

Strategic Plan 2020–2024

Setting new sights with our clean energy



Table of Contents

3 Our vision, mission and values

4 Where we stand

14 Our current context

25 Our strategies for the future

26 Our objectives and strategies at a glance

27 Strategy 1: Electrify Québec and be a leader
of the energy transition.

30 Strategy 2: Seize growth opportunities in Québec
and beyond our borders.

35 Strategy 3: Develop a culture focused on
customers and occupational health and safety.

40 Strategy 4: Continuously improve our operating
performance.

43 Our financial outlook and performance indicators

OUR VISION, MISSION AND VALUES

OUR VISION

**Set new sights
with our clean
energy.**

OUR MISSION

We deliver reliable electric power and high-quality services.

By developing clean, renewable energy sources, we make a strong contribution to Québec's collective wealth and play a central role in the emergence of a low-carbon economy.

As recognized leaders in hydropower and large transmission systems, we export clean, renewable power and leverage our expertise and innovations within Québec and around the world.

OUR VALUES

- Pride
- Innovation and daring
- Performance
- Respect
- Integrity and authenticity
- Team spirit

WHERE WE STAND

.....

Supplying you with affordable electricity is an ongoing concern.

Tight cost controls have allowed us to keep our rate increases lower than or equal to inflation.

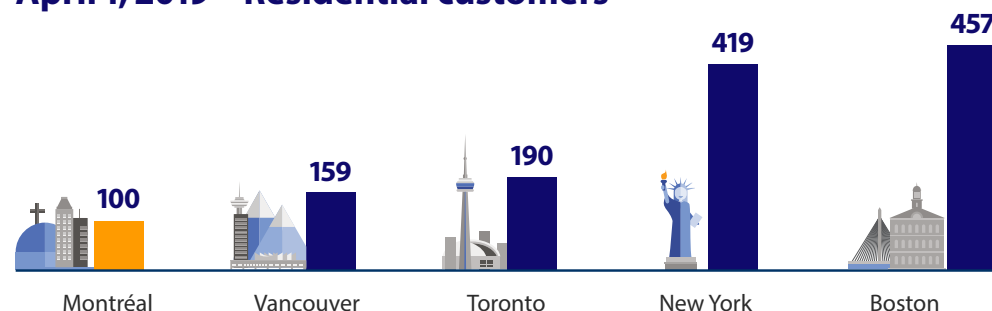
As a result, our residential rates are the lowest in North America, and our business rates rank among the most competitive on the continent.

To keep them that way, we're constantly improving our practices and increasing our efficiency.

Our electricity contributes to the quality of life of all Quebecers.



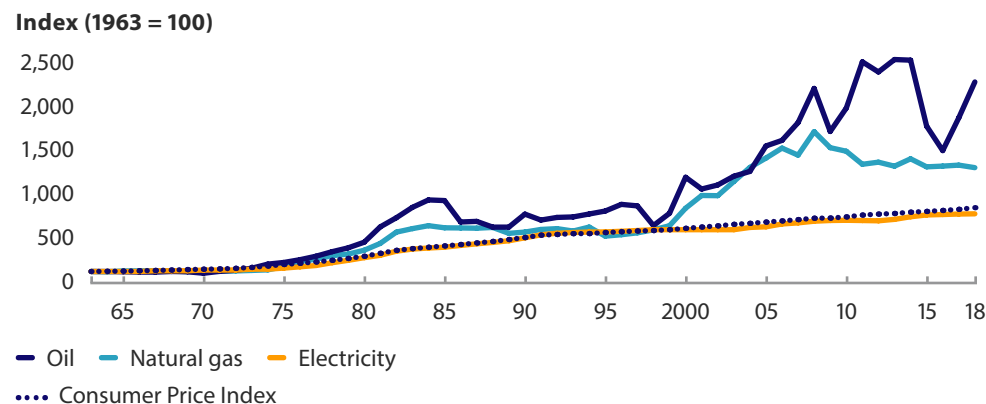
Comparative index of electricity prices as at April 1, 2019 – Residential customers¹



1. Index representing the monthly bill (before taxes) for an energy consumption of 1,000 kWh.

Inflation and energy prices in Québec: evolution from 1963 to 2018

While electricity prices have stayed in line with inflation, oil and gas prices have fluctuated more significantly.



Our efforts to improve customer service have yielded concrete results.

Overall public satisfaction

(% of customers who are “very satisfied” or “somewhat satisfied”)



Complaints received¹
↓ 52%

Average call wait time¹
↓ 60%

1. In 2018 as compared to 2015.

Customer satisfaction regarding most recent telephone contact (out of 10)

2015	2018
8.3	8.6

Simple service connections completed within 10 business days

2015	2018
83%	88%

Large-power customer satisfaction (out of 10)

2015	2018
8.2	8.5

According to a 2019 Léger Marketing survey conducted with Quebecers on the reputation of firms operating in the province, we've significantly improved our standing since 2015, moving up 126 positions. We also rank fourth among Québec's top employers. In addition, we were recognized as Canada's Best Corporate Citizen by *Corporate Knights* in 2018, and second-best in 2019.



We've taken steps to better communicate with you.

Social media and chatting

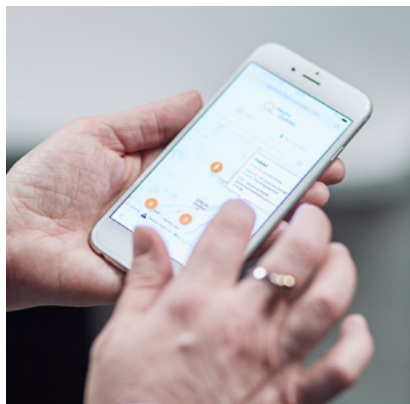


210,000 conversations with our customer service representatives

Over **294,000 social media followers** (as at June 30, 2019)



Mobile app



Over **775,000 downloads**

Over **1 million connections** per month on average during the first half of 2019

Consumption Profile



22 million consultations by residential and business customers

Tool adapted to the needs of business customers in 2017

Key achievements

- Nearly 4,750 exchanges between our managers or spokespersons and the media
- Over 60 million visits to the Customer Space
- The “Welcome to Hydro-Québec,” “ON” and “Clean energy to power us all” ad campaigns
- The électroN expedition
- Web videos featuring comedian Simon Gouache (in French)

Unless otherwise indicated, these data cover the period from 2016 to the end of June 2019.

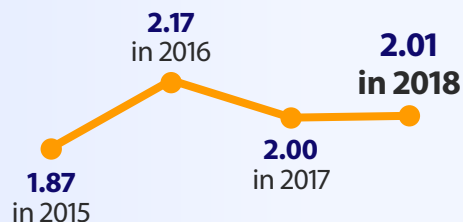
Our approach to occupational health and safety has undergone a major shift.

We conducted a major review of our occupational health and safety (OHS) practices across our operations.

Our aim: to make this fundamental value part of our DNA.

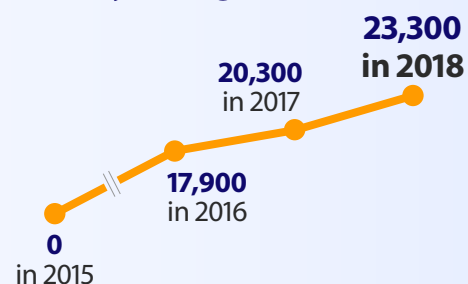
The result has been a statement of OHS principles that stresses agency and emphasizes the need for everyone to get involved and contribute.

Accident frequency rate¹ (per 200,000 hours worked)

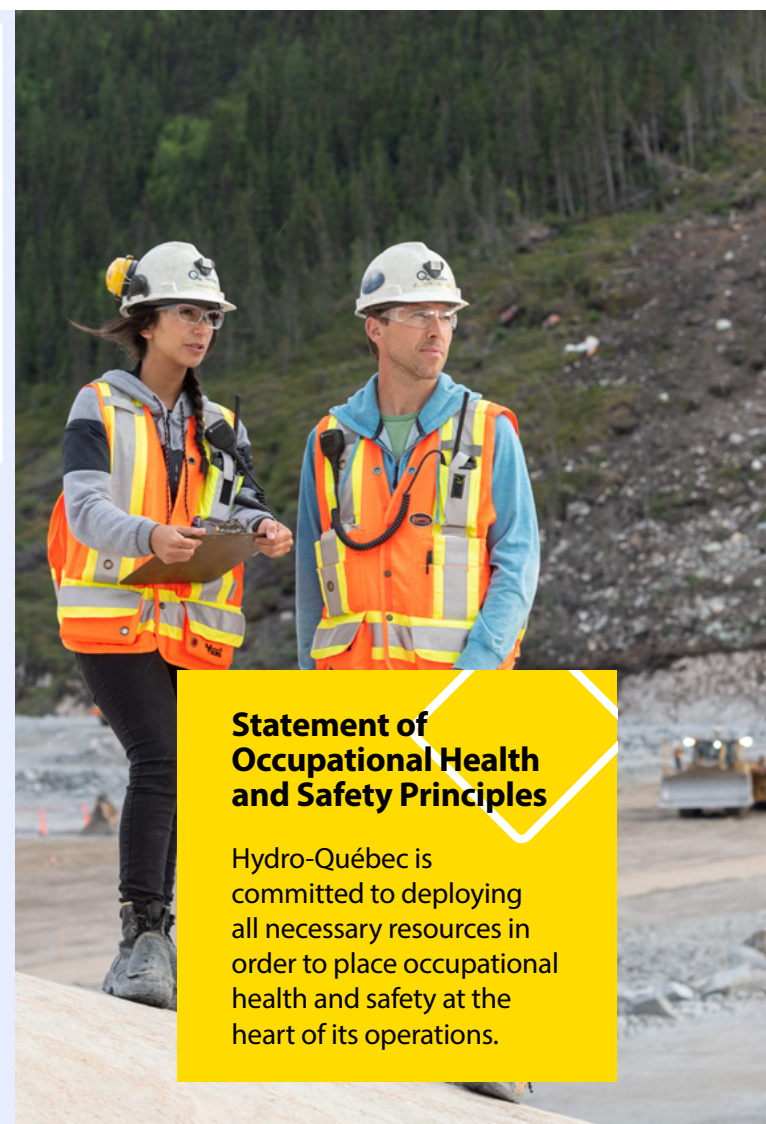


1. Incidents leading to a temporary assignment or lost time (TALT) in our operating activities.

Structured field observations made by managers



Managers of all levels regularly conduct site visits to ensure that safe work methods are being applied, recognize good practices and suggest avenues for improvement.



Statement of Occupational Health and Safety Principles

Hydro-Québec is committed to deploying all necessary resources in order to place occupational health and safety at the heart of its operations.

Massachusetts selected us as its supplier for a historic volume of clean energy.

In 2018, our bid was selected by Massachusetts in a clean energy request for proposals (RFP) to supply 9.45 TWh per year, starting in 2022. This will be the biggest long-term sales contract in our history.

The contract will reduce the need to resort to costly, GHG-emitting fossil fuels like oil and natural gas. In addition to being profitable for both Québec and Massachusetts, it will also benefit New England as a whole.

Highlights

- 20-year contract
- 9.45 TWh per year, representing 17% of the energy consumed in Massachusetts¹
- Reduction of the state's GHG emissions by more than 36 million tonnes over the term of the contract—comparable to taking 413,000 cars off the road¹
- New transmission facilities to be built in Québec and Maine

Key steps

- ✓ **2016** New legislation enacted in Massachusetts
- ✓ **2017** Six bids submitted by Hydro-Québec
- ✓ **2018** Massachusetts selects our hydropower
- ✓ **2019** NECEC project given the green light by the Maine Public Utilities Commission (PUC)
- ✓ **2019** Approval of the agreements signed with Massachusetts distributors by the state's Department of Public Utilities (DPU)
- **2019–2021** Other regulatory and government approvals
- **2021–2022** Infrastructure construction
- **December 2022** Scheduled commissioning

1. Source: Massachusetts Department of Energy Resources, July 2018.



We've adopted a disciplined approach to business growth.

We have considered numerous opportunities to acquire assets or equity stakes internationally, with a view to capitalizing on our expertise in hydropower and high-voltage transmission.

Given the competitive market context and resulting high prices, we've decided to bide our time to ensure that the projects we select align with our values and investment principles, in addition to benefiting Quebecers.

And we're staying the course.

In June 2018, however, we seized a promising growth opportunity by forging a strategic partnership with Dana, a key player in the booming electric vehicle (EV) market with an established presence in more than 30 countries.

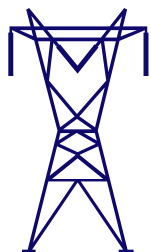


Partnership with Dana

Teaming up with a first-tier global supplier like Dana has given our subsidiary TM4—now Dana TM4—speedier access to the global EV market while boosting its activities in Boucherville, Québec.

In light of the 40% increase in Dana TM4's sales during the partnership's first year, we invested \$85 million in the new entity in July 2019. Among other benefits, this will allow Dana TM4 to develop its activities in China and extend its product range to all types of EVs.

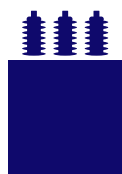
Our activities have generated major spinoffs for Québec.



Investments in Québec

Annual average 2016–2018

\$3.5 billion



Procurement of goods and services in Québec

Annual average 2016–2018

\$2.8 billion



Contribution to the Québec government's revenue¹

Annual average 2016–2018

\$4.2 billion



Community investments²

Annual average 2016–2018

\$28 million



Direct and indirect jobs sustained in Québec by our activities

Annual average 2016–2018

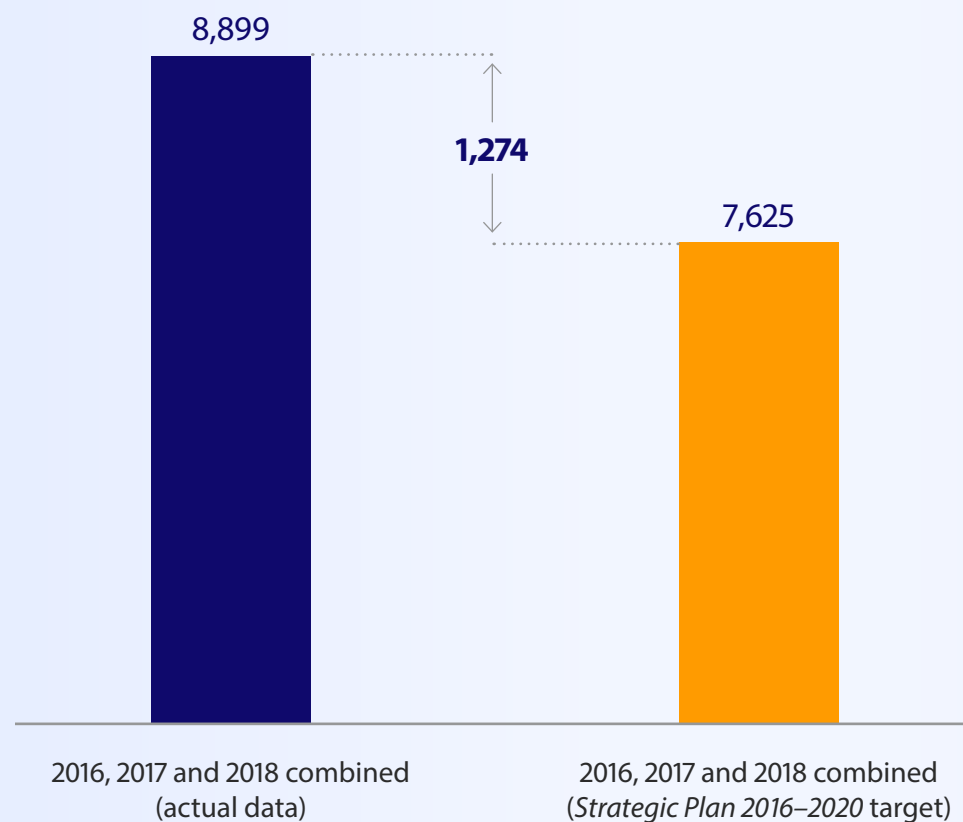
35,000 person-years

1. Net income, water-power royalties, taxes, guarantee fees and contributions to government funds and agencies.

2. Donations and sponsorships, including Centraide/United Way, the Integrated Enhancement Program, the Fondation Hydro-Québec pour l'environnement, our art collection and support for education.

We surpassed our net income target.

Total net income for the 2016–2018 period (\$M)



Surpassing the target
we set in the *Strategic Plan*
2016–2020 has translated
into an additional contribution
of nearly

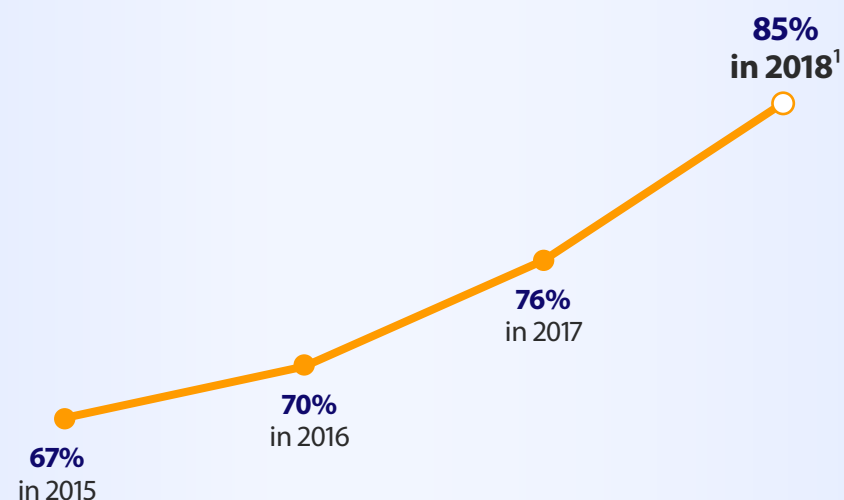


to the Québec government's
revenue over the 2016–2018
period.

We're proud of our achievements.

Our progress has heightened employee engagement, motivating our staff to provide even better customer service and turning them into true Hydro-Québec ambassadors.

Employee engagement (%)



1. In 2018, we replaced our in-house employee engagement survey with an industry survey.



OUR CURRENT CONTEXT

.....

We are in the midst of an energy transition.

What is the energy transition?

It encompasses all the **transformations** we're currently witnessing in power **generation, transmission and distribution**, as well as **energy consumption** habits worldwide.

Many factors are contributing to this transition, including:

- The fight against climate change
- Evolving lifestyles
- Greater access to technology
- The desire to make the power system more efficient

Our customers: at the heart of the energy transition

Decentralization

Energy efficiency
Demand-side management
Solar panels
Energy storage
Microgrids



Electrification

Transportation
Industry
Agriculture
Buildings

Digitization

The Internet of Things
Increased infrastructure automation

Our green power is the envy of the world.

The fight against climate change is a global priority, and the race for green power is on around the world. With our decades of experience and our more than 99% clean and renewable energy, we're ahead of the pack.

GHG emissions: how other generating options compare to hydroelectricity



Wind

=



Photovoltaic solar

× 5



Natural gas

× 50



Oil

× 70

Source: International Reference Centre for the Life Cycle of Products, Processes and Services (CIRAIG), 2014 (latest available data).

Addition of close to
5,000 MW
of installed hydropower capacity
over the 2003–2021 period

Sainte-Marguerite-3 2003–2004 | **Rocher-de-Grand-Mère** 2004

Toulnostouc 2005 | **Eastmain-1** 2006 | **Mercier** 2007

Péribonka 2007–2008 | **Chute-Allard and Rapides-des-Cœurs** 2008–2009

Eastmain-1-A 2011–2012 | **Sarcelle** 2013 | **Romaine-2** 2014

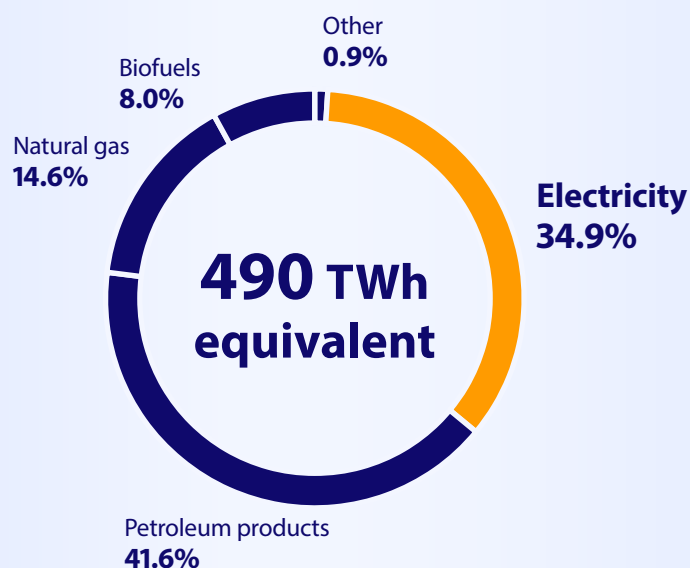
Romaine-1 2015 | **Romaine-3** 2017 | **Romaine-4** 2021



We have enough green energy available to replace
GHG-emitting fossil fuels.

However, electricity only accounts for 35% of Québec's energy consumption.

Energy consumption in Québec

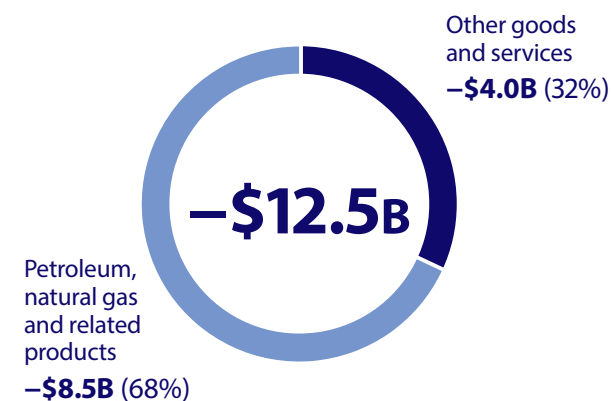


Source: National Energy Board, 2018 outlook.

Replacing fossil fuels with clean, renewable, affordable and locally generated electricity would enrich Québec as a whole and improve everyone's quality of life.

Beyond their environmental impact, fossil fuels also account for the bulk of Québec's trade deficit, since they create a heavy dependency on oil and natural gas imports.

Québec's trade deficit¹



1. Latest data published (2015), which take into account international and interprovincial imports and exports.

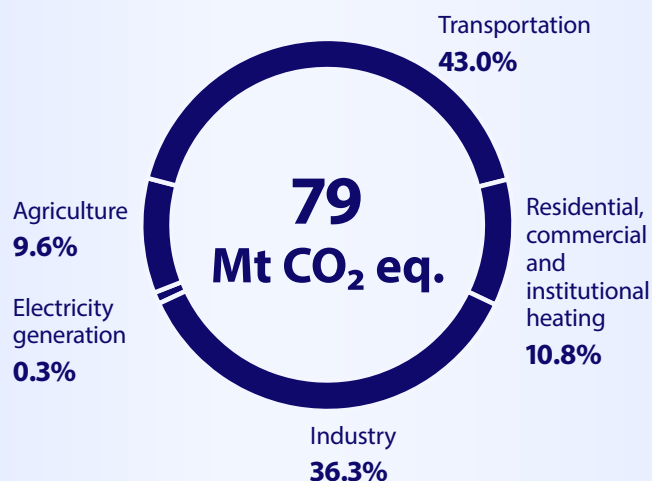
Source: Statistics Canada.

The time has come to use our electricity to its full potential to decarbonize Québec.

The electrification of the economy is one of the pillars of Québec's upcoming *Plan d'électrification et de changements climatiques 2020–2030* (PECC) [Electrification and Climate Change Plan 2020–2030].

GHG emissions by sector in Québec

Greater electrification of **transportation**, **industrial** and **agricultural activities**, and **heating** is key to achieving Québec's GHG emissions reduction targets.



Source: Government of Québec, 2016 inventory of GHG emissions in Québec, November 2018.

The transportation industry is already off to a good start.

The number of light electric vehicles on Québec's roads has increased dramatically since 2015, going from 8,000 to more than 52,000.

Tomorrow's public transit will also be electric.



Serving **16 regions** in Québec



Over **1,900 public charging stations** with close to 200 fast-charge stations



51,000 members

Data as at June 30, 2019.



© Réseau express métropolitain



© Nova Bus



We're also making headway in the industrial, commercial and institutional sectors.

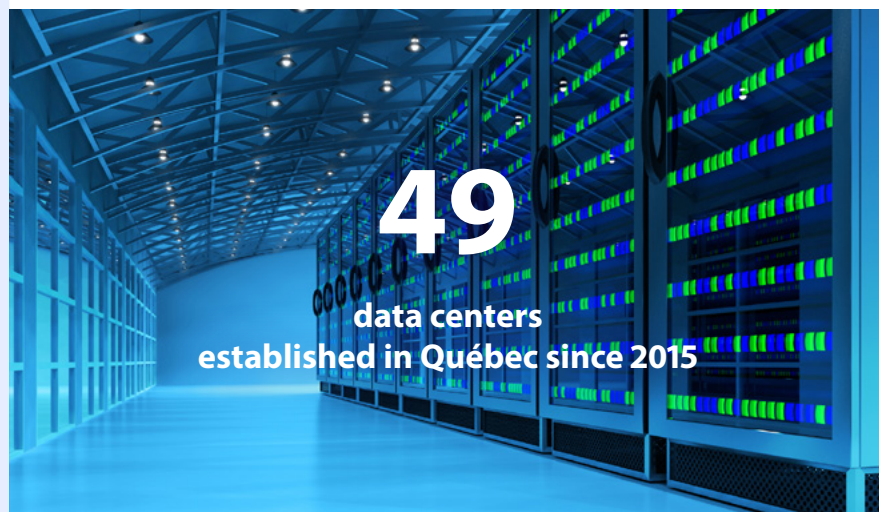
The Laboratoire des technologies de l'énergie, our energy technologies laboratory, has been working closely with Québec partners since 1987 to develop efficient electrotechnologies in order to optimize the energy performance of buildings and industrial processes. Products developed at the lab include a high-frequency kiln for precision-drying lumber and a next-generation heat pump for large buildings.

For more information: www.hydroquebec.com/business/offers-programs/efficient-technologies.html.

Our clean, affordable energy is also a powerful driver of economic development.

Our electricity is highly prized. That's why Québec has emerged as one of North America's data center hot spots.

In fact, the greater Montréal region was voted Data Centre Location of the Year at the Datacloud Global Awards in June 2019.



We offer data center customers turnkey solutions with unparalleled benefits.

For more information: www.hydroquebec.com/data-center.

Businesses in all sectors can take advantage of our competitive rates and an array of programs tailored to their needs.

- Economic development and industrial revitalization rates
- Efficient Solutions Program: financial assistance for over 200 energy efficiency measures
- Demand Response Program
- Electricity Management Systems Program for industrial customers
- Financial assistance and advice for innovative projects

Looking to the future: clean hydrogen

With our green energy and Québec's vast water resources, we're poised to support the development of clean hydrogen, produced through electrolysis rather than from the methane in natural gas. This energy source could present interesting market opportunities both in Québec and beyond our borders.

Five promising applications for clean hydrogen



Ammonia and methanol production



Heating buildings



Road and rail transportation



Carbon-neutral fuels (synthetic hydrocarbons)



Renewable natural gas

We are the battery of northeastern North America.

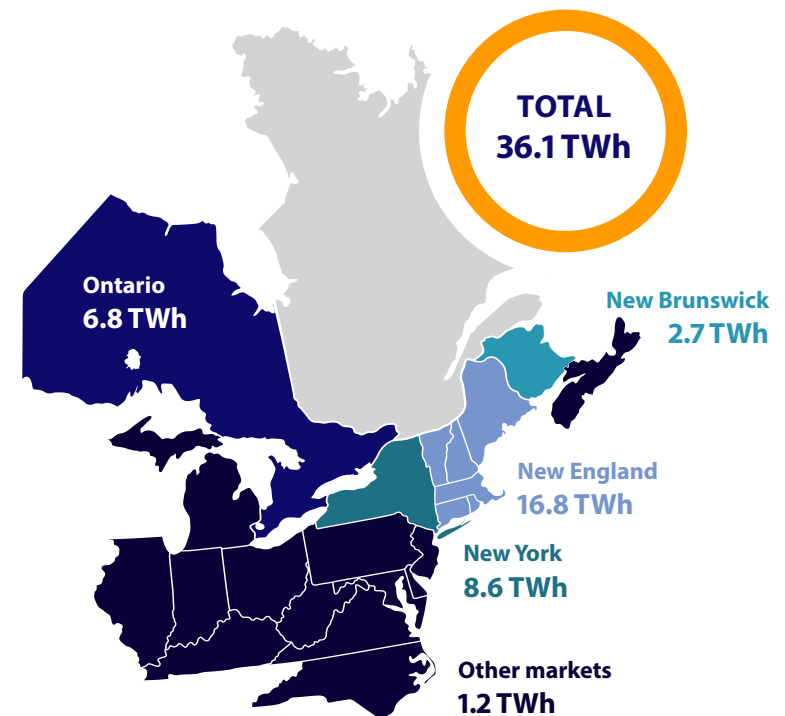
Thanks to our vast reservoir system, we're a prime supplier of clean energy. This puts us in a position to help the entire Northeast reach its GHG emissions reduction targets.

We offer our neighbors a unique opportunity to plug into a large, reliable supply of electricity that is available at all times, at competitive, foreseeable prices.

By balancing and firming up variable renewables like wind and solar, our hydropower makes it possible to optimize deliveries and increase market efficiency.



Record volume of net exports in 2018



Our employees drive our success.

The energy industry is undergoing tremendous change—and our employees are at the very heart of it.

Along with our health and safety initiatives, we're building an engaging corporate culture founded on:

- Shared values
- Recognition of desirable behaviors
- Development of skills and talent

Our aim: to ensure that all employees can achieve their full potential and help us meet our objectives in this new business context.

A positive employee experience is key to a great customer experience and the attainment of ambitious targets.



Today's changing lifestyles are opening up new horizons for us.

The rise in digital technologies has brought about sweeping changes in how we all live. Your expectations are changing, too, which inspires us to go further still by:

- Personalizing the customer experience to a greater extent
- Broadening our range of interactive, user-friendly and on-demand products and services
- Offering greater autonomy and the freedom to perform transactions when it suits you
- Harnessing the full potential of smart technologies to better manage personal energy use



Going further involves increasing the use of digital technologies.

“Industry 4.0, also known as the Factory of the Future or the Fourth Industrial Revolution (4IR), is characterized by smart automation and the integration of new technologies into the corporate value chain.”

Ministère de l'Économie
et de l'Innovation
du Québec
[our translation]

In concrete terms, we see this as:

- Integrated control of our power system, from generation through distribution
- Increased automation of our infrastructure
- Situational awareness of the grid, which enables remote operations
- Optimizing our operating and maintenance procedures and practices

New prospects

- Increased grid reliability
- Shorter service restoration times
- Customer interactivity
- Proactive, personalized services
- Improved management of peak periods
- Response speed and flexibility
- Integration of distributed generation
- Power transmission optimization



Major investments are needed to modernize the grid.

Current grid control systems and some components of our infrastructure are reaching the end of their useful lives.

New technologies present multiple possibilities in terms of convergence, connectivity and artificial intelligence.

Our capacity to innovate is a major asset.

Institut de recherche d'Hydro-Québec (IREQ)

Since 1970, Hydro-Québec's research institute, IREQ, has been developing advanced technologies and applications tailored to the energy situation in Québec to help us improve the performance of our power system and better serve our customers.

IREQ comprises three distinct facilities:

- The Hydro-Québec research center in Varennes
- The energy technologies laboratory (LTE) in Shawinigan
- The Center of Excellence in Transportation Electrification and Energy Storage in Varennes



Our scientists and technicians are already working to support the energy transition by focusing on:

1. Our customers

- Efficient electrification and market decarbonization
- Clean hydrogen
- Integration/decentralization of renewables
- Grid interactivity

2. Our assets

- Major asset diagnostics and prognostics
- Next-generation asset development and integration
- Demand, generation and operating constraint modeling

3. The power system of the future

- Integrated grid control
- Automated operations
- Integration of new technologies: Internet of Things, Big Data, AI, etc.
- Data valorization
- Reliability and cybersecurity

OUR STRATEGIES FOR THE FUTURE

.....

OUR OBJECTIVES AND STRATEGIES AT A GLANCE

Objectives

- **Contribute to the reduction of GHG emissions in all our markets.**
- **Power Québec's economic development.**
- **Be a benchmark in customer experience.**
- **Increase our net income.**

Strategies

1

Electrify Québec and be a leader of the energy transition.

Stimulate the development of electric transportation. | Convert systems powered by fossil fuels to electricity. | Convert our off-grid systems to cleaner, cheaper sources of energy.

2

Seize growth opportunities in Québec and beyond our borders.

Develop the Québec market. | Increase our exports to support the decarbonization of northeastern North America. | Acquire assets or equity stakes through our disciplined approach. | Leverage our technologies. | Complete the Romaine hydroelectric project and assess long-term clean power needs.

3

Develop a culture focused on customers and occupational health and safety.

Enrich the customer experience. | Develop our service offerings. | Ensure the reliability of the power system. | Boost our performance in occupational health and safety (OHS). | Enhance the employee experience and talent management.

4

Continuously improve our operating performance.

Increase our efficiency and our productivity. | Embrace digitization. | Adapt to climate change.

ELECTRIFY QUÉBEC AND BE A LEADER OF THE ENERGY TRANSITION.

Stimulate the development of electric transportation.

- Create a full range of integrated, scalable charging services to ensure an optimal customer experience:
 - Densify and expand the Electric Circuit's charging offering and step up the rollout.
 - Adapt charging station capabilities to the characteristics of vehicles newly available on the market.
 - Implement an upgradable charging station management platform and consumption management tools for peak periods.
- Support the electrification of public transit.
- Develop and test advanced technologies in order to anticipate market needs while ensuring grid reliability.
- Increase the percentage of electric vehicles in our fleet.
- Raise public awareness in Québec about the benefits of electric transportation.



Densifying the Electric Circuit in Québec

The Electric Circuit will roll out 1,600 new fast-charge stations by 2030.

Cutting the GHG emissions of our vehicle fleet

We currently have some 300 hybrid or electric vehicles in our fleet. We will continue our efforts to replace internal combustion vehicles as they reach the end of their useful lives with hybrid or electric vehicles while also reducing the overall size of our fleet.

ELECTRIFY QUÉBEC AND BE A LEADER OF THE ENERGY TRANSITION.

Convert systems powered by fossil fuels to electricity.



- Promote the environmental benefits of our hydropower.
- Offer conversion solutions for electrifying buildings, industrial processes and agricultural activities:
 - Target the most promising conversion niches in terms of environmental impact and profitability.
 - Drive technological advances by leveraging the expertise of our researchers and forging partnerships.
 - Structure our energy efficiency programs around efficient electric technologies.
- Raise awareness of conversion-related issues among our stakeholders so that they can help support our goals.

ELECTRIFY QUÉBEC AND BE A LEADER OF THE ENERGY TRANSITION.

Convert our off-grid systems to cleaner, cheaper sources of energy.

- **Aim to achieve a 70% renewable supply overall by 2025 through various initiatives, e.g.:**
 - Connect remote communities to the main grid where feasible:
 - › Îles-de-la-Madeleine (undersea cables)
 - › La Romaine and Unamen Shipu
 - Integrate two wind turbines into the Îles-de-la-Madeleine system.
 - Supply the village of Inukjuak with hydropower.
- **Lay the groundwork to convert off-grid systems:**
 - Apply business models adapted to each region's realities.
 - Prepare off-grid generating stations for conversion:
 - › Ensure that our diesel plants can provide the necessary backup.
 - › Upgrade generating station and power system controls.
 - › Deploy energy storage systems.
- **Continue to innovate:**
 - Pursue the northern solar power/energy storage demonstration project currently under way in Quaqtaq.
 - Implement a microgrid in the Îles-de-la-Madeleine region.

All projects must meet the criteria we have set for integrating renewables into our off-grid systems.



Reduced greenhouse gas emissions



Reliable power supply



Social and environmental acceptability



Lower supply costs

SEIZE GROWTH OPPORTUNITIES IN QUÉBEC AND BEYOND OUR BORDERS.

Develop the Québec market.



- Highlight the advantages of our clean and renewable energy for companies operating in Québec and stimulate electrification.
- Develop the data center and computing center markets:
 - Continue to partner with organizations that promote Québec as a place to invest.
 - Focus primarily on high-potential data centers, particularly the tech giants.
- Support the development of high-potential markets like hydrogen, in particular through our R&D:
 - Join forces with partners to create innovation hubs and/or become part of existing hubs.
- Develop the greenhouse market:
 - Pursue our marketing efforts targeting the largest producers.

SEIZE GROWTH OPPORTUNITIES IN QUÉBEC AND BEYOND OUR BORDERS.

Increase our exports to support the decarbonization of northeastern North America.



- Complete the Romaine hydroelectric project.
- Carry out the remaining steps that will lead to our first deliveries of electricity to Massachusetts in 2022, following the RFP that we won in 2018.
- Sign new long-term electricity sales agreements.
- Build the transmission infrastructure required in Québec to support our exports.
- Promote the load balancing capability of our hydroelectric fleet on external markets in order to foster the development of variable renewables such as solar and wind power.
- Work with our neighbors to help them reap the full benefits of our clean and renewable energy.

SEIZE GROWTH OPPORTUNITIES IN QUÉBEC AND BEYOND OUR BORDERS.

Acquire assets or equity stakes through our disciplined approach.

- Target businesses, assets or projects outside Québec that will leverage our key competencies in the fields of hydropower and high-voltage transmission.
- In Québec, target acquisitions or investments that present a strong potential for synergy with our activities.

Our know-how adds substantial value

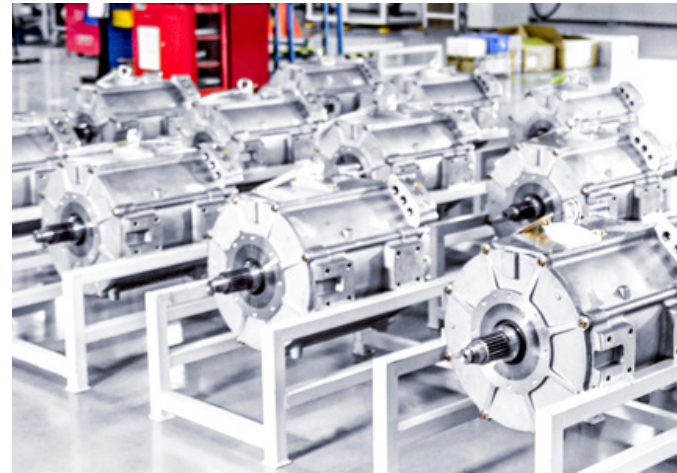
Over the years, we've developed world-renowned expertise and innovative technological solutions in hydroelectric generation and power transmission. The companies we invest in will benefit from our expertise.



SEIZE GROWTH OPPORTUNITIES IN QUÉBEC AND BEYOND OUR BORDERS.

Leverage our technologies.

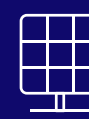
- Support the development of TM4 in partnership with Dana:
 - Convince the world's leading automobile manufacturers to integrate TM4's electric powertrains into their platforms.
 - Expand the Boucherville center of excellence.
- Continue to seek out opportunities to leverage the innovations we develop.



SEIZE GROWTH OPPORTUNITIES IN QUÉBEC AND BEYOND OUR BORDERS.

Complete the Romaine hydroelectric project and assess long-term clean power needs.

- Commission Romaine-4 generating station (245 MW) in 2021.
- Assess the feasibility and profitability of operating solar power plants in Québec:
 - Build and operate two experimental plants in Varennes and La Prairie.
- Decide on future renewable energy projects to meet long-term clean power needs, taking into consideration the various renewable options available (e.g., hydroelectricity, solar power and wind power) as well as demand response solutions.



We have many options at our disposal to meet long-term clean power needs, including hydroelectricity, wind and solar power, and demand response.

These options will be analyzed in terms of:

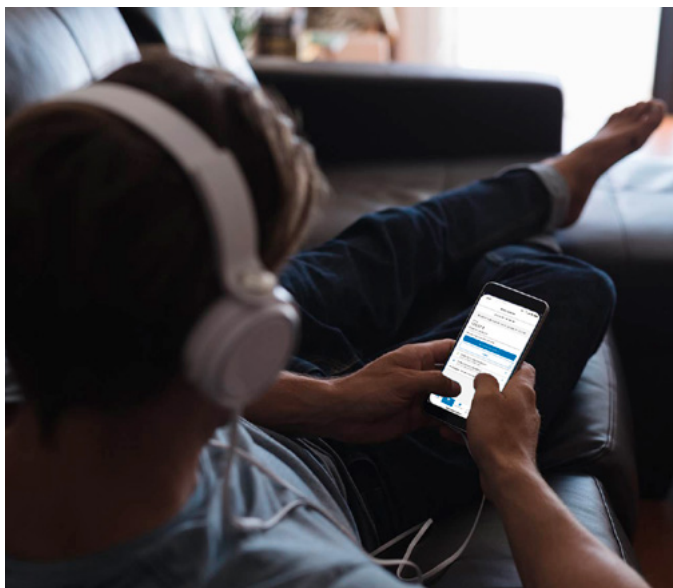
- Technical feasibility and profitability
- Environmental acceptability
- Favorable reception by host communities

Variables that will influence our choices

- The costs associated with each option
- Capacity and energy needs, including the needs of energy-intensive industries
- Available capacity and energy, given the expiry of the contract with the Churchill Falls (Labrador) Corporation in 2041
- The storage capacity of our reservoirs
- The increasing market adoption of home automation, distributed generation and energy efficiency measures
- The impact of climate change

DEVELOP A CULTURE FOCUSED ON CUSTOMERS AND OCCUPATIONAL HEALTH AND SAFETY.

Enrich the customer experience.



- **Hear what you have to say:**
 - Adopt a Voice of the Customer (VoC) approach to draw on your feedback at each stage of your dealings with us in order to enhance, personalize and streamline our practices and our service offerings.
- **Draw on our employees' skills to serve you better:**
 - Offer our employees the kind of job experience that helps them tap into their full potential.
 - Be authentic, supportive and engaging in each of our interactions with you.
- **Offer more points of contact to make your lives easier:**
 - Improve our Web self-service tools, particularly for mobile users.
 - Enhance our digital communications by making greater use of social media and chatting while continuing to optimize our traditional communication channels.

DEVELOP A CULTURE FOCUSED ON CUSTOMERS AND OCCUPATIONAL HEALTH AND SAFETY.

Develop our service offerings.

- Offer our customers a greater selection of rates and options:
 - Roll out dynamic rates and winter credits starting in winter 2019–2020.
- Deploy a range of smart home services.
- Expand our array of services for residential customers.
- Launch new products and services for business customers.
- Build on the know-how of our research institute to develop technologies and conduct living lab projects with a view to diversifying our products and services.

The choice is yours

During the winter, our grid is subject to higher demand due to heating needs, especially at certain times of day.

Available on an opt-in basis, our new Flex rates and Winter Credit Options allow you to save money by reducing your electricity use at our request during peak periods.

Actions = Savings



For more information: www.hydroquebec.com/business/customer-space/rates/winter-credit-option.html.

DEVELOP A CULTURE FOCUSED ON CUSTOMERS AND OCCUPATIONAL HEALTH AND SAFETY.

Ensure the reliability of the power system.



- Optimize the way we manage and operate our assets in order to maintain the quality of our electricity service as cost-effectively as possible:
 - Target our investments with a view to extending the useful life of aging assets or replacing them as needed.
 - Step up the maintenance of transmission facilities.
 - Prioritize predictive maintenance across all our operations.
- Adapt the grid based on Quebecers' changing consumption habits in light of the energy transition and other factors.

Predictive asset maintenance

Digital technologies are revolutionizing maintenance practices because they make it possible to switch from preventive maintenance, based on upkeep or replacing equipment at scheduled intervals, to predictive maintenance, which takes into account the actual condition of in-service equipment. This leads to significant efficiency gains.

DEVELOP A CULTURE FOCUSED ON CUSTOMERS AND OCCUPATIONAL HEALTH AND SAFETY.

Boost our performance in occupational health and safety (OHS).

- Accelerate the development of our corporate culture and on-site practices with regard to OHS:
 - Reinforce leadership in the handling of OHS matters.
 - Place greater emphasis on overall health, including psychological health, in our OHS culture.
 - Establish a register of the main risks and corporate standards.
 - Simplify ways of addressing OHS issues.
- Pay particular attention to potentially serious incidents.



My health, my energy

DEVELOP A CULTURE FOCUSED ON CUSTOMERS AND OCCUPATIONAL HEALTH AND SAFETY.

Enhance the employee experience and talent management.



- Make the employee experience a vector of our transformation:
 - Modernize our processes, programs, tools and practices, including our management practices.
 - Draw on best practices to manage change.
 - Maintain our talent pools and attract new talents.
 - Pursue the updating of our internal communications.
- Optimize the use of our buildings and ensure that our facilities contribute to employee well-being.
- Anticipate our changing needs regarding core competencies and guide the professional development and career paths of our employees accordingly.

CONTINUOUSLY IMPROVE OUR OPERATING PERFORMANCE.

Increase our efficiency and our productivity.

- **Continue to carefully manage our expenses, in particular:**
 - Build on the synergies that currently exist between different teams, especially regarding expertise and asset maintenance.
 - Capitalize on certain buildings and properties we own and lower our occupancy costs.
- **Complete the deployment of our management system:**
 - Set targets and define indicators at all levels and for all activities to help us better measure our performance and that of our assets and better manage performance gaps.
 - Increase the on-site presence of managers.
 - Hold daily scrums to focus our efforts on priorities, accelerate decision-making and mobilize our staff.

Our daily decisions focus on six key areas.



CONTINUOUSLY IMPROVE OUR OPERATING PERFORMANCE.

Embrace digitization.

- **Ensure the technological evolution of the power system:**
 - Roll out a single platform allowing integrated control of the entire grid.
 - Modernize the special protection systems and substation protections and controls.
 - Continue building the foundations to support our digital shift, such as the creation of a digital lake and the implementation of other collaborative tools.
- **Carry out an in-depth transformation of our activities:**
 - Leverage data analytics and artificial intelligence to improve our efficiency as well as our products and services.
 - More fully integrate information technologies, operational technologies and telecommunications, and strengthen cybersecurity in all facets of our operations.
 - Review our practices and processes in light of the new technologies we implement.



Examples of innovative technologies:

- Virtual reality and 3D scanning (refurbishment and construction projects)
- Digital twins (asset maintenance and operations)

CONTINUOUSLY IMPROVE OUR OPERATING PERFORMANCE.

Adapt to climate change.



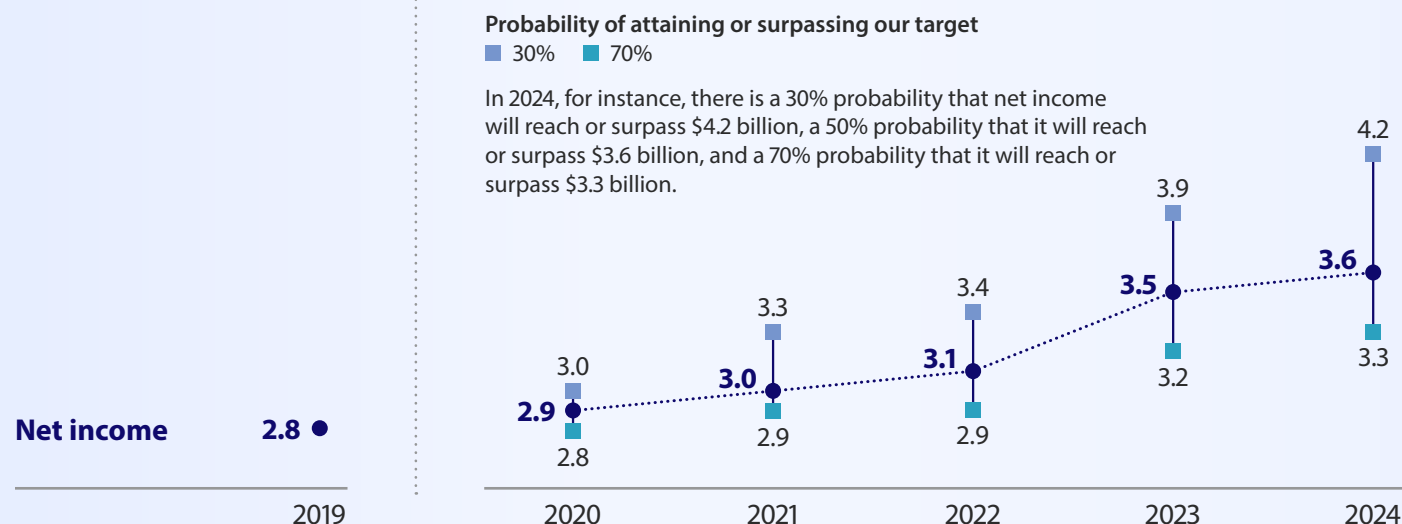
- **Implement an adaptation plan to mitigate the risks related to climate change:**
 - Improve our understanding of the future climate through modeling.
 - Determine the potential impacts of climate change on our assets and operations.
 - Adapt the operating modes of potentially vulnerable assets.
 - Safeguard the physical integrity of at-risk facilities.
- **Improve grid resilience:**
 - Review our practices with regard to grid and equipment design, as well as maintenance and investments.
- **Ramp up vegetation control near the grid.**

OUR FINANCIAL OUTLOOK AND PERFORMANCE INDICATORS

.....

We reaffirm our ambition to earn net income of \$5.2 billion or more in 2030.

Financial outlook^{1,2} (\$B)



2030 target

Net income
≥ \$5.2B

1. Based on normal temperatures except in 2019, for which the outlook factors in seven months of actual data.

2. Assuming that Bill 34 is adopted. The 2020 rate freeze will lead to a \$200-million decrease in net income per year throughout the Plan period.

MAIN FACTORS THAT CAN LEAD TO VARIATIONS IN NET INCOME	IMPACT ON NET INCOME FOR 2020 (\$M)	IMPACT ON NET INCOME FOR 2024 (\$M)
Energy prices on export markets • Variation of US 1¢/kWh	±180	±285
Exchange rate (C\$/US\$1) • Variation of 10¢	±69	±210
Temperatures above or below normals (December–March) • Variance of 1°C 1.6 TWh	±95	±95

Our performance indicators

OBJECTIVES	INDICATORS AND TARGETS			
Contribute to the reduction of GHG emissions in all our markets.	Avoided GHG emissions in Québec (% of Québec government target for 2030 compared to 1990 emission level)	GHG emissions avoided through our long-term export contracts (Mt CO ₂ eq.)	2019	2024 target
			14	17
Power Québec's economic development.	Contribution to Québec's gross domestic product (GDP) (\$B)		2019	2024 target
			20.4	23.4
Be a benchmark in customer experience.	Reputation (overall score out of 10)		2019	2024 target
			6.96	7.20
Increase our net income.	Net income (\$B)		2019	2024 target
			2.8	Between 3.3 and 4.2

The financial outlook is based on estimates and assumptions concerning our future results and the course of events. Given the risks and uncertainties inherent in any forward-looking statements, our actual results could differ from those anticipated.

Units of Measure

\$M	millions of dollars	Wh	watthour (a unit for measuring electric energy)
\$B	billions of dollars	TWh	terawatthour (one trillion watthours)
W	watt (a unit for measuring capacity or power demand)	Mt CO ₂ eq.	million tonnes of CO ₂ equivalent
MW	megawatt (one million watts)		

Note: All amounts are expressed in Canadian dollars, unless otherwise indicated.

Hydro-Québec wishes to thank all people,
in particular its employees, whose photos
appear in this Strategic Plan.

© Hydro-Québec

Vice-présidence – Stratégies d'entreprise
et développement des affaires

Reproduction authorized with reference
to source

Legal deposit – 4th quarter 2019
Bibliothèque et Archives nationales du Québec
ISBN 978-2-550-84782-3 (PDF)

2019G252A

Ce document est également publié en français.
Original text written in French.

www.hydroquebec.com