Strategic Plan
2022–2026
Québec has embarked on an ambitious transition toward a low-carbon economy.

**Over 100 TWh** of additional clean electricity—more than half of our current annual generating capacity—will be required to attain carbon neutrality in Québec by 2050.

It's a tall order. Regardless of the pace and magnitude of this transition, Hydro-Québec is fully committed to meeting this challenge.
# Table of Contents

**Message from the President and CEO** 04  
Our vision, mission and values 05  

## Context 06  
The energy transition 07  
New paradigms 08  
Paradigm 1 – Our energy and capacity balances 09  
Paradigm 2 – Our supply costs 10  
Paradigm 3 – Our grid’s design and operation 11  
Paradigm 4 – Our infrastructure investments 12  
A social endeavor 13  

## Process 14  
A participative approach 15  
Consulting our stakeholders 16  

## Objectives and strategies 17  
Our objectives and strategies at a glance 19  
Objective 1 – Drive the efficient decarbonization of Québec. 20  
Objective 2 – Prepare our grid for tomorrow’s energy and technology needs. 26  
Objective 3 – Increase Québec’s collective prosperity. 31  
Objective 4 – Engage our customers, employees and partners in the achievement of our goals. 36  

## Financial outlook and performance indicators 42  
Our financial outlook 43  
Our performance indicators 44
“We will join forces with the entire population to bring about an energy transition that leads to sustainable economic development and a low-carbon future as cost-effectively as possible.”

Message from the President and Chief Executive Officer

Against the backdrop of the pandemic, with profound changes sweeping Québec and the entire world, we have reflected on our values and prioritized our commitment to help Québec society become more resilient, more prosperous and more sustainable.

Meanwhile, at the end of 2020, the Québec government launched the 2030 Plan for a Green Economy, an ambitious social undertaking designed to transform and decarbonize the economy in keeping with the global desire to slow the pace of climate change. At the heart of this plan: our clean electricity, the amazing collective legacy passed on to us by previous generations. Given the pivotal role that Hydro-Québec is called on to play in this vast electrification initiative, the time was right for us to begin a new strategic planning cycle.

To enhance this process, we carried out a broad consultation of our stakeholders, both internal and external, as we sought to identify both the main issues and the promising new opportunities that will arise in the years to come. I would like to offer my sincere thanks to all those who took part in this innovative exercise and who helped broaden the scope of our reflections. In fact, it is the inclusiveness of our approach that makes me particularly proud to present Hydro-Québec’s Strategic Plan 2022–2026.

The decarbonization of our economy will, to a great extent, depend on our capacity to transition our power system, which is already envied around the world for its high level of integration and the fact that our energy output is over 99% clean. We are moving toward a more encompassing energy system. A system capable of generating, transmitting and distributing more renewable energy from a variety of sources. A system equipped with leading-edge technology that will empower each customer to make optimal use of energy. A system whose costs will remain among the most competitive in North America.

The challenges are immense. They will require major efforts that go well beyond the scope of a five-year plan. That is why we see our plan as a roadmap that positions Hydro-Québec for the coming decades and lays the groundwork for actions whose benefits may take several years to materialize. A roadmap that we will have to adjust over time to keep pace with the evolution of the energy sector, which is undergoing tremendous change, and the needs of our customers. A roadmap that will lead us to work closely with local and Indigenous communities and to draw upon the collective strength of all Quebecers.

At Hydro-Québec, we are looking to the future with humility, pride and determination. We will draw on our core values of inclusion, courage, innovation and the common good to help build a sustainable energy future and spark new possibilities for the society that we have the privilege of serving.

Sophie Brochu
Our vision

Mobilizing the collective strength of Quebecers to accelerate the energy transition, stimulate the local economy and build a sustainable future.

Our mission

We provide a reliable supply of electricity and high-quality services tailored to our customers’ needs at competitive prices.

By making use of clean, renewable energy sources, we contribute to Québec’s collective wealth and play a central role in the emergence of a green, sustainable economy.

As recognized leaders in hydropower and large power grids, we help neighboring markets reduce their carbon footprint by leveraging the attributes of our renewable energy.

Firm believers in the power of innovation, we develop state-of-the-art solutions and share our expertise to help decarbonize the economy and optimize energy use.

Our values

The common good

Putting people and the community first.

Courage

Believing in our ideals and acting upon them.

Inclusion

Being a rallying force and a model of openness.

Innovation

Making positive changes, day after day.
SECTION 01

Context
The energy transition

The global energy transition is underway and unstoppable.

What is the energy transition?

The energy transition encompasses all the changes undertaken to reduce the environmental impact of generating, distributing and consuming energy.

A pillar of sustainable development and the fight against climate change, the energy transition is grounded in advanced technologies, as well as changes in attitude and behavior. For power system operators like us, it includes three main components:

- **Decarbonization**, or the gradual phase-out of fossil fuels in favor of renewable energy sources with a smaller carbon footprint
- **Digitization**, which leverages cleantech innovation to optimize power system operations and energy consumption
- **Decentralization**, through which customers can play a greater role in generating renewable energy and managing their energy use

Québec is on board.

Recognizing the imperative to act now to reduce greenhouse gas (GHG) emissions—the main cause of climate change—the Québec government has set out to make Québec a leader of the energy transition.

In the **2030 Plan for a Green Economy** (2030 PGE) published in late 2020, the government proposes concrete measures to achieve this goal, including the launch of a vast electrification initiative that will be carried out in a number of sectors.

Key takeaway

The science is clear: the energy transition is necessary. It will have major impacts, not only on how we generate, transmit and distribute electricity, but also on how we all consume it.
New paradigms

We are facing four major paradigm shifts.

Paradigm 1
Our energy and capacity balances
While we’ve been able to rely on an abundance of available energy in recent years, an upswing in demand for our green electricity will tighten our balances. As a result, our priorities will shift from selling large quantities of energy to helping Quebecers become more energy-efficient and maximizing the value of our energy by targeting the most promising uses.

Paradigm 2
Our supply costs
Historically, our electricity supply costs have been low and stable, thanks in large part to the heritage pool of hydropower. However, the additional electricity purchases we will have to make to meet future needs will cost more. As a result, the energy transition will entail significant costs and we must find ways to keep these costs under control.

Paradigm 3
Our grid’s design and operation
Our current power grid is unidirectional, delivering electricity from the generating station to our customers. However, the energy system of tomorrow will be multidirectional, integrating new energy resources and new technologies enabling customers to interact with our facilities and even with each other. We must adapt our operating methods in order to tap the full potential of these new resources and technologies.

Paradigm 4
Our infrastructure investments
Significant investments will be required to reinforce our grid and equip it to handle higher demand—all the more so given that some of our assets are aging and must be replaced or upgraded. We are therefore entering into a new major investment cycle that will last several years.

What is a paradigm shift?
It’s a fundamental change in a vision or conceptual framework that shapes a particular way of thinking and, by extension, of behaving. Paradigm shifts may apply to individuals, businesses, sectors of activity or societies as a whole.
PARADIGM 1

Our energy and capacity balances

Then
Sizable volume of available energy: Focus on quantity

Over the past few years, the generating capacity of our facilities, combined with our other sources of supply, has exceeded our needs. This has given us considerable latitude to power Québec’s economic development and maximize our contribution by selling large quantities of electricity at market prices in northeastern North America.

Now
Tighter energy and capacity balances: Focus on value

To decarbonize the economy, Québec has launched a vast electrification initiative. Electricity demand is therefore expected to rise, even though the rate at which the new needs will materialize is uncertain. As a result, we must prioritize the uses that stand to create the greatest value for Québec.

+20 TWh
Projected growth of electricity demand in Québec between 2019 and 2029

Source: Hydro-Québec, État d’avancement 2021 du Plan d’approvisionnement 2020-2029 (in French only).

Our clean energy is also highly valued by neighboring markets.

Two neighboring U.S. states have concluded long-term power purchase agreements with us to help them attain their GHG emissions reduction targets. These agreements will be very profitable, since they recognize the value of our renewable energy.

Massachusetts
9.45 TWh through the New England Clean Energy Connect project

New York
10.40 TWh through the Champlain Hudson Power Express project

2027
The year in which we will need new energy supplies

2026–2027
The winter in which we will need new capacity supplies

Calls for tenders have already been launched to meet these needs, and others will follow.

Key takeaway
After several years of record energy sales across all our markets, tightened balances will prompt us to focus on maximizing the value derived from our clean energy.
PARADIGM 2

Our supply costs

Then
Low supply costs
To supply the Québec market, we have long relied primarily on the heritage pool of 165 TWh, which is available at a lower rate.

3¢/kWh
Cost of heritage pool electricity

Now
Increasing supply costs
New non-heritage electricity supplies will be needed to meet the growing demand.

While the heritage pool still accounts for a significant portion of our supply portfolio, its relative weight will decrease as we enter into new agreements to meet additional electricity needs. As a result, the overall cost of our electricity purchases will gradually increase, putting upward pressure on rates.

We must bank on various solutions to meet growth in demand at the lowest cost.

Energy efficiency and demand response measures reduce electricity needs, especially during peak periods, without impinging on either customer comfort or equipment performance. For this reason, they constitute two powerful levers for limiting the rise in supply costs and keeping rates down.

Boosting the installed capacity of our existing hydroelectric fleet and using other renewables like wind and solar—which can be deployed quickly in many different locations—as a complement to hydropower represent promising avenues for meeting our additional capacity requirements.

11¢/kWh
Average non-heritage energy and capacity supply cost, taking into account the agreements in effect and the planned short- and long-term market purchases

Key takeaway
To meet the challenge of the energy transition at the lowest possible cost for Quebecers, we must act on multiple fronts to limit the increase in our supply costs.

10
PARADIGM 3

Our grid’s design and operation

Then

Traditional grid

Our predecessors built infrastructures that have gained international renown. Some of them also revolutionized our industry with innovations like 735-kV transmission technology.

Over the years, we have developed a vast power system that transmits electricity from the generating stations to some 4.5 million Québec customers. Thanks to this system, we supply reliable power at prices that are among the most competitive in North America.

Now

A more complex, more interactive energy system

We must tap into this same inventive spirit to modernize our assets and operations.

Tomorrow’s grid will be more decentralized and incorporate greater quantities of variable renewables. If we are to continue to successfully fulfill our mission, we must therefore leverage our intrinsic capacity for innovation to adapt our current power system and operating methods to these new realities.

Thanks to digital technologies, we can implement multiple solutions to optimize the operation of an increasingly complex energy system.

By making greater use of digital technologies, we can design a smarter grid—one that will let us better manage our assets, boost our productivity and better meet our customers’ needs.

Key takeaway

Today’s power grids are being transformed into interactive energy systems. This profound shift compels us to adapt the design and operation of our facilities, but it also provides us with the opportunity to optimize our processes and enhance our offerings to benefit our customers.
Our infrastructure investments

Then
Stable investment level
Each year over the past few decades, we’ve carried out hundreds of infrastructure projects, both large and small, to keep pace with evolving demand and provide quality service. Our project planning and scheduling processes were designed as a function of this relatively stable business environment.

Now
Major increase in investments required
We’re entering a new era of growth that will call for substantial investments.

With the launch of the massive electrification initiative outlined in the 2030 PGE, our facilities will have to handle much higher demand. However, many of them are already operating at full capacity or approaching the end of their useful life. Greater efforts will need to go into replacing or upgrading assets or increasing system capacity and robustness—efforts that will coincide with the implementation of several new development projects.

Resource allocation will be of paramount importance.
More than ever, it will be critical to prioritize our investments based on an overall vision of our needs. It will also be important to carefully manage the associated risks. This will involve designing the grid in such a way as to limit the deployment of new assets to the greatest extent possible, while continuing to ensure quality of service.

Key takeaway
To ensure the reliability and sustainment of our aging infrastructures and fully assume our role in the electrification of Québec while developing sufficient capacity for future generations, we must pay particular attention to resource allocation so as to maximize the return on our investments.

PARADIGM 4

Our infrastructure investments

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Key takeaway
To ensure the reliability and sustainment of our aging infrastructures and fully assume our role in the electrification of Québec while developing sufficient capacity for future generations, we must pay particular attention to resource allocation so as to maximize the return on our investments.
Quebecers have the power to help us build the energy future we’re all aspiring to.

Our success depends on a collective commitment.

The energy transition will entail significant costs for Québec society. Implementing sustainable solutions will call for considerable financial investments, as is the case in every other part of the world, along with major changes in energy consumption habits.

To limit the cost of this ambitious project, cooperation is key. That is exactly what we plan to do, both in Québec and beyond our borders, where we hope to join forces with our neighbors to ensure the greatest benefit for all.

Our choices will be critical for future generations.

Our challenge: to make the right decisions and take action as cost-effectively as possible in the areas that hold the most promise for Québec society, both now and in the future. For it is only through actions that are beneficial in the long term that we can contribute to Québec’s enduring prosperity.

If the past is any indication of what the future holds, Québec will meet the challenge of the energy transition head-on by drawing on its collective strength.

It is by pooling our efforts with those of our partners and the population at large that we will successfully carry out the colossal task of electrifying Québec.
SECTION 02

Process
A participative approach

The Strategic Plan 2022–2026: The result of a consultation process aimed at mobilizing Québec’s collective strength

Over the past year, we asked a host of people to reflect with us on the energy transition—the challenges it poses, but also the new opportunities it opens up.

As a responsible corporate citizen, we want to be a catalyst for positive change in Québec society. Under the Collective Energy initiative we launched in April 2021, we urged all Quebecers to help us come up with and implement innovative projects in every region of the province.

Invited to share their ideas and aspirations in three key areas—the green economy, sustainable mobility and responsible energy use—Quebecers responded in great numbers.

The most promising projects will be carried out in a subsequent phase of the initiative.

Results

26,800+ Survey respondents

15,200+ Ideas submitted
Consulting our stakeholders

In parallel with our public consultation, we sought out energy sector stakeholders to elicit their ideas, concerns and respective issues.

Community partners and collaborators
We asked some sixty representatives from the economic, municipal and academic spheres, as well as various associations, to enrich our reading of Québec’s energy future by sharing their insights on decarbonization, economic development, energy sector innovation and Hydro-Québec’s role in electrification.

Indigenous people
We reached out to various Indigenous people active on the political, economic, environmental or academic scenes to hear their thoughts on economic development, employment and training opportunities, and community engagement.

Business customers
If we are to truly fulfill our role as catalyst for economic development, we need a sound grasp of the realities that Québec businesses face. Companies from a wide range of sectors shared with us their situation, needs and ideas.

Our employees
Over 7,000 employees took part in our internal consultation. Of these, more than 500 attended virtual coffee breaks during which they were invited to propose ways of using our expertise, ingenuity and facilities, as well as advanced technologies, to build a better world.

The strategies put forth in the Strategic Plan were informed by this broad-based consultation and take into account the priorities expressed by participants.
SECTION 03

Objectives and strategies
In light of the current context and our consultation process, this Strategic Plan:

- Lays the groundwork for our decarbonization efforts and positions us for the decades to come.
- Sharpens the focus on our core mission and outlines targeted means to make it evolve.
- Aims to achieve the energy transition at the lowest possible cost for Québec society.
- Seeks to increase our contribution to Québec’s prosperity and resilience in the post-pandemic era.
- Recognizes that our success will spring from the collective strength of Quebecers.
- Reflects the priority actions recommended by our employees, our partners and the public.
Our objectives and strategies at a glance

1 Drive the efficient decarbonization of Québec.
   1.1 Help Québec make better use of electricity.
   1.2 Stimulate the growth of electric transportation.
   1.3 Facilitate the rollout of solutions to replace fossil fuels.
   1.4 Become carbon neutral in our operations by 2030.

2 Prepare our grid for tomorrow's energy and technology needs.
   2.1 Transition our power system to an increasingly diversified smart grid.
   2.2 Increase our generating capacity by 5,000 MW.
   2.3 Ramp up the rollout of demand response measures.
   2.4 Adapt our practices to address new issues regarding grid reliability and resilience.

3 Increase Québec's collective prosperity.
   3.1 Realize the full value of our energy and its attributes.
   3.2 Sustainably maximize the wealth we create for Québec through our operations.
   3.3 Increase our presence and operations in neighboring markets.
   3.4 Continuously improve our operations management so that we can offer quality service at the lowest cost.

4 Engage our customers, employees and partners in the achievement of our goals.
   4.1 Offer our customers a simple and engaging experience that is tailored to their needs.
   4.2 Strengthen our relations with local and Indigenous communities.
   4.3 Increase collaboration with our external partners to resolve top-priority energy issues.
   4.4 Remain an employer of choice and become a leader in occupational health and safety.
We can rely on several advantages to help Québec achieve its GHG emissions reduction targets. Thanks to our hydropower, Québec is one of the few places on earth where electricity generation is already carbon-free. Our clean energy can gradually come to replace the fossil fuels consumed in various economic sectors like transportation, construction, industry and agriculture.

Energy efficiency will be key in easing the upward pressure on electricity demand, allowing us to decarbonize more uses without having to add equivalent generating capacity.

The energy transition in Québec will call for a major effort and considerable investment. To maximize the benefits of this transition, we will take a pragmatic, solution-oriented approach that will reduce GHGs at the lowest possible cost for Québec society.

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Our strategies for making this happen

1.1 Help Québec make better use of electricity.

Our electricity is a precious resource. That’s why we must rethink how we use it and take action to reduce energy waste.

1.2 Stimulate the growth of electric transportation.

A key priority of decarbonization is fast-tracking the electrification of various modes of transport. There’s still a long way to go in this regard, particularly with respect to heavy transport.

1.3 Facilitate the rollout of solutions to replace fossil fuels.

By focusing on innovation and providing ongoing support to our customers, we can help reduce Québec’s dependence on fossil fuels.

1.4 Become carbon neutral in our operations by 2030.

Beyond helping Québec decarbonize, we will set the example by cutting emissions in our own operations.
OBJECTIVE 1
Drive the efficient decarbonization of Québec.

STRATEGY 1.1
Help Québec make better use of electricity.

Our initiatives

Step up our energy efficiency efforts to achieve savings of 4 TWh by 2025 and 8.2 TWh by 2029.

The collectively adoption of behaviors resulting in smarter energy use will yield significant economic and environmental rewards. Thanks to new technologies, it is possible to save energy while maintaining or even improving comfort.

To reach our energy savings targets, we will focus on:

- Providing simple, flexible and integrated offers that foster a positive customer experience.
- Introducing new programs adapted to each industry and customer segment.
- Improving financial assistance for the implementation of the best energy efficiency measures, particularly by residential customers, as part of construction or renovation projects, for example.

In addition to carrying out our own energy-saving initiatives, we will work with other players in the energy sector to:

- Influence the evolution of energy efficiency standards, including in the building construction industry.
- Increase the complementarity between different programs in order to maximize their overall impact.

Make it easier for our customers to become more energy-wise.

To help our customers optimize their energy use, especially during peak periods, we will:

- Support our residential customers by providing them with tools to compare and analyze their consumption, as well as technical advice and tips on smart habits to adopt.
- Support and advise our commercial, industrial and agricultural customers so that they can make the most of the many solutions available to them.

Test innovative energy management models and promote the adoption of the most promising solutions.

Over the past few years, we’ve carried out a number of pilot projects to test advanced energy management technologies, learn from them and better understand the power system of tomorrow.

Future building construction and renovation projects stand to benefit from the expertise acquired and solutions developed under these projects. To that end, we plan to:

- Work with various partners to create the energy-efficient neighborhoods of the future.
- Launch new pilot projects or set up technology showcases (like the Lac-Mégantic microgrid) related to energy efficiency and energy management.
- Foster initiatives that promote the energy-efficient renovation of small businesses and rental housing.

Energy efficiency: Nothing to lose and everything to gain!

Energy efficiency involves making optimal use of available energy, which makes it possible to reduce consumption while meeting the same needs and maintaining comfort. For example, replacing a 60-W incandescent light bulb with a 9-W LED light bulb, which produces the same amount of light, results in worthwhile savings on customers’ electricity bills. The same goes for the installation of smart thermostats, which maintain a more stable temperature. These are cost-effective ways to contribute to the energy transition.
STRATEGY 1.2
Stimulate the growth of electric transportation.

Our initiatives

**Broaden and improve the Electric Circuit’s public charging service for light vehicles.**

The Electric Circuit is the largest public charging network in Québec. At the end of 2021, it had about 3,400 charging stations across Québec, including some 600 fast chargers.

To expand the network even more, we plan to:

- Partner with Québec municipalities to add 4,500 new standard charging stations in urban centers by 2028.
- Operate 2,500 fast-charge stations adapted to market needs and power grid constraints by 2030.
- Roll out multi-vehicle charging stations in and around large cities.

To improve service quality and promote electric driving, we will:

- Enhance the customer experience through new technological solutions.
- Implement an interoperability solution in as many partner networks as possible to make means of payment compatible across all the charging stations they operate.
- Scale our charging offer based on the needs of EV drivers.
- Participate in awareness-raising initiatives launched by other players in the ecosystem.

**Design and implement complementary charging solutions adapted to all types of electric vehicles.**

To speed the growth of the light EV fleet and support the electrification of other types of vehicles, including in the heavy, recreational, marine and air transport sectors, we will expand our range of charging solutions. Developing smart integrated charging offers for these different market segments will help keep our customers’ bills down and limit the impact on the power grid.

In particular, we intend to:

- Develop a home charging offer with a curtailment component during peak periods.
- Develop smart integrated charging solutions for heavy vehicle fleets and assist customers who undertake electrification.
- Launch a public fast-charge pilot project for commercial transport.
- Adapt charging station power levels as new models of vehicles become available on the market.
- Set up a scalable charging station management platform along with tools to manage electricity use during peak periods.
Develop and test leading-edge charging technologies.

Innovation will also factor strongly into our contribution to transportation electrification. We will put our expertise to work developing new technologies tailored to personal and public transportation, as well as both heavy and light vehicles.

Our approach will consist in developing and testing leading-edge technologies that can meet future market needs without jeopardizing power system reliability. In particular, we will:

- Start researching smart charging technologies that enable two-way energy exchanges with homes, commercial buildings and the power grid.
- Use our test benches to experiment with ultrafast charging and different charging power levels.
- Launch a pilot project involving an autonomous, mobile solar-powered fast charger.

Growth in the number of light electric vehicles and Electric Circuit charging stations in Québec (2011–2021)

**Objective 1**

Drive the efficient decarbonization of Québec.

**Strategy 1.3**

Facilitate the rollout of solutions to replace fossil fuels.

**Our initiatives**

Help develop new efficient electrical technologies.

Thanks to our clean energy, Québec has everything to gain from replacing fossil fuel-intensive processes with efficient electrical technologies.

- Prioritize solutions that maximize the reduction of GHG emissions without affecting power system reliability.
- Leverage the expertise of our research institute and partners to develop or optimize efficient electrical technologies that meet both our customers’ needs and our own operational requirements.

**What’s an efficient electrical technology?**

Electric technologies, also called electrotechnologies, are said to be efficient if their energy performance is superior to that of conventional equipment or systems that perform the same function.

For instance, an oil system used for home heating is around 80% efficient, whereas a conventional electric resistance heating system is nearly 100% efficient. However, the efficiency of an electric system that also includes an air-to-air heat pump is two and a half times greater than that of a conventional electric system, making it the electrotechnology of choice.

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</table>

*As at November 30, 2021
**As at December 31, 2021
• Facilitate the implementation, mainly by commercial and industrial customers, of projects designed to validate or demonstrate the technical and/or commercial viability of proposed energy-saving or power demand optimization measures.

Help develop the market for green hydrogen.
Québec will be turning to green hydrogen to indirectly electrify activities, such as chemical and industrial processes as well as certain types of heavy transport, where direct electrification is not technically or economically feasible.

Our role will consist in supporting the development of the green hydrogen market in order to lay a solid foundation for this sector. This support will take many forms, including:

- Participating in the implementation of the Québec government’s green hydrogen and bioenergy strategy.
- Assessing the strategic nature of the proposed green hydrogen projects and the required conditions for success, in part to minimize the impact of connecting the facilities to the grid.

Work with industry partners to speed up the large-scale deployment of existing efficient electrotechnologies.

Efficient electrotechnologies with enormous potential for reducing GHG emissions are already available on the market. However, various economic and regulatory barriers, among others, stand in the way of their adoption.

We will therefore join forces with our partners to foster greater use of these technologies. For example, we plan to:

- Make it easier for business customers to adopt efficient technologies like heat pumps and other high-performance energy solutions and assist them in this process.
- Adapt some of our practices (pricing, financial support, etc.) and advocate for regulatory changes that would encourage the use of the right equipment in the right place and at the right time, and help make the targeted technologies more competitive.

The Efficient Solutions Program

Companies that sign up for the Efficient Solutions Program receive technical and financial support from Hydro-Québec to implement energy-saving projects that lower their operating costs and reduce their carbon footprint.

Case study: Beneva

Created through the merger of La Capitale and SSQ Assurance, Beneva is currently completing work to reduce the emissions of two of its buildings by 657 t CO₂ eq. per year—the equivalent of taking about 200 vehicles off the road. We’ve helped the insurer achieve this by making improvements like:

Projects eligible for the Efficient Solutions Program:
- Installing an aerothermal heat pump
- Adding a thermal storage unit, which optimizes load management during peak periods
- Installing an exhaust heat recovery ventilation system

Other measures:
- Installing a new CO₂ cooling system
- Replacing the fuel heating system with an electrical system with radiant heat panels
- Adding electric boilers
- Adding electric humidifiers

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Strategic Plan 2022–2026

Objectives and strategies

24
OBJECTIVE 1
Drive the efficient decarbonization of Québec.

STRATEGY 1.4
Become carbon neutral in our operations by 2030.

Our initiatives

Continue to convert our off-grid fossil fuel systems to cleaner energy sources.

At the end of 2021, we operated 22 off-grid systems—i.e., systems that are not connected to the main grid. Mainly serving remote populations like those in Québec’s northern regions, these systems are often powered by thermal generating stations and constitute our main source of GHG emissions.

To reduce these emissions, we aim to convert our off-grid systems to 80% clean energy overall by 2030. Doing so will entail working with the local and Indigenous communities concerned to carry out projects like the following:

- Finish connecting the village of La Romaine and the community of Unamen Shipu to the main grid in 2022.
- Integrate a run-of-river hydroelectric generating station into the Inukjuak off-grid system in 2022.
- Complete the Îles-de-la-Madeleine energy transition in 2027.
- Continue our studies and efforts to incorporate renewables into all our off-grid systems.

Significantly increase the percentage of vehicles in our fleet that will help us reduce our GHG emissions.

At the end of 2021, our fleet totaled some 9,700 vehicles, including 614 light hybrid or plug-in vehicles and 69 hybrid specialized vehicles. To cut the emissions generated by our fleet, we intend to:

- Boost the number of all-electric or plug-in hybrid vehicles in our fleet to 2,545 by 2026. This represents all replacement vehicles we calculate we will need by then, absent geographical or technical constraints.
- Install charging stations as needed to meet this target.

Along with our key priority of reducing the GHG emissions generated by our operations, we’re committed to offsetting our residual emissions, in particular through carbon credit purchases that will lead to the implementation of local offset projects whenever possible. We’re banking on this combined approach to achieve carbon neutrality by 2030.

Reduce the emissions of certain grid components.

Some power system components—such as circuit breakers, instrument transformers and metal-clad substations—contain either carbon tetrafluoride (CF₄) or sulfur hexafluoride (SF₆), two gases that are used as insulators. Both are potent greenhouse gases with a greater impact on global warming than carbon dioxide (CO₂), which makes the risks associated with leakage that much more serious. These components represent one of the biggest sources of direct GHG emissions associated with our operations.

Consequently, we plan to:

- Adopt best industry practices for detecting and reducing emissions from equipment with SF₆ and CF₄ and monitor the evolution of these practices.
- Design and implement innovative mitigation measures to lower such emissions in view of becoming a benchmark in this area.
- Continue to monitor the development of alternatives to SF₆ and fast-track their integration into our equipment, based on their availability and our operating requirements.
OBJECTIVE 2

Prepare our grid for tomorrow’s energy and technology needs.

The energy sector is in full transition. This sweeping change is mainly driven by the fight against climate change, evolving energy-use habits and the availability of a host of new technologies.

We’re privileged to operate a near-carbon-free generating fleet, as well as transmission and distribution facilities whose quality is recognized the world over. If we are to continue fulfilling our mission effectively in the coming decades, we must adopt a proactive approach to make sure our facilities evolve to meet the needs created by the energy transition.

It is by innovating and rethinking our grid’s design and operation that we can meet the growing demand for our clean energy and keep pace with changing customer expectations.

Our strategies for making this happen

2.1 Transition our power system to an increasingly diversified smart grid.

Tomorrow’s energy system will incorporate distributed energy resources and other advanced technologies. We must prepare for their arrival.

2.2 Increase our generating capacity by 5,000 MW.

Optimizing the output of our hydroelectric facilities and developing wind power will help us increase the amount of available electricity, particularly in terms of capacity.

2.3 Ramp up the rollout of demand response measures.

Enhanced rate offerings and our Hilo smart energy services will free up system capacity during peak periods.

2.4 Adapt our practices to address new issues regarding grid reliability and resilience.

The fight against climate change and technological advances are prompting us to rethink how we design and operate our facilities.
Transition our power system to an increasingly diversified smart grid.

Our initiatives

Prepare the grid to integrate distributed energy resources (DERs), a greater number of variable energy sources and equipment enabling customers to play a larger role in energy exchanges.

In Québec, as elsewhere in the world, DERs and variable energy sources will figure prominently in the energy transition. This is something we must take into account when designing tomorrow’s energy system. In addition to their environmental benefits, DERs will help us optimize future electricity supplies by reducing pressure on the grid during peak periods.

In anticipation of these new realities, we will:

- Develop our operating systems and update our R&D programs so that we can lay the groundwork required to effectively integrate DERs and variable energy sources.
- Assess the integration potential for DERs and variable renewables like wind and solar into our power system.

The next few years will be crucial, since we must determine the optimal proportions and distribution of these technologies, particularly with regard to grid reliability.

What are DERs?

DERs consist of small-scale (generally below 25 MW) power generation equipment like solar panels or battery energy storage systems installed on customer premises. They can also be curtailable loads (e.g., heating or electric vehicle charging) controlled remotely using new IoT (Internet of Things) technologies. In either case, DERs can be operated independently or be part of an integrated system that manages energy exchanges with the grid.

Variable generating sources will be added as a complement to our hydropower production.

What was once a unidirectional power system will become multidirectional.

Customers will be able to interact with the grid and among themselves thanks to DERs and new technologies.
Digitize and upgrade our infrastructures to create a smarter grid.

With the digital shift already well underway, we will step up the integration of digital and other technologies into our practices. A focus on automation, smart objects, data analytics, artificial intelligence (AI) and cybersecurity will continue to drive our digital transformation.

To successfully bring about this essential shift, we must:

- Pursue our research programs designed to lay a solid foundation for the integration of more smart technology into our grid.
- Step up efforts to modernize our technological infrastructure in order to optimize today’s grid and create the new services needed for the energy system of tomorrow.
- Draw on the rich and varied expertise of our staff to harness the full potential of the digital transformation, in keeping with emerging needs associated with the energy transition.

In practical terms, digital technologies will offer numerous advantages, including:

- Improved infrastructure reliability and operational performance
- Real-time situational awareness across the grid, leading to proactive, targeted interventions to avoid anomalies
- Optimized power transmission
- Greater interactivity with our customers

In light of the uncertainty regarding the growth in electricity demand, we will increase the flexibility of our generating fleet by developing 3,000 MW of wind power capacity beyond what is currently targeted by our ongoing tender calls and the projects that have already been announced. To these ends, we will:

- Conduct the studies and analyses required to begin capacity upgrades to facilities with confirmed potential, in cooperation with the local and Indigenous communities concerned.
- Continue replacing the generating units at Carillon and Rapide-Blanc generating stations and undertake similar work in other facilities.

In recent years, the anticipated decrease in equipment costs related to wind power generation has become a reality. As a result, wind power is now a competitive option that presents interesting synergies with our hydroelectric fleet and the nature of our needs here in Québec.

In practical terms, digital technologies will offer numerous advantages, including:

- Improved infrastructure reliability and operational performance
- Improved situational awareness across the grid, leading to proactive, targeted interventions to avoid anomalies
- Optimized power transmission
- Greater interactivity with our customers

Our initiatives

**Launch projects designed to add 2,000 MW of capacity to our existing hydropower generating stations by 2035.**

With the demand for renewable energy expected to rise, Québec will need additional capacity in the medium term. Replacing the generating units in some of our hydropower facilities is a cost-effective way to boost the installed capacity of our generating fleet. We will therefore:

- Conduct the studies and analyses required to begin capacity upgrades to facilities with confirmed potential, in cooperation with the local and Indigenous communities concerned.
- Continue replacing the generating units at Carillon and Rapide-Blanc generating stations and undertake similar work in other facilities.

Develop by 2026, in partnership with local partners, a portfolio of wind energy projects totaling 3,000 MW that could be launched as soon as needs are confirmed.

In light of the uncertainty regarding the growth in electricity demand, we will increase the flexibility of our generating fleet by developing 3,000 MW of wind power capacity beyond what is currently targeted by our ongoing tender calls and the projects that have already been announced. To these ends, we will:

- Assess the impacts on our grid of various wind power capacity increase scenarios.
- Determine the wind energy potential of various sites in Québec.
Ramp up the rollout of demand response measures.

Our initiatives

Introduce new incentives to encourage our customers to reduce their electricity use during peak periods.

We will continue to develop our rate offerings with a view to easing pressure on the grid and capitalizing fully on our electricity through efficient sales. More specifically, we plan to:

• Launch new opt-in rates allowing customers to save money in exchange for reducing their electricity use during winter peak hours and/or shifting their consumption outside of these hours.

• Roll out a new dual-energy rate offering for business customers.

• Look into improving our current Interruptible Electricity and Demand Response Options.

Step up the rollout of behind-the-meter technologies and equipment.

Over the next few years, we’re planning a major rollout, on business and residential customers’ premises, of Hilo products and technologies that will help us better manage the grid.

With a connected ecosystem and a network of partners, including market stakeholders, we can eventually free up hundreds of megawatts of capacity. This in turn will reduce our future needs for additional, more costly electricity supplies and thus help us keep our rates low.

Hilo’s enhanced offerings will also help decrease our winter peak power imports from neighboring markets, which will translate into both lower GHG emissions and avoided costs.
Adapt our practices to address new issues regarding grid reliability and resilience.

Our initiatives

Adapt our power system’s design and management, keeping in mind the impact of climate change, emerging risks and technological advances.

Climate change is affecting all of our operations and assets. For example, the rising number of extreme weather events is creating a need for greater grid resilience, both to keep the number of resulting outages down and to ensure that service is quickly restored in the event of a power failure. Similarly, the anticipated increase in precipitation could present technical challenges related to the water levels in our reservoirs.

To cope with this new reality, we will adapt our practices regarding the design and operation of our power system and facilities. We will:

• Improve our understanding of tomorrow’s climate and its potential impacts by working closely with the Ouranos consortium and making use of a climate atlas, among other things.
• Deploy priority mitigation measures in the highest-risk areas, including grid reinforcement projects, predictive maintenance based on actual equipment status, and vegetation control.
• Take climate change into account in all our activities, projects and value chain, and establish clear guidelines in this regard.

While our primary focus will be on the risks associated with climate change, we will nonetheless continue to rigorously monitor all the main risks to the grid and implement appropriate measures to counter them.

Optimize asset replacement and modernization through a coordinated approach to investment.

Like many other infrastructure managers, we are currently dealing with facilities that were commissioned decades ago and are today reaching the end of their useful life. Significant investments will be required in the short and medium term to replace certain transmission system components and refurbish some of our generating stations throughout Québec. Further investments will also be needed to modernize our assets in order to connect new loads and diversified energy sources to the grid, and to manage changes to power consumption that will arise from self-generation and transportation electrification, for example.

To respond to these imperatives and the structural shifts brought about by the energy transition and the integration of new technologies, we plan to consolidate management of our assets across the board. In concrete terms, this will mean:

• Developing a comprehensive view of our investments and adopting a cross-functional approach to capital allocation based on asset life cycle management and taking into account our aging infrastructures, climate change, our changing business environment, energy transition requirements and the ongoing digital shift.
• Targeting priority investments and stepping up maintenance to prolong the useful life of our existing assets.
• Improving our ability to foresee what is to come by taking full advantage of enhanced predictive models, new tools, as well as risk and mitigation modeling.
OBJECTIVE 3

Increase Québec’s collective prosperity.

A green economy puts the environment squarely at the heart of its priorities. With our renewable and competitive energy, we’re well positioned to help both Québec and export markets meet their environmental targets.

Whether this involves dealing with local suppliers, helping local businesses convert to clean energy or attracting companies from outside Québec who seek to reduce their carbon footprint, we will use our energy to support Québec’s economic development and create positive impacts in all regions.

As a government-owned corporation, Hydro-Québec belongs to all Quebeckers. It gives us great pride to know that with the work we do each day, we contribute to the province’s collective wealth.

Our strategies for making this happen

3.1 Realize the full value of our energy and its attributes.
Clean, renewable, reliable and dispatchable on demand, our electricity presents major advantages that give rise to interesting business opportunities.

3.2 Sustainably maximize the wealth we create for Québec through our operations.
We are going to work with the government, as well as with our partners, suppliers and customers who use the most energy, to generate even more positive spinoffs for society.

3.3 Increase our presence and operations in neighboring markets.
Commercial agreements with our neighbors will speed up the decarbonization of northeastern North America while creating major economic benefits for Québec.

3.4 Continuously improve our operations management so that we can offer quality service at the lowest cost.
We’ll make sustained efforts to improve our efficiency and do what we can to limit the cost of the energy transition.
OBJECTIVE 3
Increase Québec’s collective prosperity.

STRATEGY 3.1
Realize the full value of our energy and its attributes.

Our initiatives

- Promote Québec as an attractive place to set up shop for multinationals and foreign investors seeking to reduce their environmental footprint and energy costs.

- Leverage all the services related to our hydropower, including capacity and ancillary services.

  The ancillary service offerings associated with hydropower are superior to those of other renewables like wind and solar, particularly in terms of flexibility, reliability and the ability to meet operating reserve requirements.

  In order to take full advantage of hydropower’s potential, we will determine the economic value of the range of related services available on the market, compared to the value of services associated with other energy sources.

Work with the Québec government to adapt the legislative and regulatory frameworks and our own rate structure to the needs of the energy transition.

The energy transition, technological advances and the proliferation of distributed energy resources will cause major upheavals in our industry over the coming years. To ensure an optimized transition at the lowest possible cost and keep pace with new market realities so that we can continue to serve our customers well, we’ll need to become more agile and more flexible.

For this reason, we will provide input to the Québec government’s reflections on the evolution of the laws and regulations that govern our activities. Among other things, we will:

- Take part in the implementation of an electricity supply model that’s agile, flexible and cost-effective.

- Develop rate options that reflect the value of our locally generated renewable energy and that will help us meet growing demand while keeping our residential rates very competitive.

What are ancillary services?

The term “ancillary services” refers to a wide range of services that help maintain the stability and reliability of an electric power system, including power line frequency control and operating reserves of generating capacity that can be quickly dispatched in the event of an emergency. Together, these services finely balance electricity supply and demand within system operating limits.
OBJECTIVE 3
Increase Québec’s collective prosperity.

STRATEGY 3.2
Sustainably maximize the wealth we create for Québec through our operations.

Our initiatives

- Integrate environmental, social and governance (ESG) criteria into our management practices and decision-making processes, as well as into the selection of our suppliers and partners.

Our stakeholders expect our governance to be exemplary, in keeping with the principles of sustainable development. They also expect us to report on our performance, giving priority to the ESG factors that relate to our operations. We will therefore:

  • Integrate ESG criteria and sustainable development principles into our decision-making processes regarding our business partnerships and large-scale projects.

  • Select suppliers and subcontractors who fulfill the relevant ESG requirements and establish a mechanism to ensure these requirements are met.

  • Maintain the exemplary governance practices of our Board of Directors and our internal decision-making processes.

  • Put greater emphasis on ESG performance criteria in our publications and in the reporting of our financial results.

  Support the realization of promising projects involving the integration of new energy-intensive loads into the grid.

Our tightened energy and capacity balances, combined with the keen interest in our energy, are prompting us to qualify and assess projects from a new angle.

To maximize the creation of sustainable wealth for Québec and limit impacts on the power system, we will:

  • Determine, in collaboration with the government, which energy-intensive projects will generate the most positive impacts for Québec, taking into account a range of factors, in particular economic development, rate impacts and contribution to decarbonization.

  • Implement innovative solutions to facilitate the planning of our grid, such as orienting certain types of customers to areas with sufficient capacity or deploying mechanisms to proactively prepare to connect new customers.

  • Strengthen our supply chain while maximizing the creation of sustainable wealth.

As a government-owned corporation with a strong presence across Québec, we contribute to the economic and social development of communities and prioritize dealings with local businesses while leaving room for healthy competition. To maximize the spinoffs from our procurement of goods and services, we will be stepping up our efforts in this regard.

Moreover, to ensure supply chain robustness for certain strategic products and services, we will seek out long-term partnerships grounded in value creation and supply security.

Spinoffs from our operations for Québec – 2019–2020 averages

- $3.6 billion in Investments
- $2.8 billion in Procurement of goods and services
- $3.9 billion in Contribution to Québec government revenue
OBJECTIVE 3
Increase Québec’s collective prosperity.

STRATEGY 3.3
Increase our presence and operations in neighboring markets.

Our initiatives

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**Optimize our energy exchanges with neighboring systems.**

We already operate 15 interconnections that enable us to trade energy according to the needs of Québec and neighboring markets. The addition of variable energy sources like wind and solar in our export markets in the coming years will increase the role our reservoirs play and thus boost the value of their storage capacity. Recent studies also show that increased energy exchanges between Québec and its neighbors will make it possible for northeastern North America to decarbonize at a reduced cost.

That is why we plan on pursuing our cooperation with neighboring markets to help them reach their GHG reduction targets and capitalize on the business opportunities these markets present. With this in mind, we will:

- Refurbish certain substations to enhance our bidirectional flow capacity and thereby harness the full potential of our existing interconnections.
- Commission new interconnections with the New England and New York markets as part of two projects—the New England Clean Energy Connect (NECEC) and the Champlain Hudson Power Express (CHPE).

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**Continue to explore the commercialization of ancillary services in neighboring markets.**

Decarbonizing the Northeast comes with a host of technical challenges, including the integration of large volumes of variable renewables. Our hydropower places us in a strong position to help our neighbors in this respect by offering ancillary services.

To this end, we will pursue our discussions with neighboring system operators and the relevant regulatory bodies with a view to increasing business opportunities in these markets.

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**Focus our asset acquisition initiatives on potential economic benefits and opportunities to develop our expertise or gain market access.**

We are in a highly competitive marketplace where many players, including major institutional investors, are battling it out for the most attractive opportunities to acquire renewable energy assets. In this context, we have chosen to focus our efforts on assets where we can bring added value, whether through our expertise as a utility or our knowledge of the geographic market in question.

Over the next few years, we will target assets—primarily in neighboring markets and ideally early in their development cycle—that could, in particular, offer our subsidiaries the chance to play a complementary role.

In a broader sense, we will be on the lookout for opportunities that, in the long term, will let us not only create wealth for Québec, but also acquire knowledge and expertise that complement our existing know-how.

We will therefore continue to actively monitor the North American market to identify the most attractive acquisition targets.

To reinforce our role as a key player in the energy transition, we will also target co-investment opportunities, including those that may arise from our strategic alliance with Innergex.
OBJECTIVE 3
Increase Québec’s collective prosperity.

STRATEGY 3.4
Continuously improve our operations management so we can offer quality service at the lowest cost.

Our initiatives

Step up our efforts to boost efficiency and productivity.

To keep our electricity rates competitive, we will maintain our efficiency drive to optimize resource use and foster sound management of our operating costs. In particular, we plan to:

- Prioritize our initiatives based on common lines for improvement.
- Draw inspiration from best practices and share those that are the most relevant across the company.
- Integrate new technologies into our processes.
- Use data modeling, analytics and artificial intelligence to enhance our business decisions.
- Launch pilot projects to test new methods.

- Foster a culture of continuous improvement and lean management, based on maximizing efficiency to achieve the desired results.
- Exercise proximity leadership and support our field workers to help them enhance their performance.

Optimize the planning and execution of our major capital projects.

Current labor shortages mean we must increase our efficiency in carrying out major infrastructure projects, which will be numerous given our growth activities and the need to replace certain assets. More specifically, our teams will work to:

- Develop integrated investment plans with cross-functional scheduling and optimize their implementation in terms of capacity, predictability and agility.
- Produce a multiyear view of investment and maintenance needs.
- Perform a project portfolio scenario analysis to enable informed decision-making over the long term and promote wealth creation for Québec.
- Maximize the use of technology and optimize the shift toward processes that use AI, including digital twins.
- Ensure cross-functional risk management and value creation for our projects, keeping in mind best practices and our strategic objectives.

What’s a digital twin?

A digital twin is a scalable virtual replica of a physical asset (like a generating unit) that, through automatically updated data and simulation tools, can continuously monitor and predict the condition and behavior of its real-life counterpart, with the goal of optimizing the latter’s performance.
OBJECTIVE 4

Engage our customers, employees and partners in the achievement of our goals.

Successfully transitioning to a low-carbon economy will entail the mobilization of all players in the energy ecosystem. With our strong presence across Québec, we are well positioned to work with partners from all regions and walks of life and to use our clean energy to serve Québec society.

More than ever, the general public will also have a key role to play in optimizing energy use. By pooling our efforts with those of the entire population to implement innovative solutions adapted to the Québec context, we can create maximum value for all Quebeckers. And it goes without saying that our employees will continue to be at the heart of our achievements as we carry out the ambitious project of electrifying Québec’s economy.

Our strategies for making this happen

4.1 Offer our customers a simple and engaging experience that is tailored to their needs.

We will be focusing on clarity and simplicity in all of our interactions with customers.

4.2 Strengthen our relations with local and Indigenous communities.

The vitality of all regions of Québec is central to the transition to a green economy, and we are committed to doing our part.

4.3 Increase collaboration with our external partners to resolve top-priority energy issues.

The collective force of all players engaged in the energy transition will make it possible to find optimal solutions to complex issues.

4.4 Remain an employer of choice and become a leader in occupational health and safety.

Because Hydro-Québec would be nothing without the energy, skills and know-how of its employees, their well-being will always be a priority.
OBJECTIVE 4
Engage our customers, employees and partners in the achievement of our goals.

STRATEGY 4.1
Offer our customers a simple and engaging experience that is tailored to their needs.

Our initiatives

Simplify and adapt the customer experience.

The arrival on the market of new technologies, an increase in communication channels and the diversification of our services: all of this can complicate things for the customer.

By placing our customers, more than ever, at the core of our decisions, we will pursue our efforts to provide a simple and engaging experience tailored to their needs.

In concrete terms, we will:

• Deliver an experience that’s consistent across our many channels.
• Listen to our customers and keep abreast of best practices.
• Improve our advisory role and strive to support our customers, whatever their needs: energy use management, choice of products and services, payment arrangements for customers coping with financial difficulties, etc.

• Use the best tools available on the market to increase our responsiveness and agility and facilitate our interactions at every stage of the customer journey.

Use the power of data to anticipate and better meet expectations in each customer segment.

Optimizing the customer experience hinges above all on being able to tune into their needs and expectations. Today, data analytics can help us deliver the right offer to customers at the right time.

To leverage the power of data, we will:

• Continue to improve our analytical capabilities.
• Assess and improve our interactions based on the information at our disposal.
• Adapt our offers and services to the specificities of different customer categories.

We remain committed to using data securely and applying the best cybersecurity practices, with absolute respect for privacy, at all times.

Create more opportunities for customers to voice their opinions and participate in certain decisions.

Like all Quebeckers, our customers are becoming increasingly aware of the importance of successfully transitioning to a green economy. That’s why we want to encourage them to share their ideas and experiences with us, be it to:

• Improve their interactions with us.
• Convey their expectations and preferences.
• Influence our priorities and spheres of activity.

We will also continue to seek out opportunities to consult with the general public and enlist their participation in bringing to fruition key projects for Québec.
OBJECTIVE 4
Engage our customers, employees and partners in the achievement of our goals.

STRATEGY 4.2
Strengthen our relations with local and Indigenous communities.

Our initiatives

Intensify cooperation with local communities.
Québec’s cities, towns and regional county municipalities (MRCs) are important partners for us: they’re our customers, the host communities for our current and future facilities, and the managers of local infrastructure. In the coming years, we will therefore:
• Strengthen ties with our municipal partners, remaining open to their concerns and increasing discussions about our respective issues, such as flood management, vegetation control and the planning of our activities and projects.
• Continue to implement practices aimed at improving the social acceptability of our projects and activities.
• Promote our facility tours to the general public.

Contribute to regional vitality by maintaining the geographic distribution of our workforce.
We endorse the Québec government’s workforce regionalization strategy and will contribute to its realization, in keeping with our business objectives. In fact, our workforce is already highly regionalized, not only to meet our customers’ needs, but also because our projects and facilities are located across Québec. We are firmly committed to continuing our active support of regional vitality.

Maintain an ongoing dialogue and deepen our involvement with Indigenous communities.
We are committed to developing lasting relationships with Indigenous communities so that they may influence our decisions and play a larger role in our projects and activities. To do so, we will:
• Maximize our employees’ presence in Indigenous communities.

Reach out through different tools and communications channels (website, newsletters, Facebook page, educational videos, etc.).
• Be attentive to the needs of Indigenous communities and conduct surveys to gauge the quality of our relations.
• Continue to raise our employees’ awareness about the culture of Indigenous peoples and the different communities in which they live.

Over the next few years, we will strive to:
• Launch innovative joint undertakings related to investment projects or operating activities, like the partnership concluded with the Mohawk Council of Kahnawà:ke as part of the Hertel–New York interconnection line project or the reconciliation process with Uashat mak Mani–utenam (ITUM).
• Negotiate and implement employment agreements.
• Contribute to other areas of communities’ economic development—such as access to fiber optics or technology showcases on energy efficiency and decarbonization—with a view to generating mutual benefits.
Working with Indigenous partners, develop job offers and key skill-building opportunities adapted to the needs of the First Nations and the Inuit Nation.

We are committed to creating an open and receptive workplace that takes the realities of Indigenous communities into account. To improve our performance in this regard, we will:

- Financially support organizations and initiatives promoting academic success.
- Support and get involved in training in areas related to our activities.
- Expand our Indigenous workforce and ensure an equitable representation of Indigenous employees in our various job categories.
- Provide a work environment that offers employees from Indigenous backgrounds the chance to reach their fullest potential.

Increase collaboration with our external partners to resolve top-priority energy issues.

Our initiatives

Stimulate innovation and the development of expertise by forging partnerships with energy sector players and the educational community.

Given our role as Québec’s primary electricity supplier, we are well positioned to work with our sector’s many different stakeholders to resolve priority issues regarding the electrification of the economy. Establishing close working relations with the various players in the energy ecosystem—including established companies and start-ups, academia, community associations, research centers and customers—will not just help stimulate innovation and the development of expertise, but also foster the adoption of new technologies.

To create this cooperative framework, we plan to:

- Expedite the deployment of open innovation programs.
- Forge links with emerging companies focused on issues related to our core business.

Make some of our data available to the public to foster knowledge sharing and inject vitality into the innovation ecosystem.

Over the past few years, data democratization—access to a broader range of company data—has become an essential focus. Our open data initiative aims to allow third parties in Québec’s energy ecosystem to use some of our information to enhance customer products and services. It goes without saying that we will take all necessary steps to ensure the security and confidentiality of sensitive data regarding our customers and operations.

The types of data that could prove useful to share include:

- Information on power outages
- Scheduling for planned work
- Real-time data related to fluctuations in demand and electricity generation in Québec
- Hydrometeorological data on water levels and flows, among other things
Focus our R&D efforts on priority issues related to our core business in the context of the energy transition.

Our challenge consists in striking the right balance between projects that deliver quick wins and those that will help us find innovative ways of optimizing the design and operation of tomorrow’s energy system.

In the coming years, our efforts in this sense will mainly go toward:

• Helping to implement efficient electrification and support its growth.
• Moving automation forward to improve energy efficiency and resilience, for both our customers and the power grid.
• Improving system interventions and the decision-making process regarding our assets.
• Modernizing our assets.
• Rethinking power system design and operation.

We also plan to boost our research partnerships with the twofold aim of fostering collaboration and getting market feedback as quickly as possible.

Help improve understanding of energy issues and climate change, particularly among young people.

As a government-owned corporation, we have an important role to play in raising Quebecers’ awareness about the impact of our society’s energy choices. We’re also in a position to explain the links between climate change, GHG emissions and various energy sources. However, to maximize our impact, we need to join forces with other players. For this reason, we will:

• Work with environmental groups and the educational sector to create information campaigns and enhance educational program content with regard to renewables and their role in the fight against climate change.
• Enhance our own communication tools to explain the fundamentals of our operations.
• Support the initiatives of partners whose aims and initiatives align with our own.

Remain an employer of choice and become a leader in occupational health and safety.

Our initiatives

Aim for excellence in occupational health and safety.

We want occupational health and safety (OHS) to become a source of corporate pride, a true cornerstone of our culture and our practices in the field, and a tangible facet of our performance. To achieve this, we will focus in particular on:

• Cultivating a culture of caring and prevention while strengthening leadership within our own ranks and in those of our internal and external stakeholders.
• Stepping up our efforts to make a holistic approach to health—particularly psychological health—an intrinsic part of our culture.
• Communicating our OHS achievements to our partners and stakeholders.
• Developing skills and leadership among our employees in the field.

Enhance the employee experience to attract the talent we need to meet our future requirements and foster employee engagement.

In a labor shortage context, the employee experience is of paramount importance. This spurs our commitment to modernizing the experience we offer our employees to better reflect who we aspire to be as an employer. In so doing, we hope to stimulate employee engagement, boost pride in our achievements, keep our talent pools topped up and attract new talent.

In concrete terms, we will:

• Review our value proposition, including with regard to flexible work arrangements, based on changing market expectations.
• Adapt our processes, policies and practices.
• Modernize our work tools.
Ensure that we maintain our expertise and continue to evolve key competencies.

As the pace of change continues to increase, our trades are constantly evolving. To sustain this pace over the long term, we will need to adapt and anticipate our changing needs regarding core competencies.

We will therefore work toward:

- Using new tools to better understand, guide and monitor skills development among our employees while ensuring that current expertise is retained.
- Working more closely with our business partners and the educational sector to develop the expertise needed for the energy transition.
- Setting up knowledge-sharing networks between different teams and crews in the field.
- Integrating “learning in the flow of work” tools, i.e., tools that are readily available in real time in the context of daily activities.

Increase diversity and foster inclusion.

With inclusion as one of our core values, we aspire to be a role model for diversity and the kind of inclusive workplace where everyone, whatever their background and particular situation, has the opportunity to achieve their full potential.

To achieve this, we commit to:

- Hiring more people from diverse backgrounds and supporting them through the key stages of their journey within our company.
- Changing behaviors and internal practices by taking note of everyone’s concerns.
- Helping managers to develop the right reflexes with regard to equity, diversity and inclusion by better equipping them to lead a diverse workforce.

Seize opportunities to work in concert with the unions and our workforce to help our organization evolve.

The energy transition and changing face of the energy sector bring their share of challenges, but they also give rise to new possibilities that lead us to change our ways of doing things.

To navigate these changes successfully and come up with optimal solutions, we will:

- Reinforce the dialogue with all of our employees.
- Foster a participative approach that encourages unions and the overall workforce to propose and help implement solutions.
SECTION 04

Financial outlook and performance indicators
Our financial outlook

Net income ($B)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual data</th>
<th>Outlook¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>2020</td>
<td>2.3</td>
<td>3.5</td>
</tr>
<tr>
<td>2021</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>4.1</td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Based on normal temperatures.

Main factors that can lead to variations in net income

<table>
<thead>
<tr>
<th>Factor</th>
<th>Impact on net income for 2022 ($M)</th>
<th>Impact on net income for 2026 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy prices on export markets</td>
<td>±165</td>
<td>±250</td>
</tr>
<tr>
<td>• Variation of US 1¢/kWh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange rate (C$/US$1)</td>
<td>±15</td>
<td>±250</td>
</tr>
<tr>
<td>• Variation of 10¢</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperatures above or below normals (December–March)</td>
<td>±95</td>
<td>±95</td>
</tr>
<tr>
<td>• Variance of 1°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our performance indicators

The Strategic Plan lays the groundwork for medium- and long-term actions through which we aim to maximize our contribution to the energy transition. The targets and performance indicators presented herein will help us gauge our progress in the coming years.

### Indicators and targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2021</th>
<th>2025 target</th>
<th>2026 target</th>
<th>2029 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoided GHG emissions in Québec (Mt CO₂ eq.)</td>
<td>4.8¹</td>
<td>7.1</td>
<td>7.1</td>
<td>8.200</td>
</tr>
<tr>
<td>Energy savings resulting from our energy efficiency initiatives (GWh)</td>
<td>22.7</td>
<td>28.1</td>
<td>4,000</td>
<td>8,200</td>
</tr>
<tr>
<td>Net income ($B)</td>
<td>3.6</td>
<td>4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputation index (overall score out of 10)</td>
<td>7.5</td>
<td>&gt; 7.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined customer satisfaction index (out of 10)</td>
<td>8.4</td>
<td>8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification level under the Canadian Council for Aboriginal Business's Progressive Aboriginal Relations (PAR) program</td>
<td>Silver</td>
<td>Gold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity, diversity and inclusion (% of new hires from diverse backgrounds)</td>
<td>44.5</td>
<td>50.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost time accident frequency rate (per 200,000 hours worked)</td>
<td>1.10</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable engagement index (%)</td>
<td>88</td>
<td>&gt; 88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. December 31 forecast established in October 2021.
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

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M$</td>
<td>millions of dollars</td>
</tr>
<tr>
<td>$B$</td>
<td>billions of dollars</td>
</tr>
<tr>
<td>W</td>
<td>watt (a unit for measuring capacity or power demand)</td>
</tr>
<tr>
<td>MW</td>
<td>megawatt (one million watts)</td>
</tr>
<tr>
<td>Wh</td>
<td>watthour (a unit for measuring electric energy)</td>
</tr>
<tr>
<td>kWh</td>
<td>kilowatthour (one thousand watthours)</td>
</tr>
<tr>
<td>MWh</td>
<td>megawatthour (one million watthours)</td>
</tr>
<tr>
<td>GWh</td>
<td>gigawatthour (one million kilowatthours)</td>
</tr>
<tr>
<td>TWh</td>
<td>terawatthour (one billion kilowatthours)</td>
</tr>
<tr>
<td>V</td>
<td>volt (a unit for measuring voltage)</td>
</tr>
<tr>
<td>kV</td>
<td>kilovolt (one thousand volts)</td>
</tr>
<tr>
<td>t</td>
<td>tonne (metric ton)</td>
</tr>
<tr>
<td>t CO₂ eq.</td>
<td>tonnes of CO₂ equivalent</td>
</tr>
<tr>
<td>Mt CO₂ eq.</td>
<td>million tonnes of CO₂ equivalent</td>
</tr>
</tbody>
</table>

Note: All amounts are expressed in Canadian dollars, unless otherwise indicated.
Hydro-Québec wishes to thank everyone, in particular its employees, whose photos appear in this Strategic Plan.

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