilities.

CONSOLIDATED RESULTS BY QUARTER

					2018
$M	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
Revenue	4,507	3,291	2,901	3,671	**14,370**
Expenditure					
Operations	697	705	649	792	**2,843**
Other components of employee future benefit cost	(85)	(85)	(85)	(85)	**(340)**
Electricity and fuel purchases	638	496	444	589	**2,167**
Depreciation and amortization	650	654	659	722	**2,685**
Taxes	305	244	264	298	**1,111**
	2,205	2,014	1,931	2,316	**8,466**
Income before financial expenses	2,302	1,277	970	1,355	**5,904**
Financial expenses	658	654	661	739	**2,712**
Net income	1,644	623	309	616	**3,192**

					2017
$M	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
Revenue	4,257	2,908	2,753	3,550	13,468
Expenditure					
Operations	669	670	635	690	2,664
Other components of employee future benefit cost	(82)	(83)	(83)	(74)	(322)
Electricity and fuel purchases	569	448	392	596	2,005
Depreciation and amortization	641	654	649	742	2,686
Taxes	300	245	246	285	1,076
	2,097	1,934	1,839	2,239	8,109
Income before financial expenses	2,160	974	914	1,311	5,359
Financial expenses	617	615	626	655	2,513
Net income	1,543	359	288	656	2,846

BOARD OF DIRECTORS

Seated, from left to right: Yvon Marcoux, Jacynthe Côté, Dominique Savoie, Éric Martel, Anne-Marie Croteau. Standing, from left to right: Hélène V. Gagnon, Marie-Josée Morency, François Lafortune, Geneviève Bich, Suzanne Gouin, Geneviève Brouillette, Carl Cassista, Paul Stinis, Anik Brochu, Laurent Ferreira.

Jacynthe Côté

Chair of the Board,
Hydro-Québec

Appointment: November 7, 2018
Term: May 14, 2023
Status: Independent director
Place of residence: Candiac

Jacynthe Côté holds a bachelor's degree in chemistry from Université Laval. She spent most of her career at Alcan, where she held a series of management positions in areas including human resources, environment, health and safety, business planning and development, production and management, in both Québec and England. After Alcan was acquired by Rio Tinto, she headed the Rio Tinto Alcan Primary Metal group for a number of years. From 2009 to 2014, she was the multinational's President and Chief Executive Officer. Ms. Côté serves on the boards of Banque Royale du Canada, Transcontinental and Finning International. Since July 2010, she has been a member of the advisory board of the Montreal Neurological Institute. She also chairs the boards of Alloprof and the Fondation CHU Sainte-Justine.

Éric Martel

President and Chief Executive Officer, Hydro-Québec

Appointment: July 6, 2015
Term: July 6, 2020
Status: Non-independent director
Place of residence: Mont-Royal

Éric Martel graduated from Université Laval with a bachelor's degree in electrical engineering and is a member of the Ordre des ingénieurs du Québec. Before joining Hydro-Québec in July 2015, he held a number of management positions at Bombardier from 2002 to 2015, including President of the Avions d'affaires and Services à la clientèle divisions. Mr. Martel has also worked for several high-profile international companies such as Pratt & Whitney, Rolls Royce, Procter & Gamble and Kraft Foods. He serves on the board of the Global Sustainable Electricity Partnership. As Chair of the World Energy Council (WEC) Programme Committee, he sits on the WEC's Officers Council. He is also Chair of the Electricity Industry community of the World Economic Forum. He has been actively involved with Centraide of Greater Montréal since the late 1990s.

Geneviève Bich

Vice President,
Human Resources, Metro inc.

Appointment: September 9, 2015
Term: September 9, 2019
Status: Independent director
Place of residence: Westmount

Geneviève Bich has a Bachelor of Arts with a major in psychology from McGill University and a Bachelor of Law from Université de Montréal. She is a member of the Barreau du Québec and the Ordre des conseillers en ressources humaines agréés du Québec. From 1991 to 2008, she held various management positions at Bell Canada, including Vice-President, Human Resources and Labour Relations. Before joining Metro in 2013 as Vice President, Human Resources, Ms. Bich worked at Groupe Dynamite and Aimia. She sits on the board of Collège de Bois-de-Boulogne.

Anik Brochu

Director, Special Projects,
Groupe T.A.P.

Appointment: September 13, 2006
Term: July 6, 2020
Status: Independent director
Place of residence: Val-d'Or

Anik Brochu holds a law degree from the University of Ottawa and is a member of the Barreau du Québec. After serving as General Manager of the Chambre de commerce de Val-d'Or from 1997 to 2008, she was a lawyer with Cain Lamarre Casgrain Wells from 2008 to 2010. In 2011, she joined Groupe T.A.P., where she now holds the position of Director, Special Projects. She sits on the board of the Centre de musique et de danse de Val-d'Or.

Geneviève Brouillette

Chief Financial Officer,
Groupe ALDO

Appointment: July 12, 2017
Term: December 16, 2018[1]
Status: Independent director
Place of residence: Montréal

With a Bachelor of Commerce from McGill University and a bachelor's degree in accounting from Université du Québec à Montréal, Geneviève Brouillette is a member of the Ordre des comptables professionnels agréés du Québec (CPA, CA) and has certification from the Collège des administrateurs de sociétés. Over the course of her career, she has held senior positions at Kraft Canada, Pratt & Whitney Canada, Groupe St-Hubert, Colabor and Keurig Dr Pepper, in Canada and the United States. She joined Groupe ALDO in January 2019 as Chief Financial Officer.

Carl Cassista

Corporate Director

Appointment: September 26, 2007
Term: December 17, 2018[1]
Status: Independent director
Place of residence: Lévis

A graduate of Université Laval, Carl Cassista worked in electrical engineering at Technologies Axion from 1982 to 2017. He piloted the company's expansion in North America and Europe, and served as its president from 1994 to 2017. Mr. Cassista has sat on the boards of numerous economic development organizations.

1. When their term expires, directors remain in office until replaced or reappointed.

Anne-Marie Croteau

Dean, John Molson School of Business, Concordia University

Appointment: July 6, 2016
Term: July 6, 2020
Status: Independent director
Place of residence: Montréal

Anne-Marie Croteau holds a bachelor's degree in actuarial mathematics from Concordia University, a Bachelor of Business Administration and a master's in management from HEC Montréal, and a PhD in administration from Université Laval. She is dean of the John Molson School of Business at Concordia University and full professor of business technology management. She is certified by the Collège des administrateurs de sociétés and serves on the boards of the Société de l'assurance automobile du Québec and Finance Montréal.

Laurent Ferreira

Executive Vice President and Co-Head, Financial Markets, Banque Nationale du Canada

Appointment: December 17, 2014
Term: December 17, 2018[1]
Status: Independent director
Place of residence: Westmount

Laurent Ferreira holds a bachelor's degree in economics from Université du Québec à Montréal and a master's in management with a specialization in finance from HEC Montréal. Mr. Ferreira was formerly an Associate – Investment Banking – Marketing and Derivatives at the U.S. firm Bankers Trust. In 1998, he joined Banque Nationale du Canada, where he has held positions including that of Executive Vice President and Managing Director, Derivatives and Equities. He sits on the boards of various not-for-profit organizations.

Hélène V. Gagnon

Vice President, Public Affairs and Global Communications, CAE Inc.

Appointment: April 22, 2015
Term: April 22, 2019
Status: Independent director
Place of residence: Outremont

A graduate of McGill University in both civil law and common law, Hélène V. Gagnon also has a master's degree in public administration and public policy from the London School of Economics. She is a member of the Barreau du Québec and holds accreditation from the Canadian Public Relations Society. Ms. Gagnon has been Vice President, Public Affairs and Global Communications at CAE since 2015 and has held similar positions at Bombardier Aéronautique, Bombardier Transport and Noranda. She sits on the boards of Aéroports de Montréal, the Canadian American Business Council and Aéro Montréal, Québec's aerospace cluster.

Suzanne Gouin

Chair of the Board of Management, Canada Revenue Agency

Appointment: September 26, 2007
Term: July 6, 2020
Status: Independent director
Place of residence: Hampstead

Suzanne Gouin has a bachelor's degree in political science from Concordia University, where she also pursued graduate courses in media studies. She completed an MBA at the University of Western Ontario and has earned certification from the Institute of Corporate Directors. She has held several management positions in media companies, including President and Chief Executive Officer of TV5 Québec Canada from 2002 to 2015. She was appointed Chair of the Board of Management at the Canada Revenue Agency in 2017. She chairs the board of directors of Montreal Digital Spring and sits on the boards of the Bell Fund and the Foundation of Greater Montreal.

François Lafortune

Founder and Chief Executive Officer, Diagram Ventures

Appointment: July 12, 2017
Term: July 12, 2021
Status: Independent director
Place of residence: Montréal

François Lafortune holds a Bachelor of Engineering from McGill University and an MBA from Stanford University in California. In 2006, he joined McKinsey & Company management consulting, where he rose through the ranks to become project manager and co-leader of its Canadian technology practice, a position he held until he left the company in 2015. The following year, he founded Diagram Ventures, a business incubator for innovative technology companies in financial services, insurance and healthcare, and has remained at its helm since inception.

Yvon Marcoux

Corporate Director

Appointment: December 17, 2014
Term: December 17, 2018[1]
Status: Independent director
Place of residence: Boucherville

With a licentiate in law from Université Laval and a Master of Laws from the University of Toronto, Yvon Marcoux is a retired lawyer and Lawyer Emeritus. After starting out as a professor in the Faculty of Law at Université Laval, he held senior management positions at Québec's Conseil du trésor and Ministère des Affaires municipales, as well as at Banque Nationale, Banque Laurentienne and Provigo, and was Chairman and President and Chief Executive Officer of the Société générale de financement du Québec. He has sat in the Québec National Assembly, where he was Transport Minister, then Justice Minister and Attorney General.

Marie-Josée Morency

Corporate Director

Appointment: July 6, 2016
Term: July 6, 2020
Status: Independent director
Place of residence: Québec

After completing a bachelor's in communications at Université Laval, Marie-Josée Morency began her career as an entrepreneur. She has worked in communications in the Saguenay region for Cystic Fibrosis Québec, the Association provinciale des constructeurs d'habitation du Québec and Promotion Saguenay. From 2010 to 2017, she was Executive Director, Chambre de commerce et d'industrie Saguenay-Le Fjord, and has served on the boards of numerous economic development corporations. From 2017 to 2018, she worked for Raymond Chabot Grant Thornton as Director of Business Development at their subsidiary Operio.

1. When their term expires, directors remain in office until replaced or reappointed.

Dominique Savoie

Deputy Minister of Energy and Natural Resources

Appointment: March 21, 2018
Term: July 11, 2021
Status: Non- independent director
Place of residence: Montréal

Dominique Savoie holds a bachelor's degree in psychology from Université du Québec à Montréal and a master's in psychology from Université de Montréal. For nearly 30 years, she has been with the public service, where she has held a number of management positions including Assistant Deputy Minister responsible for operations at Emploi Québec (2005–2006), Associate Deputy Minister and Secretary General of the Commission des partenaires du marché du travail (2006–2009), Deputy Minister responsible for Employment and Social Solidarity (2009–2011), Deputy Minister of Transport, Sustainable Mobility and Transport Electrification (2011–2016) and administrator of state at the Ministère du Conseil exécutif (2016–2018). In 2018, she was named Deputy Minister of Energy and Natural Resources. Ms. Savoie is certified by the Collège des administrateurs de sociétés and sits on the board of Ressources Québec.

Paul Stinis

Corporate Director

Appointment: April 22, 2015
Term: July 6, 2020
Status: Independent director
Place of residence: Westmount

With a bachelor's in mining engineering from McGill University and an MBA from Concordia University, Paul Stinis began his career as an engineer in the oil and gas industry. He has held various management positions at two major banks, and was Vice-President, Finance and Treasurer at Bell Canada International. In 2003, he joined BCE, where he held the positions of Vice-President and Assistant Treasurer as well as Senior Vice-President and Treasurer from 2009 to 2018.

DIRECTORS' COMPENSATION AND BENEFITS IN 2018[a]

	Base compensation	Meeting fees	Taxable benefits[b]
Geneviève Bich	$19,166	$23,813	$6,384
Anik Brochu	$19,166	$27,389	$150
Geneviève Brouillette	$19,166	$26,982	$150
Carl Cassista	$24,577	$28,752	$6,384
Jacynthe Côté[c]	$7,427	$12,191	$828
Anne-Marie Croteau	$21,428	$23,849	$213
Laurent Ferreira	$19,166	$34,577	$150
Hélène V. Gagnon	$24,577	$21,113	$150
Suzanne Gouin	$19,166	$33,276	$2,679
François Lafortune	$19,166	$19,776	$150
Yvon Marcoux	$24,880	$31,527	$213
Éric Martel[d]	–	–	–
Marie-Josée Morency	$11,681	$16,625	$6,384
Dominique Savoie[d]	–	–	$3,759
Paul Stinis	$24,577	$36,419	$150

a) Compensation set by the government under Order-in-Council No. 610-2006 of June 28, 2006. It consists of a basic annual retainer plus a fee for each Board or committee meeting attended. A yearly supplement is also paid to the chairs of Board committees.

b) Insurance and health assessments paid by Hydro-Québec.

c) Jacynthe Côté's compensation was set under Order-in-Council No. 1342-2018 of November 7, 2018. She receives an annual base compensation of $58,517, plus a meeting fee of $903 for each Board or committee meeting attended.

d) By law, non-independent directors—Éric Martel and Dominique Savoie—receive no compensation or meeting fees as members of the Board of Directors.

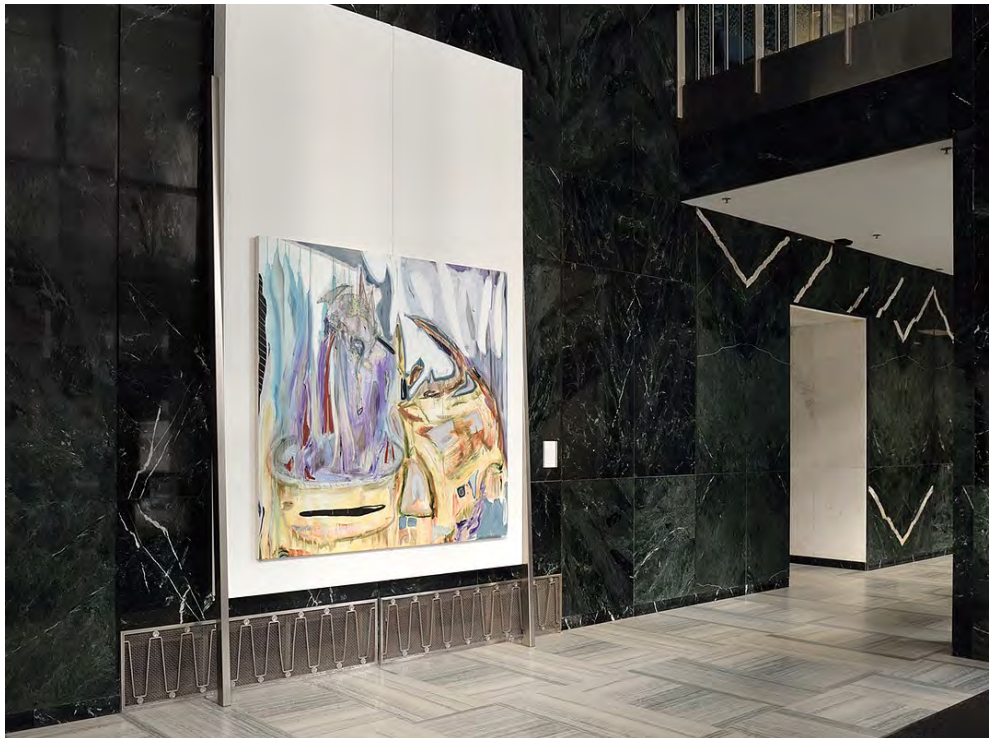
BOARD OF DIRECTORS

The Board of Directors met 20 times in 2018, while its committees held 52 meetings over the same period. The Board oversaw the implementation of the *Strategic Plan 2016–2020*. It reviewed the mandates and composition of its committees as well as the expertise and experience profiles required of its members. It approved the metrics for assessing Hydro-Québec's efficiency and performance, including benchmarking metrics. It updated all of the company's policies and adopted a directive on social responsibility.

The Board closely monitored the company's growth activities. It approved a strategic partnership under which Hydro-Québec sold a 55% equity interest in its subsidiary TM4 to multinational Dana Incorporated.

It also approved capital projects in power transmission and distribution, including the addition of a 735-kV transmission line between Micoua and Saguenay substations and the deployment of fast-charge stations for electric vehicles. It reviewed the progress of the Romaine complex and approved the renewal of power purchase agreements resulting from the 1991 invitation to tender.

It approved organizational changes and the appointment of senior executives reporting to the President and Chief Executive Officer. It paid close attention to the optimization of resources and processes, management succession and talent acquisition. It monitored the ongoing shift to a corporate culture focused on customers and on employee health and safety by tracking the main customer satisfaction indicators and overseeing the Occupational Health and Safety Action Plan. It examined the findings of the survey on employee engagement and followed the renewal process for the company's collective agreements.



Hydro-Québec is proud to support the visual arts in Québec. Some pieces from our collection are displayed in high-traffic areas of our premises, where they can be enjoyed by as many people as possible. Manuel Mathieu, *Lye*, 2018, mixed media on canvas. © Manuel Mathieu

In the course of its recurring deliberations, the Board examined the company's objectives and approved its Business Plan and its quarterly and annual financial results, as well as the financial statements of the Hydro-Québec pension plan. It reviewed the progress of the company's main capital projects and studied the status report on the Distributor's Electricity Supply Plan 2017–2026. It examined the consolidated portfolio of residual business risks and approved the annual internal audit plan. The independent directors hold a closed-door session at the end of each Board meeting.

EXECUTIVE (A)

The Executive Committee did not hold any meetings in 2018.

GOVERNANCE AND ETHICS (B)

The Governance and Ethics Committee held eight meetings in 2018, including a joint meeting with the Audit Committee. It recommended that the Board review its committees' mandates and composition and that it approve Hydro-Québec's *Annual Report 2017* as well as the metrics for assessing the company's efficiency and performance, including benchmarking metrics. It also recommended approval of the management rule for reimbursement of directors' expenses, updating of the Board members' expertise and experience profiles, and adoption of the director induction and continuing development program. In addition, it recommended the appointment of the most senior officer of each of Hydro-Québec's wholly owned subsidiaries, as well as the directors and external auditors of its first-tier wholly owned subsidiaries. The Committee recommended that the Board update the company's policies and examined the annual reports on several of those policies.

AUDIT (C)

The Audit Committee held 11 meetings in 2018, including a joint meeting with the Governance and Ethics Committee. After abolishing the Pension Plan Financial Management Committee on May 11, the Board of Directors proceeded to add financial management of the pension plan to the Audit Committee's mandate. The Pension Plan Financial Management Committee had held two meetings before it was abolished. In 2018, the Audit Committee examined the company's 2019 internal audit plan and recommended its approval by the Board. It reviewed the internal audit results and monitored the ensuing recommendations and action plans. In addition, the Committee examined the quarterly and annual financial statements of Hydro-Québec and its pension plan, and the annual financial statements of Société d'énergie de la Baie James.

With regard to financial management of the pension plan, the Committee examined the pension plan financing policy, as well as the responsible investment policy and the annual update of the pension fund investment management policy, and recommended their approval by the Board. It evaluated the performance and structure of the pension fund portfolio and the performance of specialized portfolio managers. It monitored changes in the pension plan's financial position and its funding and solvency status, and closely monitored the management of risks related to the pension fund.

The Committee also reviewed and followed up on the annual control plans of the company and its pension plan. It examined the reports on those control plans and on the application of the financial disclosure policy. It closely monitored the handling of allegations concerning wrongdoing or inappropriate situations, as well as the management of Hydro-Québec Distribution's accounts receivable.

HUMAN RESOURCES (D)

Chaired by Yvon Marcoux, who succeeded Carl Cassista on May 11, the Human Resources Committee met nine times in 2018. The Committee examined executives' performance objectives. It recommended that the Board approve criteria for evaluating the President and Chief Executive Officer's performance and coordinated that evaluation. It closely monitored the succession process for executives and top managers, and submitted recommendations to the Board for the appointment of members of Senior Management. It studied the results of the survey on employee engagement, along with the ensuing action plans. It followed the collective agreement renewal process and the tendering process for coverage of employee benefits. It reviewed the corporate policies on human resources and security, recommended that the Board update them and studied the reports on their application. It also monitored legislative and regulatory developments that have an impact on human resources management. Finally, the Committee studied the 2017 report of activities of the Corporate Ombudsman.

ENVIRONMENT AND SOCIAL RESPONSIBILITY (E)

As part of its review of committee mandates, the Board renamed the Environment and Public Affairs Committee, which is now the Environment and Social Responsibility Committee. Chaired since May 11 by Hélène V. Gagnon, the Committee met six times in 2018. Among other topics, it studied the results of the annual environmental management review as well as the semiannual reports on environmental compliance, and it heard a presentation on environmental risk management.
The Committee commented on Hydro-Québec's *Sustainability Report 2017* and met with the report's auditor. It recommended Board approval of donations and sponsorships, as well as the new Social Responsibility Directive. It carefully studied the quarterly reports on communications and monitored the company's communications activities. This included examining the key factors that influence the company's reputation, as well as taking note of the new graphic platform and the final phase of the "ON" advertising campaign. The Committee reviewed the policies on the company's social role and environmental responsibilities, and recommended that they be updated. It further reviewed the results of the university research chairs program, the annual report of the Fondation Hydro-Québec pour l'environnement, and the annual report on international cooperation initiatives funded by Hydro-Québec in French-speaking nations.

FINANCIAL AFFAIRS, PROJECTS AND TECHNOLOGIES (F)

As part of its review of committee mandates, the Board renamed the Finance Committee, which is now the Financial Affairs, Projects and Technologies Committee, and added to its mandate the activities of the Information Technologies Committee, which was then abolished. The latter committee had met three times between January 1 and May 11. It was chaired by Anne-Marie Croteau, who subsequently became Vice Chair of the Financial Affairs, Projects and Technologies Committee. This committee, chaired by Paul Stinis, met nine times in 2018.

With respect to the company's financial affairs, the Committee analyzed the Business Plan and examined various annual programs and files of a financial nature before recommending their approval by the Board: borrowings, guarantees, swaps, sinking fund management, derivatives and underlying products. It recommended Board approval of credit limits for each counterparty for each of the functions concerned. It further analyzed and monitored the rate filing.

As regards capital projects and business development, the Committee examined various investment, partnership and development projects, both inside and outside Québec. It also tracked major capital projects and examined the portfolio of information and communication technologies (ICT) projects. It monitored the progress of projects to modernize the grid control and isolation systems. It also studied the company's annual ICT cost schedule and paid close attention to matters pertaining to cybersecurity. Lastly, with regard to business risk management, the Committee examined and monitored the consolidated portfolio of residual risks and recommended Board approval of the annual financial risk management program. It also recommended the updating of the risk management programs for Hydro-Québec Production's wholesaling and trading activities and Hydro-Québec Distribution's procurement activities.

WORKPLACE HEALTH AND SAFETY (G)

This Committee is chaired by Carl Cassista, who succeeded co-chairs Éric Martel and Hélène V. Gagnon on May 11. It held four meetings in 2018. The Committee reviewed the work of Raymond Chabot Grant Thornton, the firm hired to audit the implementation of the company's Occupational Health and Safety Action Plan, and recommended that the Board approve the firm's work plan. It closely monitored implementation of the Action Plan at the Romaine jobsite and of the program for improving safety in switch building bays. It also tracked the progress of the investigation and the measures taken by Management following an accident on the Chamouchouane–Bout-de-l'Île jobsite, and kept the Board informed in this matter. On October 12, the Board made the Committee permanent to enable it to monitor all actions taken by Management with respect to occupational health and safety.

DIRECTOR ATTENDANCE AT MEETINGS OF THE BOARD OF DIRECTORS AND BOARD COMMITTEES IN 2018

Director	Notes	Board[1]	Committees							Abolished committees[2]	
			A	B[3]	C[3]	D	E[4]	F[5]	G	H	I
Number of meetings →		20		8	11	9	6	9	4	2	3
Jacynthe Côté	A B C D E F G 6	4/4		1/1	3/3	2/2	2/2	2/2	1/1		
Éric Martel	A E F G 7	20/20		5/8	10/11	9/9	6/6	9/9	4/4	2/2	3/3
Geneviève Bich	D G 8	16/20			1/1	8/9	1/1		3/4		
Anik Brochu	D E G 9	16/20			1/1	8/9	5/6		4/4		
Geneviève Brouillette	C D 10	19/20			10/11	4/5					
Carl Cassista	F G 11	18/20		3/3		4/4		6/6	2/2		3/3
Anne-Marie Croteau	E F 12	20/20					2/4	5/6			3/3
Laurent Ferreira	B C D 13	15/20		7/8	8/11	8/9		1/1			3/3
Hélène V. Gagnon	E G	19/20					5/6		3/4		
Suzanne Gouin	A C F 14	18/20		3/3	8/8	4/4		6/6		2/2	
François Lafortune	F 15	17/20						4/6			3/3
Yvon Marcoux	A B C D 16	19/20		7/8	7/8	5/5		3/3	2/2	2/2	
Marie-Josée Morency	E G 17	16/16					4/4		1/3		
Dominique Savoie	18	15/17									
Paul Stinis	A B C F 19	19/20		5/5	11/11			9/9		2/2	

Committees

A. Executive
B. Governance and Ethics
C. Audit
D. Human Resources
E. Environment and Social Responsibility
F. Financial Affairs, Projects and Technologies
G. Workplace Health and Safety[20]

Abolished committees

H. Pension Plan Financial Management
I. Information Technologies

Notes

1. The Board of Directors held 20 meetings, including 11 special meetings.
2. The Pension Plan Financial Management Committee and the Information Technologies Committee were abolished on May 11, 2018.
3. The Governance and Ethics Committee and the Audit Committee held a joint meeting on September 24, 2018. Laurent Ferreira, Yvon Marcoux and Paul Stinis are members of both committees. Their attendance was recorded for both committees but they received only one fee for the joint meeting.
4. On May 11, 2018, the Environment and Public Affairs Committee became the Environment and Social Responsibility Committee.
5. On May 11, 2018, the Finance Committee became the Financial Affairs, Projects and Technologies Committee.
6. Jacynthe Côté took office on November 7, 2018.
7. Éric Martel attends meetings of the Governance and Ethics, Audit, and Human Resources committees as a guest.
8. Geneviève Bich participated as an expert in the meeting of the Environment and Social Responsibility Committee on September 6, 2018, and as an additional member in the Audit Committee meeting on October 31, 2018.
9. Anik Brochu attended the Audit Committee meeting on October 31, 2018, as an additional member.
10. Geneviève Brouillette was appointed to the Human Resources Committee on May 11, 2018.
11. Carl Cassista was a member of the Governance and Ethics Committee and the Human Resources Committee from January 1 to May 11, 2018. He was appointed to the Financial Affairs, Projects and Technologies Committee and the Special Committee on Workplace Health and Safety on May 11, 2018.
12. Anne-Marie Croteau was appointed Vice Chair of the Financial Affairs, Projects and Technologies Committee and also became a member of the Environment and Social Responsibility Committee on May 11, 2018.
13. Laurent Ferreira participated as a guest in the February 14, 2018 meeting of the Finance Committee, which later became the Financial Affairs, Projects and Technologies Committee.
14. Suzanne Gouin was a member of the Governance and Ethics Committee and the Human Resources Committee from January 1 to May 11, 2018. She was appointed to the Financial Affairs, Projects and Technologies Committee and the Audit Committee on May 11, 2018.
15. François Lafortune was appointed to the Financial Affairs, Projects and Technologies Committee on May 11, 2018.
16. Yvon Marcoux was a member of the Finance Committee and the Special Committee on Workplace Health and Safety from January 1 to May 11, 2018. He was appointed to the Human Resources, Audit, and Executive committees on May 11, 2018.
17. Marie-Josée Morency was appointed to the Special Committee on Workplace Health and Safety on May 11, 2018. She withdrew temporarily from the Board of Directors, the Environment and Social Responsibility Committee and the Special Committee on Workplace Health and Safety from May 14 to October 2, 2018.
18. Dominique Savoie was appointed effective March 21, 2018.
19. Paul Stinis was appointed to the Governance and Ethics Committee on May 11, 2018.
20. The Special Committee on Workplace Health and Safety was made permanent and renamed the Workplace Health and Safety Committee on October 12, 2018.

Hydro-Québec's Board of Directors complies with the requirements of the *Hydro-Québec Act* with regard to governance. In particular, it ensures that appropriate controls are in place and are the subject of periodic reporting.

INDEPENDENCE

With the exception of Éric Martel, President and Chief Executive Officer, and Dominique Savoie, Deputy Minister of Energy and Natural Resources, the members of the Board are independent directors, meaning that they have no direct or indirect relations or interests—financial, commercial, professional or philanthropic in nature, for example—that could affect the quality of their decision making with regard to the interests of the company.

RULES OF ETHICS

The Board is responsible for compliance with the rules set out in the Code of Ethics and Rules of Professional Conduct for Directors, Executives and Controllers of Hydro-Québec (in French only), which are based primarily on the *Regulation respecting the ethics and professional conduct of public office holders*. The code is available at www.hydroquebec.com/about/governance/ethics.html.

COMPENSATION AND BENEFITS PAID TO DIRECTORS

Compensation for all independent directors is set out in Order-in-Council No. 610-2006 and is indexed periodically by the government. Compensation consists of a basic annual retainer of $19,268 plus a fee of $903 for each Board or committee meeting attended. A yearly supplement of $6,022 is paid to the chairs of Board committees. Under Order-in-Council No. 1342-2018, the Chair of the Board receives annual compensation of $58,517 and earns the same compensation as the other independent directors for participating in meetings of the Board and its committees, as well as for chairing a committee. Board members are also entitled to reimbursement of travel expenses incurred in the performance of their duties.

HIRING OF INDEPENDENT EXPERTS

Board members may retain the services of independent experts at the company's expense in order to obtain advice on matters related to their mandate.

DIRECTOR INDUCTION AND TRAINING PROGRAM

Governance

When Board members are first appointed, they receive training on their roles and responsibilities, the nature and business context of Hydro-Québec's principal activities, and the company's legal and regulatory context. New directors also receive training providing them with a solid grasp of the basic notions of electricity, as well as tours of the system control center and the energy trading floor. By the end of the induction program, new members have received about 15 hours of training.
New directors Geneviève Brouillette and François Lafortune have completed their induction, which began in 2017, while Dominique Savoie and Jacynthe Côté are continuing theirs.

Continuing director development in 2018 took the form of presentations at regular Board meetings on such topics as big data, blockchain potential and applications, the governance framework of Hydro-Québec's pension plan, ratemaking principles, strategic objectives for energy storage and batteries, and diversity.

DEINTEGRATION

In 1997, Hydro-Québec restructured itself into divisions, which enabled it to obtain a power marketer's licence and sell electricity at market prices on U.S. wholesale markets. Among other things, this deintegration, or structural unbundling, ensures that the Transmission Provider's operations are kept separate from those of its affiliates. Rules of conduct and ethics were enacted and integrated into internal directives, which are briefly described below:

- *Transmission Provider Code of Conduct*[1] – Governs relations between the Transmission Provider and its affiliates, and is intended to prevent any form of preferential treatment or cross-subsidization.
- *Reliability Coordinator Code of Conduct*[2] – Ensures that the reliability of the transmission system remains the Reliability Coordinator's top priority and prevents any form of preferential treatment in favor of other structural units of the Transmission Provider, its affiliates or other system users.
- *Code of Ethics on Conducting Calls for Tenders*[3] – Ensures that the Distributor's tendering process is conducted fairly for all electricity suppliers.
- *Code de conduite du Distributeur* (Distributor Code of Conduct)[4] – Regulates transactions between the Distributor and the Generator for non-tendered electricity supply in order to ensure that the Generator does not benefit from any unfair advantage. It also governs dealings between the Distributor and its affiliates, with the aim of preventing affiliates' business operations from being financed, in whole or in part, by electricity service customers.

The application of each of these codes is the subject of an annual accountability report to the Régie de l'énergie.

INTERNAL CONTROL SYSTEM

Hydro-Québec's Management maintains an internal control system, whose financial information component is based on the internationally recognized framework developed by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. The objective of this system is to provide reasonable assurance that financial information is relevant and reliable, and that Hydro-Québec's assets are appropriately recorded and safeguarded. The system includes a business risk management process and the development of an annual internal control plan that requires the involvement of all structural units. Internal auditing helps to determine whether the internal control system is sufficient and effective, and to assess the company's policies and procedures. It includes a performance audit to ensure the efficiency, effectiveness and cost-effectiveness of the company's activities.

AUDITORS' FEES AND INDEPENDENCE

KPMG LLP, Ernst & Young LLP and the Auditor General of Québec are Hydro-Québec's independent auditors for 2018. The professional fees billed by KPMG LLP and Ernst & Young LLP in 2018 for services other than auditing and certification accounted for 18.1% of the total $4.1 million in fees billed. Hydro-Québec uses various mechanisms to enable the Audit Committee to ensure that independent auditors remain independent, including a process whereby any assignment that could be given to them is analyzed beforehand. No professional service engagement may be assigned to the Auditor General of Québec, since that office serves the National Assembly exclusively.

1. *Transmission Provider Code of Conduct* (www.oasis.oati.com/HQT/HQTdocs/code_de_conduite_en.pdf).
2. *Reliability Coordinator Code of Conduct* (www.hydroquebec.com/data/transenergie/pdf/code_conduite-en.pdf).
3. *Code of Ethics on Conducting Calls for Tenders* (www.hydroquebec.com/data/achats-electricite-quebec/pdf/code_240701_en.pdf).
4. *Code de conduite du Distributeur* (Distributor Code of Conduct) (in French only) (www.hydroquebec.com/data/a-propos/pdf/code-conduite-distributeur.pdf).

COMPENSATION AND BENEFITS PAID TO THE COMPANY'S FIVE MOST HIGHLY COMPENSATED OFFICERS AS AT DECEMBER 31, 2018

	Base salary as at December 31	Incentive compensation for 2017, paid in 2018	Perquisites used[a]	Taxable benefits			
				Automobile			Life insurance and health insurance
				Nature of benefit	Allowance	Usage and parking	
Éric Martel President and Chief Executive Officer, Hydro-Québec	$559,866	$257,538	$8,780	Executive vehicle	–	–	$9,340
David Murray Chief Operating Officer, Hydro-Québec President, Hydro-Québec Production	$465,000	$126,000	$250	Car allowance or provision of a vehicle, plus parking	$16,614	$5,060	$8,338
Réal Laporte President, Hydro-Québec Innovation, équipement et services partagés President and Chief Executive Officer, Société d'énergie de la Baie James[b]	$459,680	$110,151	$787		$20,764	$4,971	$11,874
Marc Boucher President, Hydro-Québec TransÉnergie	$445,120	$106,080	$4,699		$16,614	$6,078	$9,256
Jean-Hugues Lafleur Executive Vice President and Chief Financial and Risk Officer	$420,000	$105,797	$5,000		$15,091	$3,598	$8,474
	Pension Plan and Supplementary Benefits Program						
	Basic Hydro-Québec Pension Plan (HQPP) – Usual contribution under the plan – Pension calculated on the basis of average salary for the best five years – Credit of 2.25% per contribution year – Recognition of 66.67% of the maximum incentive compensation as pensionable earnings for purposes of the HQPP, up to a maximum of 20% of salary **Supplementary Benefits Program** – Contribution assumed by Hydro-Québec – Additional benefits to offset the tax limits under the HQPP (lifting of ceiling on the permitted maximum amount) – Payment of benefits according to the same terms as those applicable under the HQPP *Other provisions applicable to the President and Chief Executive Officer of Hydro-Québec* – Pension calculated on the basis of average salary for the best three years (less pension payable under the HQPP) – Credit of 4% per contribution year (less pension credit under the HQPP) – Recognition of 100% of the maximum incentive compensation as pensionable earnings (less portion recognized for purposes of the HQPP)						

a) Taxable benefits related to financial and estate planning, sports clubs and professional dues.

b) Réal Laporte does not receive any separate compensation as President and Chief Executive Officer, Société d'énergie de la Baie James.

COMPENSATION AND BENEFITS PAID TO THE ONLY OFFICER COMPENSATED BY A WHOLLY OWNED SUBSIDIARY AS AT DECEMBER 31, 2018

	Base salary as at December 31	Incentive compensation[c]	Perquisites[d]	Benefits
Nadyne Guay General Manager, Société de transmission électrique de Cedars Rapids limitée	$132,919	–	$1,790	Hydro-Québec pension plan and group insurance plan

c) Given the appointment of Ms. Guay on March 16, 2018, no incentive compensation was paid in 2018.

d) Taxable benefits related to financial and estate planning, sports clubs, monthly transit passes and professional dues.

ACCESS TO DOCUMENTS AND PROTECTION OF PERSONAL INFORMATION

During the past year, Hydro-Québec received and processed 565 requests for access to information that concerned administrative documents or personal information; of these, 182 were granted in full, 233 were granted in part and 80 were turned down. When requests were totally or partly denied, it was most often on the basis of the following provisions of the *Act respecting access to documents held by public bodies and the protection of personal information*:

- confidentiality of personal information
- confidentiality of third-party information
- information of a commercial nature
- information that could reveal a method of investigation or hinder the effectiveness of a security program

As for the other 70 requests, either they could not be fulfilled because the company did not have the document, the request was withdrawn or the information concerned another public body. Altogether, 241 requests for access were processed within 20 days, 301 were processed within 21 to 30 days, and 23 were processed within 31 days or more. Fourteen review notices were received from the Commission d'accès à l'information. In addition, two requests for access were the subject of reasonable accommodation measures under the government policy on equal access for persons with disabilities to publicly available documents and services. The report on requests received and processed in 2018, along with detailed statistics, is accessible at www.hydroquebec.com/documents-data/act-respecting-access/record.html.

The company's employees were reminded of the principles of access to documents and protection of personal information through various communications and training sessions, as well as in connection with specific cases. In addition, to facilitate access to information whose publication is prescribed by the *Regulation respecting the distribution of information and the protection of personal information*, Hydro-Québec publishes it on its Web site, at www.hydroquebec.com/documents-data/act-respecting-access/distribution-information/.

ETHICS

Loyalty, integrity, respect, discretion and fairness are ethical principles that reflect Hydro-Québec's social commitment to its customers and the community. Ethical rules stemming from these principles are set out in the *Code of Ethics and Rules of Professional Conduct for Directors, Executives and Controllers of Hydro-Québec* and in the employee Code of Conduct, which also applies to the company's executives and controllers. The latter document, which is available (in French only) at www.hydroquebec.com/data/a-propos/pdf/code-conduite.pdf, is intended to help all employees fulfill their duties with integrity and loyalty, in accordance with Hydro-Québec's ethical principles. A self-training program, a presentation and other tools on the Code of Conduct are made available to managers to help them assume their ethical leadership role. The Supplier Code of Conduct sets out the expectations of Hydro-Québec and its wholly owned subsidiaries with respect to suppliers with whom they have a business relationship (any connection or exchange, verbal or written, with or without a contract).

LANGUAGE GUIDELINES

Hydro-Québec continues to set an example and act as a driving force in applying the *Charter of the French Language*. Among the measures established to enable it to assume this role are a consultation service offered to all employees and an intranet site devoted to the language guidelines applicable to Hydro-Québec. In 2018, the company collaborated with the Conseil supérieur de la langue française on a survey to draw a portrait of the linguistic practices of government departments and public bodies in their interactions with individuals and corporate entities.

SUSTAINABLE DEVELOPMENT

The Sustainability Report discusses the company's main sustainable development initiatives, the progress made in this area and the company's sustainable energy choices. The report is based on Global Reporting Initiative standards and is available at www.hydroquebec.com/sustainable-development, where additional information is provided on the company's performance with regard to sustainable development.

SUSTAINABLE DEVELOPMENT ACTION PLAN 2015–2020

Hydro-Québec published its *Sustainable Development Action Plan 2015–2020* in July 2015. This is one way we contribute to the implementation of Québec's *Government Sustainable Development Strategy 2015–2020*, its 2018–2022 strategy to ensure the occupancy and vitality of territories and its Agenda 21 for Culture. A formal accounting of the company's performance with respect to the Action Plan will be presented in the *Sustainability Report 2018*.

	Action	Indicator	Results as at December 31, 2018
1	Build hydropower projects OVT	Cumulative capacity made available by the Romaine complex	1,305 MW
2	Increase the capacity of existing hydroelectric generating stations OVT	Cumulative gains in additional available peak capacity	61 MW[a]
3	Continue energy efficiency initiatives	New annual energy savings	454.7 GWh[a]
4	Continue efforts in the field of transportation electrification in Québec	Number of Electric Circuit charging stations in service and number of regions served	1,669 charging stations[a] / 16 regions[a]
	OVT	Number of R&D partnership agreements	3 agreements[a]
		Number of patents held	533 patents
5	Publicize the knowledge acquired through Hydro-Québec environmental studies C	Number of documents published on the Web	4 documents published[a]
6	Continue to protect and enhance the company's built, technological and intangible heritage C OVT	Number of measures carried out by 2020	8 measures[a]
7	Strengthen environmentally responsible management practices	Annual GHG emissions from the light-vehicle fleet	51,967 t CO_2 eq[a]
	OVT	Number of videoconferences held annually	17,074 videoconferences
		Percentage of company printers that are print-release enabled	18.4%[a]
8	Continue measures that take into account and protect biodiversity and ecosystem services OVT	Number of innovative measures implemented annually to take into account and protect biodiversity and ecosystem services	5 measures
9	Optimize the application of sustainability principles to projects and activities	Number of projects or activities analyzed each year	1 projet[a]
10	Promote the integration and favorable reception of Hydro-Québec's system equipment OVT	Percentage of MRCs that have received the information program	44%
11	Integrate the life cycle approach into our innovation efforts	Number of projects to which sustainability and eco-innovation principles have been applied	1 project
12	Keep updating current knowledge on the life cycle assessment of electricity distributed in Québec	Number of updates of inventory data on the life cycle of Québec's electricity mix per year	1 update

a) Preliminary data. The final figure will be published in the *Sustainability Report 2018*.

OVT Action related to the implementation of the strategy to ensure the occupancy and vitality of territories.

C Action related to the implementation of Québec's *Agenda 21 for Culture*.

ACT TO FACILITATE THE DISCLOSURE OF WRONGDOINGS RELATING TO PUBLIC BODIES

A number of years ago, to promote ethical behavior, Hydro-Québec adopted a procedure for handling allegations of wrongdoing. This procedure has been updated to meet the requirements of the *Act to facilitate the disclosure of wrongdoings relating to public bodies*.

2018 REPORT	
Cases covered by Section 25 of the *Act to facilitate the disclosure of wrongdoings relating to public bodies*	Number of cases
1 Disclosures received by the designated officer	9
2 Cases in which processing or examination of the disclosure was ended under paragraph 3 of Section 22	–
3 Well-founded disclosures	4
4 Disclosures broken down by category of wrongdoing set out in Section 4:	
• a contravention of a Québec law, of a federal law applicable in Québec or of a regulation made under such a law	–
• a serious breach of the standards of ethics and professional conduct	–
• a misuse of funds or property belonging to a public body, including the funds or property it manages or holds for others	4
• gross mismanagement within a public body, including an abuse of authority	3
• any act or omission that seriously compromises or may seriously compromise a person's health or safety or the environment	2
• directing or counselling a person to commit any of the wrongdoings described above	–
5 Information forwarded under the first paragraph of Section 23	–

ACT RESPECTING WORKFORCE MANAGEMENT AND CONTROL WITHIN GOVERNMENT DEPARTMENTS, PUBLIC SECTOR BODIES AND NETWORKS AND STATE-OWNED ENTERPRISES

On December 5, 2014, the Québec government adopted the *Act respecting workforce management and control within government departments, public sector bodies and networks and state-owned enterprises*. The purpose of the Act is to strengthen workforce management and control mechanisms within public bodies, in particular through workforce planning and measures to control staffing and service contracts.

In accordance with the Act, Hydro-Québec adopted a directive establishing the situations in which the authorization of its Chief Executive Officer is not required for the signing of service contracts during the application period of the Act. The directive was submitted to the Conseil du trésor and has been in effect since December 1, 2017. For 2018, the Chief Executive Officer of Hydro-Québec authorized 1,235 contracts falling within the scope of the Act, for a total of $1,287,785,855.

Hydro-Québec's workforce remained within the total paid hours authorized for it by the Ministère de l'Énergie et des Ressources naturelles for the reference year (April 1, 2017 to March 31, 2018).

PAID HOURS	
Management	3,481,781
Professionals	12,624,880
Clerical staff, technicians and similar	9,974,668
Peace officers	54,667
Laborers, maintenance and service personnel	12,602,068
Students and interns	154,687
Total	38,892,752

BACKGROUND

Under the *Hydro-Québec Act*, the company must conduct an assessment in which it compares itself against other companies in the power industry and reports on the outcome every three years. The table to the right shows the results of the third assessment performed by the company.

The reference period varies according to data availability for each indicator. In some cases, indicators were not compared for lack of common benchmarking metrics, but the data were nevertheless examined by recognized independent organizations.

RESULTS

Over the period from 2016 to 2018, Hydro-Québec posted net income that exceeded the targets set in the *Strategic Plan 2016–2020*, and it also kept rate increases below inflation. The scores obtained reflect the company's efforts to carefully manage operational expenditure while improving customer service. To meet the challenges of occupational health and safety (OHS), the company is currently reviewing its processes in order to improve its performance in this regard.

2018 ASSESSMENT

INDICATORS COVERED IN THREE-YEAR BENCHMARKING

COST INDICATORS	Hydro-Québec's results / *Average results*			Comments
Transmission substations (US$/MVA)[a] *(Benchmarked by First Quartile Consulting in 2017 and 2016 and by PA Consulting in 2015)*	**2017**	**2016**	**2015**	The vastness of our system means more equipment compared to the reference group and thus higher operational and maintenance expenditure. The consulting firm doing the benchmarking since 2016 uses a larger reference group and new comparative data, but the ratio is nevertheless on the decline.
	1,006	1,030	1,617	
	614	*629*	*1,298*	
Transmission lines (US$/circuit-mile)[a] *(Benchmarked by First Quartile Consulting in 2017 and 2016 and by PA Consulting in 2015)*	**2017**	**2016**	**2015**	In view of the relatively high percentage of high-voltage lines in our system, a given load can be transmitted using a smaller number of components per circuit-mile compared to the reference group, yielding substantial maintenance savings. Our 2017 result can be attributed to an increase in maintenance expenditure, partly related to vegetation control.
	2,330	1,449	1,963	
	10,202	*10,971*	*9,936*	
Distribution system (US$/customer account)[b] *(Benchmarked by First Quartile Consulting)*	**2017**	**2016**	**2015**	The improvement in these two indicators, both in absolute terms and relative to the reference group, is due in particular to our efficiency efforts.
	67	64	72	
	91	*87*	*80*	
Customer operations (US$/customer account)[b] *(Benchmarked by First Quartile Consulting)*	**2017**	**2016**	**2015**	
	39	41	46	
	45	*49*	*50*	

OTHER INDICATORS	Hydro-Québec's results / *Average results*			Comments
Overall reputation score (out of 10) *(Benchmarked by SOM)*	**2018**	**2017**	**2016**	We measure our overall reputation on the basis of three criteria: overall assessment of the company, admiration and sense of pride. In 2018 and 2017, we ranked third out of the seven companies assessed.
	6.80	6.76	n.d.	
	6.22	*6.24*	*n.d.*	
Sustainable employee engagement index (%)[c] *(Benchmarked by Willis Towers Watson)*	**2018**	**2017**	**2016**	For measuring employee engagement, we switched from an in-house survey to an external survey in 2018; this allows us to compare our performance with the average of the world's top-performing companies.
	85	n.d.	n.d.	
	88	*n/a*	*n/a*	
Accident frequency rate (per 200,000 hours worked)	**2017**	**2016**	**2015**	The difference between our rate and that of the reference group can be attributed to various factors, such as the broader range of our operations given that we are a vertically integrated utility. In addition, our status as a public-sector organization, along with the particularities of the workers' compensation regime in Québec, may have an impact on the number of incidents declared and the rate of claims. We are nevertheless committed to making OHS a fundamental value and are currently reviewing our processes in order to improve our performance in this area.
– with temporary assignment or lost time (TALT)	2.00	2.17	1.87	
– with lost time (LT)	1.31	1.64	1.48	
(LT component benchmarked by the Canadian Electricity Association)	*0.64*	*0.66*	*0.69*	

a) Operational and maintenance expenditure, factoring in the exchange rate for the year in question.
b) Operational expenditure, factoring in the exchange rate for the year in question.
c) Indicator changed in 2018. The indicator used previously was overall employee engagement, which was 76% in 2017 and 70% in 2016.

2018 ASSESSMENT (CONTINUED)

PERFORMANCE INDICATORS IN THE *STRATEGIC PLAN 2016–2020*	Hydro-Québec's results Strategic Plan 2016–2020 *targets*			Comments
Net income ($M) *(Financial statements audited by KPMG, Ernst & Young and the Auditor General of Québec)*	**2018**	**2017**	**2016**	Careful management of our activities and operational expenditure allowed us to post income higher than the *Strategic Plan 2016–2020* outlook for the three-year period. We were thus able to pay an annual dividend of over $2 billion to our shareholder, the Québec government.
	3,192	2,846	2,861	
	2,475	*2,600*	*2,550*	
Average annual rate increase approved by the Régie de l'énergie (%)[d]	**2018**	**2017**	**2016**	We upheld our commitment to keep rate increases at or below inflation throughout the period covered.
	0.3	0.7	0.7	
Inflation – Québec Consumer Price Index (%)	1.7	1.0	0.7	
	Target: ≤ inflation			
Overall public satisfaction (% "very satisfied" and "somewhat satisfied") *(2018 data verified by EEM Gestion ESS; 2017 and 2016 data verified by Bureau de normalisation du Québec)*	**2018**	**2017**	**2016**	The increase in overall public satisfaction is evidence of the measures we have taken to improve customer service, which have helped build customer loyalty.
	93	92	91	
	2020 target: > 90			
Service connections	**2018**	**2017**	**2016**	The slight decrease recorded in 2018 is largely owing to an increase in the number of weather events that caused service interruptions. This factor, combined with a higher volume of customer requests, forced us to extend connection lead times in some cases.
– simple connections (% completed within 10 business days)	88	92	90	
	2020 target: > 90			
– work completed by the date first given to the customer (% of cases in which technical services were completed by that date)[e] *(2018 data verified by EEM Gestion ESS)*	88	85	n.d.	In 2018, we stepped up our efforts in this area, for example by introducing a dedicated telephone line and designated contacts for real estate developers and electrical contractors. As a result, this indicator improved despite the increased number of requests.
	2020 target: > 90			
Annual capital investment in Québec ($B) *(Financial statements audited by KPMG, Ernst & Young and the Auditor General of Québec)*	**2018**	**2017**	**2016**	Our capital investments were below the targets set in the *Strategic Plan 2016–2020*. Nevertheless, we contributed significantly to the Québec economy, with purchases of goods and services totaling some $2.8 billion per year.
	3.4	3.8	3.5	
	4.0	*3.9*	*3.9*	

d) Excluding the large-power industrial rate (Rate L).

e) Indicator adopted in 2017, applying to all customer requests.

2018 ASSESSMENT (CONTINUED)

OTHER INDICATORS	Hydro-Québec's results			Comments
Combined customer satisfaction index (out of 10)[f] *(2018 data verified by EEM Gestion ESS; 2017 and 2016 data verified by Bureau de normalisation du Québec)*	**2018** 8.2	**2017** 8.2	**2016** 8.1	The results attest to our continuing efforts to maintain and improve customer service.
Complaints *(2018 data verified by EEM Gestion ESS; 2017 and 2016 data verified by Bureau de normalisation du Québec)*	**2018** 2,740	**2017** 2,914	**2016** 3,836	The substantial decrease recorded over the three-year period is essentially the result of improvements in customer services, such as the introduction of new products for low-income customers and closer monitoring of service connection lead times, as well as our proactive communications.
Unadjusted System Average Interruption Duration Index – Distribution (minutes)[g] *(2018 data verified by EEM Gestion ESS)*	**2018** 411	**2017** 278	**2016** 338	The 2018 decline in this indicator is chiefly related to the frequency and severity of weather events that damaged the power system, ravaged nearby vegetation and caused outages.
Unadjusted System Average Interruption Duration Index – Transmission (minutes)[h] *(2018 data verified by EEM Gestion ESS)*	**2018** 26	**2017** 44	**2016** 34	The 2017 increase is mainly attributable to a weather event affecting Frontenac-1 substation, which alone accounted for 12.6 (or 28%) of the 44.3 minutes of interruption.
Average call wait time at our customer relations centers (seconds) *(2018 data verified by EEM Gestion ESS)*	**2018** 87	**2017** 84	**2016** 99	Improvements to customer services in the past few years have enabled us to reduce the average call wait time since 2016.
Energy savings resulting from our energy efficiency initiatives (GWh)[i] *(2017 and 2016 data verified by Bureau de normalisation du Québec)*	**2018** 455	**2017** 524	**2016** 534	The decrease in energy savings in 2018 stems mainly from the smaller number of major projects carried out under the Buildings Program Catered Component. We are continuing to adapt our energy efficiency offerings so as to provide new ways to achieve savings.
Greenhouse gas emissions (t CO_2 eq.) – off-grid systems – vehicle fleet *(2017 and 2016 data verified by Bureau de normalisation du Québec)*	**2018** n.d.[j] 51,967[k]	**2017** 221,457 51,063	**2016** 223,625 51,571	Emissions from the light-vehicle fleet continue to decline. The increase in 2018 is attributable to the heavy-vehicle fleet.
Average cost of generation (C¢/kWh) *(Benchmarking of certain cost components by Electric Utility Cost Group)*	**2017** 2.0	**2016** 2.1	**2015** 2.1	Our cost of generation remained relatively stable from 2015 to 2017 as a result of tight cost control.

f) Indicator adopted in 2016 to replace the overall customer satisfaction index used in previous assessments (2015 and 2012).

g) System average interruption duration per medium-voltage customer (outages and scheduled interruptions). Data not comparable to previous assessments (2015 and 2012), which used a combined normalized index (distribution and transmission).

h) System average interruption duration per customer (outages and scheduled interruptions). Data not comparable to previous assessments (2015 and 2012), which used a combined normalized index.

i) New indicator adopted in 2016 to replace the one used in previous assessments (2015 and 2012), which was based on cumulative total energy savings.

j) The 2018 figure will be published in the *Sustainability Report 2018*.

k) The verified final figure will be published in the *Sustainability Report 2018*.

GENERATION

INSTALLED CAPACITY — 37,310 MW

63 HYDROELECTRIC GENERATING STATIONS[a] — 36,767 MW

Robert-Bourassa	5,616	Sainte-Marguerite-3	882	Péribonka	385	Manic-1	184
La Grande-4	2,779	Laforge-1	878	Laforge-2	319	Rapides-des-Îles	176
La Grande-3	2,417	Bersimis-2	845	Trenche	302	Chelsea	152
La Grande-2-A	2,106	Outardes-4	785	La Tuque	294	Sarcelle	150
Beauharnois	1,900	Eastmain-1-A	768	Romaine-1	270	La Gabelle	131
Manic-5	1,596	Carillon	753	Beaumont	270	Première-Chute	131
La Grande-1	1,436	Romaine-2	640	McCormick	235	Les Cèdres	113
René-Lévesque	1,326	Toulnustouc	526	Rocher-de-Grand-Mère	230	Rapides-des-Quinze	109
Jean-Lesage	1,229	Outardes-2	523	Paugan	226	Rapides-Farmer	104
Bersimis-1	1,178	Eastmain-1	480	Rapide-Blanc	204	Other (18 generating stations rated less than 100 MW)	771
Manic-5-PA	1,064	Brisay	469	Shawinigan-2	200		
Outardes-3	1,026	Romaine-3	395	Shawinigan-3	194		

a) 62 managed by Hydro-Québec Production and 1 by Hydro-Québec Distribution.

24 THERMAL GENERATING STATIONS[b] — 543 MW

Bécancour (gas turbine)	411
Other (23 diesel plants on off-grid systems)	132

b) 1 managed by Hydro-Québec Production and 23 by Hydro-Québec Distribution.

OTHER SOURCES OF SUPPLY — 10,675 MW

Churchill Falls generating station [Churchill Falls (Labrador) Corporation Limited][a]	5,428
41 wind farms operated by independent power producers[b]	3,876
8 biomass and 4 biogas cogeneration plants operated by independent power producers[c]	272
7 small hydropower plants operated by independent power producers[b]	107
Other suppliers[d]	992

a) Hydro-Québec has access to almost all the output until 2041.
b) Hydro-Québec purchases all of the output.
c) Hydro-Québec purchases almost all the output.
d) Hydro-Québec has access to the output of these suppliers.

HYDROELECTRIC GENERATING STATION UNDER CONSTRUCTION — 245 MW

Romaine-4	245

TRANSMISSION

Voltage	Lines (km)	Substations (number)
765 and 735 kV	11,918[a]	41
450 kV DC	1,218	2
315 kV	5,498	80
230 kV	3,252[b]	53
161 kV	2,140	43
120 kV	6,965	219
69 kV or less	3,370[c]	94[d]
Total	**34,361**	**532**

a) Including 469 km of 735-kV lines operated at 315 kV.
b) Including 33 km of 230-kV lines operated at 120 kV.
c) 3,098 km of lines operated by Hydro-Québec TransÉnergie and 272 km by Hydro-Québec Distribution.
d) 83 substations operated by Hydro-Québec TransÉnergie and 11 by Hydro-Québec Distribution.

DISTRIBUTION

Medium voltage	Lines (km)
34 kV	755
25 kV	112,466
12 kV	4,714
4 kV or less	195
Total	118,130
Low voltage	106,529
Total	**224,659**

OUR MAJOR FACILITIES

Generating station rated 245 MW or more	●	Hydro
	▲	Thermal
Other facilities	○	Generating station under construction
	■	735-kV substation
	□	735-kV substation under construction
	———	735-kV line
	- - - -	735-kV line under construction
	- - - -	450-kV direct-current line
	⋈	Interconnection
	——■——	Neighboring system (simplified)

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Hydro-Québec wishes to thank all
the employees and suppliers whose photos
appear in this Annual Report.

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