Annual Report 2021

Hydro Québec

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COVER

Rivière des Outaouais (Ottawa River)
In the background, Carillon generating station.

NOTE

Some of the photographs in this document were taken before the pandemic and the implementation of public health measures by Hydro-Québec.

HYDRO-QUÉBEC IN NUMBERS

$3,564 million
Net income in 2021

$4.9 billion
Contribution to the Québec government's revenue in 2021

$4.2 billion
Investments in Québec in 2021

210.8 TWh
Net electricity sales,
including 35.6 TWh in exports

7.39 ¢/kWh
Residential rate,
the lowest in North America

97%
Public satisfaction index

$7.65 million
Total donations raised for Centraide
in the 2021 Hydro-Québec employees' and pensioners' fundraising campaign, an amount that has grown steadily for the past seven years

$17.4 million
Donations and sponsorships to 422 organizations in 2021

We're championing an ambitious collective project.

Together, we are working to reduce the economy's reliance on carbon and step up the fight against climate change.

We're playing a leading role in the energy transition.

The choices and actions we opt for today will shape the world we leave to future generations.

Our role and our reality are changing.

We must strengthen the grid and adapt our offerings to the expectations of our customers, who are increasingly aware of their energy footprint.

MESSAGE FROM THE CHAIR OF THE BOARD

Jacynthe Côté
Chair of the Board

Throughout the year, the Board of Directors worked with Management to ensure Hydro-Québec's success. We were particularly active in drafting the company's new strategic plan, which sets out Hydro-Québec's priority objectives for the coming years.

In terms of commercial activities, we were delighted by New York State's selection of the joint proposal submitted by Hydro-Québec and Transmission Developers, proponent of the Champlain Hudson Power Express. The 1,250-MW lines that will be built on either side of the border under this project will deliver clean energy covering approximately 20% of New York City's electricity needs.

In 2021, the Board focused on health and safety issues, closely monitoring the actions taken by the company after accidents occurred on its jobsites and in its facilities, some of which unfortunately resulted in the death of contractors' employees. The Board provided Management with its full support in analyzing and managing these accidents.

The Board also paid special attention to Hydro-Québec's relations with First Nations and the Inuit Nation. Training sessions and discussions were held to raise awareness about the historical context and the rapport that the company hopes to build with Indigenous communities going forward.

The Board approved two key projects: a partnership between Hydro-Québec and Énergir to convert buildings to dual energy; and the joint acquisition, with Innergex énergie renouvelable, of two hydroelectric generating stations in New York State, which will allow the company to increase its participation in the U.S. renewable energy market.

The Board supported the creation of a team whose mission is to promote equity, diversity and inclusion within the company. In addition, it closely monitored Hydro-Québec's progress regarding its commitments in connection with the energy transition and the rollout of public fast charging stations for electric vehicles, among other things.

This past year, the Board welcomed two new members, Geneviève Biron and Marco Dodier, whose skills expand the Board's expertise.

My fellow Board members and I would like to highlight the outstanding work done by the entire Hydro-Québec team in 2021, which led to the excellent financial results posted by the company, including remarkable net income of $3,564 million.

Jacynthe Côté

MESSAGE FROM THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

In 2021, Hydro-Québec pulled out all the stops to deliver the best financial results in its history for continuing operations—which is to say, without taking into account the disposal of assets. We posted net income of $3,564 million, compared to $2,303 million in 2020. The dividend of $2,673 million we will pay to our sole shareholder, the Québec government, represents our biggest contribution to the provincial coffers to date.

Our performance is in large part attributable to the rebound in electricity demand both here at home and in neighboring markets, combined with the outstanding readiness of our operational assets, despite the complications created by the pandemic.

Our financial results take on even greater meaning in light of our unparalleled satisfaction ratings, particularly from our customers regarding the services we provide.

With 2021 behind us, our sights are now resolutely turned to the future that we are working to build with great enthusiasm and resolve.

It was against the backdrop of the collective challenge of transitioning to a low-carbon economy that we drafted our *Strategic Plan 2022–2026* in the past year.

Enhanced by a broad consultation of our stakeholders, the Plan outlines the major issues we face and lays out the roadmap that will guide our actions as we continue to transform our remarkable power system into a smarter grid capable of integrating new renewable energy sources and handling substantial growth in demand. A grid that will enable our customers to maximize the energy efficiency of each kilowatthour they consume and that will remain among the most competitive in North America.

The challenges that lie ahead are significant, but we're prepared to meet them head on as evidenced by the strong attachment to the company shown by all members of the staff throughout the second year of the pandemic. Every day, our employees combine their efforts to serve Québec's collective aspirations. My colleagues on the management team join me in thanking all of them for their contribution and ongoing commitment.

Sophie Brochu

Pierre Fortin, Sophie Brochu, Julie Boucher and Éric Filion

Jean Matte, Geneviève Fournier and Pierre Despars

Pierre Gagnon, Jean-François Morin, Jean-Hugues Lafleur, Claudine Bouchard and Nathalie Dubois

Our management team

Consult the management team webpage for the titles of the senior executives pictured above. All public health measures in effect when the photos were taken were respected.

COLLECTIVE ENERGY

Our dreams in action

A successful energy transition in Québec requires more than a desire to make it happen: it also requires action. In 2021, we launched *Collective Energy*, an ambitious initiative inviting all Quebecers to share their ideas and aspirations in three key areas—the green economy, sustainable mobility and responsible energy use.

The aim of *Collective Energy* is to guide Quebecers through the transition, first by asking for their input, then by enlisting them in the selection and development of promising projects that will benefit communities across Québec. The initiative is unfolding in three phases:

- During the extensive public consultation carried out in early 2021, we asked our employees and the population at large to answer questions and submit their ideas on Québec's energy future.
- Through summer and fall 2021, we compiled the results and began examining the ideas proposed. Sixteen collective dreams emerged, some of which are presented in the following pages. Many of them will go on to inspire projects that will be assigned to teams made up of employees and external partners, including experts in various fields. Other ideas will go toward enhancing actions or prioritizing projects we already had in mind.
- In 2022, we'll start announcing the projects inspired by the ideas submitted. Some will take shape over the course of the year; others, more ambitious or complex, will require more lengthy preparation.

As part of our internal consultation, over 7,000 employees responded to a survey, and more than 500 took part in virtual coffee breaks. In total, they submitted some 6,700 ideas.

Provincially, nearly 27,000 Quebecers from every region took part, submitting over 15,000 ideas. Below are the main results of the survey along with some of the ideas regarding our three key focus areas:

- **50%** of respondents wanted Hydro-Québec to prioritize **transforming Québec's economy using our green energy**.
- **32%** wanted to **reimagine energy use**.
- **18%** wanted to **rethink mobility to make it more sustainable**.

At the heart of this undertaking is the website Collectiveenergy.ca. Initially launched for the consultation, it then served to publish the results and continued to fulfill this purpose throughout the year.

The key to our success

The COVID-19 pandemic forced us to innovate in our work organization. We asked all employees whose jobs could be performed remotely to work from home. The need to comply with health regulations has called for exemplary resilience on the part of our workforce these past several months. Like many other employers, we foresee a gradual exit from the crisis and are already preparing for a return to the office that takes the unprecedented operational realities of the “new normal” into account.

Seeing to employee health and wellness has become more important than ever, as is offering a workplace that is safe at all times. In the office, on the jobsite, in the shop, atop a tower or up in a boom lift, risk-taking remains unacceptable and will not be tolerated. Prevention is essential; taking action is vital.

While continuing to foster the development of skills and talent, we’ve planned a number of initiatives to promote equity, diversity and inclusion, the better to maintain an open, attractive work environment that's in step with the evolution of Québec society.

THE KEY TO
OUR SUCCESS

Remote management, new collaborative technologies for telework, the application of health measures, adjusted working methods: throughout it all, our employees demonstrated a great deal of resilience and courage. As for managers, they have had to adapt their leadership style and management practices to keep their teams motivated and continue delivering results.

We tackle daily challenges related to the pandemic.

Emergency measures

In keeping with our emergency response plan, pandemic-related health measures were continuously monitored. Much of the focus was on applying government health guidelines, managing travel-related issues and planning for a gradual return to the office. We continued to work closely with external partners like Québec public security, particularly during the vaccination campaign. Though our employees worked more hours in 2021 compared to the previous year, we had fewer cases of infection among our ranks than the national average—concrete proof of the effectiveness of our measures.

We also continued to ensure the proper implementation of health measures as the situation evolved, in keeping with public security guidelines. In addition to maintaining telework for employees whose jobs could be performed remotely, we went on monitoring fieldwork operations and implemented a risk-based inspection and audit program. Quarantine and evacuation procedures were also developed for employees working outside of major urban centers or on remote jobsites.

COVID-19 and remote work

Throughout the year, our employees and managers had to remain nimble and adaptable as they continued the full-time telework experiment. By May, the reality of work experience brought about by the pandemic had prompted us to come up with a flexible hybrid work plan. This plan recognizes that digital technologies provide new remote collaboration opportunities across Québec, sharply reducing the need for travel—and by the same token, lowering the risk of accidents and the GHG emissions associated with transportation.

After over a year of telework for a significant portion of our staff, we devised a plan for progressively going back to the workplace and transitioning smoothly to a hybrid work model. A key step in the plan consisted in three return-to-the-office pilot projects conducted during summer 2021 in the cities of Québec, Chicoutimi and Montréal.

Supply chain logistics issues

In 2021, we continued to strengthen our supply chain while increasing our strategic material stocks. We attained these goals through different means, including weekly monitoring of at-risk items, placing orders months in advance, securing and boosting stock coverage, and optimizing our planning for equipment needs.

Our vaccination clinic

In spring 2021, the Québec government asked large employers to serve as COVID-19 “vaccination hubs.” We responded by teaming up with Intact Assurance to run a clinic in Saint-Hyacinthe under the supervision of the local health authority. Over 40 employees, including nurses and kinesiologists, took part in the initiative, which offered a drive-through vaccination service on weekdays between 8 a.m. and 6 p.m. The clinic ran from May 24 to August 27, during which over 20,000 vaccines were administered. Hydro-Québec’s Centre de services partagés, Direction principale – Sécurité corporative, Direction – Santé et sécurité and Management were involved in the project, which received high marks from employees and the general public.

THE KEY TO
OUR SUCCESS

We're developing a health indicator that takes into account different risk factors such as disengagement, internal mobility and use of the employee and family assistance program. A first measure taken at year-end will allow us to monitor trends throughout 2022.

We are continuously improving our OHS practices.

Prevention and information

Tragically, four contractor employees mandated to work on our projects and activities lost their lives in 2021. Following these serious incidents, we stepped back to assess our occupational health and safety (OHS) risk management. We will continue to develop simple, well-communicated and properly enforced standards related to key hazards. Our managers will also continue to play a major role by maintaining a strong presence in the field, with full support from our prevention teams, to facilitate start-of-shift meetings, make observations in the field, draw lessons from incidents. and implement best practices. Each life lost is one too many.

OHS and our goods and services providers

To improve OHS management among our suppliers, we designed a program based on four key tenets:

- Establishing (2021) and rolling out (2022) OHS selection criteria in our requests for proposals
- Drafting and deploying consistent OHS requirements for key hazards (2021–2024)
- Implementing a mechanism for assessing the OHS performance of our suppliers (2022)
- Providing our contract managers with training and support to improve the supervision of suppliers (2022–2024)

Focusing on key hazards

We have improved standards for moving vehicles, including off-road vehicles and those found on construction sites. Driver training for off-road vehicles (ATVs and snowmobiles) has refocused on individual skills. Light vehicles are being equipped with technology that alerts the driver to excess speed, and we are also cutting back on travel, a move that has been made easier by virtual meetings. With regard to energy sources (electrical, mechanical, pneumatic, hydraulic, thermal, radiation), we are currently updating the *Work Safety Code*. The latest version will be published in 2022 and its content will be integrated into employee training.

Improving our OHS performance

Developing the skills and knowledge of our managers, employees and goods-and-services suppliers is key to improving our OHS performance. Below are some of the initiatives launched in 2021:

- The new health and safety Web portal provides quick and easy access to knowledge-building tools and resources aimed at encouraging the adoption of new OHS behaviors.
- The OHS introductory training course transposes preventive, collaborative and positive leadership behaviors to scenarios in our various work environments.
- The danger awareness campaign aims to stimulate our culture of caring through communications tools featuring employees and their families. The emphasis is on vigilance and quickly detecting risks in different personal and professional situations.

THE KEY TO
OUR SUCCESS

The past year saw many employees change positions, calling for considerable efforts to meet company objectives and cope with a growing need for personnel. By the end of the second quarter, job vacancies were twice as high as usual. The multiple changes impacting the employment landscape (labor shortages, diversity, telework) have forced us to come up with innovative hiring strategies.

We constantly strive to enhance our hiring strategies.

Our workforce

At year-end, we had 21,168 permanent and temporary employees. While only 771 workers left for retirement in 2021, the number of new hires was up from previous years: 587 permanent and 1,803 temporary positions were filled during the year, despite the pandemic.

Millennials, i.e., those born between 1980 and 2000, accounted for 20% of our new hires.

In 2021, 3.0% of our total payroll was put toward skills development.

Future workforce needs

Transformative projects that have an impact on our basic processes, along with new areas of activity, have prompted our HR function to analyze how these changes will affect jobs, skills and development needs. In response, we're designing a collaborative approach that uses digital technologies to integrate performance support and learning into the flow of work. This approach puts the accent on personalized professional development and making skills development more self-directed.

Proactive workforce management

In today's context of workplace transition and labor shortages, a company-wide portrait of our current and future staffing needs is vital for proactive resource management. The efforts made include:

- Analyzing the impact of the labor shortage (changes in roles and expected behaviors)
- Optimizing resource allocation through cross-functional workforce planning
- Creating proactive human resource management strategies based on a global view of key projects
- Launching a skills architecture initiative
- Harnessing technology to integrate skills development into the workflow
- Managing talent and employee experience
- Putting employees in charge of their own skills acquisition (incorporating just-in-time training into the flow of work)

Employee experience and talent

We reaffirmed our commitment to putting our employees at the heart of our actions and decisions. We've created more opportunities for meetings and for incorporating employee input into company issues by setting up a permanent consultation group and online talks. In addition, frequent meetings between employees and their managers are conducive to the full development of potential. To meet current job market challenges, we are pursuing our initiatives with respect to telework, digital solutions and real estate strategies.

THE KEY TO
OUR SUCCESS

We set out to be a unifying force, which means treating everyone with fairness, openness and respect. We recognize the richness diversity brings. We function as one big family, ready to cooperate with anyone who's willing to cooperate with us.

We support diversity through concrete actions.

Equity, diversity and inclusion

In 2021, several concrete and promising actions demonstrated just how seriously we take the question of equity, diversity and inclusion. Senior Management's confirmation of Hydro-Québec's commitment led to the adoption of a clear vision calling for further action. To achieve these aims, we hired a Manager – Equity, Diversity and Inclusion, who answers to the highest echelon of our Groupe – Talents, culture et évolution under the watchful eye of the Management Committee and Board of Directors. In addition to her team of content experts, each underrepresented group in the company is supported by a member of the Management Committee, who leverages its cause.

During the year, various initiatives and pilot projects were launched or enhanced to speed our progress: internships for students with disabilities, a project for people having little-to-no education and an integration program for immigrants. Recommendations have also emerged from employee groups, such as a mentoring scheme for people from ethnocultural communities.

Inclusion week

For the second year running, we dedicated an entire week to inclusion. While this year's edition featured five special activities and such personalities as Louise Richer, Philippe Laprise and Fabrice Vil, the spotlight was above all on our own: employees from our offices and worksites across Québec.

Employees from every underrepresented group—women, people with disabilities, cultural minorities and members of the Indigenous and LGBTQ+ communities—opened their hearts to us, sharing their journeys, expertise, stories and struggles, all with humor and authenticity.

Their testimonials make two things clear: one, that we are all more similar than we are different; and two, that diversity is a source of strength. All of this underscores the importance of inclusion, not just in our company, but also in society as a whole.

Women at Hydro-Québec

This past year saw the rise in representation of women employees in middle and senior management, where 40% gender parity has now been achieved. In terms of women's professional development, over 200 of our female employees have now completed the Effet A leadership program. Various initiatives by groups of women leaders are also underway, and we've consulted with some 50 women employees at Hydro-Québec to identify obstacles to professional fulfillment.

At Hydro-Québec, cultural minorities account for:

5.6% of managers

14.9% of office workers

19.0% of engineers

15.3% of specialists

4.5% of technicians

Across the board, visible and ethnic minority representation is on the upswing.

THE KEY TO
OUR SUCCESS

At every stage of our planning and decision-making processes, our governance model ensures careful consideration of the collective interest from an economic, environmental and social standpoint. Essentially, our governance sets out to make sustainability integral to our every operation and project.

We practice responsible governance.

Combating corruption

As one of the companies in Québec that awards the most contracts, Hydro-Québec has a duty to adopt best practices in the areas of ethics and transparency. Attaining ISO 37001:2016 certification last June—a first in Québec for a government-owned corporation—confirms the reliability and robustness of our anti-bribery management system (ABMS). This achievement reflects our continuous improvement approach and supports our desire to integrate sustainable development into our governance, as well as into our various activities and projects. ISO 37001 proposes ways to prevent, detect and address corruption and provides guidelines for the design, implementation, maintenance and improvement of an ABMS. Obtaining the certification also enables us respond to the call by the United Nations to collectively combat corruption.

Responsible procurement

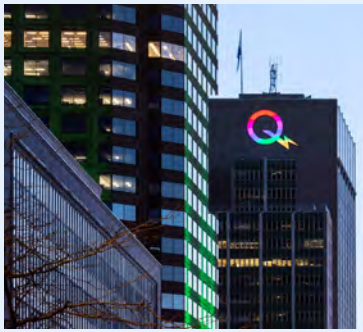
Hydro-Québec will not tolerate labor practices that run counter to the values and expectations with respect to suppliers set out in its most recent *Supplier Code of Conduct*.

That's why we strongly encourage our suppliers to take every necessary measure to ensure that their supply chains are free of forced labor and that their established practices comply with Québec and international human rights and labor laws.

We therefore ask suppliers exposed to human rights risks to adopt internationally recognized traceability protocols. These protocols allow them to identify the source of their inputs and closely monitor the supply chain, right up to manufacture and distribution of the finished product. Such tools are essential to improving transparency and ensuring that our supply chain is free of forced labor.

A firm commitment

In March, in keeping with our efforts to purchase more goods and services from social economy enterprises and create sustainable value in the community, we signed a commitment letter under the *L'économie sociale, j'achète !* initiative of the Conseil d'économie sociale de l'île de Montréal (CESIM). These organizations support job creation, the fight against poverty, social inclusion, academic completion, gender equality and the integration of immigrants. Hydro-Québec works with a number of them across the province, including Témabex (housekeeping) in Rouyn-Noranda, Groupe RCM (waste collection) in Trois-Rivières and Services Industriels RC (manufacturing of utility bags and tool holders) in Rimouski.



Two top honors in sustainability

In 2021, Hydro-Québec once again earned accolades for its sustainable practices by placing first in *Corporate Knights* magazine's ranking of Canada's Best 50 Corporate Citizens. The annual rating points up the responsible business practices of corporations that make environmental, social and economic issues central to their activities. Our social responsibility performance also gained us an EcoVadis Platinum medal. EcoVadis assessments cover four areas—Environment, Labor & Human Rights, Ethics, and Sustainable Resource Procurement—and are required by many of our customers, including Cascades, Kruger, Imerys and Borealis AG, as part of their responsible procurement approach.

Sustainable coexistence

We have undertaken to deepen and strengthen our dialogue with the First Nations and the Inuit Nation so that, together, we can chart a path that leads to our common goals. This commitment recognizes the vitality of Indigenous peoples and promotes collaboration with them on Québec's energy development. Our desire to build a common trajectory provides a solid foundation for a new chapter in our relations: an improved partnership that paves the way for a better future for all.

The past year was marked by renewed ties between Hydro-Québec and Indigenous communities through the signing of mutually satisfactory agreements rooted in sincerity, respect and attentive listening.

Now more than ever, we are working to implement collaboration mechanisms to strengthen our relations and increase the spin-offs for affected communities: training, jobs and contracts. Our goal? To grow what unites us and overcome what has divided us in the past, in the name of building a strong collective future.

SUSTAINABLE COEXISTENCE

We maintain mutually beneficial relationships.

We want to build sustainable relations with the First Nations and the Inuit Nation to contribute to their development. One of the ways we take steps to achieve this is through the forward-looking agreements that we sign with Indigenous communities. Now more than ever, it's in the interest of all Quebecers to build a future in which harmonious coexistence contributes to the collective enrichment of all.

Declaration of commitment

As part of the Grand Economic Circle of Indigenous People and Quebec, held in November, we presented a Declaration of Commitment to the First Nations and the Inuit Nation, affirming our desire to deepen and strengthen dialogue. Hydro-Québec wants to work with these nations to define common objectives and chart a path for achieving them. Our ambition is to foster, value and embrace Indigenous promise in every aspect of our activities.

In concrete terms, Hydro-Québec announced the following actions:

- Develop a procurement strategy with Indigenous companies.
- Organize a forum on the Indigenous workforce with the objective of becoming an employer of choice in their communities.
- Contribute $500,000 to the creation of the First Nations Executive Education program, which will be offered at HEC Montréal.
- Create an initiative to support entrepreneurship among women from First Nations and the Inuit Nation.

Progressive relations with Indigenous peoples

On September 22, 2021, Hydro-Québec was awarded the PAR Silver certification during the Canadian Council for Aboriginal Business gala. The accomplishment recognizes Hydro-Québec's participation in the Progressive Aboriginal Relations (PAR) program and its commitment to being:

- A workplace that is open and receptive to Indigenous employees.
- An excellent business partner for Indigenous companies.
- An electricity provider that meets the expectations of its Indigenous customers.
- A company that is intent on ensuring that its facilities and activities integrate into Indigenous territories.

Memorandum of understanding with Kahnawà:ke

In June 2021, the Mohawk Council of Kahnawà:ke and Hydro-Québec signed a memorandum of understanding (MOU) that paved the way to an unprecedented partnership with respect to the future Hertel–New York interconnection line. This line would be used to supply New York City with green energy from Hydro-Québec. The Mohawk Council of Kahnawà:ke would become a minority owner of the line, contributing to the costs of the project and benefiting from a variety of economic spin-offs for a 40-year period. As set out in the MOU, the Mohawks of Kahnawà:ke would also collaborate on the archaeological work for the project and on the land use study for the southern part of the study area.

Discussions on topics of mutual interest

In October, the Atikamekw Council of Wemotaci and Hydro-Québec signed a framework agreement that provides for a negotiation committee to be set up in order to hold straightforward exchanges on issues of importance to the relationship. The discussions will focus on determining the potential benefits of Hydro-Québec's activities for the Atikamekw community of Wemotaci.

Agreement with the Innu community of Ekuanitshit

In July 2021, Hydro-Québec and the Innu community of Ekuanitshit signed the *Nashkuaikan Agreement*, which addresses the community's concerns about changes to the Romaine project and improves certain elements related to the implementation of the *Nishipiminan Agreement*, signed in 2009. Among its provisions, the new agreement sets up the Nashkuaikan Fund, earmarking $57 million to finance key community initiatives over a 50-year period. The agreement also provides for activities to help Hydro-Québec workers in the Minganie region learn about Innu culture and includes the possibility of offering and awarding contracts for the construction and operation of the Romaine complex to Innu companies from the community of Ekuanitshit. Lastly, the *Nashkuaikan Agreement* sets the stage for Hydro-Québec and Ekuanitshit to start discussions on a collaboration to develop a pilot project for energy-efficient buildings in the community.

Hydro-Québec contributed to Nunavik's vaccination campaign by supporting the Red Cross with its air transportation needs. We provided transportation for the organization's medical personnel, vaccination equipment and vaccine doses. Seven missions were carried out from February to September in the communities of Kuujjuaq, Inukjuak, Puvirnituq and Umiujaq.

We develop and strengthen dialogue.

Apuiat project

On February 4, 2021, François Legault, Premier of Québec, and Sophie Brochu, President and CEO of Hydro-Québec, announced a historic partnership with the Innu Nation. The Apuiat project will involve the construction of a wind farm comprising approximately 50 wind turbines with a total installed capacity of 200 MW in Port-Cartier, in the Côte-Nord region. The contract signed between Hydro-Québec and Parc éolien Apuiat S.E.C. (a partnership between several Innu communities and Boralex) sets out an electricity purchase price that will make Apuiat the most competitive of all wind farms under contract in Québec.

Three projects to showcase Innu culture

In line with our desire to rebuild people-focused bridges with First Nations, we are supporting the community of Uashat mak Mani-utenam with three projects:

- The establishment of a cultural center in the community to showcase Innu culture
- The renovation of the Sacré-Cœur chapel with a view to giving it a new life
- The creation of a video highlighting the cultural vitality of Eastern Canada's Indigenous communities, including Uashat mak Mani-utenam. This video was broadcast on September 30, 2021, as part of the National Day for Truth and Reconciliation.

Converting off-grid systems

In 2021, Hydro-Québec stepped up discussions with its partner Les Énergies Tarquti to set out the terms of a framework agreement for a regional partnership for the construction and operation of renewable energy facilities in the territory of Nunavik. The framework agreement was signed in early December. In Inukjuak, the proponent of the Innavik project continued construction of its run-of-river hydropower generating station, which is slated for commissioning in late 2022. For its part, Hydro-Québec continued work to convert the community's distribution system and started building the 25-kV substation. We also continued discussions aimed at establishing a partnership with the proponent of the renewable energy project for the communities of Kuujjuarapik and Whapmagoostui.

Connecting La Romaine and Unamen Shipu to the grid

A new line spanning some 75 km was built between the Rivière Natashquan and the La Romaine airport to connect the communities of La Romaine and Unamen Shipu to Hydro-Québec's main grid. Designed to handle 161 kV, the new line is currently operated at 34.5 kV from two substations located at either end. This project makes a direct contribution to the decarbonization of Québec since it provides a supply of clean and renewable energy to these remote communities that had been supplied solely by a thermal generating station since 1971.

Integrating and expanding ancestral knowledge

In the summer, an archaeological inventory was carried out along the route of the future Appalaches–Maine interconnection line. During the draft design studies for the project, 11 areas with archaeological potential were identified along this route, and 8 of these were found to have topographic and physical characteristics suitable for camps or for the practice of activities valued by First Nations. Digs were carried out in collaboration with our consultant Archéotec and the offices of Ndakinna and Nionwentsïo of the Abenaki and Huron-Wendat First Nations. The work undertaken is a testimony to our respect for Indigenous heritage, our commitment to integrate and expand ancestral knowledge at every step of the archaeological research process, and our contribution to the advancement of knowledge on the history of human occupation in Québec.

Focused on service

Meeting our customers' expectations means constantly improving our ways of doing things and the service we provide. This daily challenge pushes us to implement increasingly targeted initiatives so that we can offer the quality services that our customers need.

Again this year, we adapted our organization to the pandemic, maintaining measures of solidarity with the Québec population that we adopted in 2020. This choice reflects our desire to continue to support our customers through this particularly challenging time.

Despite the unique difficulties of the past year, we were able to provide a reliable and sustainable electricity supply, while meeting or even exceeding customer expectations.

FOCUSED
ON SERVICE

We are constantly enriching the customer experience.

The turmoil caused by the global COVID-19 pandemic has had a direct impact on most of our customers. To decrease the financial burden in these uncertain times, we quickly adapted the support available for people experiencing payment difficulties. In particular, we made it easier to access payment arrangements through digital tools and offered this possibility to more customers.

Demand response and dynamic pricing

In December 2019, Hydro-Québec introduced two new rate offerings (with voluntary participation) for residential and farm customers (Rate D), small-power customers (Rate G) and medium-power customers (rates M and G9). These customers can save money by reducing their consumption during winter peak hours, from 6 to 9 a.m. and 4 to 8 p.m., on days when system load is high. This is our way of thanking them for helping us reduce electricity demand during peak periods.

In the second phase of the rollout of dynamic pricing, we recorded an average curtailment of 65 MW per peak demand event, equivalent to the power needed to supply 12,000 homes in winter. Further to the positive results obtained in winters 2019–2020 and 2020–2021, we launched the third phase of the rollout. From September to November 2021, our recruitment efforts led us to increase the number of customers signed up for dynamic pricing, bringing the total to 160,000.

Online Billing

Nearly 62% of our customers are now using Online Billing, compared to 47% at the end of 2019 and 52% at the end of 2020. We donated $3 to Centraide for each customer who signed up for Online Billing, raising a total of $290,616.

A more popular Customer Space

More than 62% of our customers used their Customer Space to consult their bill or check their electricity consumption in real time, an increase of 4% compared to December 2020 (58%).

USE OF OUR DIGITAL PLATFORMS

PLATFORM	END OF 2020	END OF 2021
Facebook (followers)	206,691	216,565 +4.8%
Twitter (followers)	79,315	80,286 +1.2%
Instagram (followers)	13,739	15,905 +15.8%
LinkedIn (followers)	113,004	130,824 +15.8%
YouTube (views)	5,349,426	11,419,002 +113.5%
Website (Customer Space visits)	37,609,908	38,218,593 +1.6%
Mobile app (logins)	14,688,968	16,315,062 +11.3%

More and more customers are choosing to contact our customer services through social media (Facebook and Twitter) and our online chat service. In 2021, we had 194,247 chats, a 1% decrease compared to 196,754 chats in 2020.

Public satisfaction	Average call wait time	Decrease in the number of complaints
In 2021, 97% of customers reported being "very satisfied" or "quite satisfied" with our performance, compared to 94% in 2019 and 96% in 2020. To continue to improve customer and public satisfaction, we are honing in on customers' perceptions about rates and on the support we offer during outages.	The average call wait time at our customer relations centers was 101 seconds in 2021, compared to 104 seconds in 2019 and 95 seconds in 2020. After achieving wait time reductions in recent years, we have now reached a level that seems to satisfy customers.	At the heart of our business strategies are the customer experience and customer satisfaction. As a result, the number of complaints continues to fall, dropping from 2,231 in 2019 to 1,611 in 2020 and 1,562 in 2021, for an overall decrease of nearly 30% since 2019.

We are actively planning the power system of tomorrow.

Our power grid planning teams are guided by a vision that extends to 2035 and covers asset management, grid reliability and the integration of new technologies and distributed energy resources (DERs). This strategy garnered a Technology Transfer Award from the Electric Power Research Institute (EPRI) in the category Grid Modernization Roadmap Development.

Repairing damage caused by wind and ice

The weather system that swept across Québec in early December triggered episodes of freezing rain and strong gusts of wind that sometimes exceeded 100 km/h. The outages that followed were caused by vegetation coming into contact with power lines. Over 600 line workers were deployed, along with some 150 crews of tree trimmers, working tirelessly to restore power to more than 400,000 customers.

Vegetation management

For the past few months, our teams and suppliers who handle vegetation control have been using a new mobile tool for integrated vegetation management known by its French acronym OGIV. This tool allows users to input information about vegetation control onsite during field operations, and it has many features for effectively coordinating and following up on activities. At the end of 2021, new features related to customer requests, projects, planning and billing were added, making OGIV a comprehensive and efficient tool.

Support to neighboring systems

In January 2021, southeastern Labrador was hit by an ice storm. The storm damaged a nearly 400 km long, 350-kV direct-current transmission line. The weight of the ice on the conductors compromised many support structures and caused ground wires and conductors to sag.

Nalcor, the company that operates the line, asked Hydro-Québec for assistance in de-icing the line so that it could safely and quickly be repaired and brought back into service. Given the length of the stretch that required de-icing, our crews selected the helicopter-assisted method. This technique was developed by Hydro-Québec more than 10 years ago. It involves bringing a pole into contact with the conductors, causing vibrations that dislodge the ice. This very effective method can be used to remove ice from de-energized or live lines (up to 735 kV) over long distances.

A major work blitz

To reinforce and secure the power system in the township of Stoneham (Capitale-Nationale administrative region), our line crews had to replace the conductors and several other devices and equipment on a 1.2-km stretch (30 spans) of the 25-kV distribution line that runs along Highway 371.

Several options were considered, including the possibility of planning the work around a series of short service interruptions. However, to avoid repeated impacts on our customers, we chose to conduct a blitz of dead-line work that required a single planned outage lasting 12 hours.

In addition to carefully scheduling the work sequence, we set up a comprehensive communications plan to inform the 290-odd residents and business owners affected by the service interruption. We worked with the municipality of Stoneham-et-Tewkesbury to ensure that our communications were effective and that all planned activities would proceed as harmoniously as possible. The operation was completed smoothly, without any delays, complaints or traffic interruptions.

The upgrades will allow us to meet the growing demand for electricity in the region and reduce the risk of outages.

FOCUSED
ON SERVICE

In July 2021, we inaugurated our first microgrid, which is located in downtown Lac-Mégantic and was developed in consultation with the community in an environmentally responsible manner. The Lac-Mégantic microgrid was selected by Novae Communications as one of the year's 20 most innovative solutions, which is paving the way for a positive and sustainable economy in Québec.

We act now to prepare a better future for all Quebecers.

Economic recovery in Québec

We launched a marketing campaign to promote the Industrial Revitalization Rate among our business customers. This rate option is in step with the greening and economic recovery of Québec since it encourages the recommissioning of unused equipment and supports projects to convert industrial facilities. We focused our promotion efforts on 500 medium-power industrial customers in regions supplied by our main power system.

A much-appreciated connection

In February 2021, our teams worked with Bell and GIRAT (Gestion de l'inforoute régionale de l'Abitibi-Témiscamingue) to coordinate a project to connect telecommunication towers. The commissioning of these towers improved cell phone coverage in Abitibi-Témiscamingue.

Supporting the local economy

At least 75% of the cables on our transmission and distribution lines are manufactured in Québec, thanks to procurement contracts awarded in 2019 and 2020. These include overhead cables made of aluminum (high, medium and low voltage), underground cables made of copper (medium and low voltage), as well as copper and grounding cables, for a total of $72.75 million that is reinvested in the Québec economy.

National and international distinctions

Hydro-Québec gained recognition among companies from around the world at the Customer Centricity World Series 2021, ranking high among finalists in several award categories, including customer experience and employee experience, and even winning first place in crisis management during major outages. Moreover, Groupe – Distribution, approvisionnement et services partagés continued to earn distinctions, as it has in the past several years. After receiving the Prix Performance Québec 2020, awarded by Mouvement québécois de la qualité, it entered the Canadian scene in November 2021, taking home an Excellence Canada Platinum Award. The Canada Awards for Excellence recognize outstanding performance in the areas of leadership, governance, strategy, customer experience, employee engagement, innovation and wellness.

We launched a pilot project in the Montréal region to test commercial approaches for the installation of central heating systems with thermal storage. These all-electric systems reduce heating-related demand during peak periods by storing heat during off-peak hours. This reduction in demand can translate into savings for customers thanks to dynamic pricing.

We deploy sustainable solutions.

Electric and hybrid vehicles

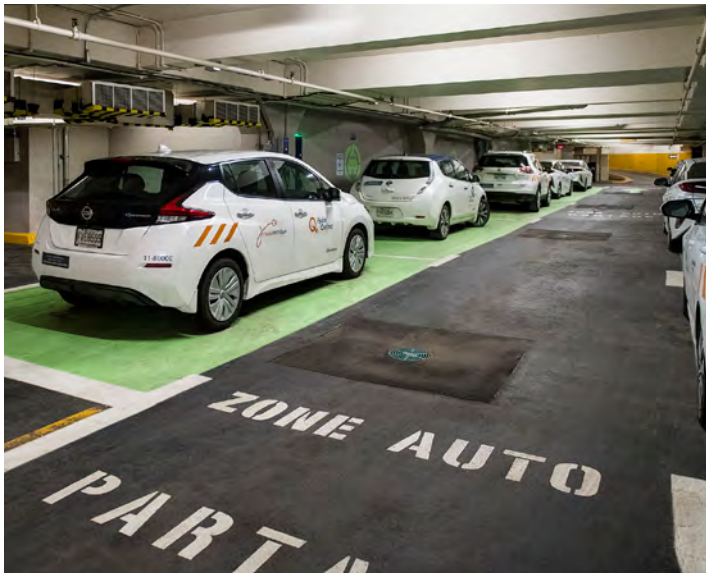
Under our commitment to decarbonize our vehicle fleet, we had publicly pledged to operate 1,100 light plug-in hybrid vehicles by 2026 and 300 specialized electric vehicles by 2030. By year-end 2021, the number of electric or hybrid vehicles had reached 683. However, the decarbonization strategy we developed in 2021 sets out to surpass our initial targets through the acquisition of more all-electric or plug-in hybrid vehicles by 2026—including Ford E-Transit vans, the first in Canada! Beginning in 2022, all end-of-life vehicles will be replaced by all-electric or plug-in hybrid models, absent geographic or technical constraints.

IT and digital projects

For over 30 years, Réseau ACTION TI has been running its annual OCTAS competition to recognize the best IT and digital projects of the year. In 2021, our information and communication technology teams received two OCTAS people's choice awards: one in the digital solutions category for our dynamic pricing project, and the other in the business solutions category for the deployment of our analysis and predictive maintenance center.

A shared vehicle fleet

In 2021, we launched a new carsharing platform that allows employees to quickly book a vehicle from within our fleet. Dozens of vehicles, spread out across 14 locations throughout Québec, can already be used and new locations will be added in 2022. This initiative will increase the usage rate of our vehicles, generate savings and improve user experience. A shuttle between Montréal and the city of Québec was also made available to employees, to offer a safe, eco-friendly and cost-effective option for travel.



Collective energy

Building homes that use less energy. The idea of not wanting to heat the whole neighborhood isn't new. But what if, even before buying a home, you could find out whether it lets heat escape? Many Quebecers suggested the idea of an energy rating that could be used to assess a building's energy efficiency. Such an approach would raise construction standards throughout Québec.

95% of Quebecers would like Hydro-Québec to promote the construction of homes that use less energy.

Taking action to decarbonize Québec

Improving energy efficiency is all about using Québec's energy resources wisely. It is a flexible and economical way to reduce the demand for electricity right at the source while cutting Québec's greenhouse gas (GHG) emissions.

Quebecers can reduce their carbon footprint without compromising their comfort by taking advantage of our energy efficiency programs, which promote ways of using energy that decrease electricity use, especially during peak periods. Leveraging smart technological solutions also plays a key role in decarbonizing Quebecers' consumption habits.

When applied province-wide, energy savings allow us to postpone investments in power generation, transmission and distribution. Avoiding significant supply- and infrastructure-related costs helps keep our electricity rates among the lowest in North America. Saving energy also makes it possible to introduce new uses and applications for electrical power, reduce the carbon footprint of Québec businesses and export more clean energy to neighboring systems.

TAKING ACTION TO DECARBONIZE QUÉBEC

As stated in the 2021 progress report on the Electricity Supply Plan 2020–2029 submitted to the Régie de l'énergie, Hydro-Québec anticipates a 20-TWh or 12% increase in Québec's electricity demand over the 2019–2029 period. During the year, the company began developing new business approaches and new programs to encourage customers to become more involved in efforts to meet the energy conservation targets (8.2 TWh) set out in the plan.

We're emphasizing energy efficiency more than ever before.

Optimizing and updating technology

In light of the new energy context and the technological developments we have seen in the past few years, we undertook two new IT projects: one to optimize our request management system for business customers, and another to update our Home Diagnostic and Dare to Compare tools to provide more customized support for residential customers. Set to launch in 2022, these projects will assist customers' efforts to improve the energy efficiency of their buildings and processes.

In parallel, we asked two outside firms to update our studies on technical/economic potential. The results will help us identify the most promising energy efficiency measures that meet recognized cost-effectiveness criteria.

A new energy efficiency measure

In February 2021, Hydro-Québec added a new measure to its portfolio of energy efficiency initiatives: financial assistance for residential customers looking to install eligible heat pumps. When it comes to heating homes in winter, a heat pump can be up to three times more efficient than baseboard heaters. Even at –20°C, a low-temperature heat pump (sometimes called a "cold climate heat pump") can generate considerable heat and meet part of customers' heating needs. It is an excellent way to bring down electricity bills. At year-end 2021, thanks to the Efficient Heat Pump Program, over 30,000 efficient units had been installed, generating total savings of more than 102 GWh. This program is part of Hydro-Québec's renewed focus on energy efficiency and will help it meet its 8.2-TWh energy savings target for the 2020–2029 period.

Residential customers of off-grid systems also have access to the Efficient Heat Pump Program, which has been open to all Hydro-Québec residential customers since 2021.

Innovative Projects Program

The Innovative Projects Program (formerly known as Sustainable Urban Development) encourages real estate developers and contractors responsible for multiple buildings to install district energy systems and high-efficiency technologies. Participants can qualify for up to $8 million in financial assistance, depending on the energy savings achieved. The developers responsible for the four projects currently underway could receive $14 million in financial assistance, paving the way for 45 GWh in annual energy savings.

In September 2021 we relaxed the program's eligibility requirements to encourage greater participation. Projects involving existing buildings now qualify for financial assistance, and engineering consulting firms can receive incentive compensation for helping customers implement their projects.

Collective Energy

Encouraging positive actions. What if, every time you turned down the heat, turned off the lights, unplugged devices you're not using or took a shorter shower, you received a few dollars as a thank you? Or, what if you had to pay taxes for overusing electricity? It's safe to say you would be even more motivated to change your habits.

84% of Quebecers say they would be in favor of Hydro-Québec initiatives that reward customers for achieving certain energy savings.

TAKING ACTION TO DECARBONIZE QUÉBEC

As part of its winter peak awareness campaign for customers served by off-grid systems, Hydro-Québec launched its *This winter, I'm changing my habits!* contest at the start of the year. To enter, participants had to answer three questions about winter energy consumption. In light of its success, the contest was brought back in winter 2021–2022 with a few changes.

We're making efficient practices our focus.

Efficient Solutions

Designed for business customers, the Efficient Solutions Program provides financial assistance when they implement a wide range of energy efficiency measures. Hydro-Québec made a number of improvements to the program to draw on the expertise of its business partners, improve project cost-effectiveness and make it easier to take part. These changes had a significant impact on program results and customer satisfaction in 2021.

Under the program, Hydro-Québec supported the reopening of Chantiers Chibougamau's kraft pulp manufacturing plant in Lebel-sur-Quévillon with a $3-million investment in energy efficiency measures. The new chlorine dioxide (ClO_2) production facility now uses 91% less energy—less than 876 kWh per tonne of ClO_2, down from 10,094 kWh. That represents roughly 55.7 GWh of annual energy savings, enough to supply over 3,200 homes.

Energy efficiency in Nunavik

Despite the difficulties associated with the pandemic, the discussions launched in 2020 continued in 2021 with leading Nunavik organizations, including the Fédération des coopératives du Nouveau-Québec, Makivik Corporation, Kativik Regional Government and Kativik Municipal Housing Bureau. The objective of these talks is to improve energy efficiency in the region. Based on these early discussions, the 2018 energy audits and a study of the energy efficiency potential, we drew up a preliminary plan of action revolving around residential, business and institutional customers as well as distributed solar power generation.

Energy efficiency in our buildings

At Hydro-Québec, the energy efficiency of our administrative buildings is at the core of our real estate strategy. While all the buildings we own are heated electrically and do not release any greenhouse gas into the atmosphere, we measure our energy consumption continuously. The average age of our building stock is 38 years, and our consumption stands at just under 1 GJ/m^2 per year, which is better than the Canadian average but slightly below our target. We strive to improve our performance with each new renovation or construction project by using the best available technologies. For example, a new building slated to be built shortly, south of Montréal, will use 0.15 GJ/m^2 a year, while the upcoming refurbishment of the electromechanical systems at Édifice Jean-Lesage, home to Hydro-Québec's head office, will cut the building's consumption by 30%.

BOMA BEST certification

BOMA BEST is a Canadian certification program recognizing environmental best practices in building management. Participation in the program, which was developed by building experts, is voluntary. The practices implemented by businesses are compared against the requirements included in a comprehensive set of specifications. There are five levels of certification: Certified, Bronze, Silver, Gold and Platinum. In 2021, the Saint-Bruno, Saint-Hyacinthe and Trois-Rivières administration centers once again received BOMA BEST Gold certification. In all, we hold 16 Gold certifications and 2 Silver certifications for our administration centers.

Collective Energy

Changing for the better. Paying a little more for an energy-efficient fridge, reheating lunch in the microwave instead of the oven, running the dishwasher only when it's full, and turning off the office lights once everyone has left: Quebecers are willing to do their share to save our precious energy. And we expect society to do its share as well—for instance, by decreasing the intensity of streetlights at night. We'd save energy and see the stars, too!

73% of respondents would agree to pay more for devices and appliances that use less energy.

The power of our people, the force of water

Thanks to the men and women who operate our 61 hydroelectric generating stations, manage our 29 large reservoirs and keep hydropower flowing across our extensive transmission system, we are a major player in eastern North America's energy transition. Together, we share a mission to ensure the long-term operability of our equipment and facilities for the benefit of present and future generations.

We generate and transmit some of the world's lowest-carbon electricity, with over 99.8% coming from renewable sources. That is a significant, long-term advantage in achieving our goal of being the battery of the U.S. Northeast, as attested by two agreements to supply electricity to New York State and New England.

But our hydropower does more than just help decarbonize these regions. In addition to playing a role in stabilizing the cost of electricity thanks to its competitive pricing, it also makes generating power from variable renewables like solar and wind more profitable.

The engagement of our people and the abundance of our water resources open up a world of possibilities, today and tomorrow, here and beyond our borders.

THE POWER OF OUR PEOPLE, THE FORCE OF WATER

In response to changes in the energy industry, Hydro-Québec embarked on a huge undertaking in recent years: to define a vision of the hydropower facility of the future. The resulting vision encourages maintenance optimization as a way to achieve our business objectives in Québec and beyond our borders by maximizing the longevity of our generation and transmission assets.

We're imagining the hydropower facility of the future.

Adaptating to climate change

Through its collaboration with Ouranos, Hydro-Québec has been deepening its understanding of climate change for over 20 years. In 2021, we created an inventory of our assets and activities that could be affected by climate conditions and identified the main risks associated to climate change that will need to be addressed. The results helped us deliver our first Climate Change Adaptation Plan, in which we commit to mitigating these risks through a range of concrete actions, such as initiating research partnerships, adjusting our practices in design, management and maintenance, and developing an atlas of climate data related to our activities. In the coming years, we will put our plan into action, while closely monitoring our climate risks.

Work at our generating facilities

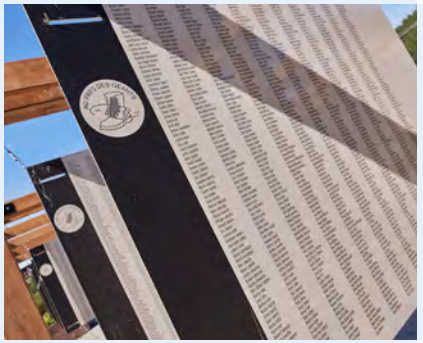
Work on a seventh unit at **Robert-Bourassa** generating station began in April 2021. It included refurbishing several major components and replacing the turbine runner. The unit was put back into operation in early November, before the winter peak. This major undertaking, which involves rehabilitating eight of the station's 16 generating units, will wrap up in 2022.

Throughout 2021, Hydro-Québec performed a number of technical and environmental surveys and studies for all **structures on the Fleuve Saint-Laurent** (St. Lawrence River) and **dikes on the Beauharnois canal**, built between 50 and 107 years ago. The findings will determine the work required to ensure the safety and long-term operability of these structures and extend their service lives by several decades.

Hydro-Québec will invest $750 million in **Carillon** generating station (photo), primarily to replace six of the 14 units. The selected supplier was asked to maximize the economic spin-offs for Québec. Work began in July 2021 with inspections and underwater repairs to the upstream and downstream stoplogs. Unit 14 was dismantled in September 2021. Ultimately, the project is expected to boost the station's output by roughly 16 MW.

We are currently preparing to replace the units at **René-Lévesque** and **Outardes-2** generating stations along with their auxiliary and protection systems. In 2021, we analyzed the findings of our 2020 surveys to determine the best solution for each component. Planning for the work on Outardes-2 is currently in progress, while certain aspects require more in-depth studies for René-Lévesque.

In operation for over 80 years, **Rapide-Blanc** generating station has an installed capacity of 211 MW. We will be carrying out refurbishment work through 2026 to improve the facility's reliability in the coming decades.



Fifty years of energy and a tribute to the 100,000 workers who built the La Grande complex

Québec's largest hydroelectric complex turned 50 in 2021. Part of a project launched by Premier Robert Bourassa in 1971, what is now known as the La Grande complex boasts 11 generating stations with a total installed capacity of 17,418 MW. Robert-Bourassa generating station alone—the world's largest underground powerhouse, hollowed out of the bedrock at a depth of 137 m—has an installed capacity of 5,616 MW. The Parc commémoratif des Bâtisseurs, a new tourist attraction in Eeyou Istchee Baie-James, was officially opened on August 31, 2021. Located on the site of the workcamp erected for the construction of Robert-Bourassa and La Grande-2-A generating stations, it commemorates the remarkable contribution of those who opened up Québec's north for hydroelectric development. The names of the roughly 100,000 men and women who built the La Grande complex are immortalized on some 40 panels.

THE POWER OF OUR PEOPLE, THE FORCE OF WATER

Transmitting electricity reliably over vast distances presents a number of challenges. Our planning and operations teams work together every day to ensure the continued development and maintenance of the main transmission system and make sure it remains reliable.

We operate an extremely reliable transmission system.

Micoua–Saguenay line

The Micoua–Saguenay line will run 262 km from Micoua substation, in the Côte-Nord region, to Saguenay substation, in Saguenay–Lac-Saint-Jean. It will make it possible to maintain supply quality for Québec customers and enhance the system's operating flexibility, while also cutting electrical losses.

Clearing of the right-of-way has been completed, and construction work has begun along the entire length of the line route. In fall 2021, over 650 workers were active on this jobsite. We maintained ongoing communications with land users to address concerns as they arose. At Micoua and Saguenay substations, the work required to connect the new line is now complete.

Reliability and flexibility gains in record time!

Southwest of Montréal, the Beauharnois–Les Cèdres complex's reliability and operating flexibility were upgraded with the commissioning of two 120-kV tie lines. The two lines open up new opportunities for exporting power and improve our capacity to take on new customers of any category. To ensure these benefits would be delivered quickly, construction followed a tight schedule, with the entire process from design to commissioning taking less than a year. This huge team effort demonstrates the advantages of working together.

Impacts of the energy transition on the grid

The energy transition will lead to big changes for Hydro-Québec's transmission system. Transportation electrification, for example, will increase electricity consumption and, therefore, transmission needs. Moreover, the power system will have to adapt to new distributed generating and storage technologies, which are very different from hydropower generation. We must be able to handle these new two-way power flows by adapting our facilities and the way we manage the grid. With all these considerations in mind, experts in many areas have come together to define a vision of the power system of the future—a vision that encompasses every aspect of the company's operations and can be adjusted and refined as needs evolve.

Increasing the thermal ratings of 735-kV lines

As customer consumption evolves, certain lines that could see increased use will have to be reinforced. When lines carry more power, the conductors heat up and lengthen, bringing them closer to the ground. We therefore began work in September 2020 to raise two 735-kV lines connecting Lévis and Nicolet substations in order to maintain the required minimum clearance from the ground at all times, ensuring grid safety and reliability.

To that end, we are using an innovative approach that involves inserting extenders into the tower bodies to raise the lines without having to de-energize them, significantly reducing the project's impact on system operations.

THE POWER OF OUR PEOPLE, THE FORCE OF WATER

Every day, we work to ensure the current and long-term operability of more than 700,000 transmission line components over more than 34,000 km. And every year, we carry out maintenance programs and launch a number of projects to replace worn system components before they fail and cause power outages.

We are optimizing our transmission system operations.

Modernization of grid control systems

In the last few years, Hydro-Québec has launched a series of major technology projects. They include the modernization of transmission and distribution control systems with a focus on implementing a unique, modern and integrated platform. In the context of the energy transition, this forward-looking technological achievement will lay the foundation for establishing a system to manage DERs such as solar panels, wind farms and batteries. It will also create new opportunities for growth and innovation in several other fields associated with the energy transition and with the ongoing evolution of our system and facilities.

Load forecasts

To ensure the safe, optimal and reliable operation of both our generating stations and our transmission and distribution systems, and to serve all our customers in Québec and elsewhere effectively, Hydro-Québec has to anticipate their energy consumption as accurately as possible over various time frames. Our team of forecasters, consisting of mathematics and meteorology experts, prepares minute-by-minute and hour-by-hour forecasts based on forecast models, historical consumption data, meteorological data and real-time consumption. The team works in close cooperation with IREQ, universities and other partners to refine existing forecast models and develop new models that leverage the power of artificial intelligence. Thanks to their research, we are able to prepare for the future by maintaining high-quality forecasts in the context of the energy transition.

Construction projects and the digital shift

The Québec government uses building information modeling (BIM) to increase productivity in the construction industry. Hydro-Québec is working with the Ministère des Transports du Québec, Société d'habitation du Québec, Société québécoise des infrastructures and cities of Montréal and Québec to progressively incorporate BDM results into its public infrastructure projects. This approach offers many advantages:

- Better synergy between Hydro-Québec, contractors and subcontractors
- Real-time sharing of quality data and information among stakeholders
- Faster project execution
- More accurate estimates and schedules
- Sufficient supplies delivered in a timely manner

Ultimately, this approach will equip Québec with infrastructure that is easier to operate and maintain and can be constantly adapted to changing needs.

A year marked by the pandemic and intense activity

Despite the pandemic, telework and the many adjustments required on our jobsites, the level of activity associated with our transmission and generation projects continued to rise. In fact, a record number of projects were carried out in 2021. Whether the goal was to secure supply in the face of global shortages, implement onsite health measures, refine our health and safety practices or develop new ways to communicate with external stakeholders, our teams and partners demonstrated the agility and innovation required to ensure our projects' success more than ever before.

THE POWER OF OUR PEOPLE, THE FORCE OF WATER

The way our hydropower complements the use of variable renewables, such as wind and solar power, was reaffirmed in a report from the United States International Trade Commission (USITC), which highlighted hydropower's contribution to decarbonizing the U.S. Northeast.

We generate renewable, affordable energy.

Champlain Hudson Power Express project

In September 2021, following a request for proposals issued in connection with New York State's Clean Energy Standard, the New York State Energy Research and Development Authority (NYSERDA) selected Hydro-Québec's electricity and the future Champlain Hudson Power Express (CHPE) line. Contracts with the CHPE line proponent, Transmission Developers, and NYSERDA were signed in November 2021 and are subject to regulatory approvals expected in 2022.

Under the project, the 1,250-MW CHPE line would bring 10.4 TWh of renewable energy, enough to supply over a million homes, right into New York City every year. This influx of clean energy would gradually displace some of the fossil-fuel generation that currently accounts for more than 85% of the region's electricity supply.

In addition, Hydro-Québec and the Mohawk Council of Kahnawà:ke would jointly own the Québec transmission line that would be built to interconnect with the CHPE. This would provide the community of Kahnawà:ke, established just south of Montréal, with economic benefits over a 40-year period.

New England Clean Energy Connect project

The new 1,200-MW Appalaches–Maine interconnection line will carry Québec hydropower to New England, delivering 9.45 TWh of energy to Massachusetts and 0.5 TWh to Maine every year for 20 years. Authorizations for the line have already been obtained from the Québec government and the Canada Energy Regulator. The Appalaches–Maine line will link to the New England Clean Energy Connect (NECEC) line. With the Presidential permit issued by the U.S. Department of Energy in January 2021, its proponent, Central Maine Power, has also received all the key authorizations and major permits required by the regulatory authorities.

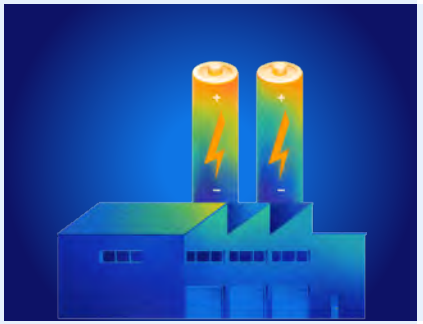
Construction began in Maine in January 2021. However, in November, following the state-wide referendum to halt the project, our U.S. partner was forced to temporarily suspend work. As a result, some construction work in Québec was also interrupted. We remain convinced of the value, merits and importance of the NECEC project. Legal proceedings are underway to determine the validity of the new legislation resulting from the referendum.

Neighboring provinces

Hydro-Québec is working with NB Power, Nova Scotia Power and representatives from the governments of Canada and the Maritime provinces to study ways to decarbonize power generation in that region.

A joint acquisition

In February 2020, Hydro-Québec and Innergex formed a strategic alliance to ramp up the implementation of their respective growth strategies and capitalize on their complementary knowledge and skill sets. In 2021, Hydro-Québec and Innergex made a first major acquisition with the purchase of Curtis Palmer, the operator of two run-of-river hydroelectric facilities totaling 60 MW. The facilities in question, Curtis Mills and Palmer Falls generating stations, are located in Corinth, New York, where Curtis Palmer is based.



Collective Energy

Converting companies to our green energy. In Québec, we're proud of our clean energy: hydropower. What if we were able to convince companies from elsewhere to set up shop here to take advantage of this asset? That would be great, but first and foremost, Quebecers want local industries to convert to electricity. They could thereby reduce their GHG emissions and improve their environmental footprint thanks to our green energy.

Quebecers' priorities for transforming the economy and making it greener

84% Converting polluting Québec companies to green energy

9% Attracting companies from elsewhere so they can benefit from our green energy

THE POWER OF OUR PEOPLE, THE FORCE OF WATER

Hydro-Québec received the Silver Award in the Tactics – Digital Communications category at the 2021 Prix d'excellence awards gala held by the Société québécoise des professionnels en relations publiques. The award recognizes two major social media campaigns to mark the 50th anniversary of Daniel-Johnson dam.

We generate electricity with a small carbon footprint.

2021 exports

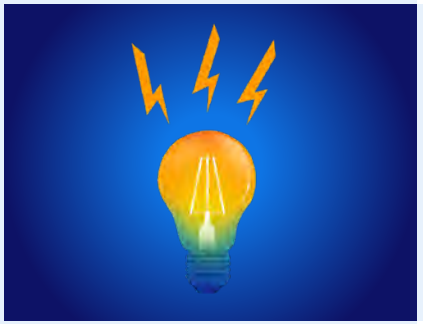
We exported 35.6 TWh of energy to neighboring markets, mainly New England, New York, Ontario and New Brunswick. These net sales of green, renewable power made a sizable contribution to our bottom line, generating net income of $865 million, while boosting efforts to shrink northeastern North America's carbon footprint.

Data centers

News stories regularly confirm Québec's ability to attract world-class players in the new economy thanks to its clean, renewable and affordable energy. In May 2021, Google announced plans to build a cloud computing data center in Beauharnois, in keeping with its desire to run its operations on carbon-free energy everywhere and at all times by 2030. With this step, Google is joining some 50 other companies that have chosen to set up data centers in the province, including Vantage, Cologix, eStruxture, Amazon and OVHcloud. No fewer than 52 data centers are now operating in Québec, for a total load of 110 MW and an annual consumption of 760 GWh.

Ongoing work at Romaine-4

At Romaine-4 generating station, we have completed the concreting and assembly of the superstructure and continue to assemble the generating units and install the mechanical, electrical, control and architectural components. The power transformers are installed and the dam crest is almost complete. The boat ramp and a weir that is impassable to brook trout are finished and work is underway to block the temporary by-pass. The facility is slated to be commissioned in 2022.



Collective Energy

Researching new ways to generate electricity. Once we get started, Quebecers can come up with lots of ideas for developing our renewable energy. Québec has an abundance of natural resources—there's no shortage of wind, sun and water!

Quebecers dream of harnessing the potential of tidal energy. The strong winds that sweep across the Golfe du Saint-Laurent (Gulf of St. Lawrence) could be leveraged by wind turbines. Why not generate energy with forest biomass, the branches and wood chips supplied in large quantities by our forests? Some even came up with the idea of installing marine turbines on our riverbeds to take advantage of their heavy flow.

90% of Quebecers support Hydro-Québec's creation of a clean energy research fund.

Projects for tomorrow

The ongoing energy transition has expanded our business horizons and prompted us to integrate additional renewable energy sources. The services we offer are also increasingly adapted to our customers' needs and consumption profiles. Electric mobility, home automation, energy storage systems: these too are all part of the new dynamic brought about by the transition.

As our customers seek to sustainably reduce their carbon footprints, helping them choose the right tools and services gives even more meaning to our role as an advocate for green solutions.

The energy transition involves a gradual reduction in our volume of available electricity as our energy and capacity balances tighten. It also entails making the smartest and most cost-effective choices in terms of decarbonization. Our building heating agreement with Énergir is a concrete example of this.

PROJECTS FOR TOMORROW

Under the wind and sun, wind turbines and solar panels generate electricity. The advantage of these variable renewables is that they can be brought online quickly, at an increasingly competitive cost, letting us scale back production at our reservoir generating stations. Any water that is not channeled through the turbines therefore remains available to produce electricity at a later time.

We're diversifying our mix of renewables.

Electrolysis plant

Hydro-Québec will contribute to the creation of an electrolysis plant in Varennes with a capacity of 88 MW, making it one of the world's most powerful electrolyzers for green hydrogen production. The facility will supply green hydrogen and oxygen to the planned Recyclage Carbone Varennes (RCV) biofuel plant, which will offer an alternative to landfilling and incinerating non-recyclable waste materials by converting them into biofuels.

Green hydrogen and bioenergy

We actively contributed to the development of Québec's strategy for green hydrogen and bioenergy for 2030, due to be released in 2022.

Hydro-Québec began supplying power to a first green hydrogen producer in January 2021, when Air Liquide opened its 20-MW proton exchange membrane (PEM) electrolyzer in Bécancour. As the largest operating plant of its kind in the world, the facility is well placed to meet the growing demand for low-carbon hydrogen in North America.

Commissioning of two solar generating stations

Gabrielle-Bodis in La Prairie and Robert-A.-Boyd in Varennes were inaugurated in the summer after being commissioned in spring 2021. With some 30,000 photovoltaic solar panels, they have a combined installed capacity of 9.5 MW and can generate close to 16 GWh of energy per year—enough to supply 1,000 homes. A storage system at Gabrielle-Bodis, slated for commissioning in 2022, will allow the energy generated to be set aside for use during consumption peaks.

New energy and capacity supplies to meet demand

The demand for electricity in Québec will increase in the coming years due to sustained economic growth, electrification and the emerging hydrogen and battery industries.

In December 2021, we therefore launched two tender calls for new electricity supplies. The evaluation criteria and certain characteristics of the supplies sought were approved by the Régie de l'énergie.

The first tender call is for a 480-MW block of renewable energy. The second is for a 300-MW block of wind power and targets local community participation, as well as Québec and regional content. For both, commissioning is slated for 2026 and contract terms will run from 20 to 30 years.

Additional supply needs over the 2029 horizon will amount to at least 1,200 MW and 3 TWh. We will launch other tender calls in the coming years.

PROJECTS FOR TOMORROW

Since June 2021, customers in several new regions have access to Hilo's service. This geographical expansion is a step in reaching the ambitious goal the subsidiary has set itself: to reduce power demand by 620 MW—equivalent to the needs of more than 114,000 households or the installed capacity of Romaine-2 generating station—between now and 2028–2029.

We promote sustainable energy use.

Unique dual-energy partnership

To concretize the vision outlined in November 2020 in the Québec government's *2030 Plan for a Green Economy*, we've partnered with Énergir to use a dual-energy approach to help achieve the goal of slashing building GHG emissions by 50% (compared with 1990 levels) between now and 2030. The solution aims to encourage customers who currently use only natural gas for heating to switch to electricity for 75% of their heating needs. The optimized use of the two energy sources will mitigate consumption peaks while keeping costs down for customers. Under the agreement, Énergir's residential, commercial and institutional customers will use electricity for their space- and water-heating needs except during very cold weather, when the power system experiences very high demand. At these times, natural gas will be used instead. Along with a dual-energy rate, participating customers will be offered financial assistance from Hydro-Québec for the purchase of energy-efficient electrical equipment.

New services and promising partnerships

The innovative value-added services offered by our subsidiary Hilo help promote and encourage the adoption of sustainable practices among Quebecers. As the smart home continues to evolve, Hilo is launching its new smart solution for electric water heaters, in partnership with HydroSolution. It is the first electric load controller with temperature probe that meets public health requirements. Working with Québec company ACCS, Hilo also has plans to roll out a comprehensive (ideation-to-installation) smart commercial building solution to help building managers reduce their energy costs and GHG emissions.

Growth of a subsidiary

Our subsidiary EVLO enjoyed an inaugural year rich in achievement. Indeed, the agreement reached as part of the work on the transmission line in the community of Parent marks a North American first. By taking over for a satellite substation, EVLO's energy storage system will ensure service continuity for the community's 350 customers for the entire duration of the line refurbishment project. EVLO also signed a reseller agreement with Nuvation that will extend its sales network to California. Lastly, in November EVLO announced the commercialization of EVLO 1000, its most powerful storage system to date. This innovative product offers enhanced safety features, quick setup and an advanced software solution for remote control and monitoring.

Collective energy

Focus on smart homes. Who doesn't want to be comfortable at home? And if this comfort could be achieved using less energy, so much the better. Of course, one solution would be to live in a smaller, less energy-intensive dwelling. But more Quebecers would prefer to live in a smart home that would let them manage their power consumption with an app!

69% of Quebecers would like to manage their electricity use through an app.

84% of young people aged 18 to 24 are very enthusiastic about the idea.

On the right track. Since 2020, thousands of Quebecers have used home automation (smart thermostats, plugs and switches) to better manage their electricity use through our subsidiary Hilo.

PROJECTS FOR TOMORROW

We're stepping up transportation electrification.

Increasingly popular, electric mobility is now an unstoppable global trend. Québec has set itself clear and ambitious goals in this respect: 1.5 million electric vehicles on the road by 2030 along with a ban on the sale of new gasoline-powered vehicles starting in 2035. To support the transition, we're implementing the tools and infrastructure needed for light and commercial electric vehicle charging.

Smart charging

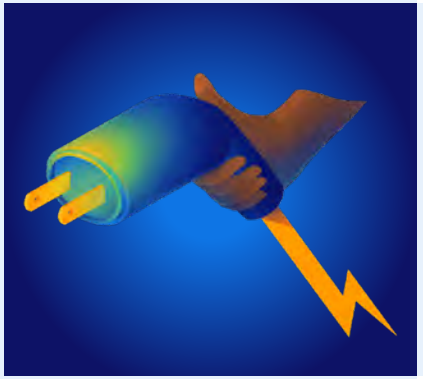
Hilo is venturing into electric mobility with a pilot to test a new smart charging solution. The solution—which uses the EVduty home charging station, manufactured in Shawinigan by Elmec—will allow Hilo to program EV charging times, with the customer's consent, to prevent too many drivers from charging their vehicles at once during winter peaks. Participants in the pilot will have the opportunity to contribute to the solution's assessment and optimization. Innovation is at the core of transportation electrification, which will require an efficient power system.

Electric snowmobiles

In 2022, our Centre de services partagés will test the first electric snowmobiles to hit the market, made in Québec by Taiga. Ten electric snowmobiles will be made available as part of vehicle-sharing services in Saint-Jérôme, Rimouski, Saint-Hyacinthe and the city of Québec.

Partnership with Autobus Groupe Séguin

To help advance the electrification of commercial vehicle fleets, we've joined forces with Autobus Groupe Séguin to test a new turnkey charging solution. The Québec family business, which specializes in school bus and chartered transportation, ordered 60 electric school buses at the start of the year. The project also involves a number of other Québec suppliers, including Compagnie électrique Lion, Malco Électrique and AddÉnergie. We're banking on having this pilot pave the way for other suppliers to develop their expertise for future projects.



Collective energy

Carefree charging. A public transit system that could take you to Percé or Tremblant? Great idea. Though, given the option, many Quebecers would like it even better if they could make the trip by electric car. More ultrafast chargers along the 132 and the 15 (and every other major road in Québec!) would free us to set off with peace of mind, stopping anywhere the scenery beckons—Kamouraska, Val-David and beyond.

Quebecers' priorities for driving sustainable mobility:

53% Add more ultrafast charging stations

32% Support public transit and active transportation

On the right track. Between now and the end of 2022, we have plans to add 160 new fast-charge stations to the 600 currently installed across Québec. Our aim for 2030: to have 2,500 charging stations that will let EV drivers "fill up" in just minutes.

PROJECTS FOR TOMORROW

We're paving the way to sustainable mobility.

In May 2021, the Electric Circuit launched a program for Québec municipalities aimed at financing the installation, between now and 2028, of 4,500 standard curbside charging stations in urban centers. Participating municipalities must keep the stations accessible 24 hours a day, 365 days a year, as well as offering free street parking at each station between 9 p.m. and 7 a.m.

The Electric Circuit

With some 3,400 charging stations (including over 600 fast chargers) currently across Québec, the Electric Circuit has been key to helping us lay the groundwork for transportation electrification. And we're continuing to think big for the future, with some ambitious new targets: an additional 2,500 fast-charge stations by 2030—that's 160 to 220 new stations a year—and a further 4,500 standard curbside charging stations by 2028.

We've also enhanced the customer experience by adding new features like Apple CarPlay and Android Auto compatibility to the Electric Circuit mobile app. What's more, in December the Electric Circuit and the ChargePoint network announced a roaming deal that will make 43,000 charging stations across North America available to members of both networks.

We've created new partnerships to raise awareness of the advantages of electric driving. The Electric Circuit contributed to the success of the e-roule electrification pilot project, which to date has helped some 40 driving schools in Québec go green. Hydro-Québec also works with the Association des véhicules électriques du Québec (AVÉQ), which runs major awareness campaigns on transportation electrification.

Lastly, the Electric Circuit contributes to a number of initiatives to support transportation electrification and the development of new mobility solutions through partnerships with other key actors in the ecosystem, such as Propulsion Québec and the Corporation des concessionnaires automobiles du Québec.

Electric Circuit

3,425 public **charging stations** (including 600 fast chargers)

Serving **17 administrative regions**

147,703 members including 52,458 new members in 2021

729 partners

70,342 members active in the past 12 months

Trip planner

The Electric Circuit's exclusive trip planner finds the itinerary with the best charging options based on departure time, weather, changes in elevation, vehicle technical features and how busy the charging sites are expected to be.

Test benches for ultrafast charging

The coming years will usher in new models of electric vehicles offering greater range and increased charging capacity. That's why the Electric Circuit has set up test benches for ultrafast charging stations. Besides serving EV drivers, these sites will help us test new technologies, see how ultrafast charging behaves with our power system and climate, and collect essential data on how the stations are used.

Collective energy

Pollution-free travel. Québec is immense—and we'd love to be able to travel around it without polluting. Many Quebecers believe the solution is electric mobility. We feel that EVs should no longer be a luxury. We also think all the buses and trucks on our roads should be powered by clean energy. We can even imagine being shuttled up and down the Saint-Laurent (St. Lawrence) by boat, especially if the boats were electric.

Quebecers' priorities for driving sustainable mobility:

60% Electric vehicles

29% Public transit

On the right track. With more than 100,000 electric vehicles on the road already, Québec is Canada's electric mobility leader.

PROJECTS FOR TOMORROW

We sell renewable energy certificates (RECs), which represent the environmental attributes of one megawatthour of renewable energy. RECs can be sold separately from the actual electricity we produce to organizations seeking to offset their carbon emissions or obtain corporate, product or building certification.

We're fostering a low-carbon economy.

Decarbonization and carbon neutrality

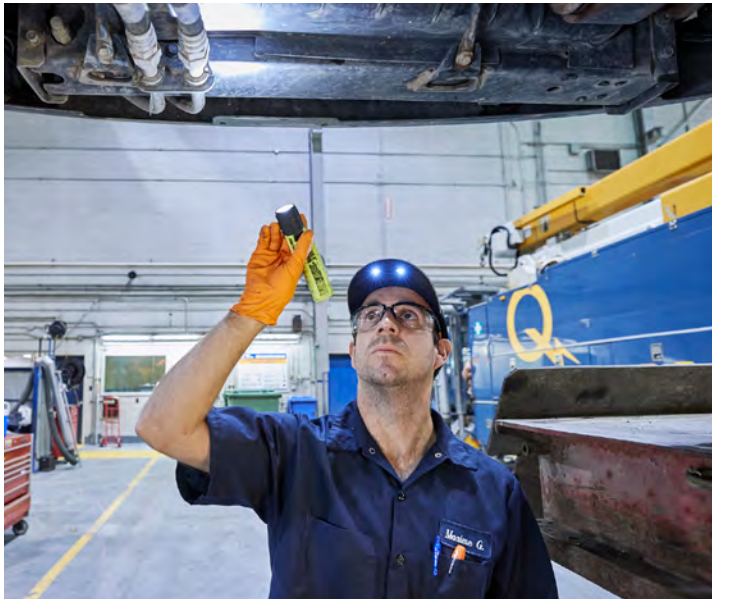
Our carbon footprint positions us as a leader in our industry, and we are driven to ramp up our decarbonization efforts whenever possible. Overall, our GHG emissions have fallen significantly since 1990 (the Kyoto Protocol reference year). In particular, our direct emissions have dropped by 75% to date.

Decarbonizing Îles-de-la-Madeleine

Converting the Îles-de-la-Madeleine system to renewable energy is key to our decarbonization strategy. A first green energy generation project became a reality in 2020 with the commissioning of the Dune-du-Nord wind farm. The project won us the award for "Leadership in External Collaboration and Partnerships" in the Canadian Electricity Association's 2021 Sustainable Electricity competition. This award goes to a company with a strong commitment to external collaboration and partnerships with Indigenous peoples, local communities, and other stakeholders. In addition, connecting the Îles-de-la-Madeleine region to the main grid by means of two underwater cables will ultimately lead to a clean, reliable and more cost-effective energy supply to the archipelago. This solution will reduce our GHG emissions in the region by 94%—equivalent to the emissions from approximately 27,000 vehicles.

Improved environmental management

Out of the 30-odd machine shops we operate, over 20 have obtained Clé Verte (Green Wrench) certification, a voluntary program that points up environmental best practices. All of our certified shops have taken steps to reduce their environmental footprint, including through responsible management of equipment, processes and hazardous materials. In 2021, six vehicle repair shops renewed their certification to obtain Platinum level, the program's highest level.



Collective energy

Keeping the energy flowing. When it comes to not wasting energy and resources, there's no shortage of ideas! Quebecers imagine generating electricity from waste or biomass. We wonder whether the heat from factories and data centers could be used to heat greenhouses where fruits and vegetables are grown year-round. There's no doubt about it: the principles of the circular economy inspire us!

Proportionally, the 25-to-34 age group had the most ideas on recovering energy.

The rewards of innovation

With the energy transition underway, innovating is more important than ever. That's because ingenuity can have a direct impact on efforts to fight climate change and decarbonize the economy. Every dollar invested in innovation has to boost energy efficiency returns if the savings are to create more collective wealth.

With our traditional approaches being turned on their heads, we are increasingly adopting digital solutions that are able to meet our energy needs, enhance our energy efficiency programs and help decarbonize and strengthen our power grid for the benefit of current and future generations.

At Hydro-Québec, we can also count on the ingenuity of the scientists, technicians and engineers at our world-class research center, IREQ, who support our teams in every facet of their activities, from power generation to delivery. This force for innovation has proven to be an invaluable asset as the electricity industry continues to face changes that will inevitably transform the way energy is supplied and used.

We are ramping up the energy transition by supporting innovative solutions that can meet our energy needs and reinforce our power system while helping decarbonize Québec for the benefit of current and future generations. Backed by other players in energy efficiency and collective intelligence, we are helping to prepare Québec's energy future!

We're joining forces to encourage energy-related innovation.

Smart innovative solutions

A visionary and environmental pioneer for choosing hydropower, Hydro-Québec has long been guided by green ambition. Today, the company strives to play a key role in decarbonizing the economy, and its subsidiaries will be pivotal in accelerating the energy transition. The energy transition is the gradual replacement of energy produced from fossil fuels with various forms of renewable energy. It is also the shift to energy-saving behaviors and away from overconsumption and energy waste. Specializing in energy storage, smart energy management and transportation electrification, our subsidiaries help reduce greenhouse gas emissions, while generating positive economic spin-offs for the company and society at large and contributing to collective wealth.

In 2021, a new subsidiary was created to spark innovation and step up the energy transition: InnovHQ. This subsidiary facilitates the development and the marketing of innovative solutions, in addition to forging ties with Québec's innovation ecosystem—particularly with start-ups and universities.

Spurring energy innovation

On November 30, our subsidiary InnovHQ organized the first *Together for Energy Efficiency* event, designed to mobilize and encourage players in the energy innovation ecosystem.

Roundtables covered a wide range of topical subjects, including sustainable mobility, energy efficiency and the role of the circular economy in the energy transition. By bringing together experts, entrepreneurs, researchers and other leaders, we are accelerating the sharing of knowledge and ideas that is so critical to the development of promising energy innovations. This event will contribute to the future of energy innovation in Québec.

Greenhouse innovations

To advance Québec's transition toward food self-sufficiency, InnovHQ launched the Open Innovation Challenge: Greenhouses in cooperation with Cycle Momentum. The initiative encourages the development and implementation of concrete technological solutions to optimize environmental and energy management in greenhouses. InnovHQ benefited from the engagement, cooperation and pooled resources of a number of industry players.

The Challenge will give finalist SMEs and start-ups a chance to develop and test new technologies in partnership with Hydro-Québec, businesses, academics and customers. This new approach will create value and have a positive impact on the local economy as well as society as a whole.

Collective energy

Supporting local businesses. Creativity is another inexhaustible resource at the disposal of Quebecers. We're delighted that there are so many young companies in Québec that help us dream of a greener future, whether it's converting waste into clean fuel or finding innovative ways to recycle plastic or treat wastewater. What if Hydro-Québec helped them make that dream a reality? The idea enjoys widespread support.

Fully **95%** of Quebecers welcome the idea of Hydro-Québec supporting SMEs that innovate in the field of clean energy.

THE REWARDS OF INNOVATION

The energy industry is undergoing profound transformations that have been prompted by the search for sustainable solutions to the impacts of climate change, ways to meet our customers' new consumption needs long-term, and scenarios to adapt to the evolution of their habits, as well as greater access to technology. To put in place the power system of tomorrow, we seek to establish partnerships with key players in the innovation ecosystem.

We are bringing together green technologies and digital technologies.

Greening building heating systems

Our teams are developing an array of technological solutions to help customers capitalize on green technologies while reducing their impact on the power grid. This year we transferred our Megapac heat pump control algorithms for large buildings to our partner Emerson. The heat pump, which can replace oil and gas heating systems for commercial and institutional buildings, will be rolled out in Québec in 2022.

Integration of DERs

With the integration of distributed energy resources (DERs), smart digital technologies will transform the unidirectional power grid currently in place into a bidirectional energy system. Using a virtual generating station test platform, our teams are gaining knowledge that will enable Hydro-Québec to manage such a system. They are preparing the company for changes in the energy market and grid management by testing various approaches to distributed energy control, identifying issues involving communication protocols, exploring constraints related to regulatory requirements, etc.

Thermostat setpoint strategies

IREQ is continuing to break new ground to advance the ongoing development of our Hilo subsidiary. In 2021, our research teams confirmed that the thermostats used for Hilo's smart home solution meet expectations: providing customers with optimal comfort, enabling them to save on energy and assisting with peaks (demand response and recovery management following power failures). In addition, the team developed the thermostat setpoint strategies to be applied to Hilo customers' thermostats during demand response events ("Hilo challenges"). Set prior to each event, those strategies deliver the minimum comfort levels that customers demand. Other research projects geared to the program included load-regulating anti-legionella water heaters, smart charging stations, the energy coach and Hilo services for business customers.

Collective energy

Focusing on research. While Quebecers are willing to make immediate changes to their habits, they also want research and development on new technologies such as biofuel and better ways to store energy. It's a perfect mission for Hydro-Québec.

82% of Quebecers approve of the fact that Hydro-Québec is actively participating in the development of green fuel.

On the right track. Hydro-Québec is currently taking part in a project to produce green hydrogen through the electrolysis of water. The hydrogen will be used to fuel trucks—or even trains—equipped with fuel cells and to produce clean fuel for planes and boats. That should go a long way to decarbonizing the transportation industry!

THE REWARDS OF INNOVATION

You can thank the R&D work carried out by Hydro-Québec and its partners for the only solid-state battery currently on the market. It will become an effective means of improving performance and reducing costs. Our breakthroughs in lithium anode and polymer technologies have made Hydro-Québec a leader in the development of next-generation batteries.

We're tapping into our experts' ingenuity.

Electricity system design and operation

At IREQ, the team in charge of the system operation simulation tool (OSER) project successfully implemented a first version of the tool in a transmission system simulation environment. Team members performed two studies to determine the impact of integrating a large number of DERs onto the grid. The simulations focused on two three-day periods, one close to the winter peak and marked by intense electric vehicle charging activity, and the other close to the summer low, when greater photovoltaic power generation was brought online.

Asset reliability and sustainment

To ensure the reliability and long-term operability of our assets and make cost-effective investments over the long term, we are developing technologies to provide real-time data on facility status. With that information in hand, we can make the best possible decisions on asset management and maintenance.

A new advanced generator diagnostics (DIAAA) tool allows us to visually inspect rotors and measure the magnetic flux of the air gap and the insulation resistance. A first version of the Athéna operations simulator recreates the generating fleet's response to various generation management and unit outage strategies, which can sometimes be complex. Athéna compares the potential operating strategies and identifies the best ones according to power system constraints.

We developed a preindustrial prototype of a robotic vehicle for inspecting transmission substations. Called RIAUPEL, this robot is able to cover long distances without human intervention and to accurately determine the condition of our facilities. It increases safety by limiting workers' movements within the substations.

Partnership agreements

DroneVolt, Université de Sherbrooke and Hydro-Québec signed an agreement in connection with their project on self-navigating drones and interactions with live lines (NADILE). The partners aim to equip the LineDrone to fly autonomously and land automatically on energized conductors. The drone will have to plan its own route, recognize its surroundings and any obstacles, determine its position in relation to them, and land on the target conductor without any human guidance.

Hydro-Québec also signed a partnership agreement with Nucleom, a company in the city of Québec, regarding the LineCore and LineOhm technologies for inspecting transmission lines. The agreement covers the industrialization and commercialization of the systems, which were developed by IREQ's inspection and maintenance robotics team.

An agreement for commercializing WireScan technology

At the start of the year, Hydro-Québec and ASI Services techniques—a division of ASI Group Ltd., a global leader in underwater inspection, maintenance and repair—signed an agreement to commercialize WireScan technology. This unique patented technology, developed by a Hydro-Québec R&D team, is a laser scanning tool that can precisely measure hydro dam components such as stop log and gate slots, both above and below the waterline.

WireScan provides dam owners with accurate 3D data to assess facility conditions, a prerequisite for effective asset management. WireScan data detects anomalies and enables owners to plan repairs, thereby optimizing refurbishment strategies and reducing the risk of gate failure. The technology also significantly reduces risks for workers by limiting traditional manned inspections.

MANAGEMENT'S DISCUSSION AND ANALYSIS

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 of Québec [Québec energy board] with respect to the transmission and distribution of electricity. They also reflect the provisions of *An Act to simplify the process for establishing electricity distribution rates* (S.Q. 2019, c. 27).

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. Lastly, the information contained herein takes into account any significant event that occurred on or before February 18, 2022, the date of approval of this Annual Report by Hydro-Québec's Board of Directors.

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2021 at a Glance

In 2021, Hydro-Québec had an excellent financial year. Whereas its operations had been deeply affected in 2020 by the COVID-19 pandemic, the implementation of strict public health measures throughout Québec and a slowdown of the economy in all its markets, its 2021 results are set against a backdrop of economic recovery. Net income thus rose to $3,564 million, compared to $2,303 million the previous year, which is the company's best performance to date for continuing operations. The $1,261-million increase is due to unprecedented overall sales, a positive variance in the amounts recognized as other components of employee future benefit cost for the Pension Plan and a reduction in financial expenses.

Hydro-Québec will therefore be able to pay a dividend of $2,673 million to the Québec government, its sole shareholder—the largest in its history.

Record sales on the Québec market

Electricity sales in Québec reached a historic peak of 175.2 TWh. This 3.8-TWh rise over 2020 is attributable to higher baseload demand in most segments, due in particular to the gradual economic recovery that followed the progressive easing of public health measures. Commercial and industrial activities had slowed considerably and even stopped in many sectors for several weeks in 2020, resulting in a contraction of energy needs on the Québec market. The increase in demand was partially offset, however, by warmer temperatures in spring 2021, especially in April, when they were on average 3°C higher than the year before.

Excellent performance on export markets

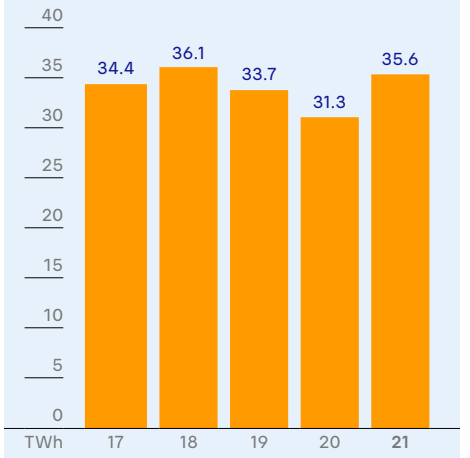
On external markets, net electricity exports[1] increased by 4.3 TWh under the combined impact of greater needs, given that demand had dropped in 2020 due to the pandemic, and favorable market conditions. As a result, they generated the unprecedented sum of $1,658 million and contributed $865 million to net income for 2021. Net export volume totaled 35.6 TWh, close to the record of 36.1 TWh set in 2018. Monthly volume records were also set in January, February, August and October.

Net electricity sales at an all-time high

Buoyed by momentum in all markets, net electricity sales reached an unprecedented level of 210.8 TWh in 2021. It is thanks to the know-how and efforts of its entire staff —which were all the more remarkable in the context of the pandemic—and the reliability and smooth operation of its generating, transmission and distribution facilities that Hydro-Québec was once again able to contribute to the decarbonization of northeastern North America and the collective wealth of Québec through its exports while also meeting the growing needs of its domestic market.

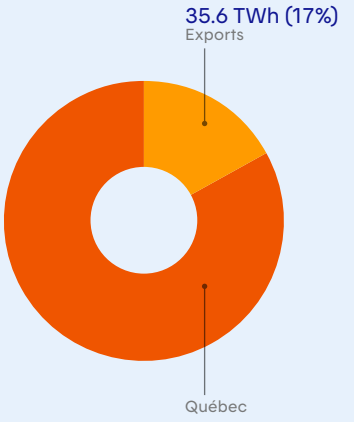
In 2021, net exports accounted for 17% of sales volume and generated 24% of the company's net income.

Net Electricity Exports



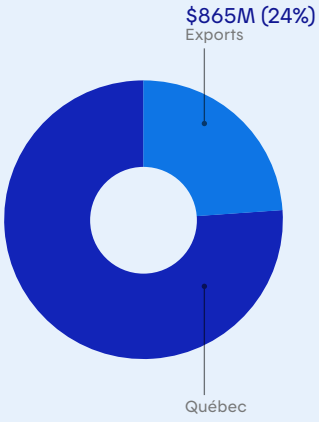
Net Electricity Sales in 2021

210.8 TWh



Net Income in 2021

$3,564M



1. Net electricity exports include electricity sales outside Québec, energy-related derivative instruments traded for risk management purposes and renewable energy certificates sold by the Generation segment on external markets, less short-term electricity purchases from third parties for export purposes.

Electricity rates still among the lowest in North America

In keeping with *An Act to simplify the process for establishing electricity distribution rates*, Hydro-Québec's rates applicable as of April 1, 2021, were indexed based on inflation. All rates were therefore increased by 1.3% except the large-power industrial rate (Rate L), which was increased by 0.8%. The company's electricity rates have remained in line with the Consumer Price Index in Québec for the last 50 years and still rank among the lowest in North America.

Significant increase in investments in the equipment fleet

Hydro-Québec invested $4,223 million in property, plant and equipment and intangible assets in 2021—25% more than in 2020, when the pace of work on its jobsites had slowed due to the public health crisis. Most of this amount was allocated to large-scale projects aimed at ensuring the long-term operability of the company's assets, as well as to major development projects in the Generation and Transmission segments.

The main projects underway 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 up and running. At the last jobsite, Romaine-4 (245 MW), work continued in 2021 with generating unit and superstructure assembly, as well as the installation of the architectural components and mechanical, electrical and control systems. The facility is scheduled for commissioning in 2022.

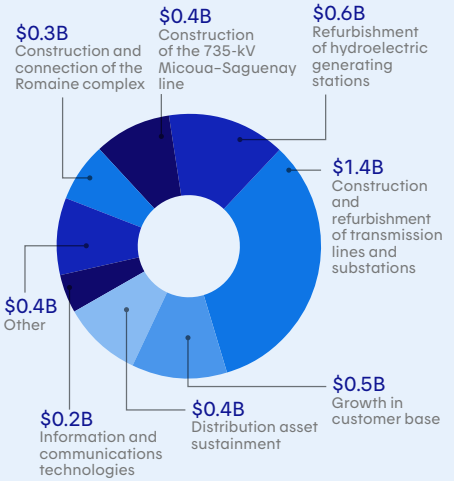
In addition, deployment of the 735-kV line between Micoua substation, in the Côte-Nord region, and Saguenay substation, in Saguenay–Lac-Saint-Jean, began early in the year. This line, which will run 262 km, will help maintain the reliability and improve the operational flexibility of Hydro-Québec's transmission system and reduce electrical losses.

Unprecedented contribution to the Québec government's revenue

Hydro-Québec's contribution to the Québec government's revenue for 2021 amounts to $4.9 billion. This substantial contribution, which includes the company's net income of $3,564 million, water-power royalties, the public utilities tax, and guarantee fees related to debt securities, benefits all Quebecers, as do the economic spin-offs of Hydro-Québec's operations throughout the province.

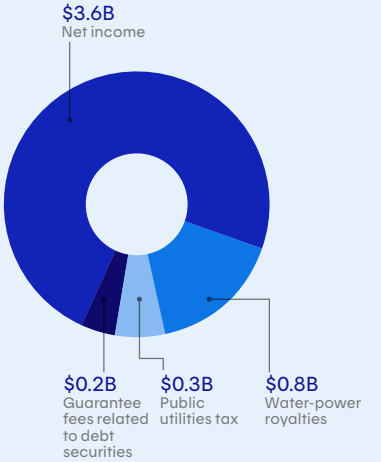
Investments in Québec in 2021

$4.2B



Hydro-Québec's Contribution to the Québec Government's Revenue for 2021

$4.9B



Consolidated Results

Net income

In a context marked by the gradual resumption of economic activity with the progressive easing of public health measures related to the COVID-19 pandemic, Hydro-Québec posted net income of $3,564 million in 2021, a $1,261-million increase over the $2,303 million recorded the previous year. This increase is due to a rise in net electricity sales in Québec,[1] a surge in net electricity exports, a positive variance in the amounts recognized as other components of employee future benefit cost related to the Pension Plan and a reduction in financial expenses.

On the Québec market, net electricity sales increased by $444 million to $10,774 million, compared to $10,330 million in 2020 under the combined effect of two factors. First, electricity sales rose by $390 million, largely on account of higher baseload demand from business customers as a result of the gradual economic recovery. An increase in aluminum prices, which have an impact on revenue from special contracts with certain large industrial customers, also contributed to electricity sales growth in Québec. Second, external energy purchases made by the Distribution segment declined by $54 million, essentially because of lower output from wind farms under contract, the impact of which was partially offset by an increase in biomass energy purchases.

On markets outside Québec, net electricity exports rose by $333 million to $1,658 million. This growth is primarily due to favorable market conditions arising in particular from an overall increase in energy prices, mainly in the second half of the year, and warmer temperatures in external markets in the second quarter, which allowed the company to seize business opportunities. It is also attributable to volume growth of 4.3 TWh due, in part, to greater needs on these markets, where demand had dropped the previous year because of the pandemic. Net export volume thus exceeded 35 TWh for the second time in Hydro-Québec's history, reaching 35.6 TWh, slightly below the record of 36.1 TWh set in 2018.

Recognition of the other components of employee future benefit cost related to the Pension Plan yielded a positive variance of $247 million over 2020, partly as a result of an increase in the value of Plan assets.

Financial expenses declined by $235 million compared to the previous year. This decrease is largely due to the maturity of certain high-interest debts and the issuance of new debt at much lower rates, given the favorable conditions on the capital market.

Revenue

Revenue totaled $14,526 million, compared to $13,594 million a year earlier. Revenue from ordinary activities reached $14,457 million, compared to $13,446 million in 2020. Electricity sales amounted to $14,238 million, or $914 million more than the $13,324 million recorded the previous year. This marked increase is due to a $390-million rise in electricity sales in Québec and growth of $524 million in electricity sales on markets outside Québec. Other revenue from ordinary activities increased by $97 million, whereas revenue from other activities decreased by $79 million.

Revenue from ordinary activities

Electricity sales in Québec

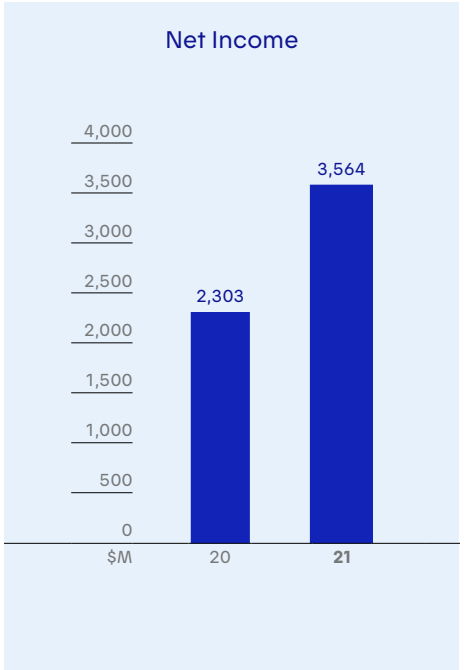
In Québec, electricity sales rose by 3.8 TWh to 175.2 TWh—a historic peak—which contributed to a $390-million increase in related revenue attributable to the combined effect of four factors.

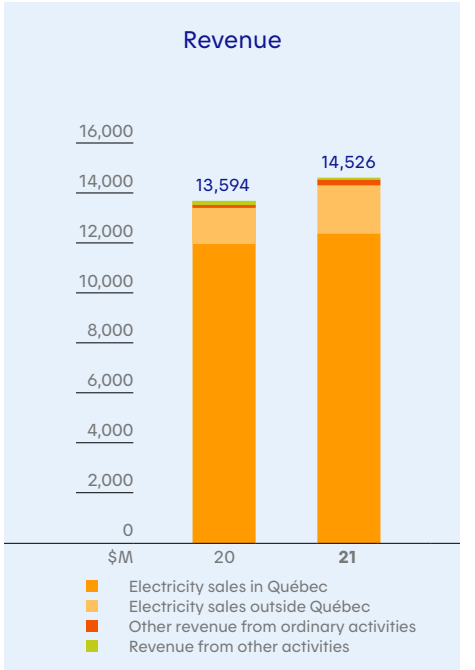
First, baseload demand climbed by 4.9 TWh or $244 million on account of greater energy needs, primarily in the commercial, institutional and small industrial segment and the large industrial segment. The growth in demand from business customers is mainly due to the gradual resumption of economic activity as public health measures were eased. These measures had led to the closure of a large number of stores and other businesses for many weeks in the spring and fall of 2020, which drove down electricity sales.

Second, temperatures had a negative impact of 1.1 TWh or $74 million. Second-quarter temperatures were warmer in 2021 than in 2020, resulting in a decline of 1.3 TWh or $100 million. The impact on sales was especially strong in April, when temperatures were on average 3°C higher than in 2020.

Third, the increase in aluminum prices, which have a bearing on revenue from special contracts with certain large industrial customers, led to a $115-million increase in revenue from electricity sales in Québec.

Fourth, the rate indexation that came into effect on April 1, 2021, pursuant to *An Act to simplify the process for establishing electricity distribution rates*, translated into a $92-million increase in revenue.





1. Net electricity sales in Québec consist of electricity sales on the Québec market, less energy purchases made from third parties by the Distribution segment.

Electricity sales outside Québec

Revenue from electricity sales on markets outside Québec totaled $1,919 million, compared to $1,395 million in 2020, essentially because of the increase in the average price obtained on the markets and the growth in export volume.

Other revenue from ordinary activities

Other revenue from ordinary activities was $219 million, an increase of $97 million over the $122 million recorded a year earlier. This rise is partly due to the sale of renewable energy certificates[1] to third parties, which generated $50 million more than in the previous year. To a lesser extent, it also results from the fact that Hydro-Québec had suspended administration charges on unpaid bills for several months in 2020 as part of the measures implemented to assist customers experiencing financial difficulties in the context of the pandemic. A return to normal business practices led to a positive variance in 2021.

Revenue from other activities

Revenue from other activities declined by $79 million compared to the previous year, amounting to $69 million. This decrease is mainly due to the impact of certain derivative instruments traded to mitigate the volatility of energy prices as part of the risk management strategy related to electricity export activities. The use of these instruments led to a negative variance in 2021 because of the increase in market prices, which, by the same token, contributed to the growth in revenue from sales outside Québec.

Expenditure

Total expenditure was $8,594 million in 2021, compared to $8,688 million a year earlier.

Operational expenditure

Operational expenditure amounted to $3,288 million, or $142 million more than the $3,146 million recorded in 2020. The difference is primarily attributable to a $94-million rise in the Pension Plan's current service cost, mainly due to a decrease, at the end of 2020, in long-term interest rates on capital markets, which determine the discount rates. To a lesser degree, it also results from the negative effect of salary indexation and inflation of other costs.

It is also worth recalling that the COVID-19 pandemic had had a positive or negative impact on several expenditure categories in 2020. The return to a nearly normal situation in 2021 had the reverse effect on each category. For example, total payroll increased due to greater staffing requirements to handle the higher volume of activity, as did expenditure related to external services. Conversely, the expense recognized in connection with the provision related to the collectibility risk for debts, which had been adjusted upwards in 2020 to take into account the fact that certain customer accounts were showing signs of deterioration, was brought back down to pre-pandemic levels. Likewise, the renewed pace of work on the company's construction and refurbishment jobsites led to an increase in the number of hours of work capitalized in the cost of the related projects, and thus to lower operational expenditure in this connection.

Other components of employee future benefit cost

In the line item Other components of employee future benefit cost, a credit amount of $743 million was recognized in 2021, compared to $494 million in 2020. This positive variance is attributable in particular to an increase in the value of Pension Plan assets.

Electricity purchases

Electricity purchases totaled $2,169 million, a $35-million decrease from the $2,204 million recorded in 2020 that is due to a $54-million reduction in external energy purchases related to distribution activities. More specifically, wind power supplies declined by 0.9 TWh or $84 million because of lower output from wind farms under contract, while biomass energy purchases increased by 0.3 TWh or $34 million following the commissioning of a new cogeneration plant at the end of 2020. The difference also reflects a $34-million increase in short-term electricity purchases for export purposes.

Depreciation and amortization

Depreciation and amortization expense amounted to $2,689 million, comparable to the $2,694 million recognized a year earlier.

Taxes

Taxes were $1,191 million, or $53 million more than the $1,138 million recorded in 2020, mainly because of a $41-million increase in water-power royalties resulting from higher output and rate indexation.

Financial expenses

Financial expenses totaled $2,368 million in 2021, compared to $2,603 million the previous year. This $235-million decrease is largely due to the maturity of certain high-interest debts and the issuance of new debt at much lower rates, given the favorable conditions on the capital market.

1. A renewable energy certificate, or REC, is a negotiable instrument proving that the bearer owns the "environmental attributes" associated with one megawatthour of electricity generated by a renewable source such as hydroelectricity, wind power or solar power. RECs can be sold separately from the electricity generated as a means of offsetting greenhouse gas emissions, for example.

Key Figures for 2021

	2021	2020
OPERATIONS AND DIVIDEND ($M)		
Revenue	**14,526**	13,594
Income before financial expenses	**5,932**	4,906
Net income	**3,564**	2,303
Dividend	**2,673**	1,727
BALANCE SHEETS ($M)		
Total assets	**82,698**	80,895
Property, plant and equipment	**68,530**	66,900
Long-term debt, including current portion and perpetual debt	**49,698**	48,413
Equity	**23,260**	21,322
FINANCIAL RATIOS		
Return on equity (%)[a]	**14.3**	9.5
Capitalization (%)[b]	**32.0**	31.0
Profit margin (%)[c]	**24.5**	16.9
Interest coverage[d]	**2.52**	1.89
Self-financing (%)[e]	**52.2**	12.8

a) Net income divided by average equity for the year less average accumulated other comprehensive income for the year. The increase in this ratio compared to 2020 is mainly due to higher net income.

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. The increase in this ratio compared to 2020 is mainly due to higher net income.

d) Sum of income before financial expenses and net investment income divided by interest on debt securities. The increase in this ratio compared to 2020 is mainly due to higher income before financial expenses and lower 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. The increase in this ratio compared to 2020 is mainly due to the $2.3-billion increase in cash flows from operating activities.

Cash and Capital Management

Operating activities

Cash flows from operating activities amounted to $5.1 billion in 2021, compared to $2.8 billion in 2020. This increase is primarily due to the $1.3-billion rise in net income and the variance in interest paid on the redemption of zero-coupon bonds, which amounted to $7 million in 2021, compared to $1.6 billion in 2020.

The funds raised were used to pay the dividend for 2020 and to finance a portion of the investment program, among other things.

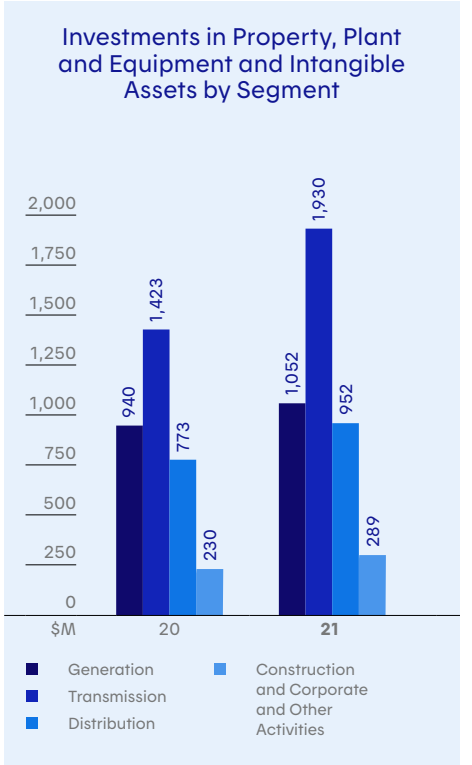
Investing activities

In 2021, Hydro-Québec invested $4.2 billion in property, plant and equipment and intangible assets, compared to $3.4 billion in 2020. Of this amount, $1.3 billion was allocated to development projects and $2.9 billion to asset sustainment.

Investments in the Generation segment totaled $1,052 million, of which $372 million went to development activities, mainly the ongoing construction of the Romaine hydroelectric complex, and $680 million to asset sustainment. Refurbishment projects are underway in several generating stations, including Robert-Bourassa, Rapide-Blanc, Carillon, Beauharnois and Bersimis-2.

Capital spending in the Transmission segment totaled $1,930 million. Of this amount, $382 million was used to connect new generating facilities to the grid and increase transmission capacity. Another $1,548 million was invested in transmission asset sustainment and reliability enhancement projects, especially equipment replacement, facility modernization and grid reinforcement, including construction of the 735-kV Micoua–Saguenay line.

Investments in the Distribution segment totaled $952 million. Most of this amount was dedicated to projects aimed at handling the growing customer base and ensuring the long-term operability of the distribution system.



Financing activities

In 2021, Hydro-Québec made eight fixed-rate bond issues maturing in 2060 on the Canadian capital market, at an average cost of 2.72%.

These issues raised a total of $3.4 billion, which was used to support part of the investment program and to repay higher-cost maturing debt whose average rate was on the order of 10%.

Sources of Financing

Type of financing	Amount authorized by the Board of Directors	Market	Outstanding as at December 31, 2021
Operating credit lines	C$ or US$1,000 million[a]		C$0.2 million
Credit facility[b]	US$2,000 million[c]		–
Commercial paper[b]	US$3,500 million or equivalent in C$	United States or Canada	–
Medium-term notes[b]	US$3,000 million or equivalent in other currencies	United States	US$280 million[d]
	C$20,000 million or equivalent in US$	Canada	C$11,087 million[d]

a) Of this amount, available balances of US$200 million, C$2 million and $294 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) Including a US$750-million swing loan.

d) Net proceeds from the issuance of medium-term notes.

Credit Ratings

	2021		
	Commercial paper	Long-term debt	Outlook/ Trend
U.S. agencies			
Moody's	**P-1**	**Aa2**	**Stable**
S&P Global Ratings	**A-1+**	**AA–**	**N/A[a]**
Fitch Ratings	**F1+**	**AA–**	**Stable**
Canadian agency			
DBRS Morningstar	**R-1 (middle)**	**AA (low)**	**Stable**

a) S&P Global Ratings does not provide an outlook for Hydro-Québec's credit rating.

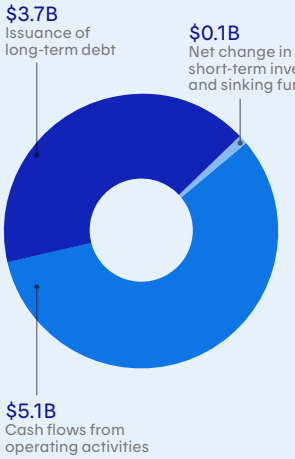
These credit ratings are identical to those in effect on December 31, 2020.

Dividend and capitalization

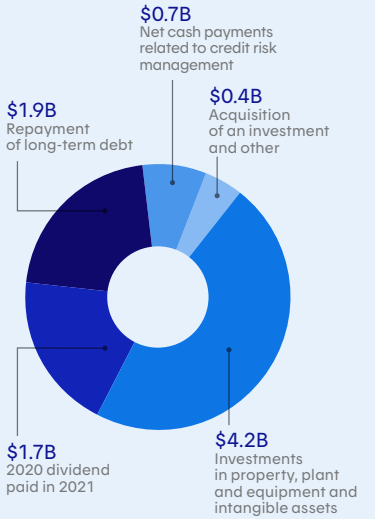
The dividend payable to the Québec government for 2021 is $2,673 million. Once it is factored in, the capitalization rate was 32.0% as at December 31, 2021.

Under the *Hydro-Québec Act* (CQLR, c. H-5), 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 2021



Uses of Funds in 2021



Segmented Results

Operating segments

At the beginning of 2021, Hydro-Québec made changes to its organizational structure, replacing its divisions and other first-tier units with groups. The adjustments came into effect on February 22. As a result, the company now comprises 11 groups, including the following:

- Innovation, production, santé, sécurité et environnement
- TransÉnergie et équipement
- Distribution, approvisionnement et services partagés

These changes had no impact on the company's business segments or the reporting of segmented information in the consolidated financial statements. Hydro-Québec therefore continues to carry out its principal activities in four reportable business segments—Generation, Transmission, Distribution and Construction—its other activities being grouped together under the heading Corporate and Other Activities.

Operations and Assets by Segment

						2021
Segmented financial information ($M)	Generation	Transmission	Distribution	Construction	Corporate and Other Activities[a]	Hydro-Québec
Revenue[b]	**7,222**	**3,477**	**12,529**	**2,765**	**(11,467)**	**14,526**
Net income (loss)	**2,682**	**581**	**516**	**10**	**(225)**	**3,564**
Total assets	**34,672**	**25,365**	**14,976**	**218**	**7,467**	**82,698**

						2020
Segmented financial information ($M)	Generation	Transmission	Distribution	Construction	Corporate and Other Activities[a]	Hydro-Québec
Revenue[b]	6,490	3,624	12,070	2,053	(10,643)	13,594
Net income (loss)	1,842	586	216	6	(347)	2,303
Total assets	33,513	24,145	14,147	43	9,047	80,895

a) Corporate and Other Activities includes intersegment eliminations and adjustments.

b) Segment data include revenue from both external and intersegment customers as 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

This segment includes activities related to the operation and development of Hydro-Québec's generating facilities, except in off-grid systems. It also includes electricity sales and arbitrage transactions on wholesale markets in northeastern North America.

Transmission

This segment includes activities related to the operation and development of the main power transmission system, the marketing of system capacity and the management of power flows across Québec.

Distribution

This segment includes activities related to the operation and development of Hydro-Québec's distribution grid. It also includes retail electricity sales on the Québec market, as well as customer services and the promotion of energy efficiency.

Construction

This segment includes activities related to the design and execution of construction and refurbishment projects involving mainly power generation and transmission facilities.

Generation

2021 AT A GLANCE	
Revenue	**$7.2B**
Net income	**$2,682M**
Contribution of net exports to net income	**$865M**
Customers (% of revenue from electricity sales)	
Distributor	**73%**
Other	**27%**
Sales volume	
Distributor	**163.3 TWh**
Other	**36.2 TWh**
Property, plant and equipment as at December 31 (including work in progress)	**$31.9B**
Investments in property, plant and equipment and intangible assets	**$1,052M**

Under the *Act respecting the Régie de l'énergie* (CQLR, c. R 6.01), the Groupe – Innovation, production, santé, sécurité et environnement,[1] in its role as electricity generator (the "Generator"), is required to provide the Groupe – Distribution, approvisionnement et services partagés, in its role as electricity distributor in Québec (the "Distributor"), with a base volume of up to 165 TWh of heritage pool electricity annually and may also compete for contracts under the Distributor's open tendering process. In addition, it offers balancing services and firming capacity to the Distributor to offset variations in wind farm output and thereby facilitate integration of this energy source. The Generator also exports clean, renewable energy to neighboring markets.

Its generating fleet, with a combined storage capacity of 178.9 TWh, includes 63 power plants, 29 large reservoirs and 684 dams, including 92 control structures.

Operating results

The Generator posted net income of $2,682 million in 2021, an increase of $840 million compared to 2020. Net electricity exports brought in $333 million more than the previous year, amounting to $1,658 million, due to favorable market conditions and a volume increase. Electricity sales to the Distributor rose by $231 million to $5,304 million, mainly on account of higher demand on the Québec market. The net result from special contracts with certain large industrial customers in Québec rose by $122 million, largely because of an increase in the market price of aluminum. Recognition of the other components of employee future benefit cost related to the Pension Plan yielded a positive variance of $79 million, and financial expenses declined by $106 million.

Net electricity exports

Net electricity exports reached a historic peak of $1,658 million, compared to the $1,325 million recorded in 2020. This $333-million increase is primarily due to favorable market conditions arising from a general increase in energy prices, especially in the second half of the year, and warmer temperatures in external markets in the second quarter, which drove up the average price obtained even further. It also results from volume growth of 4.3 TWh that is partly attributable to greater needs on these markets, where demand had fallen the previous year on account of the pandemic.

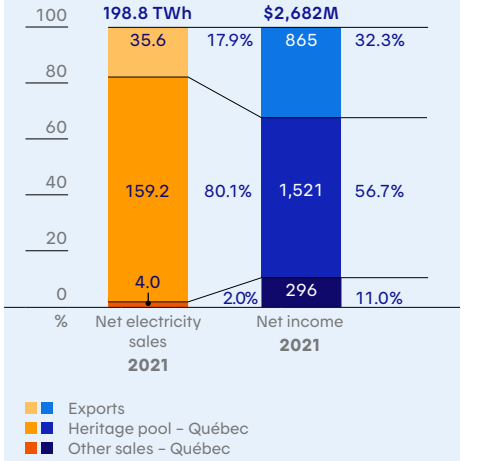
Net export volume thus exceeded 35 TWh for just the second time in Hydro-Québec's history, reaching 35.6 TWh, slightly below the record of 36.1 TWh set in 2018.

Electricity sales in Québec

Sales to the Distributor

Electricity sales to the Distributor totaled $5,304 million, a $231-million rise compared to the $5,073 million recorded a year earlier. This increase is due to growth in the volume of supplies, mainly as a result of higher demand from Québec customers as the economy gradually recovered with the progressive easing of public health measures. It also reflects the indexing of the price of heritage pool electricity, in accordance with the *Act respecting the Régie de l'énergie*.

Generation Segment's Net Electricity Sales and Net Income by Market



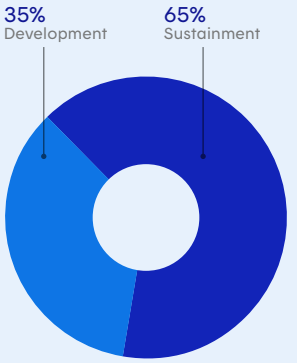
1. For the presentation of segmented information, the financial data pertaining to the Direction principale – Institut de recherche d'Hydro-Québec, the Direction principale – Filiales et innovations commerciales and the Direction principale – Santé, sécurité et environnement are included in Corporate and Other Activities.

Investing activities

In 2021, the Generator invested $1,052 million in property, plant and equipment and intangible assets. Of this amount, $372 million went to development activities, mainly ongoing construction of the Romaine-4 hydroelectric facility, in Minganie, where the generating station is slated to come on stream in 2022. In keeping with the energy transition, the Generator also commissioned two photovoltaic solar power plants in the Montérégie region in the first half of the year: Gabrielle-Bodis generating station, in La Prairie, and Robert-A.-Boyd generating station, in Varennes.

The remaining $680 million was allocated to asset sustainment and output optimization, including ongoing refurbishment projects at the Robert-Bourassa, Rapide-Blanc, Carillon, Beauharnois and Bersimis-2 facilities.

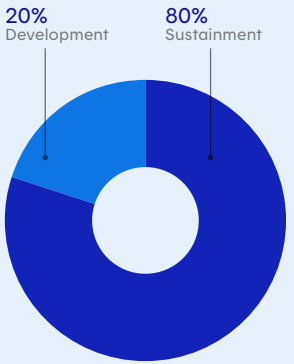
Breakdown of Generation Segment Investments in 2021



Transmission

2021 AT A GLANCE	
Revenue	$3.5B
Net income	$581M
Customers (% of revenue)	
Distributor *(native-load transmission service)*	84%
Generator and other North American wholesalers *(point-to-point transmission services)*	12%
Other	4%
Property, plant and equipment as at December 31 (including work in progress)	$24.7B
Investments in property, plant and equipment and intangible assets	$1,930M

Breakdown of Transmission Segment Investments in 2021



The Groupe – TransÉnergie et équipement,[1] in its role as provider of power transmission services in Québec (the "Transmission Provider"), 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 the province, offering non-discriminatory access to its system to all market players in compliance with applicable regulatory requirements.

The Transmission Provider's activities are regulated by the Régie de l'énergie. Since January 1, 2019, the Transmission Provider's rates have been subject to performance-based regulation (PBR), applicable for a four-year period. Under PBR, rates for the 2021 rate year, currently under review by the Régie, were determined using a parametric formula that provides for the application of the cost-of-service method for some unpredictable costs and the use of an indexation formula for the other cost components.

Rate case

In July 2021, the Transmission Provider filed its 2021 and 2022 rate application with the Régie de l'énergie. This application seeks the approval of revenue requirements and changes to transmission service rates. The Régie's decision regarding this application is expected in the first quarter of 2022.

Operating results

The Transmission segment's net income was $581 million in 2021, comparable to the $586 million recorded a year earlier. The decline in revenue, mainly in connection with native-load transmission service, was offset by a decrease in depreciation and amortization and financial expenses. The 2021 net result reflects a reduction in the revenue presented in the 2021 rate application.

Investing activities

In 2021, the Transmission Provider invested $1,930 million in property, plant and equipment and intangible assets: $382 million for development projects and $1,548 million for asset sustainment and reliability enhancement projects. The purpose of development projects is to connect new generating facilities to the grid or to increase transmission capacity in response to higher load demand or new service requests. Asset sustainment and reliability enhancement projects involve keeping facilities in good operating condition, continuously improving service quality and complying with the legal and regulatory requirements for operating a power transmission system.

In the development category, the Transmission Provider continued its work on the anticipated deployment of a 320-kV direct-current line running some 100 km between Appalaches substation near Thetford Mines and a point on the Québec/Maine border, as part of a larger project aimed at building a new 1,200-MW interconnection between Québec and the New England grid. It also started construction of the 315/25-kV Le Corbusier substation to meet growing demand in the western end of the city of Laval.

At the same time, the Transmission Provider carried out more than 1,500 projects aimed at enhancing the reliability and long-term operability of its assets. These include the continuation of various activities under the architecture development plan for the 315-kV system on the island of Montréal, as well as the replacement of the grid control systems, special protection systems, and substation protections and controls. The Transmission Provider also launched construction of the 262-km, 735-kV Micoua–Saguenay line, designed to help maintain the reliability of Hydro-Québec's transmission system.

1. For the presentation of segmented information, this group's financial data are divided between the Transmission and Construction segments.

Distribution

2021 AT A GLANCE	
Revenue	$12.5B
Net income	$516M
Market segments (% of revenue from electricity sales)	
Residential	45%
Commercial, institutional and small industrial	32%
Large industrial	20%
Other	3%
Property, plant and equipment as at December 31 (including work in progress)	$11.1B
Investments in property, plant and equipment and intangible assets	$952M
Rate increase effective April 1, 2021, pursuant to *An Act to simplify the process for establishing electricity distribution rates* (except Rate L)	1.3%

The Groupe – Distribution, approvisionnement et services partagés,[1] in its role as power distributor in Québec (the "Distributor"), 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.

The Distributor's activities are regulated by the Régie de l'énergie, which has exclusive jurisdiction to set electricity rates.

Process for Establishing Electricity Distribution Rates[a]

2020	2021–2024	2025	2026–2029
Rate freeze	Indexed based on inflation	Régie de l'énergie to set rates based on cost of service for one year and start of new cycle	Indexed based on inflation

a) Except Rate L.

Rate-setting process

The Distributor's rates are subject to *An Act to simplify the process for establishing electricity distribution rates*, which came into force in 2019. In particular, the Act specifies that rates are to be set or modified by the Régie every five years commencing on April 1, 2025, and that, in the interim, they are to be adjusted each year based on the annual change in the average Québec Consumer Price Index. However, it authorizes the Distributor to apply to the Régie, before the deadline, to modify its rates if they do not allow for recovery of the cost of service.

Pursuant to the Act, all distribution rates for the rate year beginning on April 1, 2021, were indexed at a rate of 1.3%, except the large-power industrial rate (Rate L). This adjustment is based on the change in the average Québec Consumer Price Index between September 30, 2019, and September 30, 2020, excluding alcoholic beverages, tobacco products and recreational cannabis. Rate L was increased by 0.8%, which is equal to the 0.65 rate authorized by the Régie in February 2021 multiplied by the general indexation factor of 1.3%. Rates in effect in 2019–2020 had been carried over to the rate year ended March 31, 2021.

For the rate year starting on April 1, 2022, Hydro-Québec has announced an increase of 2.6% for all rates except Rate L. The increase applicable to Rate L has been set at 1.7%, which corresponds to the 0.65 rate authorized by the Régie in February 2022 multiplied by the general indexation factor of 2.6%.

Supplying the Québec market

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

For requirements of less than three months, the Distributor 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 the Generator that covers the period from January 1, 2020, to December 31, 2022. This agreement was approved by the Régie in December 2019.

In November 2021, the Distributor filed a second progress report on the Electricity Supply Plan 2020–2029 with the Régie. This report provides an updated demand forecast for the Québec market, which projects 20-TWh growth over the period from 2019 to 2029, and outlines the events that have influenced supply planning as well as the measures taken since the first progress report on the Plan was filed in October 2020.

Moreover, the Distributor is continuing its efforts to promote energy efficiency. Among other things, it has developed an integrated offer based on raising awareness among customers and helping them make lasting changes in how they use electricity. In addition, it constantly adjusts its programs according to market needs and the company's requirements, seeks to ensure that its initiatives are in line with those of its various partners and remains on the lookout for potential energy savings from new technologies.

1. For the presentation of segmented information, the financial data pertaining to the Direction principale – Approvisionnement stratégique and the Direction principale – Centre de services partagés are included in Corporate and Other Activities.

Lastly, in July 2021, the Distributor entered into a partnership agreement with Énergir to reduce greenhouse gas emissions associated with heating residential, commercial and institutional buildings. The agreement involves the implementation of a dual-energy solution combining electricity and natural gas in keeping with the *2030 Plan for a Green Economy*, which establishes the Québec government's electrification and climate change policy framework. The partners submitted a joint application regarding this agreement to the Régie in September and are awaiting its decision before launching the project.

Operating results

Net income related to distribution activities totaled $516 million, or $300 million more than the $216 million posted in 2020. Revenue from electricity sales increased by $390 million on account of two main factors: growth in baseload demand from business customers—due in part to the gradual economic recovery as public health measures were eased—and higher aluminum prices, given that the latter have an impact on revenue from special contracts with certain large industrial customers. Electricity purchases and the related transmission costs rose by $213 million, primarily because of an increase in supplies purchased from the Generator. Lastly, recognition of the other components of employee future benefit cost related to the Pension Plan yielded a positive variance of $76 million, whereas financial expenses declined by $38 million.

Electricity sales in Québec

Revenue from electricity sales amounted to $12,319 million, a $390-million increase over 2020 that was due to a surge in electricity demand in Québec, the increase in the market price of aluminum and the rate indexation on April 1, 2021. These factors were partially offset by the negative impact of temperatures.

Sales volume grew by 3.8 TWh to a historic peak of 175.2 TWh, compared to 171.4 TWh in 2020.

On the one hand, baseload demand rose by 4.9 TWh, essentially because of greater energy needs in the commercial, institutional and small industrial segment and the large industrial segment with the gradual resumption of economic activity. The public health measures implemented in the context of the pandemic had forced the closure of numerous stores and other businesses for many weeks in the spring and fall of 2020, driving down electricity sales. As the public health measures were eased in 2021, the economy bounced back and baseload demand grew. This factor was partially offset, however, by the fact that the 2020 leap year included an additional day of sales, which led to a negative variance in all customer categories in 2021.

Electricity Sales in Québec by Segment

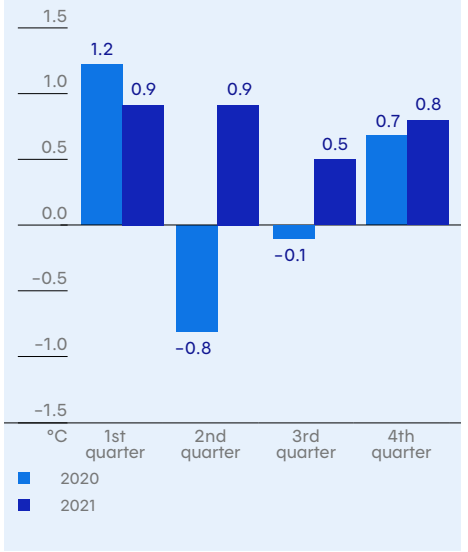
	Sales volume			Sales revenue		
	2021	2021–2020 change		**2021**	2021–2020 change	
Market segments	TWh	TWh	%	$M	$M	%
Residential	**67.6**	(1.0)	(1.5)	**5,522**	(13)	(0.2)
Commercial, institutional and small industrial	**46.2**	1.1	2.4	**3,957**	104	2.7
Large industrial	**55.8**	3.7	7.1	**2,498**	290	13.1
Other	**5.6**	–	–	**342**	9	2.7
Total	**175.2**	3.8	2.2	**12,319**	390	3.3

Factors Underlying the 2021–2020 Change in Sales by Segment

	Volume effects					Price effects	**Total**
	Baseload demand[a]		Temperatures		**Total**		
Market segments	TWh	$M	TWh	$M	$M	$M	$M
Residential	–	1	(1.0)	(69)	**(68)**	**55**	**(13)**
Commercial, institutional and small industrial	1.1	79	–	(5)	**74**	**30**	**104**
Large industrial	3.7	155	–	–	**155**	**135**	**290**
Other	0.1	9	(0.1)	–	**9**	**–**	**9**
Total	4.9	244	(1.1)	(74)	**170**	**220**	**390**

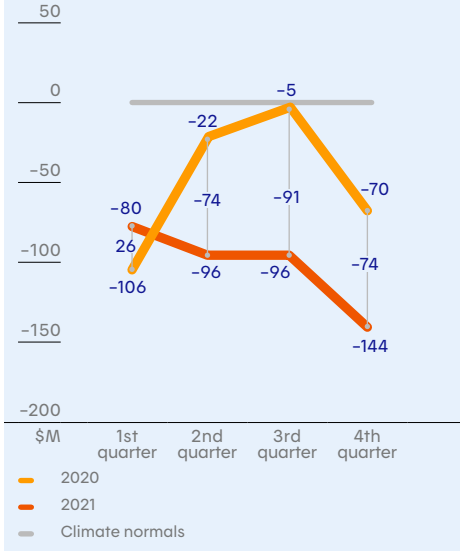
a) Including the leap year effect of additional sales on February 29, 2020.

Variances from Climate Normals – Montréal and Québec



On the other hand, temperatures led to a 1.1-TWh decrease in sales. Their impact was mainly felt in the spring, especially in April, when they were on average 3°C higher than in 2020, leading to a decline of 1.3 TWh or $100 million in electricity sales in the second quarter.

Cumulative Impact on Electricity Sales in Québec of Temperatures Compared to Normals



Other revenue from ordinary activities

Other revenue from ordinary activities rose by $64 million compared to the $31 million recorded in 2020, primarily because the sale of renewable energy certificates generated an additional $42 million in 2021. To a lesser extent, the increase is also due to the fact that Hydro-Québec had suspended administration charges on unpaid bills for several months in 2020 to assist customers experiencing financial difficulties in the context of the pandemic, which led to a positive variance in this regard in 2021.

Electricity purchases and transmission costs

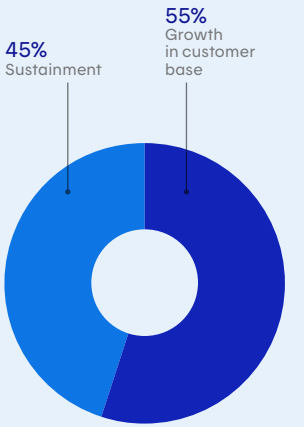
Electricity purchases and the related transmission costs increased by $213 million compared to 2020. Supplies from the Generator rose by $231 million on account of the higher volume of electricity sales in Québec and the indexation of heritage pool electricity, pursuant to the *Act respecting the Régie de l'énergie*. Supplies from third parties decreased due to lower output from wind farms under contract, which was partially offset by an increase in biomass energy purchases following the commissioning of a cogeneration plant at the end of 2020. Lastly, the costs incurred for native-load transmission services provided by the Transmission Provider also declined.

Investing activities

In 2021, the Distribution segment's investments in property, plant and equipment and intangible assets totaled $952 million.

Of this amount, $527 million went toward handling the growth of the Québec customer base. This includes connecting over 54,000 new customers and commissioning most of the facilities linking the village of La Romaine and the Innu community of Unamen Shipu, both in the Basse-Côte-Nord region, to the main grid. The Distributor also continued to build a new generating station to supply the Inuit village of Tasiujaq, in the Nord-du-Québec region. In addition, it allocated $425 million to asset sustainment, in particular the project to replace the distribution grid control system.

Breakdown of Distribution Segment Investments in 2021



Construction

2021 AT A GLANCE	
Volume of activity	$2.8B
Main customers	
Generator	33%
Transmission Provider	60%

The Construction segment consists of activities related to projects carried out by the Groupe – TransÉnergie et équipement[1] and by Société d'énergie de la Baie James (SEBJ) (collectively, the "Construction Expert").

The Groupe – TransÉnergie et équipement 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 an engineering, construction and environmental specialist, the Construction Expert also offers the Generator and the Transmission Provider 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

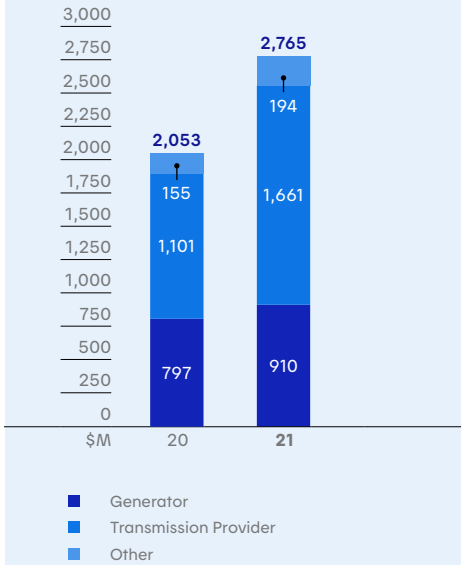
The Construction Expert carried out projects amounting to $2,765 million in 2021, compared to $2,053 million the previous year, when the pace of activity on the company's jobsites had slowed due to the public health crisis. The high volume is attributable to several large-scale projects. Work done for the Generator totaled $910 million, compared to $797 million in 2020, while work done for the Transmission Provider totaled $1,661 million, compared to $1,101 million in 2020.

Main projects

In the area of power generation, the Construction Expert went on working on the Romaine-4 development to complete the Romaine hydroelectric complex and continued to overhaul some of the generating units at Robert-Bourassa and Beauharnois generating stations. It also started replacing six units at Carillon and the headgates at Bersimis-2. Progress was also made on the refurbishment of Rapide-Blanc generating station and the dike at Les Cèdres, as well as the upgrade of the auxiliary systems at Carillon.

In the area of transmission, construction work began on the 735-kV Micoua–Saguenay line and the 315/25-kV Le Corbusier and Des Irlandais substations. In addition, the Construction Expert carried on with its numerous replacement programs throughout Québec, while also upgrading various facilities on the main transmission system and pursuing other projects to increase transmission capacity. Achievements in this regard include the replacement of the static compensators at Chamouchouane substation.

Breakdown of Construction Segment Activities



1. For the presentation of segmented information, this group's financial data are divided between the Transmission and Construction segments.

Corporate and Other Activities

The Corporate and Other Activities heading includes all corporate activities, which are handled by the Groupe – Direction financière, Groupe – Affaires corporatives, juridiques et gouvernance, Groupe – Expérience client, communications et relations avec les communautés, Groupe – Talents, culture et évolution, Groupe – Gestion intégrée des risques and Groupe – Audit interne. It also encompasses the activities of the Groupe – Technologies de l'information et des communications, Groupe – Stratégies d'entreprise et développement des affaires, Direction principale – Approvisionnement stratégique, Direction principale – Centre de services partagés, Direction principale – Santé, sécurité et environnement, Direction principale – Institut de recherche d'Hydro-Québec and Direction principale – Filiales et innovations commerciales, as well as intersegment eliminations and adjustments.

Results

In 2021, Corporate and Other Activities posted a net loss of $225 million, compared to $347 million a year earlier. The loss recorded in 2021 relates in particular to the activities of the Institut de recherche d'Hydro-Québec and of the startup subsidiaries tasked with leveraging the technologies and services resulting from the company's R&D efforts in the areas of energy efficiency, demand response and energy storage systems.

Corporate activities

The **Groupe – Direction financière** is responsible for financing, treasury, accounting, budget planning, taxation, control, preparation of financial statements and reports, as well as Pension Plan and Pension Fund management. As at December 31, 2020, the date of the most recent actuarial valuation, the Pension Plan showed a funding surplus of $10.1 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* (CQLR, c. R-15.1). The Pension Plan's funding ratio was 152.1% 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 of Québec and the Canada Energy Regulator. It also develops strategies and guidelines and provides advisory services in the areas of corporate affairs, governance and ethics, access to documents and protection of personal information, information management, and sustainable development. At the request of Hydro-Québec's Management or Board of Directors, it also conducts analyses and verifications aimed at evaluating the company's governance, performance and compliance in different areas, such as anti-bribery policies, the environment and occupational health and safety.

The **Groupe – Expérience client, communications et relations avec les communautés** provides advice and guidance on customer experience and marketing to Hydro-Québec and its subsidiaries. It is also responsible for communications with the general public and the company's stakeholders, including governments, as well as relations with local communities and Indigenous peoples. In addition, it develops integrated strategies regarding all stakeholders to ensure the social acceptability of Hydro-Québec's projects and activities, and works with the other groups and the subsidiaries to continuously enhance the company's reputation.

The **Groupe – Talents, culture et évolution** develops strategies, guidelines, directives, 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 supports the company's development and continuous improvement by seeking to ensure that Management can count on optimum conditions regarding human resources. Moreover, it is responsible for all measures regarding the protection of personnel and third parties, as well as the security of Hydro-Québec's facilities and assets.

The **Groupe – Gestion intégrée des risques** coordinates and oversees the company's integrated business risk portfolio. It also monitors market and credit risks related in particular to energy trading floor operations, the regulated activities of the Transmission Provider and the Distributor, business development, treasury activities, financing, as well as debt and Pension Plan management. It also conducts economic and financial analyses regarding major capital, acquisition and equity investment projects. Lastly, it optimizes Hydro-Québec's energy and capacity balances according to different scenarios and proposes ways to enhance the value of the current and projected asset base and related resources, with a view to reliability, profitability, decarbonization and sustainable development.

The **Groupe – Audit interne** ensures that internal control mechanisms are well designed and implemented and that they are adequate and effective by providing reasonable assurance and by supporting the Board of Directors in exercising sound governance at Hydro-Québec. It provides advice and suggests improvements not just in terms of efficiency, but also in the areas of environmental protection, health and safety, technology, innovation and social responsibility. To do so, it focuses on working with Senior Management and creating added value. Reporting to the Board of Directors' Audit Committee, the group is responsible for the internal audit of the company, including its subsidiaries and Pension Plan, and has the necessary powers and authority to perform its role in an independent and objective manner, in compliance with applicable laws and standards. In carrying out its duties, it adopts a systematic and methodical approach, taking into account Hydro-Québec's objectives, strategies, risks, governance processes and management system, and is guided by best practices in internal auditing.

Groupe – Technologies de l'information et des communications

The Groupe – Technologies de l'information et des communications designs, deploys and operates the company's information networks, systems, applications and infrastructure, and plans their development. To this end, its teams ensure the sustainment of hardware and software resources, establish the technological foundations essential to business growth, and continue to implement an integrated vision regarding governance, architecture, development and

operations, with an emphasis on security. In addition, the group develops innovative, cutting-edge solutions to increase productivity and facilitate the company's digital transformation, which involves increased power grid and business process automation, greater mobility, and the use of cloud computing, data analytics and artificial intelligence, as well as instilling a strong cybersecurity culture. It is also responsible for the operation, development, maintenance and security of Hydro-Québec's telecommunications network, which is one of the largest in the North American electricity sector and underpins one of the world's most complex power grids.

The group's volume of activity totaled $890 million in 2021, compared to $768 million in 2020. This increase is due to a rise in Hydro-Québec's business needs, mainly as regards technological debt management and the compliance and security of information and communications technologies, as well as to the launch of various initiatives to meet efficiency and business growth imperatives.

Investing activities

In 2021, the investments made by the Groupe – Technologies de l'information et des communications totaled $197 million. This amount was primarily allocated to maintaining the long-term operability of assets in line with enterprise architecture targets and strategic objectives related to the company's digital shift.

Groupe – Stratégies d'entreprise et développement des affaires

The Groupe – Stratégies d'entreprise et développement des affaires has three main mandates. First, it is responsible for developing the Québec market and seizing business opportunities in neighboring markets, so that Hydro-Québec can maximize its contribution to sustainable wealth creation for Québec and play a leading role in the energy transition. More specifically, it seeks out growth opportunities in the form of facility acquisitions or long-term partnerships in the renewable energy sector while also attracting promising investments to Québec. Secondly, the group works to expand export markets by promoting the advantages of Québec hydropower to support the decarbonization of northeastern North America. Lastly, it develops corporate strategies to help Hydro-Québec evolve in step with the business, economic and social context by leveraging its intellectual capital and infrastructure, and it assists the other groups in the achievement of their respective strategic mandates.

Direction principale – Centre de services partagés and Direction principale – Approvisionnement stratégique

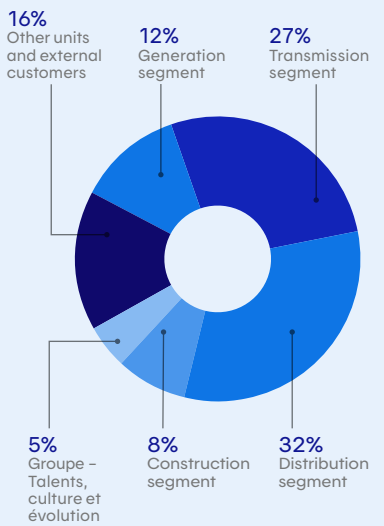
The mission of the Direction principale – Centre de services partagés[1] is to create value and enable its partners to focus on their core mission by providing competitive services and expertise in property management, material and transportation logistics, as well as administrative support to the company as a whole. It thereby contributes to Hydro-Québec's bottom line by optimizing costs and maximizing asset value. The Direction principale – Approvisionnement stratégique[1] provides corporate-wide guidelines, directives, products and services related to strategic procurement, according to best practices in this area.

These two units' combined volume of activity amounted to $655 million in 2021, compared to $590 million in 2020.

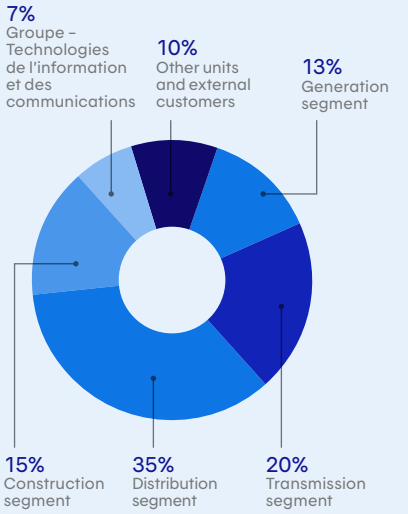
Direction principale – Santé, sécurité et environnement

The Direction principale – Santé, sécurité et environnement[2] maintains Hydro-Québec's expertise and supports the company's activities in the areas of occupational health and safety and the environment. It defines the related guidelines and directives, ensures their consistent application and does the necessary follow-ups to enable the company to proactively manage the associated risks and challenges and improve its performance in these areas. It is accountable to the Management Committee in this regard.

Breakdown of 2021 Activities: Groupe – Technologies de l'information et des communications



Breakdown of 2021 Activities: Direction principale – Centre de services partagés and Direction principale – Approvisionnement stratégique



1. This Direction principale is part of the Groupe – Distribution, approvisionnement et services partagés.
2. This Direction principale is part of the Groupe – Innovation, production, santé, sécurité et environnement.

Direction principale – Institut de recherche d'Hydro-Québec

The Direction principale– Institut de recherche d'Hydro-Québec[1] (IREQ) develops cutting-edge technologies and applications adapted to the energy situation in Québec, in order to help the company improve grid performance and better serve its customers.

As Hydro-Québec's innovation hub, IREQ includes the company's research center and the Center of Excellence in Transportation Electrification and Energy Storage. The research center, whose projects are designed in particular to support the energy transition, keeps the company on the leading edge of advances in knowledge and technological solutions in all areas likely to have an impact on its operations over the short and long term. The work of the Center of Excellence focuses on advanced materials for sustainable mobility and small- and large-scale energy storage, two key elements in the fight against climate change.

Direction principale – Filiales et innovations commerciales

The mandate of the Direction principale – Filiales et innovations commerciales[1] is to develop an end-to-end vision and strategy for commercializing innovative technologies that will help build Québec's energy future for the benefit of customers and the community. It is also in charge of coordinating the operations of the Hydro-Québec IndusTech subsidiaries tasked with marketing the technologies and services resulting from Hydro-Québec's R&D efforts, including Hilo (energy efficiency and demand response) and EVLO (energy storage systems). It also oversees the operations of subsidiaries working in the electric mobility sector, namely DANA TM4 (propulsion systems), Circuit électrique Québec (Electric Circuit charging network) and AXSO (software platform for smart electric vehicle charging).

Contingency

Further to the agreement entered into by Hydro-Québec to sell 9.45 TWh of energy to electricity distributors in Massachusetts over a 20-year period, Hydro-Québec and its U.S. partner Central Maine Power ("CMP") launched the New England Clean Energy Connect ("NECEC") project in the United States to transmit the power via the State of Maine. This project is part of a larger project aimed at establishing a new interconnection between the Québec and New England grids. In January 2021, CMP initiated the construction of the NECEC line, as all the key authorizations and major permits required by the U.S. regulatory authorities had been obtained. In November 2021, Mainers voted in a citizen initiative referendum to block the project. Hydro-Québec and CMP are challenging the legality of the new law resulting from this initiative in court, and CMP has suspended construction work until the issue has been resolved by the ongoing legal proceedings. In coordination with CMP, Hydro-Québec also suspended some of the construction work related to the interconnection project in Québec.

Should the project be abandoned, certain costs recognized as property, plant and equipment under construction, which totaled $347 million as at December 31, 2021, will be charged to results, along with the amounts that Hydro-Québec has undertaken to pay under various agreements, which amounted to $189 million at year-end 2021.

1. This Direction principale is part of the Groupe – Innovation, production, santé, sécurité et environnement.

Outlook

For 2022, Hydro-Québec is targeting net income of $3.4 billion. Given the current context, however, there is still uncertainty about how the COVID-19 pandemic will develop and how it will impact the company's operations. The company continues to monitor the situation very closely, as it has been doing since the start of the public health crisis.

Hydro-Québec plans to invest approximately $5.0 billion in 2022, most of which will be allocated to the operations of the Transmission Provider ($2.2 billion), the Generator ($1.2 billion) and the Distributor ($1.0 billion). Nearly two thirds of the total amount will be earmarked for asset sustainment. The remainder will go toward development activities.

The 2022 borrowing program is set at $5.5 billion. The funds raised will be used to support a large part of the investment program and to repay higher-rate maturing debt.

The **Generator** 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 is scheduled to follow in 2022. At the same time, the Generator will continue investing to ensure the long-term operability of its facilities and optimize their output. For instance, refurbishment is underway at Robert-Bourassa, Rapide-Blanc, Carillon and Beauharnois generating stations.

The **Transmission Provider** will devote a large part of its investments to erecting transmission lines, in particular the 735-kV line that will extend 262 km between Micoua substation, in the Côte-Nord region, and Saguenay substation, in the Saguenay–Lac-Saint-Jean region. It 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 work stemming from the architecture development plan for the 315-kV system on the island of Montréal.

The **Distributor** will continue to deliver reliable power and high-quality services to Quebecers and will make investments to better meet customer needs, such as the ongoing construction of a new generating station to supply the Inuit village of Tasiujaq, in the Nord-du-Québec region. It will also carry out asset sustainment projects, including the replacement of the distribution grid control system.

Integrated Business Risk Management

Hydro-Québec has been applying an integrated business risk management process as part of its ongoing activities for many years. This process is supported by various control, communication and assessment mechanisms intended to ensure dynamic monitoring of risk developments.

All groups within the company have a role to play. As part of their activities, they manage the risks to which they are exposed and reassess them on a regular basis, daily in some cases, using the tools developed by the Groupe – Gestion intégrée des risques, among other things. In concrete terms, each group 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 groups report periodically 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 forecast net income.

Integrated Business Risk Management Process

	Annually	Monthly
Groups	• Identification of each group's risks and validation by the manager reporting to the President and Chief Executive Officer • Development or updating of the group's portfolio of residual business risks	Report on the monitoring of each group'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 forecast 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 • Analysis of the company's consolidated portfolio of residual business risks and risk map **Financial Affairs, Projects and Technologies Committee** Analysis of the Business Plan and probability of attaining forecast net income **Board of Directors** Review of the Business Plan, the company's consolidated portfolio of residual business risks, risk map and probability of attaining forecast net income	

a) Acting as the risk management committee, with the Vice President – Integrated Risk Management 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 teams 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. Lastly, 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 that are 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 arise from 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. To mitigate the impacts of the pandemic in 2021, the company relaxed its payment arrangement conditions to accommodate the needs of both residential and business customers.

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 the Distributor's power purchase agreements and the Generator's 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 derivative instrument portfolios below a predetermined threshold.

Regulatory risks

Hydro-Québec is exposed to regulatory risks because, under the *Act respecting the Régie de l'énergie*, its electricity transmission and distribution operations are regulated. The decisions handed down by the Régie de l'énergie may therefore affect the results of the Transmission Provider and the Distributor. 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.

However, *An Act to simplify the process for establishing electricity distribution rates*, which came into force in 2019, put an end to the regulatory practice whereby any variance between the actual amounts of certain items, in particular revenue variances related to weather conditions and variances related to the cost of electricity supplies, and the amounts forecast in the rate filings, which were based on climate normals and recognized by the Régie for rate-setting purposes, could later be factored into the Distributor's rates. As a result, the Distributor is now exposed to the risks associated with these items, which were formerly covered by variance and deferral accounts. Since 2021, however, these risks are partially mitigated by the annual indexation of rates.

Various measures have been put in place to reduce the impact of regulatory risks on the results of the Transmission Provider and the Distributor. These measures include submitting complete and well-argued files to the Régie and maintaining a constructive dialogue with the Régie and the intervenors, particularly during working sessions.

Operational risks

Managing a power system poses numerous technical challenges in connection with aging equipment. Hydro-Québec must therefore make informed decisions when it comes to planning investments aimed at extending the useful life of its facilities and replacing certain assets.

Generation

One of the primary uncertainties that Hydro-Québec faces relates to natural water inflows. The Generator 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 the Distributor 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 Generator 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 margin allows it 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 Generator's generating capacity and energy reserve.

Moreover, the Generator operates many generating stations and control structures in southern Québec, particularly on the Rivière Saint-Maurice, the Rivière des Outaouais (Ottawa River) and the Fleuve Saint-Laurent (St. Lawrence River), along which a number of urban centers and other agglomerations are located. These rivers have experienced major spring flooding in recent years, especially in 2017 and 2019. To reduce the impact of flooding on communities, the Generator plans ahead and manages its facilities in such a way as to maximize public safety, by carrying out rigorous monitoring and by working closely with the authorities. For example, various reservoirs are used to limit the risk of flooding. The company held numerous information sessions during the year to educate the public about the key role that its reservoirs and control structures play in managing floods.

The Generator is also exposed to risk arising from variances between actual temperatures and domestic market demand and forecast values. Such variances have an impact on its electricity sales to the Distributor and may affect the volume available for its export sales.

In addition to runoff uncertainties, the Generator's export activities on wholesale markets are subject to market risk and the risk of unavailability of generating and transmission equipment. Market risk is the result of fluctuations in energy prices on markets outside Québec. It is mitigated by

the ongoing monitoring of trends on wholesale markets and the use of hedging derivative instruments. The risk of unavailability of generating and transmission equipment is mitigated through the implementation of maintenance and upgrade programs.

The risks related to export activities are quantified in an integrated fashion by a team of specialists that is independent of the team carrying out the transactions. This team sees to the application of controls, submits daily reports to the managers who oversee these activities 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. To counter these factors, the Transmission Provider relies on a variety of preventive measures. For instance, it implements the reliability standards of the North American Electric Reliability Corporation (NERC), as well as various 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 the Direction principale – Contrôle des mouvements d'énergie et exploitation du réseau of the Groupe – TransÉnergie et équipement serves as the Reliability Coordinator for transmission systems in Québec, a role it was assigned by the Régie de l'énergie in 2007.

The Transmission Provider must provide enough transmission capacity to supply the Distributor and other customers, while 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 the Distributor is exposed relates to continuity of service. To maintain power quality, it makes ongoing investments in its system to modernize and automate it, and to enhance its security. It also relies on vegetation control, the implementation of an asset maintenance program and an asset renewal strategy, 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, it has adopted new technologies for rapid detection of outages, faster service restoration and remote management of certain incidents.

Even under normal weather conditions, the Distributor has to deal with demand fluctuations that are due to economic and energy market factors and that impact its results. When demand is lower than forecast, it cannot recover from customers all the costs related to power transmission and distribution. Since *An Act to simplify the process for establishing electricity distribution rates* came into force, the Distributor has also been exposed to risks associated with weather conditions and variances in electricity supply costs. To limit the impact of all these risks, it constantly fine-tunes its method of forecasting electricity demand.

Construction

One of the main risks Hydro-Québec faces in its construction projects is occupational health and safety on its jobsites. In 2017, the company initiated a major shift aimed at developing strong leadership, raising its standards and improving its performance in health and safety, so as to become a benchmark in this area in Québec's construction industry.

Despite all the efforts made to date, a few fatal accidents occurred on Hydro-Québec's jobsites in 2021. These tragic events have underscored the necessity to reduce risk tolerance and act swiftly to control critical hazards and implement controls in all circumstances. Among the initiatives prioritized are regular on-site inspections and sustained interactions with contractors. In light of the workforce turnover on the jobsites, greater emphasis is also being placed on the orientation, qualification and support of new workers. All groups and teams are working together to achieve a common goal: ensuring a safe, healthy, respectful and caring work environment.

Pressure on construction project costs is another risk to which Hydro-Québec is constantly exposed. This pressure stems from such factors as a labor shortage due in part to the boom in Québec's construction industry, higher prices for certain materials and products, as well as issues like late deliveries, poor quality and work stoppages, which affect project schedules. Post-pandemic recovery plans that began rolling out in the second half of 2021 could put more pressure on project costs and labor availability.

To meet its commitments and continue to apply high safety and quality standards, the Construction Expert has implemented a

number of measures to reduce its risk exposure. For instance, its teams analyze health and safety risks, and then develop integrated solutions to eliminate or mitigate these risks in the early stages of engineering. In addition, it closely monitors project schedules, costs, accidents and risks specific to each project or key deliverable, an approach that enables it to ensure that projects are progressing as planned and to take any necessary corrective action. In collaboration with internal partners, the Construction Expert also maintains ongoing relations with the relevant organizations and government departments to stay abreast of future amendments to laws and regulations that could affect its activities. Lastly, in conjunction with the Direction principale – Approvisionnement stratégique, it monitors the markets and develops procurement strategies that promote competition, Hydro-Québec's attractiveness as a customer, the sustainability of supplies and the maintenance of expertise in its markets, and it adapts its project implementation strategies to the economic situation, in collaboration with its partners.

Corporate and Other Activities

Occupational health and safety

Hydro-Québec is continuing the company-wide shift it initiated to change its culture and improve its performance in occupational health and safety (OHS) in order to protect all its workers. This shift revolves around three pillars: leadership, risk management and performance.

Numerous initiatives have thus been launched. Priority is given to the two risks involving the most serious consequences, namely moving vehicles and live equipment, as well as ground-level slips, trips and falls, which are very frequent.

Significant efforts have been made to optimize the reporting of accidents, determine their causes and implement effective control strategies and methods. For instance, a specialized team was tasked with conducting independent investigations to determine the root causes of potentially serious incidents with a high risk of recurrence.

Given the current public health crisis, the company has also added biological risks to its action priorities. In March 2020, it deployed its emergency biohazard response plan, which calls for the application of numerous hygiene measures in workplaces and on jobsites in order to protect both workers and the local populations concerned. At the same time, it implemented a number of support measures to help teleworkers maintain a healthy lifestyle.

OHS performance indicators continue to be closely tracked in dashboards and performance reviews, and the measures taken since 2017 have laid the groundwork for achieving the desired results. Improving the company's OHS performance and creating a genuine culture of prevention is a long process. However, the continued deployment of the company's health and safety action plan in 2021 should contribute to more effective risk management and new gains in this area during the coming years.

Safety of individuals and security of assets and revenue

Hydro-Québec takes every possible measure to protect its employees and third parties against any threats, hazards, disasters and exceptional circumstances that might occur in the course of operations. It carries out continuous monitoring of threats and vulnerabilities, and of the safety measures necessary for accomplishing its mission. The company also looks after securing all its physical assets, information assets and cyber assets.

To help ensure optimal protection of individuals and of its assets and revenue, Hydro-Québec is committed to fostering a culture of safety and security; increasing public awareness of the need for good safety habits near its facilities; anticipating, evaluating and mitigating risks and threats; establishing and applying adapted safety measures; ensuring surveillance of assets and detection of anomalies; responding quickly in the event of harm, damage or threat to individuals, assets or revenue in order to limit impacts; complying with legal and regulatory requirements; and taking part in government safety and security initiatives.

Concerning protection of revenue, Hydro-Québec pays special attention to electricity theft, fraud, intellectual property infringement and possible attacks on the grid. To counter these risks, the company relies on a series of measures, including an analytical method for detecting electricity theft, the creation of a team dedicated to investigating collusion, corruption, fraud and economic integrity, the proactive verification of security problems, as well as continued active surveillance in collaboration with its partners.

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 occurrence.

The corporate plan integrates the emergency response plans and activities of all the groups with the aim of strengthening and improving coordination of the efforts of all internal and external responders, including public authorities.

Security of information and communications technologies

Cybersecurity is a key concern for Hydro-Québec. To manage this issue, the company relies on a multidisciplinary team of experts who work closely with a network of external collaborators. Together, these stakeholders protect technology assets, anticipate and analyze threats, and rigorously monitor related risks. The company regularly assesses the mitigation measures in place and deploys new strategies based on changes in the business environment and emerging trends in security.

Growth in Québec and beyond

Hydro-Québec intends to take advantage of opportunities both in Québec and beyond its borders with a view, in particular, to increasing the company's value, enhancing its strategic position and supporting the decarbonization of all its markets. The growth avenues it is exploring involve developing its domestic and export markets, leveraging its technologies and acquiring assets or equity stakes. To ensure the success of these ventures, the company has adopted a disciplined approach and implemented a business opportunity analysis process to identify the related risks and manage them proactively.

Environment

Every year, Hydro-Québec reviews its management of environmental risks as well as areas for improvement using its ISO 14001:2015–certified management system. It thereby seeks to better control the impact of its operations and projects on biophysical and human environments and to maximize the positive environmental spin-offs of its presence throughout Québec.

Climate change

Since climate change is already starting to have an impact on Hydro-Québec's operations, the company has undertaken to implement an adaptation plan aimed at mitigating the related risks. In 2020, a committee with representatives from all the groups concerned set out to identify the company's key vulnerabilities. In 2021, it identified the main risks associated with climate change and proposed adaptation measures that will be implemented progressively over the coming years. The company has also asserted its intention to be a leader in the energy transition so as to make an even larger contribution to the fight against global warming.

MANAGEMENT'S REPORT ON FINANCIAL INFORMATION

Hydro-Québec's consolidated financial statements and all the 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 of Québec 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, as well as the Code of Ethics applicable to all Hydro-Québec employees to ensure the proper management of resources and the orderly conduct of business, in compliance with the applicable laws and regulations. An internal audit process assists in evaluating Hydro-Québec's policies and directives and in determining the sufficiency and effectiveness of controls. 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 Vice President – Internal Audit 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 Vice President – Internal Audit have full and unrestricted access to the Audit Committee, with or without Management present.

The 2021 and 2020 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/ Sophie Brochu
President and Chief Executive Officer

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

Montréal, Québec
February 18, 2022

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 and its subsidiaries (the Group), which comprise the consolidated balance sheets as at December 31, 2021 and 2020, 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, 2021 and 2020, 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. The other information comprises the information included in the Annual Report, but does not include the consolidated financial statements and our auditors' report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do 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 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 this other information, 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.

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, these principles have been applied on a basis consistent with that of 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.

On behalf of the Auditor General of Québec,

/s/ KPMG LLP[1]

/s/ Ernst & Young LLP[2]

/s/ Patrick Dubuc, CPA auditor, CA
Acting Assistant Auditor General

Montréal, Québec
February 18, 2022

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

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statements of Operations

Years ended December 31 In millions of Canadian dollars	Notes	2021	2020
Revenue	20	**14,526**	13,594
Expenditure			
Operations		**3,288**	3,146
Other components of employee future benefit cost	18	**(743)**	(494)
Electricity purchases		**2,169**	2,204
Depreciation and amortization	4	**2,689**	2,694
Taxes	5	**1,191**	1,138
		8,594	8,688
Income before financial expenses		**5,932**	4,906
Financial expenses	6	**2,368**	2,603
Net income		**3,564**	2,303

Consolidated Statements of Comprehensive Income

Years ended December 31 In millions of Canadian dollars	Notes	2021	2020
Net income		**3,564**	2,303
Other comprehensive income	16		
Net change in items designated as cash flow hedges	15	**(544)**	(229)
Net change in employee future benefits	18	**1,586**	(464)
Other		**5**	(9)
		1,047	(702)
Comprehensive income		**4,611**	1,601

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	2021	2020
ASSETS			
Current assets			
Cash and cash equivalents		**1,297**	1,467
Short-term investments		**381**	304
Accounts receivable and other receivables	15	**3,069**	2,313
Derivative instruments	15	**52**	147
Regulatory asset	3	**122**	123
Materials and supplies		**389**	316
		5,310	4,670
Property, plant and equipment	7	**68,530**	66,900
Intangible assets	8	**1,165**	1,053
Investments	9	**1,967**	1,717
Derivative instruments	15	**3**	11
Regulatory assets	3	**3,020**	5,700
Other assets	10	**2,703**	844
		82,698	80,895
LIABILITIES			
Current liabilities			
Accounts payable and accrued liabilities		**2,163**	2,080
Dividend payable	16	**2,673**	1,727
Accrued interest		**877**	933
Asset retirement obligations	11	**75**	84
Derivative instruments	15	**337**	14
Current portion of long-term debt	12	**3,247**	1,900
		9,372	6,738
Long-term debt	12	**46,197**	46,257
Asset retirement obligations	11	**867**	838
Derivative instruments	15	**126**	3
Regulatory liabilities	3	**319**	331
Other liabilities	13	**2,303**	5,150
Perpetual debt	14	**254**	256
		59,438	59,573
EQUITY	16		
Share capital		**4,374**	4,374
Retained earnings		**20,949**	20,058
Accumulated other comprehensive income		**(2,063)**	(3,110)
		23,260	21,322
		82,698	80,895
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
Chair 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	Note	Share capital	Retained earnings	Accumulated other comprehensive income	Total equity
Balance as at December 31, 2020		**4,374**	**20,058**	**(3,110)**	**21,322**
Net income		**–**	**3,564**	**–**	**3,564**
Other comprehensive income	**16**	**–**	**–**	**1,047**	**1,047**
Dividend	**16**	**–**	**(2,673)**	**–**	**(2,673)**
Balance as at December 31, 2021		**4,374**	**20,949**	**(2,063)**	**23,260**
Balance as at December 31, 2019		4,374	19,482	(2,408)	21,448
Net income		–	2,303	–	2,303
Other comprehensive income	16	–	–	(702)	(702)
Dividend	16	–	(1,727)	–	(1,727)
Balance as at December 31, 2020		4,374	20,058	(3,110)	21,322

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	2021	2020
Operating activities			
Net income		**3,564**	2,303
Adjustments to determine net cash flows from operating activities			
Depreciation and amortization	4	**2,689**	2,694
Amortization of premiums, discounts and issue expenses related to debt securities		**12**	127
Deficit of net cost recognized with respect to amounts paid for employee future benefits		**(342)**	(181)
Interest and other	17	**251**	(1,243)
Regulatory assets and liabilities		**(231)**	(178)
Change in non-cash working capital items	17	**(852)**	(694)
		5,091	2,828
Investing activities			
Additions to property, plant and equipment		**(4,014)**	(3,151)
Additions to intangible assets		**(209)**	(215)
Acquisition of investments	9	**(197)**	(661)
Net change in short-term investments and sinking fund	10	**(105)**	217
Other		**(73)**	(15)
		(4,598)	(3,825)
Financing activities			
Issuance of long-term debt		**3,728**	4,541
Repayment of long-term debt		**(1,948)**	(938)
Cash receipts arising from credit risk management		**3,862**	5,036
Cash payments arising from credit risk management		**(4,524)**	(5,060)
Net change in borrowings		**(1)**	(64)
Dividend paid		**(1,727)**	(2,192)
Other		**(37)**	26
		(647)	1,349
Foreign currency effect on cash and cash equivalents		**(16)**	–
Net change in cash and cash equivalents		**(170)**	352
Cash and cash equivalents, beginning of year		**1,467**	1,115
Cash and cash equivalents, end of year		**1,297**	1,467
Supplementary cash flow information	17		

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

Note 1
Significant Accounting Policies

Years ended December 31, 2021 and 2020

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

Under the provisions of the Hydro-Québec Act *(CQLR, c. H-5), 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. It 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 *(CQLR, c. R-6.01). As a government corporation, Hydro-Québec is exempt from paying income taxes in Canada.*

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

Management has reviewed events occurring until February 18, 2022, 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 of Québec (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 to be set on a basis that allows for recovery of the cost of service and provides a reasonable return on the rate base.

Since January 1, 2019, the Transmission Provider's rates have been subject to performance-based regulation (PBR), applicable for a four-year period. Under PBR, rates for the 2019 rate year were set using the cost-of-service method, while those for the 2020 and 2021 rate years were determined using a parametric formula specifically for transmission activities, as will be the case for 2022. This parametric formula provides that some unpredictable costs are to be set based on the cost-of-service method, while the other cost components are to be calculated using an indexation formula. Moreover, the rates of the Transmission Provider are subject to an earnings-sharing mechanism.

As for the Distributor, its rates are governed by *An Act to simplify the process for establishing electricity distribution rates* (S.Q. 2019, c. 27). This Act, which came into force in December 2019, effectively amended the *Act respecting the Régie de l'énergie*. In particular, it specifies that electricity distribution rates are to be set or modified by the Régie every five years commencing on April 1, 2025, and that, in the interim, they will be adjusted each year based on the annual change in the average Québec Consumer Price Index. However, it authorizes the Distributor to apply to the Régie, before the deadline, to modify its rates if they do not allow for recovery of the cost of service.

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 determining 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 subsequently 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 Revenue. 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; as well as the useful life of property, plant and equipment and intangible assets for calculating the depreciation and amortization expense. They also concern cash flows, the expected timing of payments, and the discount rates used to determine asset retirement obligations and employee future benefit liabilities, which are based on different 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

Note 1
Significant Accounting Policies (continued)

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.

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, 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 traded 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 properly 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, in 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 terminates 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 in 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

Note 1
Significant Accounting Policies (continued)

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.

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 and supplies

Inventories of materials 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

Hydro-Québec's leases mainly concern office buildings and its generating and transmission facilities. On the execution date, Hydro-Québec determines whether an agreement is a lease by assessing whether it confers a right to control the use of a specific asset for a certain time period in exchange for consideration.

Right-of-use assets and lease liabilities where the lease is for a term of more than 12 months are recognized at the lease commencement date, using the present value of the lease payments for the term of the lease. Any lease expenses paid prior to the commencement date are added to the amount of the assets concerned. The discount rate used is the interest rate implicit in the lease to the extent that it can be readily determined. If such is not the case, Hydro-Québec uses its incremental borrowing rate at the commencement date of the lease. Renewal and termination options are taken into account in determining the term of the lease if it is reasonably certain that they will be exercised.

The costs associated with variable lease payments are not taken into account in measuring the lease liabilities and are recognized in results as and when they are incurred. If a lease has both lease and nonlease components, Hydro-Québec has elected to group them together and recognize them as a single lease component.

Right-of-use assets related to finance leases are recognized in Property, plant and equipment, while the corresponding liabilities are recognized in Current portion of long-term debt and Long-term debt. The depreciation and amortization of assets and interest on finance lease liabilities are recognized in Depreciation and amortization and Financial expenses, respectively.

Right-of-use assets related to operating leases are recognized in Other assets, while the corresponding liabilities are recognized in Accounts payable and accrued liabilities and Other liabilities. Operating lease expenses are recognized on a straight-line basis as an operational expenditure over the term of the lease.

Note 1
Significant Accounting Policies (continued)

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 in the results for the year, if applicable.

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.

The funded status of employee future benefit plans is recognized in Hydro-Québec's Consolidated Balance Sheets. It is equal to the difference between the fair value of plan assets and the value of the projected benefit obligations of each plan.

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. 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 to 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 employee retirement age.

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 unamortized balances of net actuarial losses and of past service costs (credits) accounted for in Accumulated other comprehensive income arising from 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.

Note 1
Significant Accounting Policies (continued)

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. 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. At the time of 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.

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
Change to Accounting Policy

Standard issued but not yet adopted

Financial instruments

In June 2016, the Financial Accounting Standards Board issued the Accounting Standards Update ("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 quarterly and annual periods beginning on or after January 1, 2023. Hydro-Québec is currently examining the impact of this ASU, but it does not expect its adoption to have a significant impact on its consolidated financial statements.

Note 3
Regulation

Rates

Transmission

In decision D-2020-179 of December 21, 2020, the Régie authorized the provisional renewal, effective January 1, 2021, of Hydro-Québec's power transmission rates for 2020. These rates were determined in decision D-2020-063 and came into effect on January 1, 2020. The authorized return on the rate base was set at 6.78%, assuming a capitalization with 30% equity. The Transmission Provider's rate applications for 2021 and 2022 are being reviewed simultaneously by the Régie.

Distribution

Under *An Act to simplify the process for establishing electricity distribution rates*, electricity distribution rates were indexed at a rate of 1.3% on April 1, 2021, with the exception of Rate L, which was indexed at a rate of 0.8%. Rates for the 2019–2020 rate year, in effect from April 1, 2019 to March 31, 2020, and determined in Régie decision D-2019-037, were frozen until March 31, 2021.

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	2021	2020
Regulatory assets			
Employee future benefits	As of 2022	**2,299**	4,988
Costs related to a suspension agreement	2022–2025	**482**	472
Costs related to energy efficiency initiatives	2022–2031	**332**	332
Other	2022–2047	**29**	31
		3,142	5,823
Less			
Current portion		**122**	123
		3,020	5,700
Regulatory liabilities			
Depreciation of property, plant and equipment	2022–2115	**317**	326
Other	2022	**2**	5
		319	331

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 annual costs related to the suspension agreement are recovered in the rates, 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 on the rate base until such time as they are included in the rate base and 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.

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 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 $54 million in 2021 and $45 million in 2020.

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.

Lastly, 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

	2021	2020
Property, plant and equipment	**2,385**	2,367
Intangible assets[a]	**101**	105
Regulatory assets and liabilities	**85**	106
Retirement of capital assets	**118**	116
	2,689	2,694

a) For the period from 2022 to 2026, amortization of intangible assets that have already been recognized should be as follows: $87 million in 2022, $76 million in 2023, $51 million in 2024, $23 million in 2025 and $13 million in 2026.

Note 5
Taxes

	2021	2020
Water-power royalties[a]	**757**	716
Public utilities tax[b]	**308**	304
Municipal, school and other taxes[c]	**126**	118
	1,191	1,138

a) Water-power royalties payable to the Québec government totaled $752 million in 2021 ($710 million in 2020), including a balance payable of $42 million outstanding as at December 31, 2021 (balance receivable of $5 million outstanding as at December 31, 2020).

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

c) Including two amounts payable to the Québec government in 2021, namely $59 million under the *Act respecting the Ministère des Ressources naturelles et de la Faune* (CQLR, c. M-25.2) ($59 million in 2020), of which no balance was outstanding as at December 31, 2021 and 2020, and $15 million under the *Act to establish the Northern Plan Fund* (CQLR, c. F-3.2.1.1.1) ($15 million in 2020), which was outstanding as at December 31, 2021 and 2020.

Note 6
Financial Expenses

	2021	2020
Interest on debt securities	**2,371**	2,630
Net foreign exchange (gain) loss	**(3)**	7
Guarantee fees related to debt securities[a]	**228**	217
	2,596	2,854
Less		
Capitalized financial expenses	**190**	191
Net investment income	**38**	60
	228	251
	2,368	2,603

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

	2021				2020			
	In service	Accumulated depreciation	Under construction	Net carrying amount	In service	Accumulated depreciation	Under construction	Net carrying amount
Generation								
Hydraulic	49,752	21,001	2,325	**31,076**	49,487	20,272	1,647	30,862
Other	1,325	862	357	**820**	1,252	836	388	804
	51,077	21,863	2,682	**31,896**	50,739	21,108	2,035	31,666
Transmission								
Substations and lines	36,323	14,870	1,929	**23,382**	35,508	14,167	1,261	22,602
Other	2,828	1,745	210	**1,293**	2,747	1,644	118	1,221
	39,151	16,615	2,139	**24,675**	38,255	15,811	1,379	23,823
Distribution								
Substations and lines	16,776	7,883	474	**9,367**	15,991	7,586	532	8,937
Other	3,719	2,177	169	**1,711**	3,663	2,083	129	1,709
	20,495	10,060	643	**11,078**	19,654	9,669	661	10,646
Other	1,783	1,057	155	**881**	1,581	964	148	765
	112,506	49,595	5,619[a]	**68,530**[b]	110,229	47,552	4,223	66,900[b]

a) Including costs of $347 million related to the New England Clean Energy Connect project. More information regarding this project is presented in Note 19, Commitments and Contingencies.

b) As at December 31, 2021, the cost and accumulated depreciation of property, plant and equipment under finance leases amounted to $1,254 million and $391 million, respectively ($1,247 million and $343 million as at December 31, 2020).

Note 8
Intangible Assets

	2021			2020		
	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount
Amortizable						
Software, licences and other	2,461	1,837	**624**	2,271	1,750	521
Unamortizable						
Easements and other			**541**			532
			1,165			1,053

Note 9
Investments

	2021	2020
At equity		
Innergex		
Innergex énergie renouvelable inc. (19.9% in 2021 and 19.8% in 2020)[a, b]	**642**	621
Innergex HQI USA LLC (50.0%)	**201**	–
Société en commandite Hydroélectrique Manicouagan (60.0%)[a, c]	**578**	585
Other	**546**	511
	1,967	1,717

a) In 2021, electricity purchases from Innergex énergie renouvelable inc. totaled $222 million [$239 million between February 6, 2020 (acquisition date) and December 31, 2020], while purchases from Société en commandite Hydroélectrique Manicouagan ("SCHM") totaled $82 million ($82 million in 2020).

b) This investment includes the unamortized excess of the purchase price over the underlying carrying amount of the net assets of Innergex énergie renouvelable inc. as at the acquisition date, which consisted of goodwill of $243 million and net amortizable assets of $171 million as at December 31, 2021 ($243 million and $175 million, respectively, as at December 31, 2020).

c) This investment includes the unamortized excess of the purchase price over the underlying carrying amount of the net assets of SCHM as at the acquisition date, which consisted of unamortizable intangible assets of $282 million and amortizable assets of $208 million as at December 31, 2021 ($282 million and $219 million, respectively, as at December 31, 2020).

Acquisition of investments

On October 25, 2021, Hydro-Québec acquired a 50% interest in Innergex HQI USA LLC, which took possession of two hydroelectric generating stations in the State of New York. This transaction is the first joint acquisition with Innergex énergie renouvelable inc. (TSX: INE) under the strategic alliance formed by the two parties in 2020. For Hydro-Québec, the acquisition price includes an initial cash consideration of US$159 million (CA$197 million) and a maximum contingent consideration of US$15 million (CA$19 million).

On February 6, 2020, Hydro-Québec acquired a 19.9% stake in Innergex énergie renouvelable inc. for a cash consideration of $661 million.

Note 10
Other Assets

	Notes	2021	2020
Employee future benefit assets	18	**1,813**	–
Sinking fund[a]	12	**647**	600
Operating lease assets		**160**	186
Other		**83**	58
		2,703	844

a) The sinking fund, allocated to repaying the long-term debt, consists of bonds issued by the Québec government, namely long-term bonds maturing in 2026 as well as short-term bonds presented in Short-term investments, which totaled $74 million as at December 31, 2021 ($122 million as at December 31, 2020).

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:

	2021				2020			
	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	496	242	184	**922**	500	230	157	887
Liabilities incurred	–	–	33	**33**	–	–	3	3
Accretion expense	26	15	4	**45**	26	15	4	45
Liabilities settled	(36)	(3)	(13)	**(52)**	(30)	(3)	(10)	(43)
Revision of estimated cash flows and expected timing of payments	–	(12)	6	**(6)**	–	–	30	30
Balance, end of year	486	242	214	**942**	496	242	184	922
Less								
Current portion	46	4	25	**75**	47	7	30	84
	440	238	189	**867**	449	235	154	838

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 are equal 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 0.2 and 4.6
Subsequent recognition of obligations	Between 2.4 and 5.7	Between 3.1 and 5.7	Between 0.2 and 4.6

Hydro-Québec Trust for Management of Nuclear Fuel Waste

Under the *Nuclear Fuel Waste Act* (S.C. 2002, c. 23) ("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, 2021, the investments held in the Hydro-Québec trust fund were composed of debt securities issued by Hydro-Québec, the fair value of which totaled $182 million ($183 million as at December 31, 2020).

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 and finance lease liabilities. 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.

	2021				2020			
			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]	42,938	**42,938**	**87**	**100**	40,217	40,217	84	100
U.S. dollars[a, b]	4,914	**6,219**	**13**	**–**	5,869	7,486	16	–
		49,157	**100**	**100**		47,703	100	100
Plus								
Adjustment for fair value hedged risk		**287**				454		
		49,444				48,157		
Less								
Current portion		**3,247**				1,900		
		46,197				46,257		

a) Including non-interest-bearing debts other than bonds and medium-term notes whose present value was $1,802 million as at December 31, 2021 ($1,774 million as at December 31, 2020).

b) Certain debts carry sinking fund requirements. This fund, presented in Short-term investments and Other assets, totaled $721 million as at December 31, 2021 ($722 million as at December 31, 2020).

The amortized cost, at the balance sheet date, of the tranches of long-term debt maturing over the 2022–2026 period is as follows: $3,247 million in 2022, $1,017 million in 2023, $1,362 million in 2024, $92 million in 2025 and $712 million in 2026.

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, 2021, the variable-rate portion of the bonds and notes totaled 6.4% (6.6% as at December 31, 2020).

%			2021	2020
Maturity	Canadian dollars	U.S. dollars	Weighted average	Weighted average
1–5 years	4.27	8.35	**7.18**	7.03
6–10 years	2.81	9.84	**7.22**	9.52
11–15 years	5.55	–	**5.55**	5.76
16–20 years	5.11	–	**5.11**	5.11
21–25 years	4.89	–	**4.89**	4.89
26–30 years	4.47	–	**4.47**	4.47
31–35 years	2.96	–	**2.96**	2.96
36–40 years	3.05	–	**3.05**	4.46
Weighted average	3.79	9.48	**3.91**	4.39

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 2025. 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, 2021, the available balances on these lines of credit were US$200 million, C$2 million and $294 million in Canadian or U.S. dollars (US$200 million, C$2 million and $247 million in Canadian or U.S. dollars as at December 31, 2020).

Note 13
Other Liabilities

	Note	2021	2020
Employee future benefit liabilities	18	**1,640**	4,444
Accounts payable		**523**	543
Operating lease liabilities[a]		**140**	163
		2,303	5,150

a) As at December 31, 2021, operating leases had a weighted average remaining term of 7 years, and the weighted average discount rate applicable to the related liabilities was 2.5% (8 years and 2.5%, respectively, as at December 31, 2020).

As at December 31, 2021, accounts payable included a $360-million financial liability ($349 million as at December 31, 2020) 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 $122 million ($123 million as at December 31, 2020).

This financial liability, including the current portion, represented a discounted amount of $482 million ($472 million as at December 31, 2020). It included an outstanding amount, payable in U.S. dollars, of $25 million (US$20 million) [$22 million (US$17 million) as at December 31, 2020]. The effective rate of this liability was 1.18% (1.46% as at December 31, 2020).

Note 14
Perpetual Debt

Perpetual notes in the amount of $254 million (US$201 million) as at December 31, 2021, and of $256 million (US$201 million) as at December 31, 2020, bear interest at LIBOR, plus 0.0625%, as calculated semiannually. As at December 31, 2021 and 2020, the rates applicable to the perpetual notes were 0.3% and 0.4%, respectively.

The perpetual notes are redeemable at Hydro-Québec's option. 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 sales in U.S. dollars

Currency risk – Hydro-Québec uses forward contracts to manage the currency risk associated with probable U.S.-dollar sales, designating them as cash flow hedges. The impact of these hedging transactions on results is recognized in Revenue.

Management of risk associated with debt

Currency risk and interest rate risk – Hydro-Québec uses currency forward contracts and swaps to manage the currency risk associated with long-term debt and perpetual debt, as well as interest rate forward contracts and 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 or foreign currencies, of forward contracts and swaps used to manage long-term risk:

	2021[a]	2020[a]
Forward contracts		
Canadian dollars	**(2,300)**	(2,000)
U.S. dollars[b]	**(542)**	(542)
Swaps		
Canadian dollars	**(5,716)**	(6,890)
U.S. dollars	**4,770**	5,720

a) Figures in parentheses represent amounts to be paid.

b) As at December 31, 2021 and 2020, sales and purchase contracts totaled US$743 million and US$201 million, respectively.

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 items affected by the hedged item, namely Revenue, Electricity purchases, or Financial expenses. In this context, Hydro-Québec traded foreign currency sales contracts for which the notional amounts of open positions as at December 31, 2021, were US$3,376 million (US$1,133 million for sales contracts and US$8 million for purchase contracts as at December 31, 2020).

Interest rate risk – Hydro-Québec uses interest rate forward contracts and 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.

Note 15
Financial Instruments (continued)

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 items affected by the hedged item, namely Revenue or Electricity purchases. In this context, Hydro-Québec traded electricity futures and swaps for which open positions as at December 31, 2021, totaled 21.1 TWh (22.4 TWh as at December 31, 2020), natural gas futures for which open positions as at December 31, 2021, totaled 0.2 million MMBtu (1.5 million MMBtu as at December 31, 2020), petroleum product swaps for which open positions as at December 31, 2021, totaled 38.3 million litres (62.7 million litres as at December 31, 2020), as well as aluminum swaps for which open positions as at December 31, 2021, totaled 490,050 tonnes (262,750 tonnes as at December 31, 2020).

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, 2021, $47,059 million in long-term debt and perpetual debt, net of the sinking fund ($45,626 million as at December 31, 2020), 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, as at December 31, 2021, Hydro-Québec held as collateral customer deposits totaling $89 million ($102 million as at December 31, 2020), of which $26 million ($29 million as at December 31, 2020) was recognized in Accounts payable and accrued liabilities and $63 million ($73 million as at December 31, 2020) 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:

	2021	2020
Accounts receivable[a]	**1,918**	1,944
Other receivables[b]	**1,151**	369
	3,069[c]	2,313[c]

a) Including unbilled electricity deliveries, which totaled $1,320 million as at December 31, 2021 ($1,244 million as at December 31, 2020), as well as an allowance for doubtful accounts of $339 million as at December 31, 2021 ($321 million as at December 31, 2020).

b) Including a $279-million financial guarantee ($54 million as at December 31, 2020) covering certain derivative instruments held at year-end.

c) Including US$697 million (US$102 million as at December 31, 2020) translated at the exchange rate in effect at the balance sheet date.

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, 2021, 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, excluding the impact of offsets, by type and depending on whether they are designated as fair value hedges or cash flow hedges, or not designated as hedges:

	2021				2020			
	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	–	833	6	**839**	–	1,157	6	1,163
Contracts – Interest rate risk	393	4	–	**397**	569	3	–	572
Contracts – Price risk	–	42	33	**75**	–	105	55	160
	393	879	39	**1,311**	569	1,265	61	1,895
Liabilities								
Contracts – Currency risk	–	(162)	(101)	**(263)**	–	(150)	(214)	(364)
Contracts – Interest rate risk	–	(152)	–	**(152)**	–	(43)	–	(43)
Contracts – Price risk	–	(579)	(34)	**(613)**	–	(46)	(14)	(60)
	–	(893)	(135)	**(1,028)**	–	(239)	(228)	(467)
Total	393	(14)	(96)	**283**	569	1,026	(167)	1,428

a) These derivative instruments are mainly traded as part of Hydro-Québec's risk management.

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:

	2021				2020			
	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	193	(133)	(8)	**52**	429	(132)	(150)	147
Long-term	1,118	(384)	(731)	**3**	1,466	(300)	(1,155)	11
	1,311	(517)	(739)	**55**	1,895	(432)	(1,305)	158
Liabilities								
Current	(774)	389	48	**(337)**	(314)	282	18	(14)
Long-term	(254)	128	–	**(126)**	(153)	150	–	(3)
	(1,028)	517	48	**(463)**	(467)	432	18	(17)
Total	283	–	(691)	**(408)**	1,428	–	(1,287)	141

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, 2021, $513 million receivable in consideration of net payments was included in Accounts receivable and other receivables (nil as at December 31, 2020), whereas no amount payable in consideration of net cash receipts was included in Accounts payable and accrued liabilities ($137 million as at December 31, 2020).

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.

	2021			
	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	Reclassified from Other comprehensive income to results	Recognized in results
Contracts – Currency risk	–	32	(144)[a]	(22)
Contracts – Interest rate risk	176	(216)	8[b]	–
Contracts – Price risk	–	870	278[c]	82
	176[b, d]	**686**	**142**[d]	**60**[d, e]
Impact of hedged items on results	**(167)**		**(142)**	

	2020			
	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	Reclassified from Other comprehensive income to results	Recognized in results
Contracts – Currency risk	–	6	146[a]	104
Contracts – Interest rate risk	(144)	296	10[b]	15
Contracts – Price risk	–	(253)	(336)[c]	(38)
	(144)[b, d]	49	(180)[d]	81[d, e]
Impact of hedged items on results	151		182	

a) In 2021, $(177) million was recognized in Revenue ($26 million in 2020), and $33 million in Financial expenses ($120 million in 2020).

b) These amounts were recognized in Financial expenses.

c) In 2021, $276 million was recognized in Revenue [$(341) million in 2020], and $2 million in Electricity purchases ($5 million in 2020).

d) In 2021, the items Revenue, Electricity purchases, and Financial expenses totaled $14,526 million, $2,169 million and $2,368 million, respectively ($13,594 million, $2,204 million and $2,603 million in 2020).

e) These instruments are essentially related to integrated risk management transactions. Their impact on results is recognized in the line items affected by the managed risk. Therefore, in 2021, $104 million was recognized in Revenue [$(60) million in 2020], $(17) million in Electricity purchases ($27 million in 2020), and $(27) million in Financial expenses ($114 million in 2020).

Note 15
Financial Instruments (continued)

In 2021, Hydro-Québec did not reclassify any amount from Accumulated other comprehensive income to results after having discontinued cash flow hedges (net loss of $2 million in 2020).

As at December 31, 2021, Hydro-Québec estimated the net amount of losses in Accumulated other comprehensive income that would be reclassified to results in the next 12 months to be $448 million (net gain of $192 million as at December 31, 2020).

As at December 31, 2021, the maximum period during which Hydro-Québec hedged its exposure to the variability of cash flows related to anticipated transactions was eight years (nine years as at December 31, 2020).

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 financial 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:

	2021		2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets				
Sinking fund	**647**	**678**	600	657
Liabilities				
Long-term debt[a]	**(49,444)**[b]	**(65,963)**	(48,157)[b]	(70,432)
Perpetual debt	**(254)**	**(255)**	(256)	(293)

a) Including the current portion.

b) Including an amount of $1,935 million ($1,997 million as at December 31, 2020) for debts subject to a fair value hedge, which resulted in an adjustment of $345 million ($532 million as at December 31, 2020) in connection with the hedged risk for existing hedging relationships, and of $(58) million [$(78) million as at December 31, 2020] 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, 2021 and 2020.

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 payment terms. 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 2021, the dividend is $2,673 million ($1,727 million for 2020).

Accumulated other comprehensive income

	2021				2020			
	Cash flow hedges	Employee future benefits	Other	Accumulated other comprehensive income	Cash flow hedges	Employee future benefits	Other	Accumulated other comprehensive income
Balance, beginning of year	(162)	(2,940)	(8)	**(3,110)**	67	(2,476)	1	(2,408)
Other comprehensive income before reclassifications	(686)	1,438	5	**757**	(49)	(588)	(9)	(646)
Amounts reclassified outside of Accumulated other comprehensive income	142	148	–	**290**	(180)	124	–	(56)
Other comprehensive income	(544)	1,586	5	**1,047**	(229)	(464)	(9)	(702)
Balance, end of year	(706)	(1,354)	(3)	**(2,063)**	(162)	(2,940)	(8)	(3,110)

Note 17
Supplementary Cash Flow Information

	2021	2020
Change in non-cash working capital items		
Accounts receivable and other receivables	**(727)**	181
Materials and supplies	**(73)**	(25)
Accounts payable and accrued liabilities	**56**	(824)
Accrued interest	**(108)**	(26)
	(852)	(694)
Activities not affecting cash		
Increase in property, plant and equipment and intangible assets	**110**	273
Interest paid[a]	**2,088**	3,750

a) Including interest paid upon redemption of zero-coupon bonds, which totaled $7 million in 2021 ($1,646 million in 2020). This interest is presented in Interest and other under Operating activities in the Consolidated Statements of Cash Flows.

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.

Changes in projected benefit obligations and in plan assets, at fair value

	Pension Plan		Other plans		Total	
	2021	2020	**2021**	2020	**2021**	2020
Projected benefit obligations						
Balance, beginning of year	**31,941**	28,948	**1,936**	1,729	**33,877**	30,677
Current service cost	**704**	610	**55**	52	**759**	662
Employee contributions	**208**	222	**–**	–	**208**	222
Benefit payments and refunds	**(1,177)**	(1,142)	**(79)**	(78)	**(1,256)**	(1,220)
Interest on obligations	**681**	848	**43**	51	**724**	899
Actuarial (gain) loss[a]	**(1,942)**	2,455	**(143)**	182	**(2,085)**	2,637
Balance, end of year	**30,415**	31,941	**1,812**	1,936	**32,227**	33,877
Plan assets, at fair value						
Balance, beginning of year	**29,261**	27,153	**112**	105	**29,373**	27,258
Actual return on plan assets	**3,662**	2,762	**(5)**	2	**3,657**	2,764
Employee contributions	**208**	222	**–**	–	**208**	222
Contributions by Hydro-Québec	**274**	266	**19**	19	**293**	285
Benefit payments and refunds	**(1,177)**	(1,142)	**(15)**	(14)	**(1,192)**	(1,156)
Balance, end of year	**32,228**	29,261	**111**	112	**32,339**	29,373
Funded status – Plan surplus (deficit)	**1,813**	(2,680)	**(1,701)**	(1,824)	**112**	(4,504)
Presented as:						
Other assets	**1,813**	–	**–**	–	**1,813**	–
Accounts payable and accrued liabilities	**–**	–	**(61)**	(60)	**(61)**	(60)
Other liabilities	**–**	(2,680)	**(1,640)**	(1,764)	**(1,640)**	(4,444)

a) The actuarial gain as at December 31, 2021, is primarily due to the higher discount rates resulting from the increase in long-term interest rates on financial markets. Conversely, the actuarial loss as at December 31, 2020, was mainly due to the lower discount rates resulting from the decline in long-term interest rates.

As at December 31, 2021, accumulated benefit obligations under the Pension Plan totaled $28,185 million ($29,325 million as at December 31, 2020). Unlike projected benefit obligations, accumulated benefit obligations do not take into account the future salary 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, 2021, was as follows:

%	Target allocation
Fixed-income securities	35
Equities	51
Alternative investments[a]	14
	100

a) Alternative investments include real estate investments, private 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:

	2021				2020			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash	1,459	–	–	**1,459**	1,392	–	–	1,392
Short-term investments[a]	–	55	–	**55**	–	36	–	36
Bonds[a, b]	647	7,745	–	**8,392**	558	7,155	–	7,713
Listed shares	13,911	–	–	**13,911**	12,734	–	–	12,734
Real estate investments[a, c]	758	1	3,795	**4,554**	164	2	3,273	3,439
Private investments[d]	–	–	2,317	**2,317**	–	–	1,408	1,408
Hedge funds[e]	–	2,917	–	**2,917**	490	2,040	–	2,530
Derivative instruments – Assets[f]	1	156	–	**157**	1	65	–	66
Derivative instruments – Liabilities[f]	(11)	(8)	–	**(19)**	(12)	(16)	–	(28)
Investment liabilities[a, g]	–	(1,421)	–	**(1,421)**	–	–	–	–
Other	9	25	–	**34**	7	30	–	37
	16,774	9,470	6,112	**32,356**[h]	15,334	9,312	4,681	29,327[h]

a) The fair value of Level 2 short-term investments, bonds, real estate investments and investment liabilities 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 $1,188 million ($1,365 million as at December 31, 2020).

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 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) Investment liabilities consist of securities sold under repurchase agreements. The investments in question are presented in assets given that the Pension Fund retains nearly all the risks and rewards incidental to their ownership.

h) The fair value of investments does not take into account the net amount of payables and receivables, which is an amount payable of $128 million ($66 million as at December 31, 2020).

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

	2021			2020		
	Real estate investments	Private investments	Total	Real estate investments	Private investments	Total
Balance, beginning of year	3,273	1,408	**4,681**	3,176	1,079	4,255
Acquisitions	600	741	**1,341**	347	397	744
Disposals	(308)	(335)	**(643)**	(134)	(145)	(279)
Realized net (losses) gains	(9)	(10)	**(19)**	3	2	5
Unrealized net gains (losses)	239	513	**752**	(119)	75	(44)
Balance, end of year	3,795	2,317	**6,112**	3,273	1,408	4,681

In 2021 and 2020, there was no reclassification between Level 3 and Levels 1 and 2.

Other plan assets

Other plan assets as at December 31, 2021, were composed of bonds issued by Hydro-Québec for a total of $92 million ($91 million as at December 31, 2020), as well as cash amounting to $19 million ($21 million as at December 31, 2020). 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		Total	
	2021	2020	**2021**	2020	**2021**	2020
Current service cost[a]	**704**	610	**55**	52	**759**	662
Other components of employee future benefit cost[b]						
Interest on obligations	**681**	848	**43**	51	**724**	899
Expected return on plan assets	**(1,852)**	(1,713)	**(3)**	(2)	**(1,855)**	(1,715)
Amortization of net actuarial loss	**346**	287	**40**	33	**386**	320
Amortization of past service costs (credits)	**7**	7	**(5)**	(5)	**2**	2
	(818)	(571)	**75**	77	**(743)**	(494)
Net (credit) cost recognized for the year	**(114)**	39	**130**	129	**16**	168

a) This component, net of the amount capitalized in assets, is recognized as an operational expenditure.

b) This item is presented separately in the Consolidated Statements of Operations. Its components are not capitalized in assets.

Components of other comprehensive income for the year

	Pension Plan		Other plans		Total	
	2021	2020	**2021**	2020	**2021**	2020
Actuarial (gain) loss	**(3,752)**	1,406	**(135)**	182	**(3,887)**	1,588
Amortization of net actuarial loss	**(346)**	(287)	**(40)**	(33)	**(386)**	(320)
Amortization of past service (costs) credits	**(7)**	(7)	**5**	5	**(2)**	(2)
Change in Other comprehensive income	**(4,105)**	1,112	**(170)**	154	**(4,275)**	1,266
Less						
Change in the employee future benefit regulatory asset	**(2,582)**	705	**(107)**	97	**(2,689)**	802
Net change in Other comprehensive income	**(1,523)**	407	**(63)**	57	**(1,586)**	464

Components of accumulated other comprehensive income

	Pension Plan		Other plans		Total	
	2021	2020	**2021**	2020	**2021**	2020
Unamortized net actuarial loss	**3,166**	7,264	**489**	664	**3,655**	7,928
Unamortized past service costs (credits)	**4**	11	**(6)**	(11)	**(2)**	–
Aggregate of amounts recognized in Accumulated other comprehensive income	**3,170**	7,275	**483**	653	**3,653**	7,928
Less						
Employee future benefit regulatory asset	**1,995**	4,577	**304**	411	**2,299**	4,988
Net amount recognized in Accumulated other comprehensive income	**1,175**	2,698	**179**	242	**1,354**	2,940

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	
	2021	2020	**2021**	2020
Projected benefit obligations				
Rate at end of year (%)				
Discount rate – Projected benefits	**3.00**	2.57	**3.02**	2.58
Salary escalation rate[a]	**3.25**	3.35	**–**	–
Net cost recognized				
Rate at end of prior year (%)				
Discount rate – Current service cost	**2.72**	3.18	**2.66**	3.15
Discount rate – Interest on obligations	**2.14**	2.94	**2.22**	2.99
Expected long-term rate of return on plan assets[b]	**6.50**	6.50	**2.17**	2.27
Salary escalation rate[a]	**3.35**	3.27	**–**	–
Active employees' average remaining years of service	**13**	13	**13**	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, 2021, health care costs were based on an annual growth rate of 5.9% for 2022. According to the assumption used, this rate will decrease on a straight-line basis until it reaches a final rate of 4.2% in 2040.

Benefits expected to be paid in next 10 years

	Pension Plan	Other plans
2022	1,168	71
2023	1,187	73
2024	1,205	76
2025	1,223	78
2026	1,241	80
2027–2031	6,510	437

In 2022, Hydro-Québec expects to make contributions of $285 million and $20 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 Churchill Falls (Labrador) Corporation Limited ["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. In 2021, electricity purchases from CF(L)Co totaled $113 million ($97 million in 2020).

As at December 31, 2021, 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 2062. 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:

2022	2,041
2023	2,016
2024	2,020
2025	2,084
2026	2,149
2027 and thereafter	24,682

Investments

As part of its development projects and activities aimed at sustaining its assets, Hydro-Québec plans to invest approximately $5.0 billion in property, plant and equipment and intangible assets per year in Québec over the period from 2022 to 2026. In addition, under finance leases that are not yet in force, but under which Hydro-Québec has already made commitments, it expects to make lease payments for a total undiscounted amount of $2.9 billion from 2022 to 2064.

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, 2021, the amortized cost of the long-term debts concerned was $2,119 million ($2,843 million as at December 31, 2020).

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 initiated proceedings before the Québec courts against the governments of Canada and Québec, as well as against Hydro-Québec, based on demands concerning their ancestral rights. In particular, the Innu 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. As well, in November 2006 the Innu 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 these claims.

Moreover, in October 2020, Innu Nation Inc. brought an action for damages against CF(L)Co and Hydro-Québec before the courts of the province of Newfoundland and Labrador. It claims that the construction and operation of the Churchill Falls hydroelectric complex in Labrador, which is owned and operated by CF(L)Co, are the result of a joint venture between CF(L)Co and Hydro-Québec and allegedly infringe on the ancestral rights of the Innu of Labrador. Innu Nation Inc. claims that CF(L)Co and Hydro-Québec should refund the profits derived from the complex or, alternatively, provide monetary restitution which, in Hydro-Québec's case, amounts to $4 billion. Hydro-Québec is challenging the legitimacy of this action.

Investments

Further to the agreement entered into by Hydro-Québec to sell 9.45 TWh of energy to electricity distributors in Massachusetts over a 20-year period, Hydro-Québec and its U.S. partner Central Maine Power ("CMP") launched the New England Clean Energy Connect ("NECEC") project in the United States to transmit the power via the State of Maine. This project is part of a larger project aimed at establishing a new interconnection between the Québec and New England grids. In January 2021, CMP initiated the construction of the NECEC line, as all the key authorizations and major permits required by the U.S. regulatory authorities had been obtained. In November 2021, Mainers voted in a citizen initiative referendum to block the project. Hydro-Québec and CMP are challenging the legality of the new law resulting from this initiative in court, and CMP has suspended construction work until the issue has been resolved by the ongoing legal proceedings. In coordination with CMP, Hydro-Québec also suspended some of the construction work related to the interconnection project in Québec.

Should the project be abandoned, certain costs recognized as property, plant and equipment under construction, which totaled $347 million as at December 31, 2021, will be charged to results, along with the amounts that Hydro-Québec has undertaken to pay under various agreements, which amounted to $189 million at year-end 2021.

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, including intersegment eliminations and adjustments, are grouped together under Corporate and Other Activities for reporting purposes.

Generation: This segment includes activities related to the operation and development of Hydro-Québec's generating facilities, except in off-grid systems. It also includes electricity sales and arbitrage transactions on wholesale markets in northeastern North America.

Transmission: This segment includes activities related to the operation and development of the main power transmission system, the marketing of system capacity and the management of power flows across Québec.

Distribution: This segment includes activities related to the operation and development of Hydro-Québec's distribution grid. It also includes retail electricity sales on the Québec market, as well as customer services and the promotion of energy efficiency.

Construction: This segment includes activities related to the design and execution of construction and refurbishment projects involving mainly power generation and transmission facilities. These projects are almost all carried out in Québec.

Corporate and Other Activities: The corporate units help the business segments carry out their operations. Other activities include, in particular, intersegment eliminations and adjustments.

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 in the *Act respecting the Régie de l'énergie* and *An Act to simplify the process for establishing electricity distribution rates*. 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 2021, revenue from outside Québec amounted to $1,949 million, with $1,217 million originating from the United States ($1,508 million and $1,056 million, respectively, in 2020).

Note 20
Segmented Information (continued)

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

						2021
	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Total
Revenue						
External customers	1,940	119	12,447	19	1	**14,526**[a]
Intersegment customers	5,282	3,358	82	2,746	(11,468)[b]	**–**
Depreciation and amortization	850	1,084	597	7	151	**2,689**
Financial expenses	1,068	847	396	–	57	**2,368**
Net income (loss)	2,682	581	516	10	(225)	**3,564**
Total assets	34,672	25,365	14,976	218	7,467	**82,698**
Investments in property, plant and equipment and intangible assets affecting cash	1,052	1,930	952	6	283	**4,223**

						2020
	Generation	Transmission	Distribution	Construction	Corporate and Other Activities	Total
Revenue						
External customers	1,561	189	11,992	9	(157)	13,594[a]
Intersegment customers	4,929	3,435	78	2,044	(10,486)[b]	–
Depreciation and amortization	839	1,120	599	7	129	2,694
Financial expenses	1,174	932	434	–	63	2,603
Net income (loss)	1,842	586	216	6	(347)	2,303
Total assets	33,513	24,145	14,147	43	9,047	80,895
Investments in property, plant and equipment and intangible assets affecting cash	940	1,423	773	9	221	3,366

a) Including $69 million from sources other than contracts with customers ($148 million in 2020).

b) Including intersegment eliminations of $(13,747) million [$(12,489) million in 2020].

Note 21
Comparative Information

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

FIVE-YEAR REVIEW

Consolidated Financial Information

$M	2021	2020	2019	2018	2017
OPERATIONS					
Revenue	**14,526**	13,594	14,021	14,370	13,468
Expenditure					
Operations	**3,288**	3,146	2,818	2,843	2,664
Other components of employee future benefit cost	**(743)**	(494)	(557)	(340)	(322)
Electricity purchases	**2,169**	2,204	2,227	2,167	2,005
Depreciation and amortization	**2,689**	2,694	2,782	2,685	2,686
Taxes	**1,191**	1,138	1,133	1,111	1,076
	8,594	8,688	8,403	8,466	8,109
Income before financial expenses	**5,932**	4,906	5,618	5,904	5,359
Financial expenses	**2,368**	2,603	2,695	2,712	2,513
Net income	**3,564**	2,303	2,923	3,192	2,846
DIVIDEND	**2,673**	1,727	2,192	2,394	2,135
BALANCE SHEET SUMMARY					
Total assets	**82,698**	80,895	78,563	76,989	75,769
Long-term debt, including current portion and perpetual debt	**49,698**	48,413	45,767	46,335	45,259
Equity	**23,260**	21,322	21,448	21,209	19,755
INVESTMENTS AFFECTING CASH					
Property, plant and equipment and intangible assets	**4,223**	3,366	3,614	3,402	3,754
FINANCIAL RATIOS					
Return on equity (%)[a]	**14.3**	9.5	12.4	14.0	12.9
Capitalization (%)[b]	**32.0**	31.0	32.3	31.8	30.7
Profit margin (%)[c]	**24.5**	16.9	20.8	22.2	21.1
Interest coverage[d]	**2.52**	1.89	2.07	2.18	2.13
Self-financing (%)[e]	**52.2**	12.8	48.6	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.

Operating Statistics

	2021	2020	2019	2018	2017
GWh					
Electricity sales					
In Québec, by segment					
Residential	**67,572**	68,647	70,688	69,566	66,111
Commercial, institutional and small industrial	**46,157**	45,146	47,894	47,659	45,816
Large industrial	**55,779**	52,096	50,358	50,252	53,699
Other	**5,721**	5,557	5,640	5,337	5,077
	175,229	171,446	174,580	172,814	170,703
Outside Québec					
Canada/U.S.	**36,190**	32,397	34,789	36,524	34,935
Total electricity sales	**211,419**	203,843	209,369	209,338	205,638
$M					
Revenue from electricity sales					
In Québec, by segment					
Residential	**5,522**	5,535	5,752	5,591	5,285
Commercial, institutional and small industrial	**3,957**	3,853	4,056	4,016	3,873
Large industrial	**2,498**	2,208	2,279	2,196	2,288
Other	**342**	333	342	331	317
	12,319	11,929	12,429	12,134	11,763
Outside Québec					
Canada/U.S.	**1,919**	1,395	1,510	1,731	1,651
Total revenue from electricity sales	**14,238**	13,324	13,939	13,865	13,414
As at December 31					
Number of customer accounts					
In Québec, by segment					
Residential	**4,128,692**	4,076,286	4,032,426	3,994,491	3,958,300
Commercial, institutional and small industrial	**323,501**	321,562	319,225	317,608	316,430
Large industrial	**193**	189	186	185	184
Other	**4,812**	4,763	4,705	4,630	4,582
Total customer accounts	**4,457,198**	4,402,800	4,356,542	4,316,914	4,279,496

Operating Statistics (continued)

	2021	2020	2019	2018	2017
MW					
Installed capacity					
Hydroelectric	**36,694**	36,687	36,700	36,767	36,767
Thermal	**544**	544	543	543	542
Photovoltaic	**10**	–	–	–	–
Total installed capacity	**37,248**[a]	37,231	37,243	37,310	37,309
GWh					
Total energy requirements[b]	**231,913**	223,869	229,959	230,795	226,824
MW					
Peak power demand in Québec[c]	**40,537**	36,576	36,159	38,319	38,204
km					
Lines (overhead and underground)					
Transmission	**34,775**[d]	34,826	34,802	34,361	34,479
Distribution	**226,949**	226,752	225,304	224,659	224,033
Total lines (overhead and underground)	**261,724**	261,578	260,106	259,020	258,512

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 43 wind farms (3,906 MW) and 56 hydroelectric generating stations (705 MW) and almost all the output from 13 biomass and 5 biogas cogeneration plants (419 MW) operated by independent power producers. Moreover, 554 MW are available under long-term contracts.

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

c) The 2021 figure was valid on February 18, 2022. The values indicated reflect demand at the annual domestic peak for the winter beginning in December, including interruptible power. The 2021–2022 winter peak occurred at 6:00 p.m. on January 11, 2022.

d) 34,503 km of lines operated by the Transmission Provider and 272 km by the Distributor.

Other Information

	2021	2020	2019	2018	2017
%					
Rate increase as at April 1[a]	**1.3**	–	0.9	0.3	0.7
As at December 31					
Total number of employees[b]					
Permanent	**18,163**	17,414	16,977	16,960	17,338
Temporary	**3,005**	2,597	2,500	2,944	2,448
	21,168	20,011	19,477	19,904	19,786
%					
Representation of target groups					
Women	**28.5**	28.5	29.2	28.8	28.9
Other[c]	**11.9**	10.7	10.4	8.9	8.1

a) Excluding Rate L.

b) Excluding employees of subsidiaries and joint ventures.

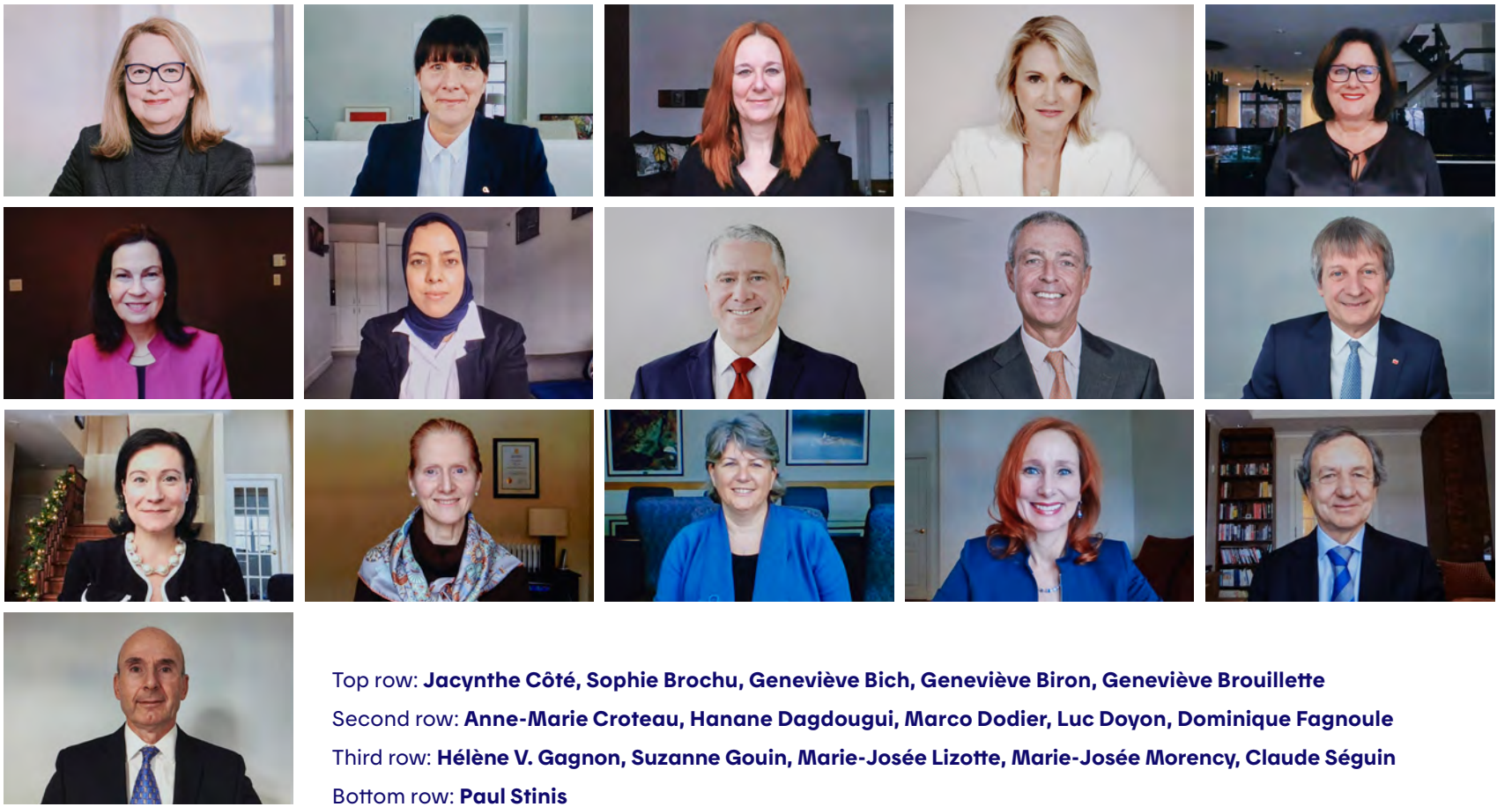
c) Self-reported members (men and women) of the following groups: Indigenous peoples, ethnic minorities, visible minorities and people with disabilities.

CONSOLIDATED RESULTS BY QUARTER

					2021
$M	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
Revenue	4,447	2,990	3,028	4,061	**14,526**
Expenditure					
Operations	768	807	788	925	**3,288**
Other components of employee future benefit cost	(186)	(185)	(186)	(186)	**(743)**
Electricity purchases	631	505	458	575	**2,169**
Depreciation and amortization	652	658	650	729	**2,689**
Taxes	332	264	274	321	**1,191**
	2,197	2,049	1,984	2,364	**8,594**
Income before financial expenses	2,250	941	1,044	1,697	**5,932**
Financial expenses	609	589	596	574	**2,368**
Net income	1,641	352	448	1,123	**3,564**

					2020
$M	1st quarter	2nd quarter	3rd quarter	4th quarter	12-month period
Revenue	4,371	2,816	2,833	3,574	13,594
Expenditure					
Operations	738	788	743	877	3,146
Other components of employee future benefit cost	(124)	(123)	(124)	(123)	(494)
Electricity purchases	594	516	469	625	2,204
Depreciation and amortization	647	651	656	740	2,694
Taxes	320	253	261	304	1,138
	2,175	2,085	2,005	2,423	8,688
Income before financial expenses	2,196	731	828	1,151	4,906
Financial expenses	671	651	625	656	2,603
Net income	1,525	80	203	495	2,303

BOARD OF DIRECTORS



Top row: **Jacynthe Côté, Sophie Brochu, Geneviève Bich, Geneviève Biron, Geneviève Brouillette**

Second row: **Anne-Marie Croteau, Hanane Dagdougui, Marco Dodier, Luc Doyon, Dominique Fagnoule**

Third row: **Hélène V. Gagnon, Suzanne Gouin, Marie-Josée Lizotte, Marie-Josée Morency, Claude Séguin**

Bottom row: **Paul Stinis**

Jacynthe Côté

Chair of the Board, Hydro-Québec

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

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 and production, 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. She also chairs the boards of Alloprof and the Fondation CHU Sainte-Justine. She was awarded honorary doctorates by Université du Québec à Chicoutimi and Université de Montréal (HEC Montréal).

Sophie Brochu

President and Chief Executive Officer, Hydro-Québec

Appointment: April 2, 2020
Term: April 2, 2025
Status: Non-independent director
Place of residence: Estrie

Sophie Brochu holds a bachelor's degree in economics from Université Laval and has over 30 years of experience in the energy sector. She began her career in 1987 as a financial analyst with Société québécoise d'initiatives pétrolières, a Québec government corporation responsible for developing the natural gas network in the province. In 1997, she joined Énergir (formerly Gaz Métro) as Vice President, Business Development, and subsequently went on to head other departments, including those in charge of gas supplies, sales and customer services. In 2007, she became Énergir's President and Chief Executive Officer, a position she held until the end of 2019. Very active in the community, she has been involved with Centraide of Greater Montreal for many years and co-founded ruelle de l'avenir, a non-profit organization that encourages students in the Centre-Sud and Hochelaga neighborhoods of Montréal to stay in school. She chairs the board of Fondation Forces AVENIR, which supports activities designed to foster and celebrate community involvement by high school, college and university students. In addition, she is a leader of L'effet A, an initiative whose aim is to promote the participation of women at all organizational levels. She also serves on the board of Banque de Montréal (BMO). Ms. Brochu was awarded honorary doctorates by Université de Montréal (HEC Montréal) and Bishop's University. She is a member of the Order of Canada and an Officer of the Ordre national du Québec.

Geneviève Bich

Vice President, Human Resources, Metro inc.

Appointment: September 9, 2015
Term: February 19, 2024
Status: Independent director
Place of residence: Montréal

Geneviève Bich holds a Bachelor of Arts with a major in psychology from McGill University and a law degree 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 its Vice President of Human Resources, Ms. Bich worked at Groupe Dynamite and Aimia.

Geneviève Biron

Founder and President, Propulia Capital

Appointment: March 31, 2021
Term: March 31, 2025
Status: Independent director
Place of residence: Montréal

Geneviève Biron received a bachelor's degree in human resource and financial management from HEC Montréal in 1997 and completed the Institute of Corporate Directors' certification program in 2013. She was Director of Human Resources for Biron Groupe Santé inc. from 1991 to 1999, when she was named the organization's Vice President of Operations. She founded Imagix Imagerie Médicale in 2005 and served as President and Chief Executive Officer until she was appointed President and Chief Executive Officer of Biron Groupe Santé inc. in 2014. With a desire to move society forward, she founded Propulia Capital in July 2021, and became the firm's President. Propulia Capital aims to support companies that believe in the power of digital transformation and in the importance of cultivating a strong, caring culture.

Geneviève Brouillette

Chief Financial Officer, Groupe ALDO

Appointment: July 12, 2017
Term: September 4, 2023
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 (FCPA and FCA), which awarded her the title of Fellow in February 2021. She has also been granted ICD.D designation by the Institute of Corporate Directors. A seasoned leader, Ms. Brouillette has held key executive and finance positions at such renowned companies as Keurig Dr Pepper, Groupe St-Hubert, Reader's Digest and Kraft Heinz, in both Canada and the U.S. She joined Groupe Aldo in January 2019 as Chief Financial Officer.

Anne-Marie Croteau

Dean, John Molson School of Business, Concordia University

Appointment: July 6, 2016
Term: August 19, 2024
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. Certified by the Collège des administrateurs de sociétés, Ms. Croteau is Vice Chair of the board of Collège André-Grasset and has served on the boards of Finance Montréal and the Société de l'assurance automobile du Québec. She is also a member of the Conseil des parrains et marraines of the Jeune Chambre de commerce de Montréal.

Hanane Dagdougui

Associate Professor, Department of Mathematical and Industrial Engineering, Polytechnique Montréal

Appointment: February 19, 2020
Term: February 19, 2024
Status: Independent director
Place of residence: Montréal

Hanane Dagdougui holds a bachelor's degree in engineering physics and a master's in energetics and automation from Université Cadi Ayyad in Marrakech, Morocco, as well as a PhD in high-risk activities engineering from the École nationale supérieure des mines de Paris, and a PhD in energy systems engineering from the École Polytechnique at the University of Genoa. Ms. Dagdougui began her teaching and research career at the latter institution's Faculty of Engineering in 2011. Prior to being appointed assistant professor in the department of mathematical and industrial engineering at Polytechnique Montréal in 2017, she spent three years as an institutional postdoctoral researcher in the electrical engineering department of Montréal's École de technologie supérieure. She has published numerous articles on the energy sector, most of which explore the links between operational research, artificial intelligence and the various actors in the power system.

Marco Dodier

Consultant in private practice

Appointment: July 12, 2021
Term: July 12, 2025
Status: Independent director
Place of residence: Estrie

Marco Dodier received a bachelor's degree in industrial engineering from Université du Québec à Trois-Rivières in 1998. After co-founding Cesart in 1996, he held the positions of Executive Vice President and President, growing the company into one of the largest and most well-known web development and consulting firms before it was acquired by Bell Canada in 2005. From 2006 to 2015, as President of Gesca Digital Investments, he was in charge of developing the company's digital assets through acquisitions or equity stakes. In addition, Mr. Dodier held several executive positions within the Power Corporation group from 2009 to 2015, including President of Cyberpresse, President of w.illi.am/ and co-President of Duproprio.com. In 2015, he became President and Chief Executive Officer of DuProprio, before selling the company to Desjardins in 2021. He is currently an independent consultant.

Luc Doyon

Corporate Director

Appointment: September 4, 2019
Term: September 4, 2023
Status: Independent director
Place of residence: Montréal

Luc Doyon holds a bachelor's degree in mechanical engineering from Polytechnique Montréal and a graduate diploma in welding engineering from the École supérieure du soudage et de ses applications in Paris. He has also taken part in the Executive Education program at INSEAD (Institut européen d'administration des affaires) [European Institute of Business Administration] in Fontainebleau, France. He spent his career with the French industrial group Air Liquide, where he worked from 1983 to 2017. He started out as an engineer at Air Liquide Canada and became a manager in 1988. In particular, he served as Vice-President, Merchant Gases at Air Liquide America in Houston, and President and Chief Executive Officer of Air Liquide Canada in Montréal. In 2012, he was appointed President and Chief Executive Officer of the welding division of Groupe Air Liquide in Paris.

Dominique Fagnoule

Executive Advisor, Banque Nationale du Canada

Appointment: August 19, 2020
Term: August 19, 2024
Status: Independent director
Place of residence: Montréal

Dominique Fagnoule has a civil engineering degree in electricity, with a specialization in electronics, from Université de Liège in Belgium. He was Chief Information Officer and a member of the executive committee of BNP Paribas Personal Finance from 2009 to 2013. Prior to that, he held various positions at FORTIS in the Netherlands and Belgium, including General Manager – Retail Banking Information Systems (personal banking). Mr. Fagnoule has also held a number of senior-level positions in major financial institutions, including Générale de Banque in Belgium. In 2013, he joined Banque Nationale, where he was Executive Vice-President – Information Technology and a member of the Office of the President before being named Executive Advisor in 2020. He also serves on the board of Youth Fusion.

Hélène V. Gagnon

Senior Vice President, Public Affairs, Global Communications and Corporate Social Responsibility, CAE inc.

Appointment: April 22, 2015
Term: September 4, 2023
Status: Independent director
Place of residence: Montréal

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 Senior Vice President, Public Affairs, Global Communications and Corporate Social Responsibility at CAE since 2015 and has held similar positions at Bombardier Aéronautique, Bombardier Transport and Noranda. She serves as Vice Chair of the board of Aéroports de Montréal and sits on the boards of the Aerospace Industries Association of Canada and the Aéro Montréal aerospace cluster. She has also served on the board of the Canadian American Business Council since 2017 and was named its Vice Chair in 2020. Also in 2020, she was inducted into the prestigious College of Fellows of the Canadian Public Relations Society.

Suzanne Gouin

Chair of the Board of Management, Canada Revenue Agency

Appointment: September 26, 2007
Term: July 6, 2020[1]
Status: Independent director
Place of residence: Montréal

Suzanne Gouin has a bachelor's degree in political science from Concordia University, where she also pursued graduate courses in media studies. She completed a Master of Business Administration at the University of Western Ontario and has earned ICD.D designation 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 sits on the board of the Foundation of Greater Montreal. In 2008, Ms. Gouin was awarded the Ordre national du Mérite of the French Republic.

Marie-Josée Lizotte

Deputy Minister of Energy and Natural Resources

Appointment: August 19, 2020
Term: July 11, 2021[1]
Status: Non-independent director
Place of residence: Capitale-Nationale

Marie-Josée Lizotte holds a bachelor's degree in urban planning and a diploma of specialized studies in engineering and development project management from Université de Montréal, as well as a master's in land use planning and regional development from Université Laval. She began her career in Québec's public service in 1989. Since 2001, she has held various senior positions in the Ministère des Finances, de l'Économie et de la Recherche and the Ministère du Développement économique, de l'Innovation et de l'Exportation. Ms. Lizotte joined the Ministère de l'Environnement et de la Lutte contre les changements climatiques in 2010 as Director General – Strategic and Environmental Assessment, and subsequently became Assistant Deputy Minister for Environmental Authorizations and Assessments. She has served as Deputy Minister of Energy and Natural Resources since 2020.

Marie-Josée Morency

Executive Vice-President and General Manager, Chambre de commerce de Lévis

Appointment: July 6, 2016
Term: August 19, 2024
Status: Independent director
Place of residence: Capitale-Nationale

After completing a bachelor's in communications at Université Laval, Marie-Josée Morency began her career as an entrepreneur. She worked in communications in the Saguenay region for Cystic Fibrosis Québec, the Association provinciale des constructeurs d'habitations du Québec and Promotion Saguenay. From 2010 to 2017, she was Executive Director, Chambre de commerce et d'industrie Saguenay-Le Fjord, and 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. Since 2019, she has been Executive Vice-President and General Manager of the Chambre de commerce de Lévis. Ms. Morency is President of the Alliance des chambres de commerce de Chaudière-Appalaches, Vice Chair of the board of the Société Alzheimer de Québec, and a member of the boards of the Fédération des chambres de commerce du Québec, Pôle Québec logistique and the Conseil régional des partenaires du marché du travail de la Chaudière-Appalaches.

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

Claude Séguin

Chair of the Board, Fonds de solidarité de la Fédération des travailleurs du Québec (FTQ)

Appointment: August 19, 2020
Term: August 19, 2024
Status: Independent director
Place of residence: Montréal

With a bachelor's degree in business administration from HEC Montréal and both a master's and a PhD in public administration from Syracuse University in New York State, Claude Séguin began his career in the public sector, holding management positions at the Secrétariat du Conseil du trésor before being appointed Assistant Deputy Minister of Finance in 1983 and Deputy Minister in 1987. In 1992 he struck out into the private sector as Téléglobe Inc.'s Executive Vice President, Finance and Chief Financial Officer. He then served as President of CDP Capital—Private Equity at the Caisse de dépôt et placement du Québec, and subsequently joined Groupe CGI, where he was Senior Vice President, Corporate Development and Strategic Investments from 2003 to 2016 and Special Advisor to the Chairman from 2016 to 2018. He has been Chair of the Board of the FTQ Fonds de solidarité since 2018.

Paul Stinis

Corporate Director

Appointment: April 22, 2015
Term: August 19, 2024
Status: Independent director
Place of residence: Montréal

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 the BCE/Bell Canada group as Vice-President and Assistant Treasurer, then served as Senior Vice-President and Treasurer from 2009 to 2018. Among other duties, he was in charge of all operations related to treasury and capital markets, including risk management, insurance, pension funds, pension plans, group benefits and investor relations. From 2015 to 2018, he headed Bimcor, the pension fund investment manager for the BCE/Bell Canada group. At the start of 2021, he joined the advisory committee that manages the investment strategy for the McGill University Pension Plan.

Directors' compensation and benefits in 2021[1]

	Base compensation	Meeting fees	Taxable benefits[2]
Geneviève Bich	$26,182	$24,751	$6,861
Geneviève Biron	$14,423	$10,741	$1,057
Sophie Brochu[3]	–	–	–
Geneviève Brouillette	$26,182	$25,685	$2,073
Jacynthe Côté[4]	$60,584	$42,497	$5,479
Anne-Marie Croteau	$19,947	$28,487	$45
Hanane Dagdougui	$19,947	$22,883	$5
Marco Dodier	$8,823	$6,071	$3,035
Luc Doyon	$19,947	$26,619	$5
Dominique Fagnoule	$19,947	$28,487	$2,766
Hélène V. Gagnon	$26,182	$17,279	$3
Suzanne Gouin	$19,947	$25,685	$2,766
Luc Jobin	$13,809	$19,147	$3,778
François Lafortune	$9,667	$10,274	$22
Marie-Josée Lizotte[3]	–	–	$177
Yvon Marcoux	$2,201	–	$5
Marie-Josée Morency	$19,947	$21,015	$6,861
Claude Séguin	$19,947	$21,015	$4,835
Paul Stinis	$19,947	$32,223	$5,526

1. Compensation set by the government under Order-in-Council No. 610-2006 of June 28, 2006. This remuneration consists of a basic annual retainer plus a fee for each Board or committee meeting attended. A yearly supplement is also paid to statutory committee chairs.
2. Insurance and health assessments paid by Hydro-Québec.
3. By law, non-independent directors—Sophie Brochu and Marie-Josée Lizotte—receive no compensation or meeting fees as members of the Board of Directors.
4. Jacynthe Côté's compensation was set under Order-in-Council No. 1342-2018 of November 7, 2018. She receives an annual base compensation of $60,584 plus a meeting fee of $934 for each Board or committee meeting attended.

ACTIVITY REPORT OF THE BOARD OF DIRECTORS AND BOARD COMMITTEES

Board of Directors

Chaired by Jacynthe Côté, the Board of Directors met 13 times in 2021, while its committees held 33 meetings over the same period. Two new directors were appointed by the government in 2021, namely Geneviève Biron and Marco Dodier. Their skills have added to the Board's existing expertise, optimizing the support provided to the company.

In collaboration with Management, the Board oversaw the development of Hydro-Québec's new strategic plan, one of the company's major undertakings in the past year. The *Strategic Plan 2022–2026*, which was submitted to the Minister of Energy and Natural Resources in early 2022, redefines Hydro-Québec's priority objectives. The Board also approved the corporate evolution plan and worked with Management to set up a solid succession plan for senior executives. In addition, it supported the creation of a team whose mission is to advance equity, diversity and inclusion within the company.

Other major files examined by the Board this past year include two interconnection projects to export our clean energy: one to New York City, and the other to the State of Massachusetts. Regarding the first, the State of New York selected the project put forth by Hydro-Québec and its U.S. partner Transmission Developers, which consists in the construction of interconnected transmission lines with a capacity of 1,250 MW in Québec (Hertel–New York) and the United States (Champlain Hudson Power Express) to deliver the equivalent of about 20% of the city's energy consumption. Once built, the Hertel–New York line would be jointly owned by Hydro-Québec and the Mohawk community of Kahnawà:ke under a partnership agreement between the two parties. The project to supply Massachusetts with power involves the construction of two interconnected 1,200-MW transmission lines: the Appalaches–Maine line in Québec and the New England Clean Energy Connect (NECEC), in Maine, whose construction began in January 2021, but was interrupted as a result of a legal challenge of the legislation adopted in Maine following a referendum initiative that took place in the fall. It is worth recalling, however, that all the key authorizations and major permits for the NECEC line have been obtained.

The Board kept abreast of Hydro-Québec's relations with First Nations and the Inuit Nation. It held training sessions and discussions to raise awareness about the historical context and the rapport that the company hopes to build with Indigenous communities going forward.

The Board approved capital projects in power generation, transmission and distribution, including the construction of a new thermal generating station in Inukjuak, the replacement of generating units and the repair of dikes at Beauharnois, and the reinforcement of the 315-kV system in the eastern part

A proud supporter of the visual arts in Québec, Hydro-Québec enriches its collection regularly by acquiring works in a variety of mediums, from paintings and photographs to prints and videos.

Moridja Kitenge Banza was born in the Democratic Republic of the Congo. Here, he pays tribute to "Papa" Abel, a man suffering from mental illness and a victim of discrimination who regularly sat behind the artist's family home, waiting for the young Moridja to bring out leftovers for him. The artist doesn't know any more about this individual than the food offered: cabbage and *mpiodi* (fish). He imagined that "Papa" Abel might have seen the young Moridja as a strange creature with food for a head.

Moridja Kitenge Banza

Je crois savoir comment il me voit, nos 8 et 9 – Colored pencil on archival cardboard, 2020

(2) 50 x 40 cm

of the island of Montréal. It also authorized a partnership with Énergir to convert buildings to dual energy (2022–2030), as well as a project to roll out public curbside fast chargers to promote the use of electric vehicles. Under the strategic partnership established in 2020 with Innergex énergie renouvelable, Hydro-Québec also acquired two hydroelectric generating stations in New York State, thereby gaining access to the U.S. renewable energy market.

The Board kept track of the company's performance indicators, with a focus on the efforts made by the President and Chief Executive Officer and Hydro-Québec's management team to meet the challenges brought on by the second year of the pandemic. In keeping with its responsibility to monitor the company's financial integrity, it also oversaw the quality of financial information and reporting mechanisms, and approved the financial statements of Hydro-Québec and its pension plan.

In the course of its recurring deliberations, the Board examined the company's objectives and consolidated business plan. It also reviewed Hydro-Québec's main capital projects and the consolidated portfolio of residual business risks.

The Board is working with Management to ensure that Hydro-Québec succeeds in all its endeavors, and particularly in the initiatives it has launched to help bring about the energy transition.

Executive Committee (A)

The Executive Committee did not hold any meetings in 2021.

Governance and Social Responsibility Committee (B)

The Governance and Social Responsibility Committee is chaired by Hélène V. Gagnon. In 2021, the Committee focused on health and safety issues, closely monitoring the actions taken by the company after accidents occurred on its jobsites and in its facilities, some of which unfortunately resulted in the death of contractors' employees. The Committee provided Management with its full support in analyzing and managing these accidents. It also supported the company with the implementation of best practices for telework given the continuation of measures related to COVID-19. The health and safety of employees and the public is a constant concern for the Committee, the Board of Directors and the company.

To continue to stay on the pulse of the social acceptability of projects, a key consideration for the Committee, Management set up a safe way to consult the public during the pandemic. In addition, Committee members were given a presentation on defining a framework to improve the social acceptability of the projects carried out by Hydro-Québec. The Committee continued to pay close attention to the company's relations with Indigenous communities and to the process of obtaining Progressive Aboriginal Relations (PAR) certification.

The Committee supported and closely monitored the company's *Collective Energy* initiative and its three key focus areas, namely the decarbonization of Québec's economy, sustainable mobility and the reimagining of the ways energy is used.

In accordance with its mandate, the Committee analyzed the results of the performance assessment of the Board and its committees, directed by the Chair of the Board, and suggested improvements to the Board. It also reviewed the new employee code of ethics, called *Code d'éthique – Pour faire vivre nos valeurs* [Code of Ethics — Bringing Values to Life] and recommended its approval by the Board.

The Committee members were proud to receive the results of the audit that led to the company achieving ISO 37001:2016 certification for its anti-bribery management system in response to the United Nation's call for a collective effort to fight corruption. The Committee also kept a close watch on all activities related to the environment and sustainability, including the drafting of the company's *Sustainability Report 2020*. Lastly, it ensured the robustness of the training program for directors.

Audit Committee (C)

Chaired by Geneviève Brouillette, FCPA, the Audit Committee met with the independent auditors to study the company's quarterly and annual financial statements as well as the annual financial statements of the Hydro-Québec Pension Plan, and it recommended that the Board approve these statements.

The Committee carefully monitored the management of risks related to the Hydro-Québec Pension Fund, the Fund's performance compared to its peers and the structure of its portfolio. It also recommended that the Board approve the Pension Fund Investment Management Policy and the actuarial valuation of Pension Plan funding and solvency.

As part of sound governance, the Committee fulfilled its role of overseeing business risk management in support of the company's decision-making. It kept a close watch on changes in the company's risk portfolio, taking into account uncertainties related to inflation, climate change, cybersecurity, energy transactions, the generalized increase in insurance premiums and other factors. It worked with the Financial Affairs, Projects and Technologies Committee to review the company's continuity plan for IT systems.

The committee also monitors any activity potentially detrimental to the company's financial health that is brought to its attention by the Vice President – Internal Audit or another member of the management team. It reviewed the compliance report for the first half of 2021 and recommended that the Board approve the compliance plan for 2022. In addition, it continued to ensure that internal audit activities were aligned with integrated risk management, corporate control and compliance activities so as to consolidate the second and third lines of defense.

In compliance with the *Act to facilitate the disclosure of wrongdoings relating to public bodies*, the Committee received two reports by the person in charge of applying this act.

The Committee fulfilled all the other responsibilities assigned to it, ensuring optimal use of the company's resources and the proper management of its financial affairs and internal controls.

All the members of the Audit Committee are independent. They received training on a number of topics, including accounting practices related to new energy sources.

Human Resources Committee (D)

Chaired by Geneviève Bich, the Human Resources Committee focused on reviewing succession planning for the company's executives and examining the development strategies for senior managers. It also looked at talent attraction and retention, with an emphasis on millennials.

The Committee studied the objectives stemming from Hydro-Québec's strategy and priorities, along with wage mandates, which it recommended that the Board approve. It also coordinated the evaluation process for the President and Chief Executive Officer and recommended Board approval of the evaluation criteria.

Other recommendations to the Board included executive appointments and organizational changes. Among the latter was the replacement of "divisions" with "groups," while maintaining strict compliance with energy market regulations.

Committee members received training from Hexarem, a consulting firm, on trends in compensation and on the main components of total compensation for Senior Management. They were also joined by the members of the Audit Committee for a training session on the structure of the Hydro-Québec Pension Plan given by the Groupe – Direction financière.

The Human Resources Committee studied the Corporate Ombudsman's report and the recommendations therein. It also reviewed the engagement plan produced following an employee survey, and it supported the implementation of activities planned for 2022 to promote equity, diversity and inclusion within the company.

Financial Affairs, Projects and Technologies Committee (E)

Chaired by Paul Stinis, the Financial Affairs, Projects and Technologies Committee reviews all corporate guidelines, policies, strategies and general objectives related to Hydro-Québec's financial affairs—including its business plan and annual budget—and to its capital projects, commercial development and technologies.

In 2021, the Committee was involved in a large number of files, including the partnership between Hydro-Québec and Innergex, an independent power producer. The two companies made their first joint acquisition: the purchase of two run-of-river generating stations in New York State.

The Committee also reviewed the company's major interconnection projects prior to their approval by the Board of Directors. These projects will allow Hydro-Québec to export its clean energy to the U.S., one to New York City (Hertel–New York line in Québec and Champlain Hudson Power Express in the U.S.) and the other to Massachussets (Appalaches–Maine line in Québec and New England Energy Connect in the U.S.).

In addition to closely monitoring cybersecurity concerns from a risk management perspective, the Committee members examined several other important issues related to the digital shift and its impact on Hydro-Québec's activities.

The Committee was consulted on all major rehabilitation projects for generation, transmission, distribution and other facilities (dams, substations, lines, generating stations, aerodromes, etc.), including the modernization of grid control systems.

The Committee also reviewed innovative projects by the company's subsidiaries. Among the initiatives approved was a project to roll out public fast chargers for electric vehicles with financial assistance from Hydro-Québec.

The members of the Committee were also given a presentation on Hydro-Québec's partnership with Énergir for the conversion of buildings to dual energy.

Director attendance at meetings of the Board of Directors and Board committees in 2021

Director	Notes	Board[1]	Committees				
			A[2]	B	C	D	E
Number of meetings		13		7	7	8	11
Jacynthe Côté	A B C D E	13/13		7/7	7/7	8/8	11/11
Sophie Brochu	A E 3	12/13		7/7	7/7	8/8	10/11
Geneviève Bich	B D	13/13		6/7		8/8	
Geneviève Biron	B 4	8/9		4/4			
Geneviève Brouillette	C D	13/13			7/7	8/8	
Anne-Marie Croteau	D E	12/13				8/8	11/11
Hanane Dagdougui	C E 5	11/13			4/4	1/1	9/11
Marco Dodier	D 6	6/6				1/1	
Luc Doyon	B E	12/13		7/7			10/11
Dominique Fagnoule	C E	13/13			7/7		11/11
Hélène V. Gagnon	B	12/13		7/7			
Suzanne Gouin	A C D	13/13			7/7	8/8	
Luc Jobin	C E 7	9/10			4/4	1/1	7/8
François Lafortune	E 8	7/7					4/5
Marie-Josée Lizotte		11/13					
Marie-Josée Morency	B D	10/13		6/7		7/8	
Claude Séguin	E	13/13					10/11
Paul Stinis	A C E	13/13		3/3	7/7	1/1	11/11

Committees

A. Executive
B. Governance and Social Responsibility
C. Audit
D. Human Resources
E. Financial Affairs, Projects and Technologies

Notes

1. The Board of Directors held 13 meetings, including 4 special meetings.
2. The Executive Committee did not hold any meetings in 2021.
3. Sophie Brochu attends the meetings of the Governance and Social Responsibility, Audit, and Human Resources committees as a guest.
4. Geneviève Biron was appointed effective March 31, 2021. She joined the Governance and Social Responsibility Committee on June 10, 2021, replacing Paul Stinis.
5. Hanane Dagdougui joined the Audit Committee on August 26, 2021.
6. Marco Dodier was appointed effective July 12, 2021. He joined the Human Resources Committee on November 12, 2021.
7. Luc Jobin resigned on August 27, 2021.
8. François Lafortune resigned on June 14, 2021.

GOVERNANCE

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

Independence

With the exception of Sophie Brochu, President and Chief Executive Officer, and Marie-Josée Lizotte, 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—in particular of a financial, commercial, professional or philanthropic nature—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 and Executives of Hydro-Québec and its wholly owned subsidiaries, which are based primarily on the Regulation respecting the ethics and professional conduct of public office holders. The Code is available in French only.

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. It consists of a basic annual retainer of $19,947 plus a fee of $934 for each Board or committee meeting attended. A yearly supplement of $6,235 is paid to the chairs of the Audit Committee, the Governance and Social Responsibility Committee, and the Human Resources Committee.

Under Order-in-Council No. 1342-2018, the Chair of the Board receives annual compensation of $60,584 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

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 framework. 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, the cybersecurity monitoring center and the energy trading floor. By the end of the induction program, new members have received approximately 15 hours of training.

The energy transition continues to be a priority issue on the Board's agenda, and members heard numerous presentations on the topic, including one on the hydrogen sector and another on carbon capture, use and storage. Continuing development activities for Board members included presentations on such topics as Indigenous peoples, climate change, and the U.S. geopolitical context and its impacts on the energy market. Members of the Audit Committee received additional training on climate change risks and cybersecurity risks, as well as a review of accounting practices related to new energy sources such as solar, wind and hydrogen and an update on accounting for derivatives. The Governance and Social Responsibility Committee was briefed on the *Act to modernize legislative provisions as regards the protection of personal information*.

Deintegration

In 1997, Hydro-Québec implemented an organizational restructuring, 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 structural unbundling, or deintegration, 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 Groupe – TransÉnergie et équipement, the Transmission Provider's affiliates or other system users.

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).

- *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 subsidized, 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. The financial information component of this system is based on the internationally recognized framework developed by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission, and includes the implementation of an annual control plan. The objective of this component is to provide reasonable assurance that the financial information is relevant and reliable, and that Hydro-Québec's assets are appropriately recorded and safeguarded. The control system includes an integrated business risk management process, and the company has also established a process for assessing the governance, performance and compliance of its operations in relation to various fields, such as the fight against corruption. 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 value-for-money audit to ensure the efficiency, effectiveness and cost-effectiveness of Hydro-Québec's operations.

Auditors' fees and independence

KPMG LLP, Ernst & Young LLP and the Auditor General of Québec are Hydro-Québec's independent auditors for 2021. The professional fees billed by KPMG LLP and by Ernst & Young LLP in 2021 for services other than auditing and certification accounted for 0.6% of the total $3.1 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 engagement that could be assigned 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.

Access to information and protection of privacy

All requests for access to information received by Hydro-Québec are handled in accordance with the *Act respecting access to documents held by public bodies and the protection of personal information* (CQLR, c. A-2.1, the "Access Act"). In 2021, Hydro-Québec processed 393 requests for access to information that concerned administrative documents or personal information. Of these, 172 were granted in full, 152 were granted in part and 39 were turned down. The most common reasons for denying requests are the need to protect third-party personal information, or security or commercial concerns that prevent disclosure of the document. As for the other 30 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, 216 requests for access were processed within 20 days, 132 in 21 to 30 days, and 45 in 31 days or more, for an average processing time of 19 days. In addition, 11 review notices were received from the Commission d'accès à l'information and no requests for access were the subject of accommodation measures under the government policy on equal access for persons with disabilities to publicly available documents and services. Decisions on access requests and the report on requests processed in 2021 are available (in French only) at https://www.hydroquebec.com/documents-data/act-respecting-access/record.html. Hydro-Québec also ensures that documents and information whose publication is prescribed by the *Regulation respecting the distribution of information and the protection of personal information* is made available on our website, at https://www.hydroquebec.com/documents-data/act-respecting-access/distribution-information/, where it can be easily accessed by the public.

Training and awareness-raising initiatives were developed under the leadership of the Committee on the Governance of Corporate Data and Technologies. Hydro-Québec reminded its employees of the principles of access to information and the protection of privacy through a mandatory training, internal communications as well as in connection with specific cases.

The company implemented a privacy protection program for ensuring compliance with the legal framework set out in the Access Act. It also developed an action plan for meeting the requirements of the *Act to modernize legislative provisions as regards the protection of personal information* (S.Q. 2021, c. 25). In the interest of transparency and to maintain public trust in its privacy practices, Hydro-Québec adopted a privacy policy [see Our Commitment to Your Privacy (www.hydroquebec.com/data/documents-donnees/pdf/your-privacy-2021-03-01.pdf)], which it has made public on its website.

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 (www.hydroquebec.com/data/a-propos/pdf/code-conduite-distributeur.pdf). [In French only.]

Ethics and reporting hotline

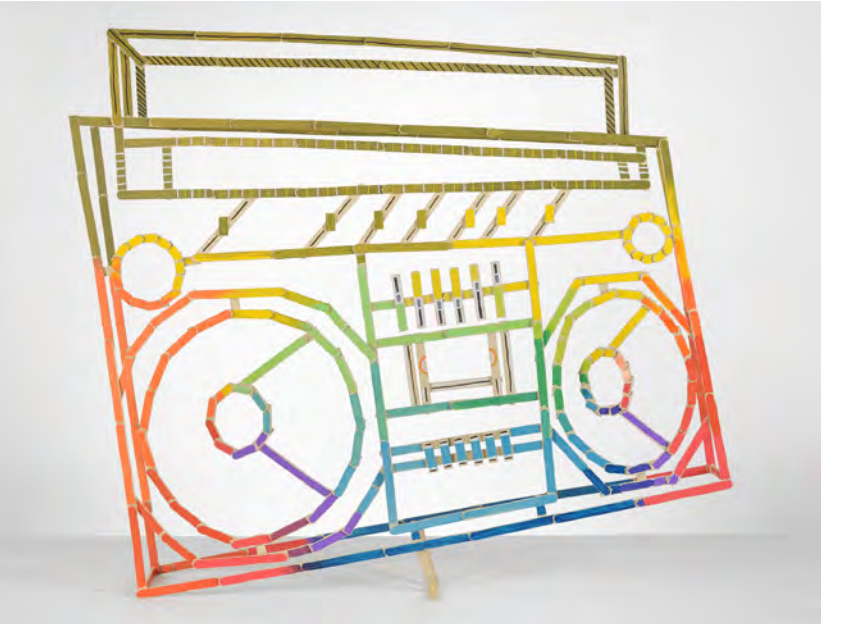
Ethics at Hydro-Québec are founded on five principles: acting with integrity, acting with loyalty and diligence, treating people and the environment with respect, managing information responsibly and treating our customers, suppliers and partners fairly and courteously. These principles, which are set out in the employee Code of Ethics (in French only, at www.hydroquebec.com/data/a-propos/pdf/hq-code-dethique-des-employes-2022-02-08.pdf) and the accompanying self-training program, are meant to guide employees in their actions and in the choices they make. Employees who wish to ask a question or request advice about a particular situation can write to ethique@hydroquebec.com or contact an ethics advisor. During the year, more than 464 requests were received and processed.

In 2021, we rewrote our employee Code of Conduct, updating the rules of ethics to better reflect Hydro-Québec's current reality. The new code, called *Code d'éthique – Pour faire vivre nos valeurs* [Code of Ethics — Bringing Values to Life], focuses on employee commitments with regard to inclusion, sustainability, workplace wellness and safety, and cybersecurity. The Code was adopted by the Board of Directors on December 17.

In January 2021, the Direction – Affaires corporatives et gouvernance was put in charge of managing the disclosures made through the reporting hotline. All reports of wrongdoing or misconduct are diligently processed, and management adopts any necessary measures. Quarterly reports are submitted to the Board's Audit Committee. In 2021, 217 reports of wrongdoing or misconduct were received.

Language guidelines

Among the measures established for applying the *Charter of the French Language* are an online consultation service offered to all employees and an intranet site devoted to the language guidelines applicable to Hydro-Québec. In 2021, Hydro-Québec began revamping this intranet site, which will be completed in 2022.



This sculpture by the BGL trio, simulating an arts-and-crafts project made with wooden sticks, differs from the industrial merchandise that inspired it: the emblematic portable stereo from the 1970s. This fanciful, hand-made representation of a boombox lends a singularity to the work, while the use of bronze renders it unusable. The disconnect between the machine, which bears no trace of its assemblage, and its artistic interpretation creates a strange contradiction.

BGL

Héritage sentimental 2 – Bronze and acrylic, 2020

68,5 x 72 x 12,5 cm

Compensation and benefits paid to the company's five most highly compensated officers as at December 31, 2021

	Base salary as at December 31	Incentive compensation for 2020, paid in 2021	Perquisites used[a]	Taxable benefits			
					Automobile		Life insurance and health insurance
				Nature of benefit	Allowance	Usage and parking	
Sophie Brochu President and Chief Executive Officer of Hydro-Québec	$598,560	–	$10,000	Executive vehicle	–	–	$7,694
Éric Filion Executive Vice President – Distribution, Procurement and Shared Services	$457,260	–	$1,958	Car allowance or provision of a vehicle, plus parking	$17,627	$5,306	$6,024
Jean-Hugues Lafleur Executive Vice President and Chief Financial Officer	$449,904	–	$5,000		$17,627	$2,901	$9,439
Claudine Bouchard Executive Vice President – TransÉnergie and Construction President and Chief Executive Officer of Société d'énergie de la Baie James[b]	$402,278	–	$314		$19,792	$769	$3,981
Pierre Despars Vice President – Corporate Strategy and Business Development	$400,000	–	$4,000		$12,298	$782	$9,834

Incentive Compensation

Under Hydro-Québec's incentive compensation policy, non-unionized employees may receive an annual performance bonus. An executive's bonus is based on corporate objectives that are set and approved annually, and is subject to the attainment of the financial performance threshold. No incentive compensation was paid in 2021.

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 provision applicable to the President and Chief Executive Officer of Hydro-Québec

- Recognition of 100% of the maximum incentive compensation as pensionable earnings (less the portion recognized for purposes of the HQPP)

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

b) Claudine Bouchard does not receive any separate compensation as President and Chief Executive Officer of Société d'énergie de la Baie James.

Compensation and benefits paid to officers among those most highly compensated who left Hydro-Québec in 2021

Other most highly compensated officers in 2021	Base salary as at December 31	Incentive compensation for 2020, paid in 2021	Perquisites used[a]	Taxable benefits			
					Automobile		Life insurance and health insurance
				Nature of benefit	Allowance	Usage and parking	
David Murray Chief Innovation Officer of Hydro-Québec Executive Vice President – Generation, Health, Safety and Environment President of Hydro-Québec IndusTech inc.[c]	$515,223[d]	–	–	Car allowance or provision of a vehicle, plus parking	$14,234	$2,773	$8,372
Marc Boucher President of Hydro-Québec TransÉnergie et équipement President and Chief Executive Officer, Société d'énergie de la Baie James[e]	$476,278[f]	–	–		$3,325	$411	$1,710
François Laurin Vice President – Information and Communications Technologies	$400,000[g]	–	–		$10,152	–	$10,129

c) David Murray did not receive any separate compensation as President of Hydro-Québec IndusTech inc.

d) David Murray's salary for 2021 until his departure on October 8, 2021, amounts to $413,984.

e) Marc Boucher did not receive any separate compensation as President and Chief Executive Officer of Société d'énergie de la Baie James.

f) Marc Boucher's salary for 2021 until his departure on February 28, 2021, amounts to $91,592.

g) François Laurin's salary for 2021 until his departure on November 30, 2021, amounts to $349,231.

Compensation and benefits paid to the only two officers compensated by wholly owned subsidiaries as at December 31, 2021[h]

	Base salary as at December 31	Incentive compensation	Perquisites	Employee benefits
Nadyne Guay General Manager of Société de transmission électrique de Cedars Rapids limitée	$141,055	–	–	Hydro-Québec Pension Plan and group insurance plan
Sébastien Fournier President and Chief Executive Officer of Services Hilo inc.	$242,000	–	$841[i]	Services Hilo inc. group RRSP and group insurance plans

h) Six directors of wholly owned subsidiaries are compensated.

For Services Hilo inc., as Chair of the Board of Directors, Carl Cassista received total compensation of $25,515. As directors, Frédéric Bastien and Myrianne Collin received total compensation of $9,931 and $7,153, respectively.

As directors of Stockage d'énergie EVLO inc., Jean Bélanger, Muriel McGrath and Pierre Nelis each received total compensation of $9,306 for 2021.

These amounts consist of the annual compensation and the meeting fees for attending Board meetings.

i) Taxable benefit related to the purchase of monthly transit passes and the provision of Hilo equipment.

Sustainable development

Inspired by the standards of the Global Reporting Initiative (GRI), Hydro-Québec's Sustainability Report covers the main actions implemented by the company and the progress it has achieved in terms of sustainable development, as well as the sustainable energy choices it has made. The report is available on Hydro-Québec's website, where readers can also find supplementary information on the company's sustainability performance.

Sustainable Development Plan 2020–2024

Entitled *Drawing on the Past to Shape the Future,* Hydro-Québec's Sustainable Development Plan 2020–2024 takes into account stakeholder expectations, an analysis of the discrepancies between common practices in the area of corporate responsibility and those found in ISO 26000, and the main sustainability issues faced by the company. It prioritizes the most pressing issues, encourages employees to become agents of lasting change and creates synergy between units. It also demonstrates our commitment to advancing Québec's collective prosperity and making the transition to a low-carbon economy. The Plan sets out 12 strategies revolving around three pillars: governance, community and the environment. Each strategy is associated with at least one improvement target and one performance indicator.

Released in April 2020, the Plan is aligned with the Québec government's initiatives. Some of the strategies it puts forward contribute to the implementation of Québec's Government Sustainable Development Strategy 2015–2020, while others support *Québec's Agenda 21 for culture.* Hydro-Québec also plans to work toward the United Nations Development Programme Sustainable Development Goals that are most relevant to its activities. A formal accounting of the company's performance with respect to the Plan is presented in the Sustainability Report.

	Strategy	Target	2021 Results
Governance			
1	Make sustainability principles integral to our governance, operations and projects	1.1 Integrate sustainability principles into our corporate guidelines	Sustainability principles integrated into 39% of our policies and directives (11/28).
		1.2 Earn public recognition for our leadership in responsible governance	ISO 37001 certification and three new recognitions obtained.
2	Do business with responsible suppliers	2.1 Identify and apply occupational health and safety requirements to risk-sensitive work categories	Health and safety selection criteria defined and implemented in several pilot requests for proposals. Contractual requirements drafted for three key hazards for the company.
3	Significantly improve our occupational health and safety performance while fostering employee wellness	3.1 Obtain ISO 45001:2018 health and safety certification by 2023	Process of obtaining ISO 45001:2018 certification 20.3% completed.
		3.2 Implement or showcase health and wellness initiatives	36 health and wellness initiatives implemented.
4	Offer an inclusive work environment that reflects Québec's diversity and rally our employees around sustainable development	4.1 Continue to improve equal access to employment by raising target group representation	28.5% women (2020: 28.5%), 1.6% Indigenous people (2020: 1.6%), 2.0% ethnic minorities (2020: 1.9%), 7.7% visible minorities (2020: 6.8%), 0.7% people with disabilities (2020: 0.6%)
		4.2 Increase target group representation in management positions	26.6% women (2020: 26.0%), 1.1% Indigenous people (2020: 1.0%), 1.2% ethnic minorities (2020: 0.9%), 4.4% visible minorities (2020: 3.5%), 0.4% people with disabilities (2020: 0.5%).
		4.3 Implement a sustainability awareness program that promotes employee engagement	Sustainability awareness program promoting employee engagement 40% implemented.
		4.4 Launch an action plan for disabled groups	Progress on 48 commitments Completed: 14 (29%) In progress: 28 (58%) Pending: 6 (13%)

Sustainable Development Plan 2020–2024 (continued)

	Strategy	Target	2021 Results
Community			
5	Foster Québec's development as a society through our financial contribution	5.1 Contribute $23.4 billion to Québec's gross domestic product (GDP) by 2024	$22.7 billion contributed to GDP (2020: $20.5 billion).[a]
6	Build and operate sustainable, resilient infrastructure while adapting our activities to climate change	6.1 Implement a climate change adaptation plan by 2021	Development and submission of a climate change adaptation plan: 100% completed.
		6.2 Expand the integration of sustainability principles in infrastructure projects	Two impact assessments completed.
		6.3 Obtain or maintain BOMA BEST certification for targeted administrative buildings and rented office premises of over 1,000 m^2 in Montréal and Québec	BOMA BEST certification for 21 buildings and premises: 100% obtained.
7	Generate more sustainable value in the community	7.1 Develop indicators and optimize certain programs to maximize their social and economic benefits for the community	Progress on the two programs in question [Integrated Enhancement Program (IEP) and Social Responsibility Directive]: 50% completed.
8	Take steps to include Indigenous peoples and encourage their input into our development	8.1 Obtain Silver-level certification from the Canadian Council for Aboriginal Business's Progressive Aboriginal Relations (PAR) program	Silver-level PAR program certification obtained.
Environment			
9	Work toward decarbonizing all of our business activities and markets	9.1 Avoid 4.6 Mt CO_2 eq. of emissions through our long-term export contracts	2.5 Mt CO_2 eq. of GHG emissions avoided (2020: 2.5 Mt CO_2 eq.).[a]
		9.2 Cut direct emissions of our operations by 35% by 2027	Not available.[b]
		9.3 Aim for carbon neutrality by 2030	Development of a detailed plan of action for the strategy aiming for carbon neutrality by 2030: 100% completed.
10	Equip Quebecers to lower their consumption through better electricity use	10.1 Propose electricity management solutions to our business and residential customers that aim to cut energy use by 2.49 TWh and potentially reduce power demand by 1,523 MW compared to 2019	Energy use by business and residential customers cut by 0.733 TWh (2020: 0.4427 TWh) Potential reduction in power demand of 438.7 MW (2020: 327 MW)[b]
11	Enhance and protect biodiversity	11.1 Develop a corporate strategy for enhancing and protecting biodiversity	Plan of action postponed to 2022 as a result of the global health situation and its impacts on the adoption of new government strategies to enhance and protect biodiversity.
12	Reduce resource use by applying the principles of the circular economy	12.1 Draft and deploy a logistics strategy that applies the best practices of the circular economy	Logistics strategy: 17% of measures implemented.
		12.2 Use tools to integrate total cost analysis (TCA) of goods and services at the time of procurement into our governance	Five total costs of ownership determined in 2021 for contracts with a total annual value of $17,484,545.

a) Preliminary result (9 months actual/3 months projected). The final figure will be published in the *Sustainability Report 2021*.

b) The final figure will be published in the *Sustainability Report 2021*.

c) Result not available. The final figure will be published in the *Sustainability Report 2021*.

Occupation and vitality of territories

As a government corporation, Hydro-Québec supports the Québec government's efforts to ensure the occupancy and vitality of territories. The following are the main measures in the company's new action plan, in compliance with the *Act to ensure the occupancy and vitality of territories* (CQLR, c. O-13).

Measures to ensure the occupancy and vitality of territories	Indicator
Continue efforts in the field of transportation electrification Hydro-Québec is actively expanding the Electric Circuit, the largest public charging network in Québec, which currently includes nearly 3,500 charging stations for electric vehicles (EVs). The rollout of the Electric Circuit to all of Québec's regions is guided by a plan based on strict criteria. The goal is to increase the use of EVs by offering users high-quality service and a network that covers the entire province. In 2018, to cater its offer to market needs, the Electric Circuit undertook to add 1,600 fast-charge stations to its fleet by 2027. In addition, under the *2030 Plan for a Green Economy* launched by the Québec government in November 2020, Hydro-Québec has committed to installing 2,500 fast-charge stations and 4,500 standard stations by 2030. The Electric Circuit will consequently be central to the strategy to accelerate transportation electrification. With the number of EV drivers growing exponentially every year, the expansion of the Electric Circuit will facilitate EV travel and contribute to stimulating tourism and economic activity in all of the province's regions. Transportation electrification is a promising green sector in which Hydro-Québec intends to play a leading role.	At present, the Electric Circuit has some 3,400 public charging stations across Québec, including over 600 fast-charge stations.
Support the greenhouse industry in Québec In July 2020, Hydro-Québec filed an application with the Régie de l'énergie to expand the measures offered since 2013 to greenhouse growers. As a result, the Additional Electricity rate option for photosynthetic lighting now also applies to space heating to raise crops and is available to all producers whose maximum power demand exceeded 50 MW in the last 12 months. These measures will help support the development of the greenhouse industry in a number of regions, while also increasing Québec's food self-sufficiency.	No indicator
Roll out an information program on the integration of Hydro-Québec's facilities into the host environment and the coordination of planning To optimize the integration of its projects throughout the province, Hydro-Québec set out to provide training on its operations and land management practices. From 2016 to 2020, this training was offered to the land-use planners of regional county municipalities (MRCs) and of the cities and agglomerations that perform some of the functions of MRCs. As at December 31, 2020, more than 20 training sessions had taken place in-person or remotely.	The company reached out to all of Québec's MRCs and invited their land-use planners to at least one of the training sessions offered since 2016. Altogether, 90 MRCs, or 89% of all MRCs in Québec, registered for at least one training session.
Offer free guided tours of some facilities By showcasing its built and technological heritage in Québec's various regions and offering free tours of some of its facilities, Hydro-Québec helps promote tourism in different parts of the province. The integration of the company's facilities into their host environments is one of the topics visitors learn about during the tours.	46,466 people visited Hydro-Québec's facilities in 2021.
Convert off-grid systems Hydro-Québec has undertaken to gradually convert its off-grid systems to cleaner, less costly energy sources. The company is also committed to working with local communities on promising initiatives while ensuring that it meets its financial and environmental goals. The specific features of each system and the needs of each community will be considered to help select a technological solution that ensures system reliability and is also optimal from the social, environmental and economic standpoints.	No indicator
Participate in the microgrid project in Lac-Mégantic Following the July 2013 rail disaster and the destruction of its downtown core, the town of Lac-Mégantic faced multiple challenges: physical rebuilding, social rehabilitation and economic diversification. Hydro-Québec is participating in this revitalization through the installation of a microgrid designed to meet the needs of Lac-Mégantic residents. The microgrid, inaugurated in July 2021, features a range of components such as solar panels, energy storage units and tools to manage buildings' energy use.	No indicator

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.*

2021 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	35
2 Cases in which processing or examination of the disclosure was ended under subparagraph 3 of Section 22	–
3 Well-founded disclosures (concluded in 2021)	10
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	18
• a serious breach of the standards of ethics and professional conduct	3
• 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	8
• 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 this 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 the period from April 1, 2020, to March 31, 2021, the President and Chief Executive Officer of Hydro-Québec authorized 138 contracts falling within the scope of the Act, for a total of $212,330,154.

The table opposite shows Hydro-Québec's total workforce, in paid hours, for the reference period.

Paid hours	
Management	3,628,756
Professionals	13,708,589
Clerical staff, technicians and similar	9,128,033
Peace officers	36,916
Laborers, maintenance and service personnel	12,051,125
Students and interns	113,160
Total	38,666,579

REPORT ON HYDRO-QUÉBEC'S EFFICIENCY AND PERFORMANCE

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 tables below show the results of the fourth assessment performed by the company since 2012. The reference period depends on data availability for each indicator, and the indicators vary from one assessment to the other to take into account changes in the company's strategic priorities. In some cases, indicators were not compared for lack of common benchmarking metrics, but the data were nevertheless examined by recognized independent organizations.

Results of the 2021 assessment

Like the whole of Québec society, Hydro-Québec was affected by the COVID-19 pandemic and the public health measures imposed, particularly in 2020. However, in 2021 it was able to benefit from the economic recovery and more favorable conditions on energy markets, allowing it to slightly exceed the overall financial target set for the 2019–2021 period in its *Strategic Plan 2020–2024*, while continuing to provide electricity services in line with customer expectations—a challenge it met successfully, judging by its customer satisfaction and reputation ratings. In the coming years, Hydro-Québec will redouble its efforts to improve its performance on every level, particularly in terms of occupational health and safety, equity, diversion and inclusion, areas which all saw the launch of promising initiatives in 2021.

Indicators covered in three-year benchmarking

COST INDICATORS	Hydro-Québec's results / *Average results*			Comments
Transmission substations (US$/MVA)[a] *(Benchmarked by First Quartile Consulting)*	**2020** 1,312 / *602*	**2019** 1,263 / *479*	**2018** 1,315 / *680*	The vastness of the Transmission Provider's system means more equipment compared to the reference group and thus higher-than-average operational and maintenance expenditure.
Transmission lines (US$/circuit-mile)[a] *(Benchmarked by First Quartile Consulting)*	**2020** 1,864 / *10,937*	**2019** 1,314 / *9,710*	**2018** 1,756 / *10,148*	In view of the relatively high percentage of high-voltage lines in the Transmission Provider's system, a given load can be transmitted using a smaller number of components per circuit-mile compared to the reference group, thus yielding substantial maintenance savings.
Distribution system (US$/customer account)[b] *(Benchmarked by First Quartile Consulting)*	**2020** 64 / *127*	**2019** n.d. / *n.d.*	**2018** 73 / *92*	In recent years, operational expenditure related to the Distributor's system has declined, thanks in part to efficiency efforts. The Distributor's investments, while up, were generally below those of the reference group. However, they are slated to increase considerably in the coming years with a view to ensuring distribution system reliability.
Customer operations (US$/customer account)[b] *(Benchmarked by First Quartile Consulting)*	**2020** 48 / *42*	**2019** n.d. / *n.d.*	**2018** 38 / *45*	The Distributor's efficiency efforts in recent years have been instrumental in improving the performance of its customer relations centers, both in absolute terms and relative to the reference group. They have also enhanced the customer experience. New optimization initiatives are planned with a view to achieving further productivity gains while maintaining a high level of customer satisfaction.
Average cost of generation (C¢/kWh) *(Certain cost components benchmarked by the Electric Utility Cost Group)*	**2020** 2.1 / *n.d.*	**2019** 2.0 / *n.d.*	**2018** 2.1 / *n.d.*	Tight control of the Generator's expenditure kept generating costs relatively stable over the 2018–2020 period.

a) Operational and maintenance expenditure, factoring in the exchange rate for the year in question.

b) Operational and maintenance expenditure plus investments, factoring in the exchange rate for the year in question.

Indicators covered in three-year benchmarking (continued)

INDICATORS RELATED TO HYDRO-QUÉBEC'S STRATEGIC OBJECTIVES	Hydro-Québec's results / *Average results*			Comments
Reputation index (overall score out of 10) *(Benchmarked by SOM)* *(Data verified by GHD)*	**2021** 7.50 / *6.20*	**2020** 7.38 / *6.21*	**2019** 7.00 / *6.12*	Hydro-Québec measures its overall reputation on the basis of three criteria: overall assessment of the company, admiration and sense of pride. Over the 2019–2021 period, the company placed first among the seven companies assessed.
Lost time accident frequency rate (per 200,000 hours worked) *(Benchmarked by the Canadian Electricity Association)* *(Data verified by GHD)*	**2021** 1.10 / *n.d.*	**2020** 1.00 / *0.53*	**2019** 1.41 / *0.64*	The difference between Hydro-Québec's results and those of the reference group can be attributed to various factors such as the broader range of the company's operations, given that it is a vertically integrated utility. In addition, the company's 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. Hydro-Québec is pursuing the company-wide initiatives it has implemented to change its occupational health and safety culture and improve not just its own performance in this area, but also that of its suppliers of goods and services.
Sustainable employee engagement index (%) *(Benchmarked by Willis Towers Watson)* *(2021 and 2020 data verified by GHD and 2019 data, by EEM Gestion ESS)*	**2021** 88 / *89*	**2020** 87 / *87*	**2019** 84 / *88*	Despite the challenges imposed by the pandemic since 2020, Hydro-Québec's sustainable employee engagement index has continued to rise and is comparable to the average of the world's top-performing companies. This is due in particular to the company's ongoing efforts to help its staff adapt to the new reality.

Indicators not covered in three-year benchmarking

INDICATORS RELATED TO HYDRO-QUÉBEC'S STRATEGIC OBJECTIVES	Hydro-Québec's results / *Strategic Plan 2020–2024 targets*			Comments
Avoided GHG emissions in Québec (Mt CO_2 eq.) *(2021 data verified by GHD)*	**2021** 4.8[c] / *n.d.*	**2020** 4.5 / *n.d.*	**2019** 4.4 / *n.d.*	In the *2030 Plan for a Green Economy* launched at the end of 2020, Québec set a greenhouse gas (GHG) emissions reduction target of 37.5% compared to 1990 levels. The province already boasts an enviable carbon footprint thanks to the fact that Hydro-Québec's energy output is over 99% clean and reliable. The company is nonetheless committed to helping the government meet its target, in particular through the electrification initiatives and energy efficiency measures outlined in its 2021 progress report on the Electricity Supply Plan 2020–2029.
	2024 target: 5.5			
Energy savings from energy efficiency initiatives (GWh) *(2021 and 2020 data verified by GHD and 2019 data, by EEM Gestion ESS)*	**2021** 733 / *n.d.*	**2020** 443 / *n.d.*	**2019** 481 / *n.d.*	The significant increase in energy savings in 2021 is due to two main factors: • Launch of the Efficient Heat Pump program for residential customers • Increased participation by business customers in the Efficient Solutions program following improvements made by Hydro-Québec in 2020 to simplify the program, involve its partners and maximize project profitability

c) Preliminary result. The final verified figure will be published in the *Sustainable Report 2021*.

Indicators not covered in three-year benchmarking (continued)

INDICATORS RELATED TO HYDRO-QUÉBEC'S STRATEGIC OBJECTIVES	Hydro-Québec's results / *Strategic Plan 2020–2024 targets*			Comments
Net income ($M) *(Financial statements audited by KPMG, Ernst & Young and the Auditor General of Québec)*	**2021** 3,564 / *3,000*	**2020** 2,303 / *2,900*	**2019** 2,923 / *2,800*	Hydro-Québec's net income was below target in 2020 because its operations were strongly impacted by the COVID-19 pandemic and the implementation of strict health measures across Québec. Conversely, its 2021 results reflect the economic recovery and favorable market conditions that marked the year. The company thus posted its best performance ever for continuing operations, which put it slightly ahead of the overall financial target set in the *Strategic Plan 2020–2024* for the 2019–2021 period.
Contribution to Québec's gross domestic product (GDP) ($B) *(2021 data reviewed within the scope of Ernst & Young's limited assurance services)*[d]	**2021** 22.7 / *n.d.*	**2020** 20.5 / *n.d.*	**2019** 20.7 / *n.d.*	The company's contribution to Québec's GDP increased in 2021 on account of its higher net income and greater investments after a year marked by the pandemic.
	2024 target: 23.4			
Combined customer satisfaction index (out of 10) *(2021 and 2020 data verified by GHD and 2019 data, by EEM Gestion ESS)*	**2021** 8.4 / *n.d.*	**2020** 8.3 / *n.d.*	**2019** 8.3 / *n.d.*	The results attest to the company's ongoing efforts to improve the products and services offered to its customers.
Certification level under the Canadian Council for Aboriginal Business's Progressive Aboriginal Relations (PAR) program *(2021 data verified by GHD)*	**2021** Silver / *n.d.*	**2020** n.d. / *n.d.*	**2019** n.d. / *n.d.*	The Silver certification obtained in 2021 recognizes Hydro-Québec's efforts in terms of: • Relations with Indigenous communities • Economic benefits • Training and employment for Indigenous workers The progress made to date shows that the company is a good business partner and is committed to promoting the prosperity of Indigenous communities and offering a workplace that welcomes Indigenous people.
Equity, diversity and inclusion (% of new hires from diverse backgrounds) *(Data verified by GHD)*	**2021** 44.5 / *n.d.*	**2020** 46.9 / *n.d.*	**2019** 43.3 / *n.d.*	This indicator measures the representation within the company of the groups targeted by the *Act respecting equal access to employment in public bodies* (CQLR, c. A-2.01), namely women, visible and ethnic minorities, people with disabilities and Indigenous people. In keeping with the stated commitment of Senior Management, Hydro-Québec has launched a number of initiatives to ensure a more equitable, inclusive and diversified workplace, including forming a group of content experts, creating an equity, diversity and inclusion (EDI) unit and launching employee awareness campaigns.

d) This indicator evaluates the contribution of Hydro-Québec's activities to the gross domestic product of the Province of Québec. The evaluation is carried out by Hydro-Québec in compliance with the Canadian System of Macroeconomic Accounts put forth by Statistics Canada. The contribution incorporates the direct and indirect effects of the company's activities, as well as the induced effects. Since Hydro-Québec is a Québec government corporation, the induced effects of its payments to the government are also taken into account.

OUR GENERATING, TRANSMISSION AND DISTRIBUTION FACILITIES

Generation

Installed capacity — 37,248 MW

61 hydroelectric generating stations[a] — 36,694 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	1,912	Bernard-Landry	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	216	Rapides-Farmer	104
Bersimis-1	1,178	Eastmain-1	480	Rapide-Blanc	211	Other (16 generating stations rated less than 100 MW)	689
Manic-5-PA	1,064	Brisay	469	Shawinigan-2	200		
Outardes-3	1,026	Romaine-3	395	Shawinigan-3	194		

24 thermal generating stations[b] — 544 MW

Bécancour (gas turbine)	411
Other (23 diesel plants on off-grid systems)	133

2 photovoltaic generating stations[c] — 10 MW

Gabrielle-Bodis	8
Robert-A.-Boyd	2

a) 60 managed by the Generator and 1 by the Distributor.
b) 1 managed by the Generator and 23 by the Distributor.
c) Managed by the Generator.

Other sources of supply — 11,012 MW

Churchill Falls generating station [Churchill Falls (Labrador) Corporation Limited][a]	5,428
43 wind farms operated by independent power producers[b]	3,906
56 hydroelectric generating stations operated by independent power producers[b]	705
13 biomass and 5 biogas cogeneration plants operated by independent power producers[c]	419
Other	554

a) Hydro-Québec has access to almost all the output until 2041.
b) Hydro-Québec purchases all the output.
c) Hydro-Québec purchases almost all the output.

Hydroelectric generating station under construction — 245 MW

Romaine-4	245

Transmission

Voltage	Lines (km)	Substations (number)
765 and 735 kV	12,319[a]	41
450 kV DC	1,218	2
315 kV	5,507	83
230 kV	3,252[b]	54
161 kV	2,128	43
120 kV	6,994	225
69 kV or less	3,357[c]	94[d]
Total	**34,775**	**542**

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) 3,085 km of lines operated by the Transmission Provider and 272 km by the Distributor.
d) 83 substations operated by the Transmission Provider and 11 by the Distributor.

Distribution

Medium voltage	Lines (km)
34 kV	823
25 kV	113,917
12 kV	4,606
4 kV or less	194
Total	119,540
Low voltage	107,409
Total	**226,949**

OUR MAJOR FACILITIES

Generating stations 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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