Sustainability Report 2021

Hydro Québec

Message from the President and Chief Executive Officer

Sophie Brochu
President and Chief Executive Officer

In 2020, the pandemic shook the world and called into question many of the things we take for granted, and 2021 was an ideal opportunity to rethink the way we operate. With our strategic planning under way, we invited our personnel, our partners and all Quebecers to take part in the process. As part of our Collective Energy consultation, nearly 27,000 people told us about their hopes and aspirations for everything from the green economy to sustainable mobility and responsible energy use. They allowed themselves to dream about new ways of tapping into our collective strength.

It is now up to us to turn those dreams into concrete initiatives. Hydro-Québec will be a catalyst, and not just another participant, in making those dreams come true. Whether it was our first plan to adapt to climate change, the microgrid we inaugurated in Lac-Mégantic, the power purchase agreement for the Apuiat wind farm co-owned by the Innu Nation, the opening of two solar power plants, our environmental studies on connecting our largest off-grid system in the Îles-de-la-Madeleine, our first-ever fleet of commercial electric snowmobiles or projects that will help decarbonize transportation, we took many steps to advance the energy transition in 2021.

With sustainability at the heart of our activities, we continue to support the Ten Principles of the United Nations Global Compact in the areas of human rights, labor standards, environmental protection and the fight against corruption by incorporating them into our strategies, practices and management processes. Our report on this effort, entitled “Communication on Progress,” can be found on page 90 of this document. While the challenges ahead are substantial, our commitment to meeting them is too.

Once again this year, our employees have demonstrated courage and determination in pursuing Hydro-Québec’s mission.

Sophie Brochu

Our mission, vision and values

MISSION

We deliver reliable electric power and high-quality services tailored to our customers' needs at competitive prices.

By developing 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 transmission systems, we help neighboring markets reduce their carbon footprint by leveraging the attributes of our renewable energy.

We are 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.

VISION

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

VALUES

The common good
Putting people and the community first.

Inclusion
Being a unifying force and a model of openness.

Courage
Believing in our ideals and acting on them.

Innovation
Making positive changes, day after day.

GRI 102-2

Our Sustainable Development Plan 2020–2024

Hydro-Québec's *Sustainable Development Plan 2020–2024* establishes an operational framework that revolves around three pillars of sustainability: governance, community and the environment. For each pillar, the plan identifies 12 strategies, each of which comes with improvement targets and performance indicators.

The Plan also takes account of the Québec government's major priorities and actions. Some of the strategies it puts forward support implementation of Québec's Government Sustainable Development Strategy 2015–2020, while others support its Agenda 21 for culture (in French only).

Governance

1 

Make sustainability principles integral to our governance, operations and projects.

2 

Do business with responsible suppliers.

3 

Significantly improve our occupational health and safety performance while fostering employee wellness.

4 

Offer an inclusive work environment that reflects Québec's diversity and rally our employees around sustainable development.

Community

5 

Foster Québec's development as a society through our financial contribution.

6 

Build and operate sustainable, resilient infrastructure while adapting our activities to climate change.

7 

Generate more sustainable value in the community.

8 

Take steps to include Indigenous peoples and encourage their input into our development.

Environment

9 

Work toward decarbonizing all of our business activities and markets.

10 

Equip Quebecers to lower their energy consumption through better electricity use.

11 

Enhance and protect biodiversity.

12 

Reduce resource use by applying the principles of the circular economy.

United Nations Development Programme

The UN agency United Nations Development Programme has identified 17 sustainable development goals (SDGs), whose realization requires close cooperation between governments, businesses, civil society and the general public. Hydro-Québec is actively working toward the following seven goals, which concern its field of activity. In this report, our contributions are indicated by icons in the Sustainable Development Plan progress reports, which are reproduced at the end of each section.

Affordable and clean energy

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.

7.3 By 2030, double the global rate of improvement in energy efficiency.

Decent work and economic growth

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7% gross domestic product growth per annum in the least developed countries.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

Reduced inequalities

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.

Responsible consumption and production

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Climate action

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Life on land

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

Peace, justice and strong institutions

16.6 Develop effective, accountable and transparent institutions at all levels.

SUSTAINABLE DEVELOPMENT GOALS

Collective Energy

In spring 2021, Hydro-Québec launched the Collective Energy initiative to find out which issues were most important to Quebecers and to help make their shared dreams come true.

This extensive consultation was one of the year's notable achievements, and it enabled us to take a fresh look at our sustainability-related priorities.

In regard to **governance**, the Collective Energy initiative gave Quebecers an opportunity to think about the projects that will ensure a successful energy transition for Québec. It also gave our employees a chance to propose their own ideas. This collective brainstorming provided valuable input for our *Strategic Plan 2022–2026*.

With respect to **community**, the Québec-wide consultation process took a close look at public priorities. Along with the views of the general public and its own personnel, Hydro-Québec heard from energy industry stakeholders, businesses, municipal organizations, universities and associations. That diversity of views is essential to ensuring the social acceptability of our projects and activities.

The **environment** is another of the three main thrusts of the Collective Energy initiative, which are the green economy, sustainable mobility and responsible energy use. Interest in environmental issues comes across clearly in the consultation findings. Some 27,000 people from across the province and over 7,000 Hydro-Québec employees took part and contributed more than 15,000 ideas, primarily on ways to use energy more efficiently.

In fall 2021, Hydro-Québec reviewed and categorized the ideas put forward to determine which projects it would carry out in the short, medium and long terms, depending on their complexity. A new approach called "the Hydro Lab" was launched to facilitate implementation of the selected projects and assist in finding innovative and promising solutions that could be tested and supported by customers and stakeholders. One of the initiatives entrusted to the Hydro Lab, for example, involves encouraging employees to drive electric and become role models for sustainable mobility.

One thing is sure: Hydro-Québec intends to pursue its dialogue with Quebecers to ensure its projects continue to represent their hopes and aspirations. It was for that reason that the Hydro and Me panel was created. Anyone who wishes to express their opinion and influence Hydro-Québec's business decisions can become a panelist and take part in the consultations, generally in the form of online questionnaires. It's a chance for everyone to help shape Québec's energy future!

GRI 102-44

Materiality Analysis

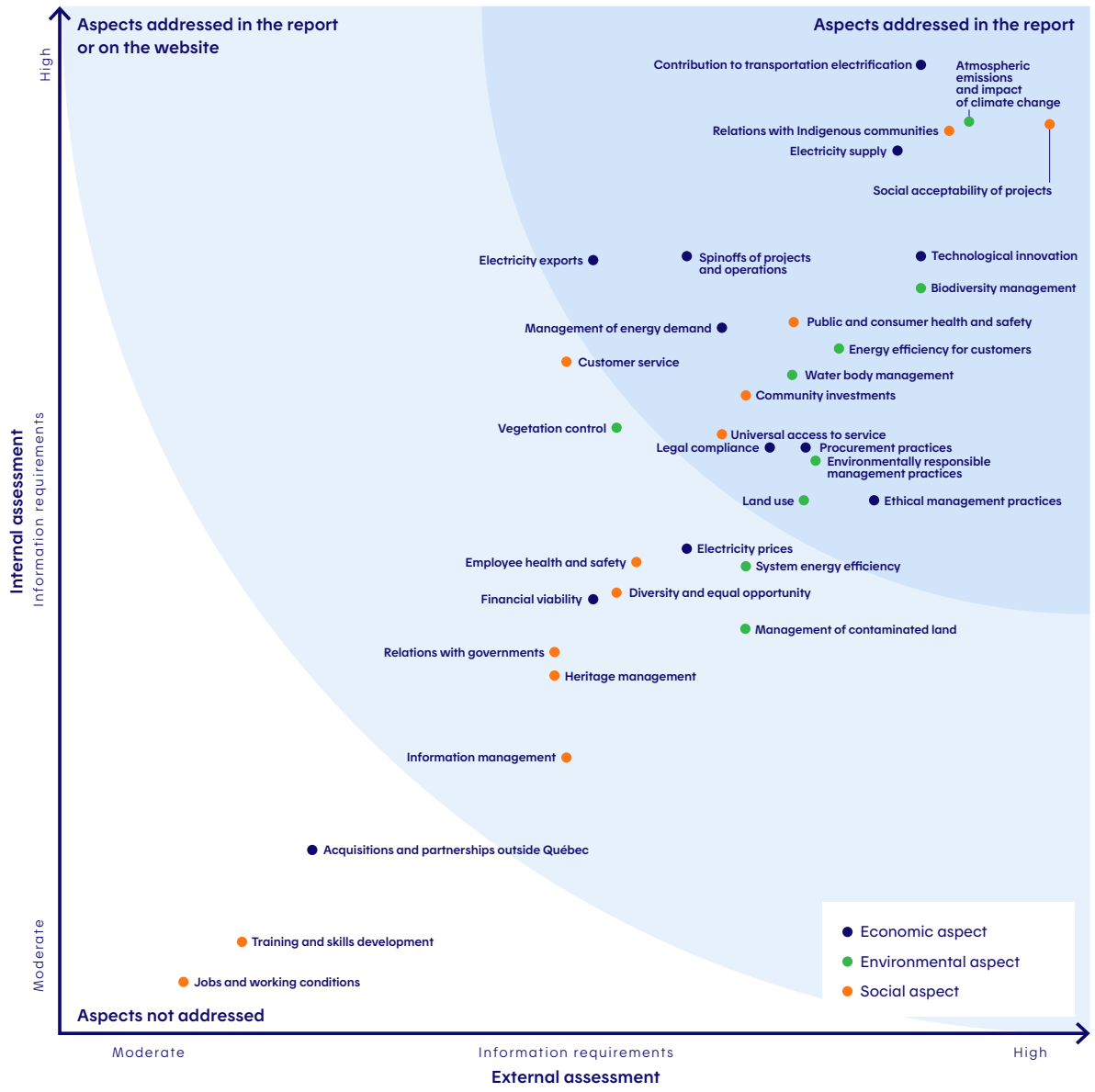
The *Sustainability Report* addresses subjects that concern Hydro-Québec's business environment and the nature of its activities, along with their social, economic and environmental impacts. The scope of those subjects is determined using a materiality analysis carried out every three years in consultation with internal and external stakeholders. The most recent consultation, which took place in January 2021, assessed the relative importance of each issue and topic to be covered in this report.

As part of the consultation, a survey was sent out to 192 external organizations, with 52 agreeing to participate. Their responses were rounded out by those of 82 Hydro-Québec staff members (out of 278 invited to take part). The survey results are shown in the materiality matrix.

In addition, a six-member advisory committee representing external stakeholders met three times during the year. Following the publication of the *Sustainability Report 2020*, the committee members took part in a responsiveness exercise during which they reviewed the aspects listed below. Their comments were taken into account in preparing this report. Further details can be found on page 84.

- Sustainability aspects and how they are addressed in the *Sustainability Report;*
- Ways to improve the *Sustainability Report 2021;*
- Ways to improve the *Sustainable Development Plan 2020-2024;*
- Hydro-Québec heritage management.

Materiality Matrix



Discussions and collaboration with stakeholders

Hydro-Québec is present throughout the province and maintains ongoing relations with numerous stakeholders. The company seeks to maintain relationships of trust with these stakeholders by being attentive to their expectations and concerns involving its projects and activities.

Hydro-Québec's stakeholders generally share the same views and concerns regarding issues such as transparency, ethics, environmental stewardship and adapting to climate change. As a result, some of the platforms and channels we use to communicate with them are shared by all: they include the *Annual Report and Sustainability Report* as well as various publications, websites and others.

We also use more targeted channels to address issues that are more specific to certain stakeholders.

Stakeholders	Specific expectations and concerns	Means used
 Customers	• Quality, accessibility and speed of service • Reliability of electricity supply • Competitive rates • Fairness for customers • Tailored collection services for low-income customers • Energy savings • Communications with non-English/French-speaking communities	• Customer satisfaction survey • Handling of complaints and claims • Translation services for the collections process • Energy efficiency partnerships • Collections working group
 Employees and unions	• Healthy, safe work environment • Harmonious labor relations • Competent succession • Training and skills development	• Occupational health and safety committees • Training programs provided by the company and unions • Employee engagement survey • International partnerships
 General public	• Public health and safety • Acceptability of projects • Social and economic development	• Public consultations • Regional economic spinoffs committees • Satisfaction survey • Public health and safety studies

GRI 102-9, 102-40, 102-42

Stakeholders	Specific expectations and concerns	Means used
Suppliers and investors	• Sustainable procurement practices • Economic spinoffs in Québec • Ethical behavior • Good governance • Risk management	• Participation in the Espace québécois de concertation sur les pratiques d'approvisionnement responsable (ECPAR), a group promoting sustainable procurement practices • Regional economic spinoffs committees • Code of conduct and rules • Mandatory disclosure of conflict of interest • Meetings with investors
Educational institutions	• Advancement of knowledge • Development of a skilled workforce • Education on key issues related to electricity	• Internships • Knowledge sharing • Presentations at universities • Support for universities • Educational kits • Research and innovation partnerships
Nongovernmental organizations	• Acceptability of projects • Tailored collection services for low-income customers	• Working group with consumer associations • Various partnerships • Community investments • Liaison committee with the Union des producteurs agricoles (UPA) [Québec farm producers' union] • Dedicated team to oversee relations with principal NGOs
Local and Indigenous communities	• Acceptability of projects • Harmonious integration of facilities into the environment • Respect for and preservation of local values and culture • Social and economic development	• Teams in charge of community and Indigenous relations • Joint committees and liaison committees • Support for local initiatives • Regional economic spinoffs committees • Agreements and other forms of collaboration
Government authorities	• Company profitability • Economic spinoffs in Québec • Contribution to government strategies • Application of sustainability principles	• Partnerships and participation in joint committees

GRI 102-9, 102-40, 102-42

About this report

The 20th edition of the *Sustainability Report* focuses on the activities carried out by Hydro-Québec in the province from January to December 2021 to implement its Sustainable Development Plan. Like the Plan, this report is divided into three sections corresponding to the main pillars of our sustainability efforts: Governance, Community and Environment. Each section ends with a table summarizing our progress with regard to the strategies and improvement targets set out in the Plan.

Data processing and verification

The scope of the topics covered in this report reflects the comments made by an advisory committee composed of representative external stakeholders.

All information has been carefully gathered and validated internally. In addition, an outside firm conducted an independent evaluation of a large amount of quantitative data and verified compliance with AccountAbility AA1000 principles. The data verified are presented in the "Audited performance metrics" section (see p. 82). An external assurance statement is supplied on page 96. This data verification method complies with GRI Sustainability Reporting Standards (GRI) standards. This report has been prepared in accordance with the GRI Standards: Core option.

In addition to this document, we use an array of communication tools to report on our sustainability performance, including a specialized website, corporate plans and reports, videos, presentations and lectures.

NOTE: Some of the photographs in this report were taken before the pandemic and the implementation of hygiene measures.

GRI 102-12, 102-45, 102-46, 102-50, 102-52, 102-54

How to use this report

INTERACTIVITY

This report, presented in PDF format, has interactive features made possible by Adobe Reader software.

FEATURES

Hyperlink to additional online information

Hyperlink to an online video

Text Hyperlink

GRI (GLOBAL REPORTING INITIATIVE)

In this report, references to GRI disclosures are shown in the bottom left corner of the page.

Value chain

The value chain includes all activities that create value, from product design to service provision. At Hydro-Québec, we integrate environmental protection, social progress and economic development considerations into every link of this chain. Hydro-Québec operates across Québec, and its activities have an impact in each of the province's 17 administrative regions. Please refer to the fact sheets (in French only) for the data specific to each region.

Construction

$2.8 billion

Volume of activity

Generation

37,247 MW

Installed capacity

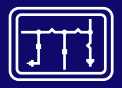
Transmission

34,775 km

Transmission lines

Activity	Value creation	Elements to monitor
Complete facility construction and refurbishment projects on schedule and within budget. Propose solutions that are effective, profitable and socially and environmentally acceptable.	Our projects create and sustain jobs for local suppliers and communities, in addition to generating various other spinoffs.	Construction projects can significantly impact both the environment and the host community. Projects must comply with all legislation, particularly environmental laws, in addition to being profitable, environmentally acceptable and favorably received by local communities.
Generate electricity from renewable energy sources while preserving the environment and taking into their use by communities.	Thanks to our hydropower, Québec companies produce goods and services with a small environmental footprint, while neighboring systems are able to obtain clean, renewable energy. Our generation activities also create economic benefits for the host communities.	Generation may involve impacts on the environment and nearby communities. The operation of generating facilities—including managing reservoir and flow levels—must take these human and environmental impacts into account.
Transmit electricity over long distances while limiting the impact on natural and human environments and the landscape. Integrate all energy inputs at the best possible cost and with the expected level of quality.	We provide high-quality, reliable power transmission, ensuring our electricity service meets our customers' needs. Furthermore, our interconnections facilitate advantageous power interchanges with neighboring systems.	Power transmission operations have an impact on the environment, particularly maintaining rights-of-way. Communities located near transmission facilities may also experience visual or noise impacts.

GRI 102-2, 102-6, 102-8, 102-15, 102-45, EU1, EU4, 103-1, 201-1, 203-2

	Activity	Value creation	Elements to monitor
 **Distribution and customer service** **4,457,198** Customer accounts	Provide reliable electricity service at the lowest possible cost and a uniform price. Assist customers in using electricity in a safe and environmentally friendly manner while keeping access to this essential service open to those experiencing payment difficulties.	We provide reliable power at some of the lowest rates in North America and high-quality services tailored to our customers' needs. We also recommend energy efficiency measures to help our customers reduce their power use.	Distribution may have impacts on the environment and local communities, such as during the vegetation control activities required to reduce outage risks. Customer services must take into account the situation of each customer, particularly low-income households.
 **Management and support of our activities, and business development** **$4.9 billion** Contributions to the Québec government's revenue	Establish and uphold rules on corporate governance and sustainability management. Oversee risk management, maintain a telecommunications network capable of processing massive amounts of critical data and explore new growth avenues.	Our corporate governance guidelines promote dialogue with the community, socioeconomic spinoffs and community investment. Our telecommunications network helps make power grid operations secure. New growth avenues stand to increase both our profits and the dividend paid to the Québec government.	The decisions made may have considerable repercussions on the entire value chain. Good governance and safeguarding the integrity of the telecommunications network and its data must be intrinsic to our corporate culture.
 **Technological innovation** **$173 million** R&D budget allocated to IREQ in 2021	Develop technological solutions to optimize power systems and extend their service life as well as to make the grid smarter, more automated and more flexible. Contribute to transportation electrification and to the development and integration of renewables.	By contributing to the improvement of our system and services, technological innovation is a driver of value creation. Our partnerships allow us to share expertise, resources and risks.	Technological innovation impacts a number of other stages in the value chain. Projects can be assessed based on their potential impact throughout their life cycle to determine the best possible solutions.

GRI 102-2, 102-6, 102-8, 102-15, 102-45, EU1, EU3, 103-1, 201-1, 203-2

Governance

Be a sustainable development leader by keeping to the highest sustainability standards, both internally and with our partners

Because the Québec government is its sole shareholder, Hydro-Québec's governance model is based on the common good. Our organizational structure, policies and guidelines make for a fair and inclusive workplace, and most of our workforce is unionized. We look out for the health and safety of our employees and partners and make certain that our suppliers behave responsibly. Finally, we integrate sustainability principles into our operations.

Key themes

- Governance structure
- Human resources
- Equity, diversity and inclusion
- Occupational health and safety
- Anti-corruption
- Responsible procurement
- Technological innovation

GRI 102-47, 103-1

Structure and operational oversight

The major priorities adopted by the Québec government—mainly through its Energy Policy and Sustainable Development Strategy—have a direct impact on the planning of all Hydro-Québec activities. Hydro-Québec comes under the authority of the Régie de l'énergie du Québec, which approves its planning tools, its rate practices for distribution and transmission operations and its transmission system investments.

Board of Directors

At the end of 2021, 11 women and 5 men appointed by the Québec government sat on Hydro-Québec's Board of Directors. Over the course of the year, the members of the Board took part in awareness training on various sustainable development issues, in particular climate change and Indigenous relations.

Committees supporting the Board of Directors

Board of Directors expertise and experience profiles [in French only]

Main sustainability governance activities

Board of Directors

- Three committees, as required under the *Hydro-Québec Act*: Governance and Social Responsibility, Audit, and Human Resources. In addition to these mandatory committees, the Act authorizes the Board of Directors to create other committees to examine particular issues or ensure sound management of the company. Currently, the Board has one committee established for this purpose: Financial Affairs, Projects and Technologies. All committees report to the Board, sharing advice and recommendations.
- Approval or review of various documents, including corporate policies and the Code of Ethics and Rules of Professional Conduct for Members of the Board of Directors, Executives of Hydro-Québec and Its Wholly Owned Subsidiaries (in French ony), Employee Code of Ethics, Strategic Plan, Business Plan, Annual Report and Sustainability Report

Performance reporting — Responsibility

President and Chief Executive Officer

- Approval of internal guidelines, the Sustainable Development Plan and the *Supplier Code of Conduct*
- Annual management reviews pertaining to the environment and occupational health and safety

Performance reporting — Responsibility

Structural units

- Various internal networks for discussing issues such as the environment and occupational health and safety
- Maintenance of certified management systems
- Environment and sustainability training
- Annual management reviews pertaining to the environment and the fight against corruption

GRI 102-18,102-22, 102-23, 102-24, 102-32, 103-2

Governance and Social Responsibility Committee

The Governance and Social Responsibility Committee makes recommendations on the adoption of the Strategic Plan, the approval of the Annual Report and company policies, the establishment of delegations of authority and the adoption of measures to assess Hydro-Québec's efficiency and performance. It is composed solely of independent directors, with the President and Chief Executive Officer attending committee meetings as a guest.

Sustainability governance

Commitment

- Mission
- Company policies
- Codes of ethics
- Our values

Planning

- Government guidelines
- *Strategic Plan 2022-2026*
- *Sustainable Development Plan 2020-2024*
- Business plans of major structural units

Implementation

- Management system containing components certified to international standards (ISO 14001, ISO 37001, ISO 9001, etc.)
- Annual review of the company's portfolio of business risks
- Environmental assessments (including impact statements and internal assessments)
- Research and development
- Stakeholder relations
- Internal discussion networks
- Training

Performance reporting

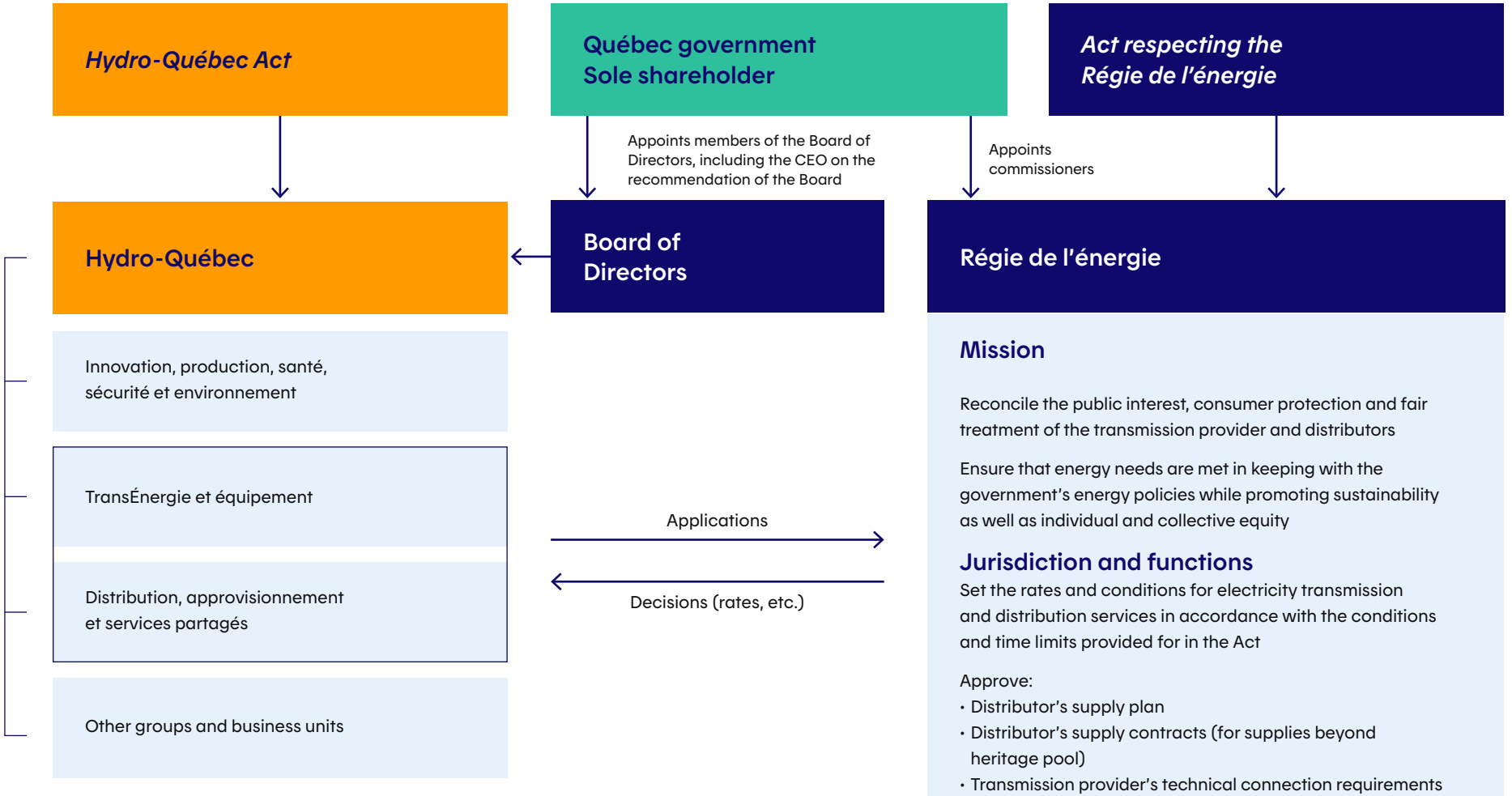
- Internal (annual reviews of company policies and guidelines, selected business lines and semiannual compliance reports)
- External (corporate documents)

Assessment and improvements

- Application of sustainability principles [in French only]
- Compliance audits
- Indicators

GRI 102-12, 102-16, 102-18, 102-22

Electricity regulation in Québec[a]



[a] Structure in effect on December 31, 2021

GRI 102-12, 102-18, 102-22

Guidelines and mechanisms for incorporating sustainability into our operations

Hydro-Québec implements structures, policies, directives and other guidelines to include sustainability principles in its governance and operations in many different spheres. As far back as 1973, namely 14 years before the Brundtland report first introduced the concept of sustainable development, we were already conducting environmental impact assessments on our projects.

In 2021, sustainability principles were incorporated into one additional directive, bringing the total number of policies and directives integrating these principles to 11.

Environment

In accordance with its environmental policy, Hydro-Québec is committed to remaining at the forefront of environmental protection. As a result of our diligent and responsible management, we ensure that our operations create value for Québec society, that they are optimized from an environmental perspective and that they are favorably received by the communities affected.

Human resources

The company's human resources policy aims to create a vibrant, inclusive and respectful workplace that fosters skill development and retention.

Social responsibility

Hydro-Québec's role as a good corporate citizen is governed by a policy and a directive, ensuring that we contribute to the economic, social and cultural vitality of society while giving due consideration to the impact of our activities on society and the environment.

Paix des Braves reservoir

GRI 102-12

Indigenous relations

Hydro-Québec's policy advocates an approach adapted to Indigenous culture and governance structures in order to ensure the acceptability and successful integration of the company's projects and activities in Indigenous communities. We focus on building and maintaining relations based on mutual respect, partnership and the meaningful involvement of Indigenous people.

Safety and security

In matters of safety, our guidelines call for risk assessment programs to protect individuals, secure assets and preserve revenue.

Ethics

Ethical behavior is governed by three codes: the Code of Ethics and Rules of Professional Conduct for Directors, Executives and Controllers of Hydro-Québec and Its Wholly Owned Subsidiaries, the Employee Code of Ethics and the Supplier Code of Conduct. In accordance with the *Act to facilitate the disclosure of wrongdoings relating to public bodies*, we have also adopted a procedure for handling allegations concerning wrongdoings and inappropriate situations. Any person who witnesses such an incident may report it by telephone, 24 hours a day. In 2021, a total of 35 disclosures were received through this channel, 10 of which were founded.

Performance reporting – 2021

Cases covered by Section 25 of the *Act to facilitate the disclosure of wrongdoings relating to public bodies*	**Number of cases**
Disclosures received by the designated officer	35
Cases closed under subparagraph 3 of Section 22	0
Well-founded disclosures (closed in 2021)	10
Disclosures broken down by category of wrongdoing set out in Section 4:	
A contravention of a Québec law, a federal law applicable in Québec or a regulation made under such a law	18
A serious breach of the standards of ethics and professional conduct	3
A misuse of funds or property belonging to a public body, including funds and property managed or held for others	4
Gross mismanagement within a public body, including an abuse of authority	8
Any act or omission that seriously compromises or may seriously compromise a person's health or safety or the environment	2
Directing or counselling a person to commit a wrongdoing described above	0
Information forwarded under the first paragraph of Section 23	0

GRI 102-12, 102-16

Human resources

Our workforce

At the end of 2021, Hydro-Québec had 21,168 permanent and temporary employees, an increase of 5.8% compared to 2020 even after 771 workers had retired. A total of 587 permanent positions and 1,803 temporary positions were filled during the year despite the pandemic.

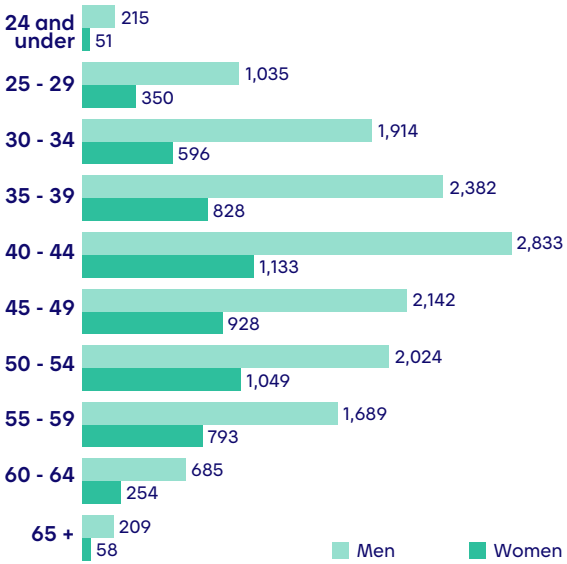
Number of employees

21,168

Average age

44.5 years old

Employee age pyramid (number)



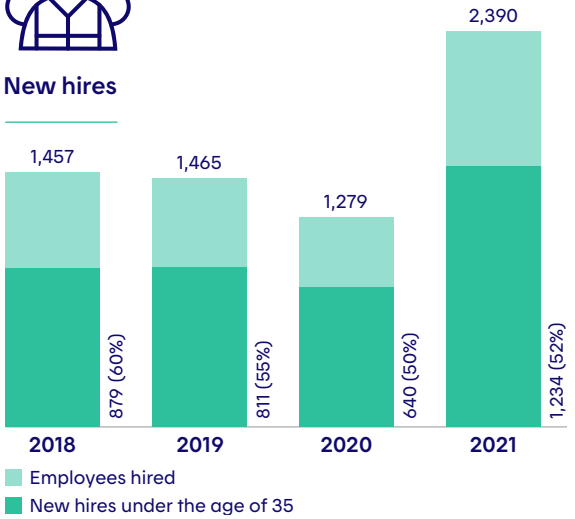
In 2021, employees aged between 45 and 59 represented 40.8% of the workforce. In this age group, 67.9% were men and 32.1% were women.

Recruitment

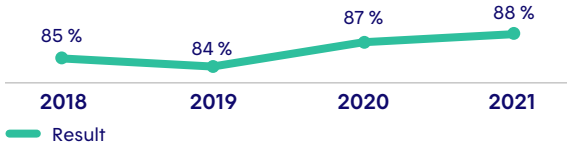
At the end of the second quarter, the number of positions to be filled was double the usual number, an unprecedented situation. The labor shortage and working from home required the use of innovative recruitment strategies, including a stronger social media presence made possible by our managers and employees, who affirmed their passion for Hydro-Québec and promoted our job openings.

We created more opportunities for employee dialogue and participation in corporate matters. Examples include setting up a standing consultation group and holding virtual get-togethers. We also pursued our initiatives with respect to working from home, digital solutions and real estate strategies to meet current job market challenges.

New hires



Employee engagement index



Employee engagement

Every year, Hydro-Québec measures its employee engagement index by means of a survey that gives employees an opportunity to express their views on various aspects of their work, their teams, their managers and the company in general. In 2021, the index was up from 2020 (87%).

GRI 405-1

Sustainability awareness

To further raise employee awareness of sustainability, Hydro-Québec released a series of six audio and video podcasts entitled *Durable, tout court!* These are in French and last 15 to 20 minutes each. Guests with sustainability expertise—both employees and external partners—were invited to discuss some of our sustainability initiatives and their social, economic and environmental impacts.

The employee involvement program set out in Hydro-Québec's Social Responsibility Directive was relaunched in 2021. It had been postponed because of the pandemic. A platform designed to meet community needs and make good use of our employees' skills will be set up to match employees with organizations.

Equity, diversity and inclusion

Hydro-Québec recognizes the value of having diverse teams, and it spared no effort in working toward its diversity targets in 2021. However, despite these sustained efforts, it is not yet representative of Québec society with respect to the groups identified in the Act.

In 2021, we took several concrete and impactful steps to promote equity, diversity and inclusion. Senior management confirmed that commitment by creating the Équité, diversité et inclusion unit to support each group underrepresented in the company. In addition, a number of projects brought us closer to achieving inclusion, including internships for people with disabilities and integration measures for immigrants. Recommendations also emerged from affinity groups, such as a mentoring program for people from ethnocultural communities.

For the second year running, we dedicated an entire week to inclusion. We welcomed well-known personalities like Louise Richer, Philippe Laprise and Fabrice Vil, but also (and more importantly) some of our employees from across Québec, including women, people with disabilities, and members of the Indigenous and LGBTQ+ communities. They shared their stories and spoke openly about their experiences, their expertise and hurdles they have overcome.

The proportion of women is relatively stable within the company, and the representation of women in middle management and executive positions has reached the parity threshold (40%). L'effet A, designed to groom the next generation of women managers, now has more than 200 graduates rising in the Hydro-Québec ranks. Various initiatives by groups of women leaders are under way, and the company has met with some 40 Hydro-Québec women to better identify factors hindering their full professional development.

As part of a pilot project, seven people with disabilities were hired in various positions and different regions. The project's goal is to remove the barriers preventing people in this underrepresented group from being hired, with follow-up done in each case. Each participant's integration into the workplace was monitored to make sure the necessary accommodations were put in place, assess the level of support required from the host team and identify success factors. The tasks of all seven people were adapted to their disabilities.

Representation of target groups (%)

	2018	2019	2020	2021
Women	28.8	29.2	28.5	28.5
Indigenous people	1.6	1.6	1.6	1.6
Ethnic minorities	1.6	1.9	1.9	2.0
Visible minorities	5.1	6.3	6.7	7.7
People with disabilities	0.6	0.6	0.6	0.7

A person may be included in more than one category. In 2021, 107 of the 276 students recruited hailed from diversity groups.

GRI 103-2, 405-1

Our zero-tolerance policy

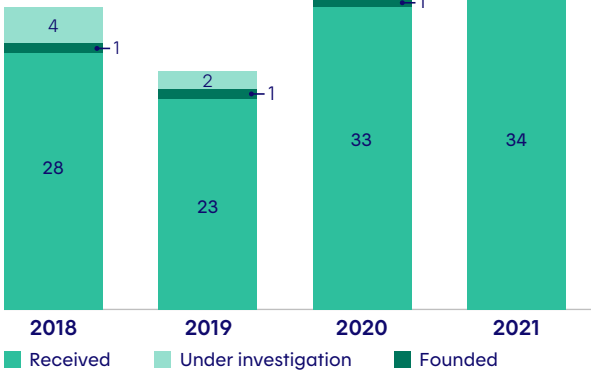
Keen to promote and maintain a healthy, engaging work environment, Hydro-Québec invites anyone who experiences or witnesses discrimination or harassment to report the incident or file a complaint. Once the report or complaint has been reviewed, and irrespective of the outcome, an action plan is implemented to resolve the conflict and improve the work environment.

OCCUPATIONAL HEALTH AND SAFETY

Once again in 2021, the pandemic was central to our occupational health and safety concerns. Because both managers and employees rigorously applied government health standards, the Hydro-Québec workplace remained safe throughout the pandemic. Overall, we had a lower incidence of COVID-19 cases than the Québec population as a whole. The vast majority of employees who did have COVID-19 contracted it outside the workplace.

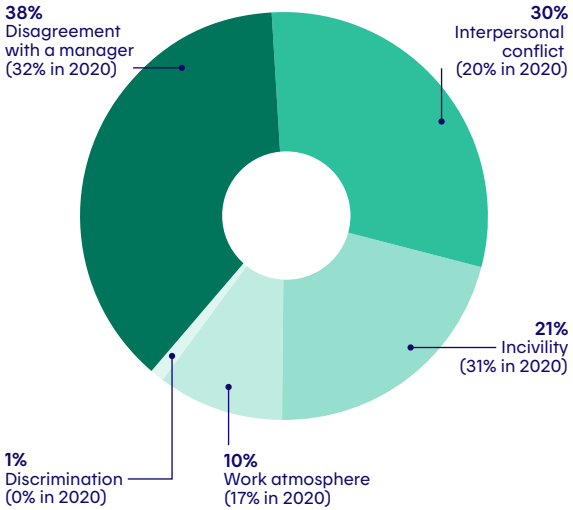
The pandemic experience prompted the company to come up with a flexible hybrid work plan. The plan recognizes that digital technologies and telework provide new remote opportunities for collaboration across Québec, reducing the need for travel and, by the same token, lowering the risk of accidents and the GHG emissions associated with transportation. The plan for transitioning to a hybrid working mode gave rise to three return-to-the-office pilot projects conducted in summer 2021 in Chicoutimi, Montréal and Québec.

Change in the number of complaints, by status (number)

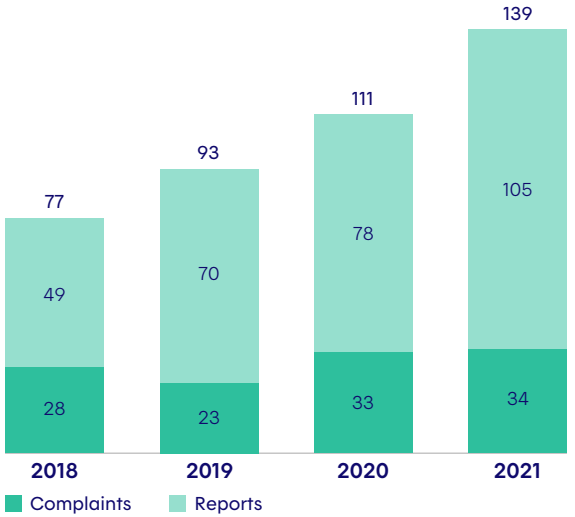


The number of complaints received is up, from 33 in 2020 to 34 in 2021.

Types of reports received (%)



Change in the number of cases identified (number)



The number of situations identified is up, from 111 in 2020 to 139 in 2021.

Risk control

Three contractor employees mandated to work on Hydro-Québec projects and activities lost their lives in 2021. Following these tragic events, the company stepped back to assess its occupational health and safety risk management practices. We will continue to develop simple standards for the key hazards to which we are exposed and ensure that they are widely disseminated and clear to all. Managers will continue to play a major role by maintaining a strong presence with employees in the field, with the full support of our prevention teams.

To date, we have rolled out specific programs to manage the risks associated with energy sources and moving vehicles, both priority hazards. We have improved standards for moving vehicles, including off-road vehicles and those operating on construction sites. Driver training for off-road vehicles (ATVs and snowmobiles) has refocused on individual skills. Measures have also been taken to reduce the distances traveled and improve compliance with speed limits.

In regard to energy sources, we continued updating our Work Safety Code and the associated guidelines in 2021. A new version of the Code is expected in 2022.

Hydro-Québec designed a specific program to include more rigorous health and safety selection criteria in its calls for proposals. The program has four main thrusts:

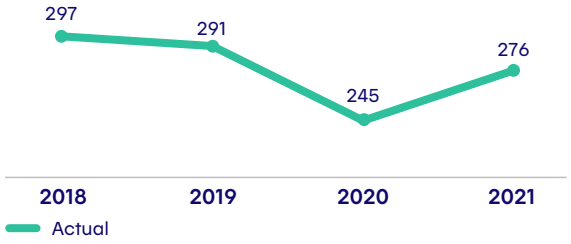
1. Integration of selection criteria in calls for proposals
2. Standardization of requirements
3. Performance evaluation program (in relation to requirements)
4. Better supervision aligned with sound management methods

Finally, because enhancing the skills and knowledge of our managers is key to improving the company's health and safety performance, we launched a skills development portal, a risk awareness campaign and a training course especially for them.

Lost time workplace accident frequency rate
(per 200,000 hours worked)

Accident frequency rose from 2020. Hydro-Québec is pursuing its initiatives to transform its occupational health and safety culture and improve not just its own performance in this area, but also that of its suppliers of goods and services. The accident rate indicates the number of events resulting in loss of time per 200,000 hours worked.

Potentially serious incidents



This indicator was introduced in 2018 to bolster our investigation and analysis practices and prevent the recurrence of serious incidents.

Field observations

Field observations are conducted by a manager. They are "safety time-outs" that give the manager and employees an opportunity to discuss health and safety issues related to a specific task. This prevention activity serves to identify any existing hazards, ensure that safe work methods are used, recognize good practices and suggest avenues for improvement. It concludes with a commitment by both parties to take the agreed-upon action.

GRI 403-9, 405-1

20 YEARS OF DEVELOPING HIGH-PERFORMANCE PROTECTIVE CLOTHING

Since the entry into force of electrical safety standards in the 2000s, Hydro-Québec has updated its flame-resistant clothing to increase the level of protection and ensure adequate visibility for roadside work.

To encourage the local economy, we mandated Québec suppliers to manufacture not only flame-resistant protective clothing but also the textiles used to make it. We remain on the lookout for new textiles and high-performance products that can ensure the comfort and safety of our employees.

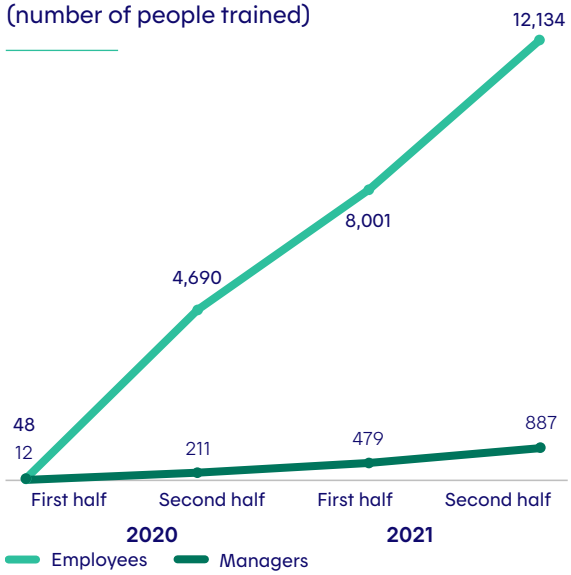
Saint-Hyacinthe material distribution center

Ethics, transparency and recognition

Anti-corruption

As one of the companies in Québec that awards the most contracts, Hydro-Québec has a duty to maintain best practices in the areas of ethics and transparency. In June 2021, we obtained ISO 37001:2016 certification, a first in Québec for a government-owned corporation. This certification confirms our desire to promote integrity in every aspect of our operations and is in keeping with the continuous improvement process in effect. The ISO 37001 standard proposes ways to prevent, detect and address corruption and provides guidelines for the design, implementation, maintenance and improvement of an anti-bribery management system.

Fostering an anti-corruption culture
(number of people trained)



Responsible procurement

In addition to the codes of conduct and ethics that its managers and employees must follow, Hydro-Québec ensures that its suppliers comply with the *Supplier Code of Conduct*, which was revised in 2021 along with the solemn declarations required of suppliers. We do not tolerate labor practices that run counter to the values and expectations set out in the Code. We therefore ask suppliers exposed to risks related to human rights infringements to adopt internationally recognized traceability protocols.

For many years now, we have been striving to purchase more goods and services from social economy enterprises whose activities support job creation, the fight against poverty, social inclusion, academic perseverance, gender equality and the integration of immigrants. We work with a number of them across the province, including Témabex (housekeeping) in Rouyn-Noranda, Groupe RCM (waste collection) in Trois-Rivières and Services Industriels RC (manufacturing of utility bags and tool holders) in Rimouski. Continuing that effort, we made a commitment to support the L'économie sociale, j'achète! initiative from the Conseil d'économie sociale de l'île de Montréal (CESIM) in 2021. In addition, under the 2021-2022 Action Plan for People with Disabilities, we ensure that the issues faced by people with disabilities are taken into account in the procurement of goods and services.

ECOVADIS PLATINUM MEDAL

In 2021, Hydro-Québec earned an EcoVadis Platinum Medal for its governance and management of social issues, human rights, ethics, responsible procurement and the environment. We now rank as one of the world's best companies in our industry—a distinction that puts us in good stead to promote our responsible and sustainable business practices to our industrial customers.

History of Hydro-Québec evaluations by EcoVadis

Year	Evaluation	Overall score
2021	Platinum (Top 1%)	73%
2019	Gold	66%
2017	Silver	61%
2016	Silver	52%

Reports about suppliers

Every year, we deal with more than 14,000 potential suppliers to procure goods and services. In 2021, thanks to stakeholders' vigilance, 209 reports were filed about our suppliers, an increase of 23% compared to 2020. These reports, 65% of which came from external sources, concerned potential irregularities involving conflicts of interest (57%), corruption, collusion, fraud or malfeasance related to economic integrity (32%), non-compliance with a law or regulation (8%), or intimidation or threats (3%).

We assessed the reports on the basis of their nature, the potential value of the information they contained and the risks they represented for the integrity of our operations. Everyone who agreed to provide information did so to effect change, request verifications or launch an investigation. A verification or investigation was performed for 84 of the reports, resulting in various administrative sanctions: warnings (3%), notices of corrective measures (26%), restitutions, penalties and other measures (62%) or loss of bidding privileges (9%).

Processing these reports helps improve our anti-corruption management system, as required by our ISO 37001 certification. In November, all potential bidders received a notice from the company informing them that forced labor had no place in our supply chain.

Access to information and protection of privacy

In the interest of transparency, we post documents and information whose publication is prescribed by the *Regulation respecting the distribution of information and the protection of personal information* on our website, where it can be easily accessed by the public. Under the guidance of the Committee on the Governance of Corporate Data and Technologies, we reminded employees of the principles governing access to information and privacy protection through company-wide mandatory training and internal communications as well as in the context of specific cases.

In accordance with the *Act respecting access to documents held by public bodies and the protection of personal information*, we processed 393 access-to-information requests concerning administrative documents or personal information in 2021, compared to 455 in 2020. Of this number, 172 were granted in full, 152 were granted in part and 39 were denied, most often because releasing the documents in question would pose commercial or security risks for the company or because the contents concerned third-party confidential information. As for the other 30 requests, either we did not have the requested documents, the request was withdrawn or the information concerned another public body. On average, requests were processed in 19 days.

In 2021, we received 11 review notices from the Commission d'accès à l'information, and no requests for access were the subject of accommodation measures under the government policy on equal access for persons with disabilities to publicly available documents and services.

In addition, we diligently handled four privacy incidents involving the personal information of customers. In each case, steps were taken to ensure that it did not happen again.

We are currently implementing a privacy protection program to ensure compliance with the legal framework set out in the *Act respecting access to documents held by public bodies and the protection of personal information*. An action plan was also developed to meet the requirements of the *Act to modernize legislative provisions as regards the protection of personal information*.

In the interests of transparency and to maintain public confidence in our privacy practices, we also adopted a privacy policy entitled Our Commitment to Your Privacy, which we have made public on our website.

Access to information requests – Number of requests processed, by type and processing time – 2021 (number)

	Requests concerning administrative documents	Requests concerning personal information	Requests for correction
Processing time			
0 to 20 days	67	148	1
21 to 30 days	59	73	0
31 days or more	20	25	0
Total	146	246	1
Average processing time: 19 days			
Decisions rendered			
Granted in full	60	112	0
Granted in part	44	108	0
Denied	25	14	0
Other	17	12	1

Open data

To ensure transparency and good governance, Hydro-Québec continued to share some of its digital data with the public in 2021. Expanded access to information is becoming increasingly essential to the way governments, businesses and societies operate.

Along with the data available in 2021 (planned and unplanned outages, pruning schedules, directory of trees and shrubs), the following were posted:

- Electricity demand in Québec (updated every 15 minutes)
- Sources of electricity generated in Québec (updated every hour)
- History of electricity generation and consumption data in Québec

The move to open data will continue next year with the addition of other sought-after information, such as figures on our greenhouse gas (GHG) emissions and interchanges with neighboring systems.

Open data contribute to energy efficiency and the energy transition by enabling stakeholders to better understand their electricity consumption. In 2022, power consumption data will be shared for all Québec municipalities, which will then be able to calculate GHG emissions on their territories. Internet users are already integrating our open data into the electricityMap platform, which charts the environmental friendliness of Québec's electricity.

Cyber security

Hydro-Québec's transparency efforts are governed by strict rules that ensure our industrial and corporate security and protect the confidentiality of personal information. Every day, there are news stories about data leaks or thefts. Most of the time, such incidents are the result of carelessness or negligence. To reduce the risks of cybercrime, we organize awareness and training activities for our employees to help them develop reflexes that enhance cyber security, in particular with respect to password management, email security, social media use, phishing and online fraud. Cyber security is truly everyone's business and must be an integral part of our everyday actions.

Awards

Best Corporate Citizen in Canada according to *Corporate Knights*

Corporate Knights magazine ranked Hydro-Québec as the top corporate citizen in Canada in 2021. This annual rating acknowledges the responsible business practices of corporations that make environmental, social and economic issues central to their activities. Over the past year, we distinguished ourselves for our water consumption, taxes paid, diversity within our management team and Board of Directors, clean investments and clean revenue, i.e., revenue derived from products or services that have a positive impact on society or the environment.

Platinum Award – Canada Awards for Excellence

Hydro-Québec's Groupe – Distribution, approvisionnement et services partagés won the Platinum Canada Award for Excellence in recognition of its outstanding performance in the areas of leadership, governance, strategy, customer experience, employee engagement, innovation and wellness. Hydro-Québec also distinguished itself in the Customer Centricity World Series 2021 in the Crisis Management, Customer Experience and Employee Experience categories.

Prix Novae award for the Lac-Mégantic microgrid

The microgrid project that we jointly developed with the municipality of Lac-Mégantic was selected by Novae Communications as one of the year's 20 most innovative solutions in recognition of the partners' remarkable collaborative effort. The convergence of our visions gave rise to an innovative strategy for managing assets, ensuring grid reliability and integrating new technologies and distributed energy resources. The strategy also garnered a Technology Transfer award from the Electric Power Research Institute (EPRI) in the Grid Modernization Roadmap Development category.

Leadership in External Collaboration and Partnerships Award

The commissioning of the Dune-du-Nord wind farm in the Îles-de-la-Madeleine won us the Leadership in External Collaboration and Partnerships Award from the Canadian Electricity Association, in the Sustainable Electricity category. The award goes to a company with a strong commitment to external collaboration and partnerships with Indigenous Peoples, local communities and other stakeholders.

Electric microgrid in operation in downtown Lac-Mégantic

GRI 405-1

Technological innovation

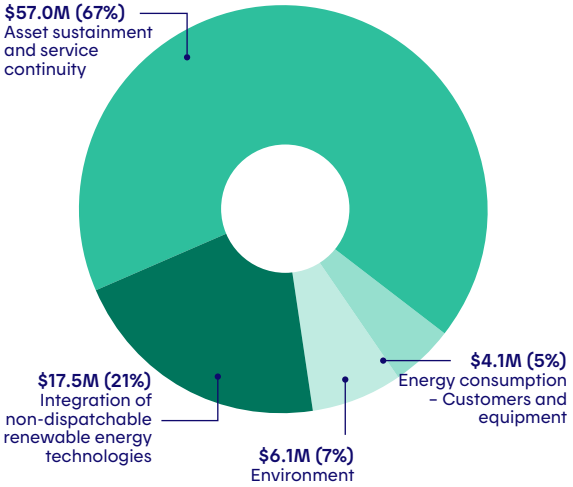
Hydro-Québec is one of the Canadian energy industry's top R&D spenders. Our research institute, IREQ, has a $173-million budget and boasts a team of 270 researchers and 105 technicians, as well as strategic partnerships with universities, research organizations and industrial businesses. IREQ holds 190 patents or pending applications in fields ranging from electricity transmission infrastructure to robotics, and from data science to digital systems.

In 2021, our income from patents and commercialized innovations totaled $9.3 million, compared to $6.8 million in 2020.

InnovHQ, a Hydro-Québec subsidiary, acts as an incubator for innovative solutions designed to accelerate the energy transition and spur technological innovation. It also manages the investment portfolios of our innovation subsidiaries. Those subsidiaries are stimulating the development of electric mobility (Electric Circuit, AXSO and Dana TM4), commercializing energy storage technologies (EVLO Energy Storage), providing smart energy solutions to customers (Hilo) and improving management of system power and reliability (EVLO and Hilo).

In 2021, to advance Québec's transition to food self-sufficiency, InnovHQ joined forces with Cycle Momentum to launch a technological challenge that gives start-ups a chance to test their innovative technologies in partnership with Hydro-Québec, businesses, educational institutions and customers.

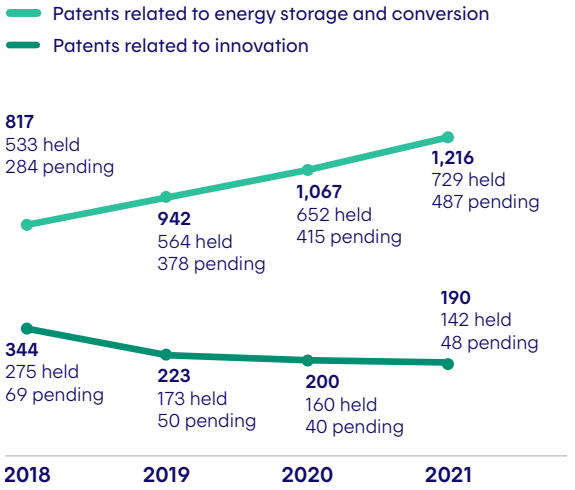
Breakdown of IREQ innovation efforts related to sustainability[a] – 2021



[a] Excludes investments in energy storage and conversion.

Overall total and sums of subtotals may differ due to rounding. In keeping with our Technology Vision 2035, we have begun restructuring our organization and research projects. Today, our efforts focus primarily on the long-term operability of our facilities and equipment.

Number of patents held or pending



Following a patent portfolio optimization and efficiency exercise in 2019, some 100 patents or pending applications were dropped. A correction was made to the data for the year 2020 in the table above.

OURANOS IS 20 YEARS OLD

To gain a better understanding of climate change issues and enhance grid resilience, Hydro-Québec co-founded the Ouranos consortium with the Québec government and other partners in 2001. Since then, the consortium has developed and conducted numerous research projects focusing on the potential effects of climate change on our activities and assets. Carried out in close collaboration with IREQ and our business units, these efforts have led to publications on hydrology, changes in asset values, the estimation of wind potential and the calculation of probable maximum floods for structural design purposes, all in connection with the effects of climate change.

Sustainable Development Plan – Progress report

Strategy

1. Make sustainability principles integral to our governance, operations and projects

SDG*

Target

1.1 Integrate sustainability principles into our corporate guidelines

Indicator

Percentage and number of policies and directives incorporating sustainability principles

Status

Sustainability principles integrated into 39% of our policies and directives (11/28)

Explanation

As part of the review of corporate policies and directives, sustainability principles were incorporated into one guideline in 2021, bringing the total number of policies and directives including them to 11 out of 28 (39%). Documents requiring revision were identified and updates will be monitored in 2022.

Target

1.2 Earn public recognition for our leadership in responsible governance

Indicator

Number of new recognitions for our leadership in responsible governance

Status

ISO 37001 certification and four new recognitions obtained

Explanation

Hydro-Québec has become Québec's first ISO 37001:2016-certified company. This certification confirms the reliability of our anti-bribery management system, which makes integrity, compliance and transparency central to all our activities.

New recognitions

- Lac-Mégantic microgrid named one of the 20 most innovative solutions in 2021 by Novae Communications
- Platinum Medal from EcoVadis for our sustainability performance
- Platinum Canada Award for Excellence – Innovation and Wellness
- Leadership Award in External Collaboration and Partnerships from the Canadian Electricity Association for the Dune-du-Nord wind farm project

Renewed recognition

- First place in the Best Corporate Citizens in Canada ranking established by *Corporate Knights*

* Sustainable development goal

GRI 102-16

Sustainable Development Plan – Progress report

Strategy

2. Do business with responsible suppliers

SDG*

Target

2.1 **Identify and apply occupational health and safety requirements to risk-sensitive work categories**

Indicator

Categorize suppliers based on the health and safety risk level of their activities and establish a qualification strategy (2020)

Begin integrating requirements for risk-sensitive work categories (2021-2024)

Status

Health and safety selection criteria defined and implemented in several pilot requests for proposals

Contractual requirements drafted for three key hazards for the company

Explanation

A pilot project was launched to include a health and safety questionnaire in requests for proposals for the purpose of selecting suppliers. Starting in April 2022, Cognibox, an external third party, will assess bidders' answers for major risk categories and then for risk categories 2 and 3 toward the end of the year.

The drafting of general and standardized contractual requirements for three key hazards (moving vehicles, live equipment and objects that are unstable or at heights) is nearing completion. Three additional requirements will be drafted in 2022 and the last three in 2023. These requirements will be incorporated into requests for proposals starting in 2022, beginning with the 25 major-risk categories.

* Sustainable development goal

GRI 103-2

Sustainable Development Plan – Progress report

Strategy

3. Significantly improve our occupational health and safety performance while fostering employee wellness

SDG*

Target

3.1 Obtain ISO 45001:2018 health and safety certification by 2023

Indicator

Progress in the ISO 45001:2018 certification process

Status

20.3% progress in the ISO 45001:2018 certification process

Explanation

We are currently designing and implementing an occupational health and safety management system (OHSMS) that will meet ISO 45001 requirements.

The system will provide a framework for our occupational health and safety management practices. In 2021, the working group in charge of the project continued its activities with the participation and collaboration of many stakeholders.

Target

3.2 Implement or showcase health and wellness initiatives

Indicator

Number of initiatives implemented or showcased

Status

36 health and wellness initiatives implemented

Explanation

We implemented 36 health and wellness initiatives, some of which are recurring. Addressing physical, psychological, social and financial health and wellness, some initiatives were aimed at all employees, while others focused on specific administrative units. Most of the initiatives will be maintained in 2022 and managed according to the company's strategy.

* Sustainable development goal

GRI 102-43, 103-2

Sustainable Development Plan – Progress report

Strategy

4. Offer an inclusive work environment that reflects Québec's diversity and rally our employees around sustainable development

SDG*

Target

4.1 Continue to improve equal access to employment by raising target group[a] representation

Indicator

Percentage of target groups in our workforce

Status

28.5% women (2020: 28.5%)

1.6% Indigenous people (2020: 1.6%)

2% ethnic minorities (2020: 1.9%)

7.7% visible minorities (2020: 6.7%)

0.7% people with disabilities (2020: 0.6%)

Explanation

The overall percentage of women in the company remains stable, and efforts must be made to increase their representation in all areas of activity. The percentage of cultural minorities increased significantly in 2021. In the administrative region of Montréal, these two groups represent 18% of the workforce. As for Indigenous people and people with disabilities, even though we doubled the number of new hires in 2021, their overall percentage in the workforce remained stable.

Target

4.2 Increase target group[a] representation in management positions

Indicator

Percentage of target groups in management positions

Status

26.6% women (2020: 26.0%)

1.1% Indigenous people (2020: 1.0%)

1.2% ethnic minorities (2020: 1.0%)

4.4% visible minorities (2020: 3.5%)

0.4% people with disabilities (2020: 0.5%)

Explanation

We have crossed the gender parity threshold for women in middle management and executive positions. There is still work to be done for supervisory management positions, which account for 60% of management positions: the percentage of women is stagnating, at approximately 18%. The biggest increase registered was for women from visible and ethnic minorities. For example, between 2020 and 2021, there was a 43% increase in the number of women from visible or ethnic minorities in management positions, while the increase for men from the same groups was around 25%.

[a] The target groups are women, Indigenous people, ethnic minorities, visible minorities and people with disabilities.

* Sustainable development goal

GRI 103-2

Sustainable Development Plan – Progress report

Target

4.3 **Implement a sustainability awareness program that promotes employee engagement**

Indicator

Progress in implementing the sustainable development awareness program (%)

Status

Sustainability awareness program promoting employee engagement 40% implemented

Explanation

We relaunched the employee involvement program provided for in our Social Responsibility Directive, which had been postponed to 2021 because of the pandemic. An action plan was developed to support partner organizations in every region of Québec by creating a platform to match employees who wish to volunteer with community organizations, thereby helping meet the organizations' needs while making good use of our employees' diverse skills. We also released *Durable, tout court!*, a six-episode podcast series on sustainability. This initiative was supported by an intranet page created for employees to expand their knowledge, get recommendations for civic engagement and share their achievements with others.

SDG*

Target

4.4 **Launch an action plan for disabled groups**

Indicator

Progress in implementing the action plan for disabled groups (%)

Status

Progress on 48 commitments:

13
completed: 27%

28
in progress: 58%

7
pending: 15%

Explanation

After being submitted to the Office des personnes handicapées du Québec, our 2021–2022 action plan for disabled groups is now being implemented. Although the pandemic delayed the process, more and more resources are now working on its rollout. Our results for 2021 show how far we have come in meeting our commitments.

* Sustainable development goal

GRI 103-2

Community

Contribute to Québec's social and economic development while improving the social acceptability of our projects and operations

In addition to the annual dividend it pays to the Québec government, Hydro-Québec contributes directly to Québec's social, cultural and economic vitality. Present throughout the province, we work closely with community representatives to balance the interests of all parties and see to the harmonious development of the land. We also contribute to the collective well-being by providing reliable, accessible and affordable electricity.

Key themes

- Financial contributions
- Donations and sponsorships
- Integrated Enhancement Program
- Public health and safety
- Community relations
- Indigenous relations
- Service accessibility and reliability
- Climate change
- Energy transition

GRI 102-47, 103-1

Creating collective wealth

In 2021, we posted net income of $3.6 billion, allowing us to pay our shareholder, the Québec government, a dividend of $2.7 billion. A significant part of this income is attributable to net electricity exports, which reached a volume of 35.6 TWh. Together with water-power royalties, the public utilities tax and guarantee fees related to debt securities, our contribution to the Québec government's revenue in 2021 reached $4.9 billion.

In Québec, electricity sales rose by 3%, stimulated by the easing of public health measures in comparison to the previous year and the spike in global aluminum prices.

Total electricity sales

	2018		2019		2020		2021	
	GWh	M$	GWh	M$	GWh	M$	GWh	M$
Electricity sales in Québec	172,814	12,134	174,580	12,429	171,446	11,929	175,229	12,319
Electricity sales outside Québec	36,524	1,731	34,789	1,510	32,397	1,395	36,190	1,919
Total electricity sales	209,338	13,865	209,369	13,939	203,843	13,324	211,419	14,238

DIRECT FINANCIAL CONTRIBUTIONS IN 2021

$2.7B
Dividend declared

$752M
Water-power royalties

$39M
Municipal, school and other taxes

$17.4M
Donations and sponsorships

$308M
Public utilities tax

$4.5M
Integrated Enhancement Program

GRI 103-2, 201-1, 203-2

Through our business strategies and operations, we support thousands of jobs and, to varying degrees, stimulate economic activity in every region of Québec. In 2021, we contributed some $22.7 billion to Québec's gross domestic product (GDP), an economic indicator that measures the creation of wealth. To this must be added all the positive effects of sustainable development, such as our social engagement in the community.

In 2021, our goods and services procured from Québec-based suppliers totaled $3,328 million, or 91% of total purchases. However, while most of these goods are distributed by Québec companies, a great many of them are manufactured outside Québec. Efforts are therefore ongoing to procure more Québec-made goods.

Our renewable hydropower has raised significant interest among various industrial groups seeking to decarbonize their operations. One example is Google, which in 2021 announced its plans to build a new data center facility in Québec. Such heightened interest will require us to work closely with our shareholder, the Québec government, to establish the economic, social and environmental criteria that will let it choose the projects most beneficial to Québec as a whole.

We plan to actively support government efforts to make Québec a world leader in the battery industry, a further avenue of responsible economic development. We also intend to support the Québec government's hydrogen development strategy by supplying electricity to promising hydrogen projects—those that stand to maximize economic spinoffs while reducing GHG emissions at the best possible cost for society.

Value of contracts awarded to social economy enterprises, by goods and services category

	Breakdown (%)			
Goods and services category[a]	**2018**	**2019**	**2020**	**2021**
Building operations and maintenance	46.54	48.85	49.61	44.43
Equipment – maintenance, repairs and operations	21.14	28.51	21.43	28.98
Vehicle maintenance	6.22	11.10	13.41	9.90
Vegetation control	5.50	–2.21[c]	0.00	3.96
Miscellaneous technical expertise	4.07	0.00	0.00	2.77
Corporate services	3.92	1.48	3.02	1.35
Electrical equipment	2.36	5.52	0.00	3.96
Other[b]	10.24	6.76	12.53	4.65
Total ($)	2,859,224	2,490,008	3,049,139	3,536,991

[a] Excludes the purchase of petroleum products from cooperatives.

[b] Includes the following categories; building construction, environmental services, power-line hardware, computer equipment, telecommunications and related services.

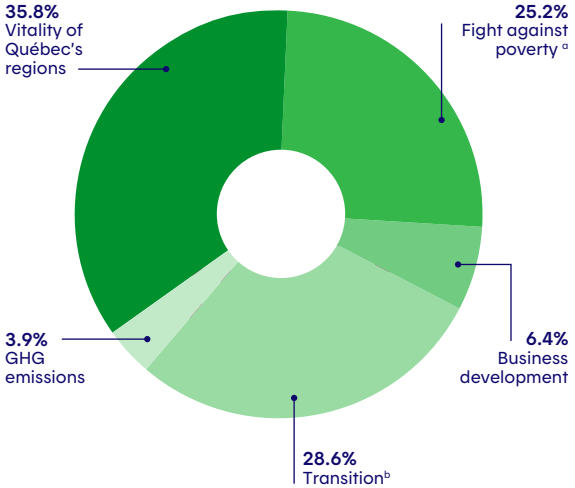
[c] The negative amount is the result of a 2019 invoicing adjustment.

GRI 102-9, 204-1, 413-1

Donations and sponsorships

Hydro-Québec has long supported the cultural and social vitality of Québec through its donations and sponsorships program. Some years ago when adopting our Social Responsibility Directive, we decided to focus on three priority issues: GHG emissions, the vitality of Québec's regions and the fight against poverty. The bulk of our donations and sponsorships budget has now been allocated to these issues. A portion amounting to 28.6% continues to be put toward preexisting multiyear commitments that will be phased out by 2026, while some 6.4% goes into sponsorships supporting our business development. In 2021, our donations and sponsorships totaled $17.4 million, while our contribution to the Centraide campaign reached $7.65 million, including donations from employees and pensioners.

Breakdown of donation and sponsorship contributions by issue – 2021



[a] Contributions to the fight against poverty include the $3,723,723 donated to the Centraide campaign. This figure does not include the $290,616 donated by the Groupe – Distribution, approvisionnement et services partagés to promote online billing, the $10,000 earmarked for the Soccer Cup, or the $12,000 donated by the Groupe – Ressources humaines to the representatives and delegates program. Hydro-Québec's total contribution to the Centraide campaign, excluding the $3,615,175 contribution from employees and pensioners, was $4,036,339.

[b] Transition amounts include multiyear commitments to support organizations (health and education) that are no longer eligible under our Social Responsibility Directive—a gradual phase-out between now and 2026.

Overall total and sum of subtotals may differ due to rounding.

$29.5M
Community investments

Details on contributions granted for 2021

Community investments ($M)

Category	2018	2019	2020	2021
Donations and sponsorships, including Centraide	19.1	18.9	19.3	17.4
Educational institutions	3.2	6.8	7.5	6.4
Integrated Enhancement Program	3.4	1.1	5.5	4.4
Other[a]	1.0	0.9	1.1	1.2
Total	26.7	27.7	33.4	29.4

[a] The Other category includes Youth Products, the Hydro-Québec art collection and presentations at universities and colleges.

GRI 201-1

Supporting the development of knowledge

Hydro-Québec wholeheartedly supports the work of higher education institutions and research groups whose expertise touches on the company's areas of activity. We've also created 1,013 internships in the last four years.

Internships (number)

	2018	2019	2020	2021
University internships	204	213	152	232
IEPE internships	9	6	10	7
College internships	37	43	32	68
Total	**250**	**262**	**194**	**307**

The company is a founding partner of the Institute of Electrical Power Engineering (IEPE).

Contributions, commitments, research chair funding and research contracts ($'000)[a]

Educational institution or research group	2018	2019	2020	2021
Université de Montréal	840	825	825	1,016
HEC Montréal	72	25	55	240
Polytechnique Montréal	380	147	720	749
Université du Québec en Abitibi-Témiscamingue	15	15	0	0
Université du Québec à Chicoutimi	297	211	211	250
Université du Québec à Montréal	695	378	880	334
Université du Québec à Rimouski	200	200	0	0
Université du Québec à Trois-Rivières	344	385	360	435
Université du Québec en Outaouais	0	0	30	0
École de technologie supérieure	174	228	239	382
McGill University	900	757	600	633
Concordia University	819	586	579	677
Université Laval	1,322	1,281	1,175	1,050
Université de Sherbrooke	555	505	545	853
Bishop's University	0	0	32	32
Ouranos, Cirano and Institute of Electrical Power Engineering, Quebec Artificial Intelligence Institute (MILA) and other Québec establishments	1,024	1,138	1,203	1,498
Institutions outside Québec	207	112	0	679
Total	**7,844**	**6,825**	**7,454**	**8,829**

[a] Including amounts recorded as donations and sponsorships: $3.1 million in 2018, $3.2 million in 2019, $2.9 million in 2020 and $2.5 million in 2021.

Integrated Enhancement Program

Created to offset the impact of transmission lines and substations, Hydro-Québec's Integrated Enhancement Program (IEP) supports initiatives aimed at improving quality of life in host communities. Under the program, municipalities and other eligible organizations receive a contribution calculated based on the length of a new line or the area occupied by a new substation. In 2021, we granted a total of $4.4 million to 10 initiatives.

Three of these were carried out by municipalities in Saguenay–Lac-Saint-Jean following completion of the Micoua–Saguenay line. The city of Saguenay and Centre d'histoire Arvida created an immersive walk that uses augmented reality to journey back in time to Saint-Jean-Vianney, a village destroyed by a landslide 50 years ago. The municipality of Saint-David-de-Falardeau launched a development fund to landscape a youth center and create an edible forest garden, and the city of Saint-Honoré redeveloped two ball fields.

In 2021, we also conducted two studies to gauge the effects of IEP-supported initiatives. The first, which focused on the Les Cèdres bike path ($105,300 contribution), showed that the path is very well used and highly appreciated by its users, who said it enhanced their mental and physical well-being. The second study evaluated the public consultation process in Rivière-des-Prairies–Pointe-aux-Trembles that led to the creation of Parc Ernest-Rouleau ($327,790 contribution). As a model of participatory democracy, inclusion, transparency, community-mindedness, cohesion and complementarity, the process will be documented to serve as a reference for other municipalities wishing to follow suit.

Les Cèdres bike path

Funding and financial commitments – Integrated Enhancement Program

	2018	2019	2020	2021
Number of initiatives	22	15	28	10
Hydro-Québec funding ($'000)	3,349.5	1,075.6	5,529.1	4,446.2
Community funding ($'000)	8,437.8	508.8	9,871.6	1,748.8
Project value ($'000)	11,787.3	1,584.4	15,400.8	6,195.0

GRI 201-1, 203-1, 204-1, 413-1

Art collection

Hydro-Québec owns one of the oldest and largest corporate art collections in Québec. With an annual budget of $300,000, the collection boasts 1,258 works, primarily paintings, drawings, prints, photographs and videos. In addition to showcasing artists, the collection helps preserve Québec's artistic heritage.

In 2021, we acquired 22 new works. A total of 21 works from the collection were also donated to non-profit socio-community organizations to make them publicly accessible—for example, by displaying them in community kitchens, waiting areas or meeting rooms.

Eruoma Awashish
Kakwotehi / Coeur-porc-épic
Fabric, porcupine quills and extruded polystyrene panel, 2021
122 cm in diameter x 9.5 cm in depth
Photo: Daniel Roussel

Highlighting our industrial heritage

For some 35 years now, we've endeavored to protect and enhance our heritage, which bears witness to both scientific innovation and the changing face of industry and technology in Québec. In 2021, we continued to inventory our built, technological and intangible heritage, focusing namely on substations with heritage value, the 69-kV Montmagny subsystem and engineering works on the Fleuve Saint-Laurent (St. Lawrence River). We also interviewed our employees and pensioners so that their knowledge and experience may be preserved.

Furthermore, we helped preserve the now-closed Chute-Burroughs generating station, commissioned by the Southern Canada Power Company in 1930, by ceding the site to the municipality of Stanstead-Est in March 2021. In addition to a wooded area and the natural waterfall standing over 55 m high, the site houses the old power plant building—a fine example of Art Deco architecture—and its generating equipment. The municipality plans to open the site to the public in 2022, showcasing its beauty and history through interpretation activities and the newly created walking trails and lookouts.

Chute-Burroughs generating station, Stanstead-Est

GRI 413-2

Our role as a good corporate citizen

The sustainable value we bring to Québec communities isn't limited to our direct and indirect financial contributions: it also includes the acceptability and sustainability of our operations.

Public health and safety

We take care to ensure that our facilities and services pose no threat to public health and safety, our top priority in terms of our responsibilities as a corporate citizen. Given the hazards of electricity, we take all necessary steps to keep people at a safe distance from energized conductors. We also erect various physical barriers to limit access to hydropower facilities, which can present a serious risk of drowning. Sadly, despite more than 3,700 preventive patrols and the expulsion of 3,583 people from danger zones in 2021, there was one drowning, at La Trenche generating station.

Year after year, we make considerable efforts to raise public awareness of the hazards of electricity. We use various outlets—newspapers, radio and social media—to communicate the risks associated with hydropower facilities and working near power lines and to remind customers about the safety rules to follow in the event of an outage. Every year, we also distribute thousands of educational kits to preschoolers and elementary school students so they can develop safe habits around electricity at a young age. In 2021, we reached over 75,000 youngsters.

Electrical accidents – 2021

	Events	Deaths
Public – Hydro-Québec facilities	7	1
Public – Use of electricity	0	0
Skilled workers – Hydro-Québec facilities	11	3
Skilled workers – Use of electricity	1	0
Hydro-Québec employees	143	0
Total	**162**	**4**

Boucherville substation

Boat ramp at Romaine-1

We also study the potential risks to human health of some of our operations. For example, we closely monitor the risks linked to the temporary rise in fish mercury levels in our reservoirs—a risk that has been deemed low. In 2021, we installed two interpretation panels at the boat ramps of Romaine-1 reservoir in the Côte-Nord region to provide anglers with fish consumption guidelines related to the presence of mercury. The information was drawn from the *Guide de consommation des poissons et des fruits de mer – Région de la Romaine*. The panels are another example of the communication tools designed to allow anglers to continue enjoying the health benefits of eating fish while avoiding any mercury-related risks.

In regard to electric and magnetic fields (EMFs), extensive research during the last 40 years has shown that the fields produced by power lines pose no health risks for workers or the general public. Hydro-Québec is currently conducting studies to better understand the thresholds at which magnetic fields can become perceptible and affect the vestibular system, a part of the inner ear that is responsible for maintaining balance. These studies will provide solid evidence to the international bodies responsible for establishing safe exposure limits.

VACCINATION SUPPORT

As the pandemic entered its second year, the Québec government asked large employers to serve as COVID-19 "vaccination hubs." We responded by teaming up with Intact Insurance to run a clinic in Saint-Hyacinthe under the supervision of local health authority CISSS de la Montérégie-Est. Over 40 employees took part in the initiative, which offered a weekday drive-through vaccination service from May to August. Over 20,000 vaccines were administered as a result.

20,000
People vaccinated

COVID-19 vaccination clinic, Saint-Hyacinthe

Social acceptability of our activities and projects

As a responsible corporate citizen, we strive to understand the concerns and expectations of the communities affected by our activities. Keeping the dialogue open and respectful helps us integrate our operations as seamlessly as possible and ensure that our presence is more socially acceptable. Our social acceptability performance involves the work of a great many teams, giving local communities a number of reference points within the company.

Measures implemented and indicators used to benchmark our social acceptability performance

Field	Main priorities
Reception and tours	• Access to facilities and guides • Access to information and explanation
Government affairs	• Direct and ongoing contact with various government representatives
Public affairs and media	• Direct and ongoing contact with the media and interest groups • Consistency of official external messages • Stakeholder consultation, proactive communication and openness to partnerships
Electricity supply	• Prior consultation with contractors • Consultation process on matters to be submitted to the Régie de l'énergie
Compliance and sustainability	• Integrated Enhancement Program • Internal advisory role • Sustainability Report • Sustainable Development Plan
Donations and sponsorships	• Donations and sponsorships program • Positive corporate presence in all regions

Field	Main priorities
Environment	• Conduct environmental studies and monitoring programs • Communications to various categories of stakeholders
Public participation	• Internal advisory role • Public participation process for projects
Planning	• Internal – Social Acceptability Committee • Start integrating factors that promote the social acceptability of projects at the planning stage
Community relations	• Constant presence in the community and proactive communication • Internal advisory role • Openness to all stakeholders for work done in partnership
Indigenous relations	• Internal advisory role • Direct and permanent link with Indigenous communities • Proactive communication with various stakeholders
Health and safety	• Employee health and safety • Public health and safety

DES IRLANDAIS SUBSTATION

The future Des Irlandais substation will be located in Pointe-Saint-Charles, a neighborhood in Montréal's Le Sud-Ouest borough. In May 2017, in preparation for construction, we acquired a lot adjacent to the Black Rock, a monument commemorating the Irish immigrants who died of typhus in 1847. The property had long been coveted by the city's Irish community, who wanted to create a site that would honor both the victims and those who had come to their aid. In response, we partnered with the Ville de Montréal and the Irish community to build the memorial space—a move that has considerably strengthened community support for the substation's construction and raised its social acceptability.

The land on which the substation is to be built is a former landfill, which will call for significant site rehabilitation. The site is also one of great archaeological value that stands to yield important findings about the lives of its former occupants.

Archaeological dig at Des Irlandais substation, Pointe-Saint-Charles

Land use

For each project, we carry out an environmental assessment that meets the various legal requirements. Projects that involve public land are assessed in consideration of the public land use plan for the region in question. In 2021, we performed an impact assessment for a project to strengthen the 120-kV and 315-kV transmission systems in Abitibi-Témiscamingue. Carried out in accordance with sections 31.1 and following of the *Environment Quality Act*, the assessment took into account the plan's guidelines applicable to the lands involved.

We also completed the training scheme for regional county municipality (MRC) land-use planners aimed at promoting the occupancy and vitality of territories.

Projects subject to a public participation process

735-kV Micoua–Saguenay transmission line – Last year, in keeping with our commitments to outfitters and controlled harvesting zones (ZECs), we put our work on hold during the fall firearm moose-hunting season, a period of high economic importance.

Hertel–New York interconnection line – As a result of COVID-19 health measures, the public participation process went virtual, taking place through videoconferencing, teleconferencing and an online consultation platform. An information bulletin and questionnaire were also mailed out to allow residents to share their questions and concerns with us in a completely secure fashion. The selected solution was presented in the fall at in-person open house events.

Refurbishment of the retaining wall at Simon-Sicard dam – Two public consultations were held on the proposed solution for refurbishing the wall and enhancing the shoreline. When health measures eased in the fall, we held an open house where residents could contribute to the project optimization process in person.

Modernization of the Beauharnois–Les Cèdres hydropower complex – Some 50 participants attended an open house information session on the studies and work needed to ensure the long-term operability of the structures, now over 50 years old. The activity gave us a chance to hear residents' questions and concerns.

Rebuilding the bridges and repairing the spillways at Rapide-2 and Rapide-7 – This project involves closing the bridges and spillways for three years. To better understand how this will impact local travel and identify measures to lessen the inconvenience, we contacted some 200 bridge users, including many hunters and anglers. One outcome was the agreement reached with the Club de motoneige de Val-d'Or to temporarily relocate a very busy regional snowmobile trail that crosses the Rapide-7 bridge.

Community relations

At Hydro-Québec, we maintain close working relations with civic institutions and bodies across Québec, pairing each local authority with a specific community relations advisor to keep us in direct contact. We also maintain an ongoing dialogue with Québec's two main municipal associations, the Fédération québécoise des municipalités (FQM) and the Union des municipalités du Québec (UMQ).

In 2021, together with the Société de transport de Montréal (STM), the Commission des services électriques de Montréal, Bell and Énergir, we signed the Charte montréalaise de chantiers [Montréal construction site charter], which aims to limit the impact of construction and harmonize jobsite practices between the city and its partners.

Certain regions where we operate generation facilities are exposed to spring run-off. We reached out to the communities in these areas to explain how we reduce the magnitude of the flooding and delimit potentially affected areas. The channels we use include webinars, routine follow-ups with partners and a regularly updated spring run-off web page.

Visual simulations: a valuable communication and decision-making tool

Hydro-Québec assesses the environmental impacts of its projects, not just on the human and natural environments, but also on the landscape itself. We often use visual simulations to help our design teams and other stakeholders grasp the project's full scope. Watch this video (in French only) to find out more about how these simulations are made.

In the spring, we consulted with the municipal associations regarding the grant application assessment criteria for the program to acquire and install EV charging stations. Before officially launching the program, which aims to extend Electric Circuit coverage to Québec's less well-served municipalities, we organized webinars with the communities in question to explain in detail how it would work. By December, we had approved 27 applications for 284 on-street charging stations. The program will continue until 2028.

As part of the Saint-Jean substation and supply line project, we worked with the municipality of Dollard-des-Ormeaux to develop a design that would foster urban biodiversity, quality of life and active mobility. As a result, users can now enjoy 42,000 m^2 of grassy, shrubby terrain beneath the power line right-of-way. Environmental monitoring will continue over a 10-year period to document changes to the vegetation, bird populations, pollinator activity and use of the new green space.

Generating unit 9—a piece of equipment switched on by then-premier René Lévesque when the Robert-Bourassa development first opened in 1979—is currently being refurbished. At the end of this process, the old turbine wheel will be donated to the Baie-James community of Radisson to be made into a monument. In February 2021, we met with local residents to discuss the plans for the monument's eventual location and display. The turbine wheel will remain a focal point during facility tours in summer 2022 before being moved to its new location in time for the 2023 tourist season.

Residents and elected officials in Montréal's Mercier–Hochelaga-Maisonneuve borough had expressed a wish to beautify the façade of a substation in a disadvantaged neighborhood. In response, we set up a committee of representatives from Hydro-Québec, the borough and the community to discuss the pictorial concept proposed by local emerging artists. The many points of view put forth helped to enhance the final design, which features figures representative of the area's diversity. The resulting mural will be unveiled in spring 2022.

We also maintain regular contact with agricultural sector stakeholders, including the Union des producteurs agricoles (UPA), exchanging information on an ad hoc basis or at the regular meetings of the HQ-UPA liaison committee. Though the committee met formally only once in 2021, the encounter gave rise to a number of working sessions.

Each year, Hydro-Québec gauges the satisfaction of its municipal partners through a survey. In 2021, overall satisfaction with Hydro-Québec remained high (8.1 out of 10), with 90% of respondents saying they were "satisfied" or "very satisfied."

Jean-Charles Piétacho, Chief of Ekuanitshit, and Sophie Brochu, President and CEO of Hydro-Québec, sign the Nashkuaikan agreement.

Indigenous relations

In 2021, Hydro-Québec's relations with First Nations and Inuit entered a new era with the signing of mutually satisfactory agreements grounded in respect, authenticity and a willingness to listen.

At last November's Grand Economic Circle of Indigenous People and Québec, we committed to making room for, valuing and leveraging Indigenous potential in every sphere of our activities, as a partner, an employer, a supplier and a purchaser of goods and services.

Our Indigenous relations

In concrete terms, this means:

- Developing a procurement strategy with Indigenous companies
- Organizing an Indigenous workforce forum with a view to becoming a local employer of choice
- Contributing $500,000 to the creation of the First Nations Executive Education program at HEC Montréal
- Creating an initiative to support entrepreneurship among First Nations and Inuit women

Indigenous entrepreneurs operate a range of businesses across the province that contribute to Québec's economic growth. In 2021, our purchases of goods and services from Indigenous companies totaled $143.5 million, or 3.99% of the total value of Hydro-Québec's contracts.

In February, Québec Premier François Legault and Hydro-Québec CEO Sophie Brochu announced a historic partnership with Innu communities in the Côte-Nord region. The Apuiat project involves the construction of a 50-turbine wind farm with 200 MW of installed capacity in the city of Port-Cartier, as well as an electricity purchase agreement with Hydro-Québec Production and Parc éolien Apuiat S.E.C., a partnership between the Innu communities and Boralex.

In the spring, we signed a memorandum of understanding with the Mohawk Council of Kahnawake (MCK), laying the groundwork for a future partnership agreement under which the MCK will become a minority co-owner of the Hertel–New York Interconnection. The deal secures economic benefits for the community for a 40-year term.

In July, we signed the Nashkuaikan agreement with the Innu community of Ekuanitshit to address concerns related to the Romaine complex and enhance certain aspects of an earlier agreement. The new agreement includes provisions for a $56.7-million fund to finance major community initiatives over a 50-year period. It also includes Innu cultural awareness activities for Hydro-Québec workers in Minganie and measures to encourage the awarding of certain Romaine complex construction and operation contracts to local Innu companies. Finally, it also paves the way for discussions on a Hydro-Québec–Ekuanitshit pilot project to build energy-efficient buildings in the community.

GRI 103-2

PARTICIPATORY APPROACH

As part of an overall effort to reduce project impacts on host environments, we are currently drawing up an inventory of Indigenous use of the lands affected by our projects. This is both to avoid disrupting Indigenous activities and to identify any mitigation measures needed. Our approach to date has been to map the various land uses based on live interviews. However, COVID-19 and the introduction of health measures like social distancing and isolation complicated the process, requiring us to adjust our methods. In some cases, community members were asked to conduct the interviews themselves, while in others, the interviews were held online, particularly for the Windfall Mine and Îles-de-la-Madeleine connection projects and the La Grande-3 quarry project.

As part of the Appalaches–Maine Interconnection project, we teamed up with the Waban-Aki and Huron Wendat First Nations to identify sites of potential archeological interest along the line route. The study has since identified 11 such sites. There are already a number of known sites along the Saint-François and Chaudière rivers. Indeed, artifacts dating as far back as 12,500 BP—the oldest known evidence of a human presence in Québec—had previously been discovered at Lac aux Araignées, which lies southeast of Lac Mégantic and the future right-of-way. The latest archeological investigations were carried out in consideration of First Nations heritage and concerns; however, the field surveys did not yield any archeological remains related to Indigenous prehistory or a recent presence.

In September 2021 at the Canadian Council for Aboriginal Business (CCAB) Business Recovery Forum, Hydro-Québec obtained Silver certification for its efforts under the Progressive Aboriginal Relations (PAR) program.

Throughout the year, discussions intensified with Tarquti Energy Corporation regarding the terms of our partnership to develop and operate renewable energy projects in Nunavik. A framework agreement was reached in early December. In Inukjuak, the developer of the Innavik project continued construction of the run-of-river hydroelectric generating station, slated for commissioning in late 2022. Hydro-Québec, in turn, continued work on converting the distribution system and began building the 25-kV substation.

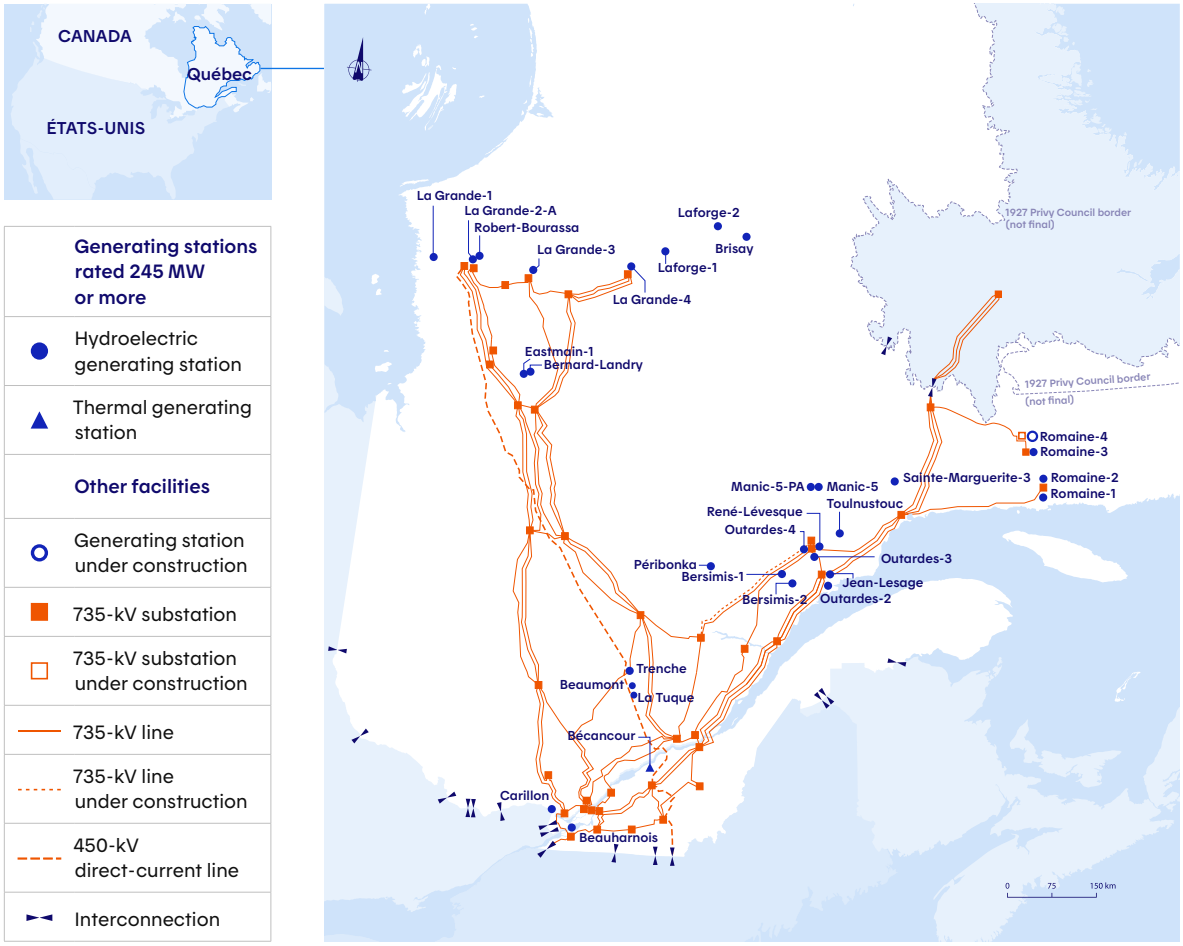
At the 29th Gala Les Météores held by the Chambre de commerce de Sept-Îles–Uashat mak Mani-utenam, we presented a recognition award in the SDEUM-Ashineun category to Innu company Uisht Construction for its excellent work.

Nathalie Claveau, Line Crew Chief, Hydro-Québec Distribution, Mashteuiatsh

An essential community service

Without a doubt, Hydro-Québec's most fundamental contribution to Québec is our electricity service. In keeping with our mission, we must deliver accessible, reliable and affordable electric power. In 2021, we delivered more than 175 TWh to 4,457,198 customers.

Map of major facilities



24
Number of thermal generating stations

61
Number of hydroelectric generating stations

2
Number of solar power plants

1
Number of microgrids

542
Number of substations

119,540 km
Length of the medium-voltage distribution system

GRI 102-2, 102-4, 102-6, 102-7, 102-8, EU1, EU3, EU4

Access to service

Hydro-Québec was created to make electricity available across Québec. Even remote regions which are not connected to the main grid are served through our 22 off-grid systems.

Our electricity is generated at 61 hydroelectric power plants, 24 thermal power plants and two solar power plants, supported by wind power and biomass inputs. Delivering that electricity to our customers takes 34,775 km of transmission lines, 542 transformer substations and 226,949 km of distribution lines.

To contribute to Québec's social and economic development, we also make our grid infrastructure available to partners. In 2021, we reviewed our business processes and streamlined our technical standards to facilitate the rollout of high-speed Internet across the province. As these efforts continue through 2022, our cooperative approach will enable cable companies to set up their fiber-optic networks faster.

In February, we joined forces with Bell and local organization Gestion de l'inforoute régionale de l'Abitibi-Témiscamingue (GIRAT) in a project to connect telecommunication towers and thus improve cellular coverage in the region.

Service reliability

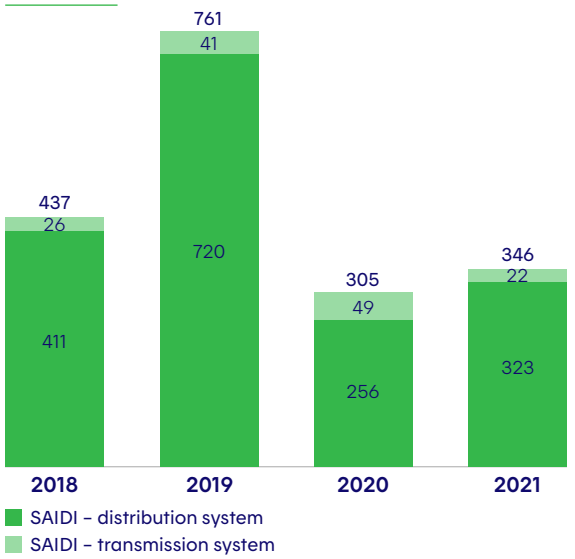
To measure electricity service reliability, Hydro-Québec uses the system average interruption duration index (SAIDI), which reflects the average service interruption time per customer over the course of a year. Some scheduled interruptions are required for system maintenance; unscheduled outages are caused by bad weather, invasive vegetation or equipment failure.

A number of hydroelectric developments commissioned between 1940 and 1970 require maintenance and refurbishment to ensure service reliability and continuity. It is thanks to these efforts that, in 2021, Shawinigan-2 generating station celebrated its 110th anniversary and La Grande-2-A, its 30th. Other maintenance projects focus on replacing deteriorated structures and equipment in the transmission and distribution systems.

346 min/customer

System average interruption duration index (SAIDI)

System average interruption duration index (SAIDI)[a] (minutes of interruption per customer)



[a] Overall total and sums of subtotals may differ due to rounding.

Transmission lines near Hertel substation, La Prairie

Work to maintain service reliability

Robert-Bourassa generating station – Work to refurbish major components and replace the turbine runner of generating unit 7 started in April 2021 and was completed by early November. This major undertaking, which involves rehabilitating 8 of the station's 16 generating units, will wrap up in 2022.

Beauharnois–Les Cèdres hydropower complex – Throughout 2021, we performed a number of technical and environmental studies for all structures on the Fleuve Saint-Laurent (St. Lawrence River) and dikes on the Beauharnois canal, which were built between 1914 and 1971. The findings will determine the work required to ensure the safety and long-term operability of these structures and extend their service lives by several decades. The commissioning of two 120-kV tie lines has also enhanced the reliability and operating flexibility of the Beauharnois complex, thereby creating new power export opportunities.

René-Lévesque and Outardes-2 generating stations – In 2021, we analyzed the findings from studies carried out in 2020 to determine the best solutions for replacing the generating units and their auxiliary and protection systems.

Rapide-Blanc generating station – Refurbishment work will continue until 2026 to improve reliability at the 204-MW facility, which has been in operation for over 80 years.

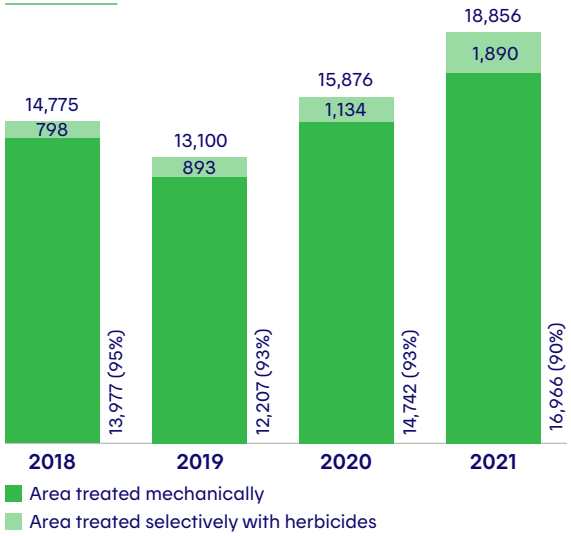
Micoua–Saguenay line – In 2021, clearing of the right-of-way was completed and construction work was begun. The new line will run for 262 km from Micoua substation in the Côte-Nord region to Saguenay substation in Saguenay–Lac-Saint-Jean.

A turbine runner being transported from Trois-Rivières to Rapide-Blanc

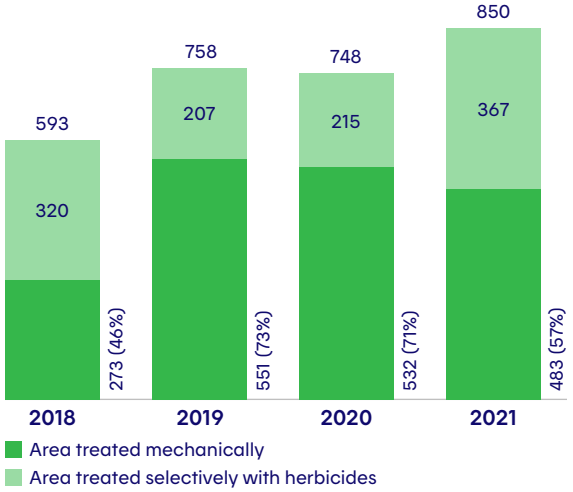
Stoneham township power system – Work to reinforce and secure the power system in the township of Stoneham involved replacing the conductors and certain equipment on a 1.2-km stretch of the distribution line that runs along Highway 371. To mitigate the impact of the work on customer supply, we chose to effect a single planned outage lasting 12 hours as opposed to a series of short service interruptions. The work was completed in November 2021.

Vegetation control – Since 40% of outages are caused by invasive growth that obstructs power system operations, vegetation control is essential to maintaining service reliability.

Vegetation control in transmission line rights-of-way (ha)



Vegetation control on dikes and dams (ha)



Herbicide use and mechanical treatment vary, depending on the five-year vegetation control planning cycle. The proportion of herbicides used changes annually.

Climate change

In addition to normal equipment wear and tear, service reliability is affected by contextual factors like climate change.

The rising frequency of extreme weather events is increasingly putting Hydro-Québec's assets and operations to the test. Dealing with a changing climate calls for resilience and flexibility. In 2021, working with a cross-functional committee composed of members from all administrative units, we delivered our first Climate Change Adaptation Plan. With the 26 main climate change-related risks to our assets and operations identified, we can continue to move ahead with concrete action, implementing our adaptation measures, planning relevant research, and offering the training needed to expand employee skill sets in this area.

The modernization of the Beauharnois–Les Cèdres hydropower complex is a good example of incorporating climate change effects into the design phase. To ensure the complex's resilience, a multidisciplinary team is currently studying how these changes may affect the future run off volumes the structures will be required to handle.

Energy transition

The energy transition will also profoundly change electricity generation, transmission and distribution. For example, transportation electrification will increase power consumption and, as a result, raise transmission needs. Our systems will have to adapt to new distributed generation technologies and the integration of solar power, whose characteristics are different from those of hydropower.

Electricity rates

Hydro-Québec is required to charge the same electricity rates throughout Québec, except in certain communities north of the 53rd parallel that are served by off-grid systems. Rates are based on the consumption profile of the different customer categories.

Hydro-Québec's rates are among the lowest in North America. On April 1, 2021, the average rate for residential customers with a monthly consumption of 1,000 kWh was 7.39¢/kWh, including generation, transmission and distribution costs. By comparison, the residential rate was 13.43¢/kWh in Toronto, 32.88¢/kWh in New York City and 31.82¢/kWh in Boston.

On April 1, 2022, rates increased by 2.6% for all customers except for large-power industrial customers, whose rates rose by 1.7%. These increases reflect the change in the Consumer Price Index (CPI) in Québec between September 30, 2020, and September 30, 2021. Electricity rates have tended to track inflation for the past 60 years.

Comparison of electricity prices in major North American cities

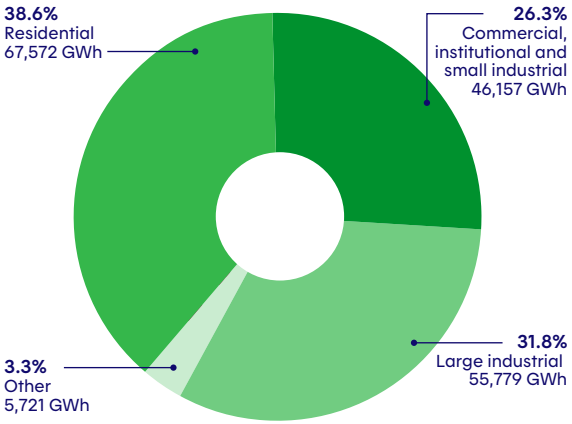
A crew at work after an ice storm, Laval

Service affordability

While electricity is inexpensive in Québec, it still represents a significant outlay for some households. That's why we've long sought to make it easier for low-income households to stay on top of their electricity bills. In 2021, 305,048 payment arrangements were signed with residential customers, representing $641.0 million gross, including 38,884 arrangements with low-income customers for $147.1 million gross. Of these, 29,580 arrangements totaling $75.8 million provided assistance for payment of arrears and, if necessary, partial payment for current electricity use.

For close to 20 years now, we have held a workshop for collection employees on doing business in a context of poverty. In 2021, close to 100 employees received training on payment arrangements.

Electricity sales in Québec by segment – 2021



Cross-subsidization

Cross-subsidization consists in charging one or more customer categories higher rates than the service cost in order to be able to offer lower rates to one or more other customer categories. Currently, residential customers benefit from cross-subsidization, paying only about 90% of the service cost. The difference is covered by the other rate categories.

Customer category	Cross-subsidization index
Residential customers	89.7
Rate G customers (small-power customers such as convenience stores and hair salons)	111.4
Rate M customers (medium-power customers such as SMEs, small industrial companies and shopping centers)	123.9
Rate LG customers (large-power customers not engaged in an industrial activity, such as hospitals, universities and office buildings)	95.3
Rate L customers (large industrial companies)	103.5

The real cross-subsidization indexes for 2020 are the most recent available at time of publication. An index below 100 means the customer pays less than the actual service cost, while an index above 100 means the customer pays more, thus helping to finance the shortfall in other categories.

These indexes reflect the provisions of the *Act to simplify the process for establishing electricity distribution rates*, changes to variance account elimination rules, the repeal of performance-based regulation, changes to the consumption characteristics of each customer category, and economic developments.

Customer satisfaction

For over 25 years, we have been using surveys to determine our customer satisfaction index. Other key indicators such as call wait times and the number of complaints and claims help us measure the quality of the services we provide to our residential and business customers. Our customer relations centers manage over 3 million customer interactions a year, including phone calls, chats and exchanges on social media.

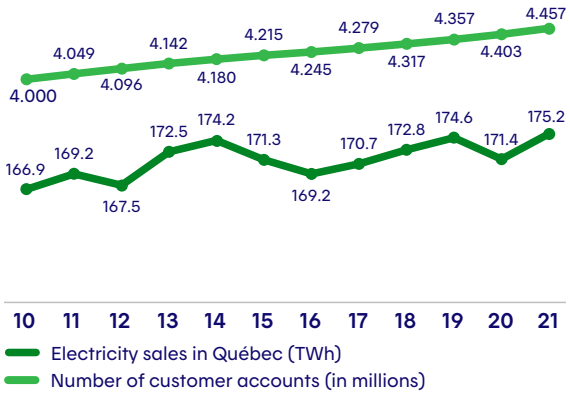
Every year, a sample of 3,600 respondents is drawn from our customer database, and approximately 300 interviews are carried out each month. In 2021, 97% of the respondents reported being "very satisfied" or "quite satisfied" (96% in 2020).

97%

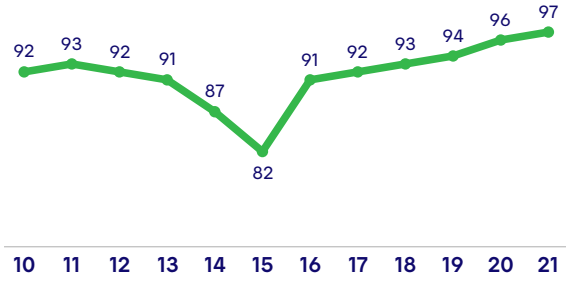
Percentage of the population that is very or quite satisfied with Hydro-Québec

Mamadou Sall, Supervisor – Customer Relations

Electricity sales and number of customer accounts in Québec – 2010–2021



Public satisfaction index



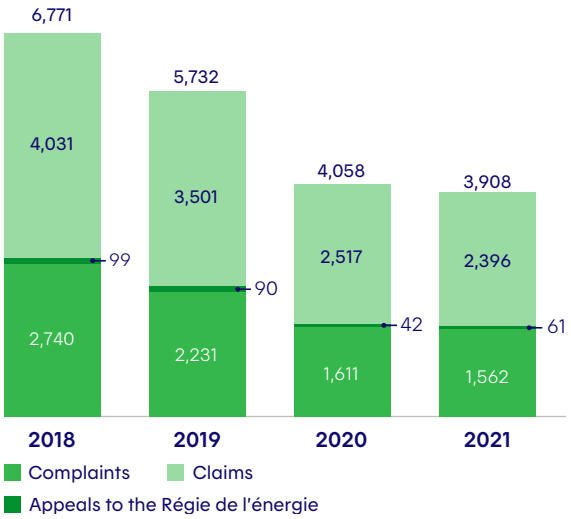
Since 2013, a sample of respondents has been drawn from our customer database; previous surveys used a random sample drawn from the general public. By the end of 2021, 97% of customers reported being "very satisfied" or "quite satisfied," a slight increase over 2020.

Maximum margin of error, ±1.6% (19 times out of 20).

HYDRO-QUÉBEC'S REPUTATION SCORE

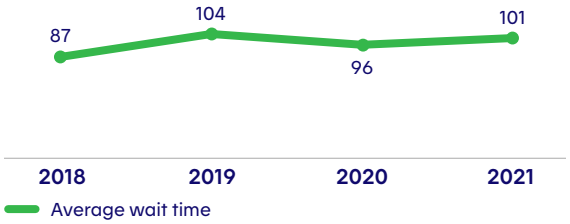
In 2021, Hydro-Québec's reputation score rose from 7.38 to 7.5. It is still the highest among comparable large companies. However, despite efforts to improve our standing in the 18–34 age group, this year's score was down slightly, from 7.08 to 7.02.

Customer complaints and claims (number)



The number of complaints continues to fall, going from 2,740 in 2018 to 1,562 in 2021, a decrease of nearly 43%.

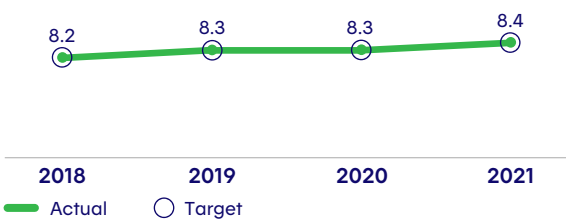
Average call wait time at customer relations centers (seconds)



Hydro-Québec's customer relations centers receive an average of 10,000 calls a day. Call volume naturally impacts the average wait time, which also varies depending on factors like seasonal extremes, moves and outages. While many questions can be resolved using self-service tools, more complex matters are usually handled over the phone.

The average call wait time at our customer relations centers was 101 seconds in 2021, up slightly from 96 seconds in 2020. This result is still below Hydro-Québec's target maximum wait time of 110 seconds.

Customer satisfaction – Combined index (scale of 10)



This index shows the level of customer satisfaction (on a scale of 1 to 10) in four areas: service quality and continuity, billing, energy efficiency products and services, and customer service. The number of interviews conducted per month for each customer category varies slightly from month to month: 300 interviews were conducted with residential customers, 150 with commercial customers and 225 with business customers. In 2018, the major accounts category was folded into the business category.

Sustainable Development Plan: Progress summary

Strategy

5. Foster Québec's development as a society through our financial contribution

SDG*

Target	Status	Explanation
5.1 Contribute $23.4 billion to Québec's gross domestic product (GDP) by 2024 **Indicator** Amount contributed to Québec's GDP	**$22.7 billion contributed to Québec's GDP (2020: $20.5 billion)**	Hydro-Québec's contribution to Québec's GDP rose in 2021 due to higher net income and the company's investments after the first year of the pandemic in 2020.

Strategy

6. Build and operate sustainable, resilient infrastructure while adapting our activities to climate change

SDG*

Target	Status	Explanation
6.1 Implement a climate change adaptation plan by 2021 **Indicator** 1) Progress on producing the climate change adaptation plan (%) 2) Progress on key actions identified in the plan (%)	**Climate change adaptation plan completed and delivered (100%)**	A first climate change adaptation plan was developed to identify adaptation measures for the 26 main climate change-related risks to which Hydro-Québec's assets and operations are exposed. The plan is expected to be released in 2022. Training was provided on the Envision sustainable infrastructure rating system, and the system's pre-assessment checklist was applied to the construction of a new substation.

* Sustainable Development Goal

GRI 102-7, 103-2, 201-1, 201-2, 203-2

Sustainable Development Plan: Progress summary

Target	Status	Explanation	SDG*
6.2 **Expand the integration of sustainability principles in infrastructure projects** **Indicator** Number of projects requiring government approval for which planning and construction stages include a comprehensive sustainability assessment	**Two impact assessments carried out**	An in-depth analysis grid showing our contributions to *Sustainable Development Act* principles was included in the impact assessments for two projects: construction of Anjou substation and its 315-kV power line, and strengthening the transmission system in Abitibi-Témiscamingue.	
6.3 **Obtain or maintain BOMA BEST certification for targeted administrative buildings and rented office premises of over 1,000 m^2 in Montréal and Québec** **Indicator** Number of BOMA BEST-certified buildings and level of certification	**BOMA BEST certification awarded to 21 buildings and office spaces (100%)**	Hydro-Québec's BOMA BEST Gold certification was renewed for three administrative buildings: the Saint-Bruno administrative center, the Saint-Hyacinthe service center and the Trois-Rivières administrative center. In total, 18 of the administrative buildings that we own and three of the ones we lease have been certified. BOMA BEST is a program established by the Building Owners and Managers Association of Canada (BOMA Canada) to assess the environmental and energy performance of commercial buildings.	

* Sustainable Development Goal

Sustainable Development Plan: Progress summary

Strategy

7. Generate more sustainable value in the community

Target

7.1 Develop indicators and optimize certain programs to maximize their social and economic benefits for the community

Indicator

Number of key programs optimized

Status

50% progress on the two targeted programs (Integrated Enhancement Program (IEP) and the Social Responsibility Directive)

Explanation

A qualitative study has enabled us to better understand the impact of IEP-supported initiatives and develop an impact assessment framework. We also noted that these initiatives enhance community quality of life and that public participation is key to their implementation.

In terms of donations and sponsorships, the development of useful long-term indicators was stalled by fluctuating COVID-19 health measures. Our efforts focused on optimizing certain programs, meeting commitments and working with organizations on partnership schemes consistent with health regulations.

Hydro-Québec has also set budget objectives aimed at ensuring the equitable distribution of donations and sponsorships across all regions of Québec, as per the issues identified in the Social Responsibility Directive: regional vitality (60%), the fight against poverty (25%) and the reduction of GHG emissions (15%).

SDG*

Strategy

8. Take steps to include Indigenous peoples and encourage their input into our development

Target

8.1 Obtain Silver-level certification from the Canadian Council for Aboriginal Business's Progressive Aboriginal Relations (PAR) program

Indicator

Annual progress in the PAR Silver certification process (%)

Status

Receipt of PAR Silver certification (100%)

Explanation

Our efforts in terms of the Progressive Aboriginal Relations program have borne fruit: receiving Silver-level certification is an important affirmation of what we have accomplished. In the years to come, we will focus on implementing the action plan and setting our next goals with a view to achieving Gold certification.

SDG*

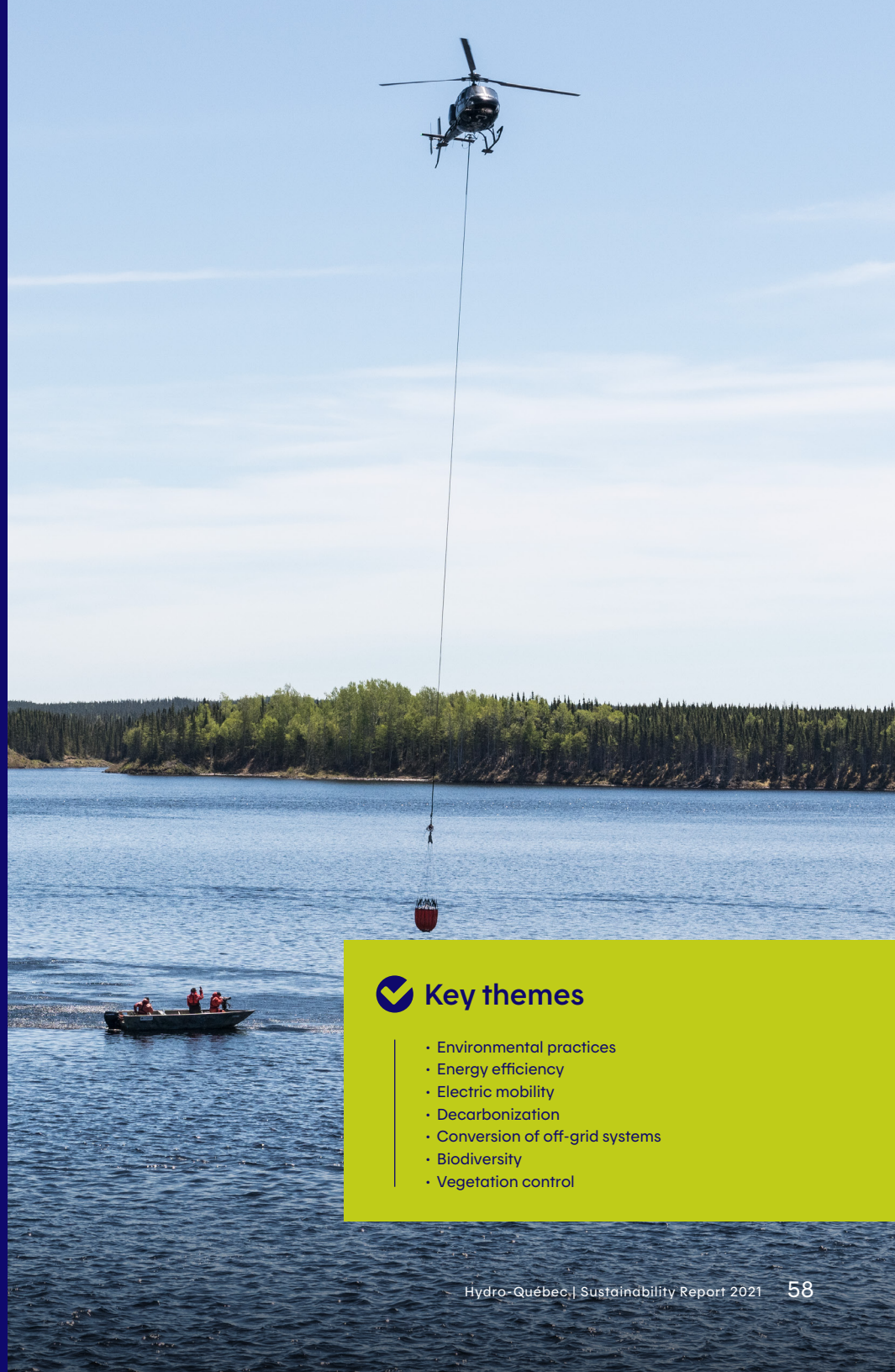
* Sustainable Development Goal

GRI 103-2

Environment

Be an environmental leader in our choices, innovative practices and expertise

Hydro-Québec's ISO 14001:2015-compliant environmental management system was developed to preserve biodiversity, reduce GHG emissions and incorporate environmental impact management into our business processes. We are implementing measures to assess, limit or mitigate the environmental impacts of our projects and activities, and we are taking proactive steps to counter the two main environmental threats to our planet: loss of biodiversity and climate change.



Key themes

- Environmental practices
- Energy efficiency
- Electric mobility
- Decarbonization
- Conversion of off-grid systems
- Biodiversity
- Vegetation control

GRI 102-47, 103-1, 201-2

Environmental practices

Hydro-Québec seeks to implement best environmental management practices when purchasing, transporting, storing and reclaiming machinery, equipment, buildings and other infrastructure. We also manage any waste materials we generate responsibly, through reduction-at-source, reuse, recycling and reclamation programs.

We make every effort to measure, limit and reduce the environmental impact of our activities through diligent and responsible management practices. We apply our environmental management system to all our activities and projects with a view to continuous improvement.

Lastly, we incorporate specific strategies inspired by the principles of the circular economy into our business processes. Those principles aim to limit consumption and prevent the waste of raw materials by rethinking and optimizing how resources are used.

La Grande-4 dam and spillway

Vehicle repair shops

In 2021, 21 of Hydro-Québec's machine shops had Clé Verte® (Green Wrench) certification, which recognizes excellence in environmental practices. The Joliette, western Montréal, Némiscau, Rimouski, Sherbrooke and Saint-Bruno shops earned Platinum-level certification when it was renewed this year. Certified shops take steps to reduce their environmental footprint, primarily through the responsible management of equipment, processes and hazardous materials.

Water bodies

Hydro-Québec owns 29 large reservoirs, huge artificial lakes held back by dikes and dams. Together, these reservoirs have a maximum storage capacity of 178.9 TWh—the equivalent of Québec's electricity needs for an entire year. The amount of water discharged by our turbines back into these water bodies is dependent on a variety of factors, including electricity demand and generation dispatch among hydroelectric facilities.

Responsible management of reservoirs and their associated water bodies takes into account a number of social and environmental considerations, such as the need to maintain an ecological flow and preserve traditional, recreational and tourism activities.

29
Number of large reservoirs

178.9 TWh
Maximum storage capacity

Insulating oil

In 2021, limited storage capacity reduced our ability to process and regenerate used oil. For this reason, the quantity of oil reclaimed as energy increased over the year. Hydro-Québec is currently carrying out an analysis regarding modernizing and optimizing the oil treatment facility in Varennes.

Recovery and reclamation

The Romaine workcamp was certified by RECYC-QUÉBEC's ICI on recycle + program for efforts to improve waste management.

The remote location of the La Grande complex in Eeyou Istchee Baie-James has prompted Hydro-Québec to step up its efforts to reduce the amount of waste materials produced at the site. In 2021, the composting service introduced at Brisay generating station a year earlier was expanded by setting up compost stations near the existing recycling stations. Given the effectiveness of this approach for sorting and processing waste, we plan to implement it at additional sites: A composter will be installed at the Laforge-1 development in the near future, and technical analyses are under way for the La Grande-3, La Grande-4 and Péribonka developments. This initiative will eliminate the need to haul waste materials over long distances.

The Uaueiashtan workcamp set up near Labrieville for construction of the Micoua–Saguenay line was assembled from modules recovered from another workcamp that was being dismantled.

Where possible, access roads to power line projects on private land are closed, and the land is restored. Recovered materials are often given to the landowners, who use them to improve their roads.

As part of its emerald ash borer program, we are partnering with the Centre de valorisation du bois urbain, a social economy enterprise that processes and repurposes wood recovered from felled trees. The 120 tonnes of wood recovered in 2021 will be used to manufacture hardwood flooring, mulch, pallets and paper pulp, as well as in local cabinetwork projects.

Lastly, throughout the second year of the pandemic, we closely monitored the recovery and recycling of masks and other disposable personal protective equipment (PPE) used to protect against COVID-19 transmission. In addition to partnering with government authorities on this front, we continue to look for local solutions to further minimize the environmental, logistical and economic impacts of waste PPE management.

Recovery and reuse of insulating oil

	2021
Quantity reused (litres)	3,775,397
Quantity recovered (litres)	5,014,828
Reuse (%)	75.3%
Quantity reclaimed (litres)	1,239,431

Recovered oil meets all of Hydro-Québec's needs. Most is decontaminated and regenerated for reuse in equipment, while oil that cannot be regenerated is reclaimed as energy.

Oil treatment at the Saint-Hyacinthe storage facility
David Grégoire, Head Attendant – Recovery

Responsible use of renewable energy

Every three years, Hydro-Québec publishes an Electricity Supply Plan (in French only) that presents the anticipated electricity needs of Québec's customers for the next 10 years and how those needs will be met. The plan is revised annually to update the balance between supply and demand for power and energy.

Current supply is expected to meet customer needs until 2026. Afterward, however, new supplies will be required to meet demand. We therefore issued two calls for tenders in December 2021 for a total of 780 MW of renewable energy, including a 300-MW block of wind power. Further calls for tenders to meet the needs set out in the Electricity Supply Plan 2020–2029 will follow.

The planning exercise takes account of population growth, economic forecasts and climate trends, as well as the many measures we have taken to improve energy efficiency.

Energy efficiency

In 2021, Hydro-Québec continued to enhance and expand its programs encouraging customers to participate in its energy-savings objectives, which were raised to 8.2 TWh in line with the Electricity Supply Plan 2020-2029. We are already seeing the benefits of these new measures. For instance, our energy-efficiency efforts generated 773 GWh in new energy savings in 2021, a 65% jump from 2020. In addition, two IT projects are scheduled for deployment in 2022 to further assist customers in their efforts to increase the energy efficiency of buildings and processes.

With a view to boosting the energy efficiency of off-grid systems in Nunavik, which run on fossil fuels, we continued discussions with several organizations, including the Fédération des coopératives du Nouveau-Québec, Makivik Corporation and Kativik Municipal Housing Bureau. Meetings with the Kativik Regional Government will also be held in the near future. The discussions led to a preliminary action plan for residential, commercial and institutional customers.

New annual energy savings – Energy-efficiency initiatives (GWh)[a]

	2018	2019	2020	2021
Residential customers	212	214	225	312
Business customers	245	257	218	420
Off-grid systems	3	10	0	0
Total	460	481	443	733

[a] Overall total and sum of subtotals may differ due to rounding.

GRI 103-2, 302-4

Residential customers

Heating is a major contributor to the high electricity demand during Québec's winter peaks. To meet this demand, Hydro-Québec has offered its customers two dynamic pricing options since 2019: the winter credit and Flex rates. Both offerings allow subscribers to save money by reducing their electricity use at our request during peak periods, typically from 6 to 9 a.m. and 4 to 8 p.m.

In winter 2020–2021, the roughly 60,000 customers who opted for dynamic pricing consumed approximately 1.1 kW less per peak event, on average. Their efforts led to a total decrease in demand of about 65 MW, equivalent to the average power consumption of some 12,000 households per event. According to a 2021 survey, 80% of respondents wished to maintain their dynamic pricing option. Over 150,000 customers signed up for dynamic pricing in winter 2021–2022.

Since February 2021, we have been offering financial assistance to residential customers for the installation of heat pumps, which can be up to three times more efficient than baseboard heaters. Even at −20°C, a low-temperature heat pump (sometimes called a "cold-climate heat pump") can meet part of our customers' heating needs while reducing their electricity bills. The program helped bring about the installation of over 30,000 heat pumps and generate 102.0 GWh in energy savings in 2021.

Hydro-Québec also launched a pilot project with residential customers in the Montréal region to promote the installation of central heating systems with thermal storage. These fully electric systems store heat, shifting the heating load to off-peak periods. It is another way for customers who have opted for dynamic pricing to maximize their savings.

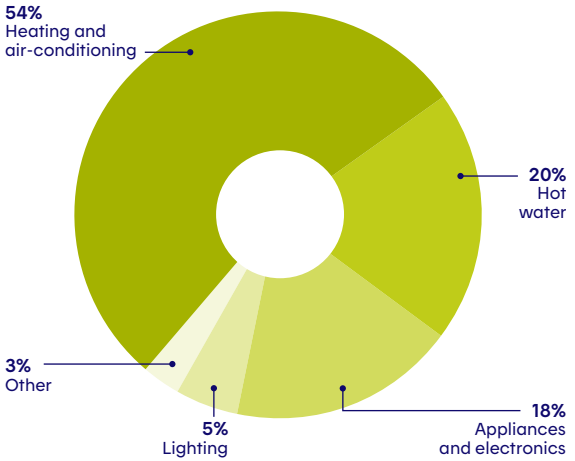
Finally, we extended our $100 rebate on the purchase of a three-element water heater until December 31, 2022. This program cut power demand by 4 MW in 2021.

Innovation

Hilo, a Hydro-Québec technology subsidiary, develops energy-efficient products and smart energy solutions that provide added value for our customers and the grid. Its objective is to reduce power demand by 620 MW by 2028–2029—equal to the demand of more than 114,000 households, or the power generated by Romaine-2 generating station.

In winter 2020–2021, Hilo's smart home service helped reduce electricity demand during peak periods. On average, every person registered for the service saved 226.5 kWh—the equivalent of 102 dryer cycles—and received a cumulative reward of $124.54. Hilo's smart home service was originally launched in Montréal, Québec, Gatineau and Trois-Rivières. Since June 2021, it has also been available in the Laurentides region and in certain municipalities in the Lanaudière, Montérégie and Capitale-Nationale regions.

Average annual energy consumption of Québec households, by type of use (%)



"Other" includes devices such as pool equipment, sump pumps and woodworking tools. Since the breakdown is based on the average of all Québec households, it does not reflect the actual consumption of a household with a pool, which is much higher than 3%. (Breakdown of a household's electricity use)

Peak winter period, Trois-Rivières

Business customers

The Efficient Solutions Program provides financial assistance to business customers when they implement a wide range of energy-efficiency measures. In 2021, 2,040 applications were submitted under the program and the projects accepted generated savings of 407 GWh—an increase of 96% over 2020. Business, institutional and industrial customers accounted for 35%, 7% and 58% of the savings, respectively.

The Innovative Projects Program encourages real estate developers and contractors with projects involving multiple buildings to install district energy systems and high-performance technologies. The four projects currently under way account for $14 million in contractual financial assistance and will ultimately generate 45 GWh in annual energy savings. The program's eligibility criteria were relaxed in September 2021 to encourage greater participation: projects involving existing buildings now qualify for financial assistance, and engineering consulting firms can receive incentives for helping customers implement their projects.

The Efficient Farming Products Program generated 13 GWh in energy savings in 2021.

Energy savings of Hydro-Québec buildings

At Hydro-Québec, the energy efficiency of our administrative buildings is central to our real estate strategy. Though most of our buildings use electric heating and do not produce any GHGs, their energy consumption is monitored on a continuous basis. Averaging 38 years old, Hydro-Québec's buildings consume almost 1 GJ/m^2 per year, a performance superior to the average for comparable buildings. Every renovation and construction project we undertake seeks to improve that performance still further by installing the best available technology. For example, a new building slated for construction in the Montérégie region will use 0.15 GJ/m^2 a year, while the upcoming refurbishment of the electromechanical systems at Hydro-Québec's head office will cut the building's consumption by 30%.

We drew up a list of 41 buildings whose power demand has to be reduced during winter peaks. The energy management measures we applied during the 2020-2021 winter peak reduced demand in our administrative buildings by 455 kW. Our energy performance for 2021 shows that we've cut the energy consumption of our buildings by 44% since 1992, for total savings of $177.6 million.

In 2021, Hydro-Québec saw its BOMA BEST Gold certification renewed for three buildings: the Saint-Bruno administrative center, the Saint-Hyacinthe service center and the Trois-Rivières administrative center. In total, 18 of the administrative buildings that we own and 3 of the ones we lease have been certified: we hold 16 Gold certifications and 5 Silver certifications. The BOMA BEST program, run by the Building Owners and Managers Association of Canada, is the largest Canadian certification program recognizing environmental best practices in building management.

Energy efficiency – Administrative buildings (kWh/m^2 gross)

	2018	2019	2020	2021
Average energy consumption	229	233	222	223

Electricity purchases outside Québec (%)[a]

Neighboring province, state or region	2018	2019	2020	2021
New England	0.037	0.001	0.001	0.006
New York	0.275	0.175	0.006	0.014
Ontario	1.994	4.141	3.967	2.095
New Brunswick	0.029	0.011	0.003	0.011
Newfoundland and Labrador	97.662	95.664	95.994	97.869
Total	**31,749 GWh**	**31,600 GWh**	**29,154 GWh**	**31,648 GWh**

[a] Overall total and sum of subtotals may differ due to rounding.

Renewable energy options

Hydro-Québec benefits from abundant hydropower resources and the technological choices made by previous generations of Quebecers. More than 99% of the electricity we sell is generated from renewable energy sources. We also purchase electricity from independent wind power producers and have recently entered the field of photovoltaic solar power generation.

Spillway, dam, generating station and switchyard, La Grande-3 generating station

Net electricity generated and purchased by Hydro-Québec[a] (GWh)

	2018	2019	2020	2021
Hydropower generated	175,232	175,086	171,162	160,459
Solar power generated	0	0	0	8
Residual hydropower purchases[b,c]	35,913	34,500	32,843	34,856
Residual biomass and waste reclamation power purchases	2,038	1,939	1,837	2,121
Residual wind power purchases	11,276	11,827	10,991	4,145
Total purchases – renewable energy sources[d]	**224,459**	**223,352**	**216,833**	**201,589**
Total energy generated	175,545	175,404	171,472	160,756
Total residual energy purchases	49,895	49,606	46,823	41,796
Net total energy generated and purchased	**225,439**	**225,010**	**218,296**	**202,551**
Renewable energy delivered to customers (%)	99.8	99.6	99.6	99.5

[a] Overall total and sum of subtotals may differ due to rounding.

[b] "Residual" means that the value shown reflects the amount of gross energy purchased less the sale of renewable energy certificates (RECs). For example, in 2021, the residual wind power purchase is based on a gross purchase of 10,997 GWh less the sale of 6,852 GWh in RECs, for a residual total of 4,145 GWh.

[c] Includes purchases from Churchill Falls (Labrador) Corporation Limited and independent power producers, including McCormick generating station, in which Hydro-Québec holds a 60% interest.

[d] These figures include RECs for Hydro-Québec Production generating station output (4,772 GWh in 2021, 3,035 GWh in 2020, 2,923 GWh in 2019 and 2,923 GWh in 2018) that were sold to third parties. They exclude purchases of wind, hydro and biogas power for which certificates were sold to third parties.

GRI EU2, EU10

Brisay generating station

Hydropower

The hydropower consumed in Québec is a reliable form of energy that can be stored and can adjust quickly to fluctuations in demand. Because of its flexibility and reliability, hydropower can easily step in for variable renewable energy sources like wind and solar power, making them more cost-effective.

Data sheets on renewable energy sources

Montérégie wind farm

Wind power

Hydro-Québec has been studying the potential of wind power since the installation of a first vertical-axis wind turbine by its research institute in 1975. Because wind-generated power depends on wind speed, its integration into a large hydropower system presents significant challenges. Hydro-Québec's power transmission system has undergone several modifications to adapt to the inherent characteristics of wind power.

In 2021, 43 wind farms belonging to independent power producers, with a combined installed capacity of 3,906 MW, were connected to the grid.

The Belle-Rivière wind farm was commissioned at the end of 2021, followed by the Des Cultures wind farm in January 2022. Each farm operates six turbines and has an installed capacity of 24 MW.

Gabrielle-Bodis generating station in La Prairie

Solar power

Solar power generation varies according to the amount of sunshine, which means that its integration into a large hydropower system presents challenges similar to those of wind power.

Hydro-Québec inaugurated its first two solar energy generating facilities in summer 2021: Gabrielle-Bodis generating station in La Prairie and Robert-A.-Boyd generating station in Varennes. With approximately 30,000 photovoltaic solar panels, they have a combined installed capacity of 9.5 MW and can generate close to 16 GWh of energy per year—enough to supply 1,000 homes. A storage system was added at Gabrielle-Bodis, allowing the energy generated to be set aside for use during consumption peaks.

Decarbonization

Hydro-Québec provides its customers in Québec and elsewhere with electricity that is over 99% clean and renewable. However, electricity represents only 38% of the energy used in Québec, with petroleum products accounting for 39%, and natural gas, 13%[a]. Québec's decarbonization strategy is therefore based on increasing electrification in the transportation, building heating, industrial and farming sectors. Beyond our borders, we also intend to contribute to the energy transition in neighboring provinces and the northeastern United States.

Since over 97% of the energy consumed in the transportation industry is derived from petroleum products, replacing oil with electricity is key.

Under the *2030 Plan for a Green Economy*, Hydro-Québec will play a vital role in helping the government reach its target of cutting Québec's GHG emissions by 37.5% by 2030.

Overall, our GHG emissions have fallen substantially since 1990. Direct emissions have dropped by 76%. The main source of direct emissions remains electricity generation by thermal power plants in off-grid systems. An 86% decline in thermal power plant emissions can be attributed primarily to the shutdown of seven such plants. Hydro-Québec's carbon footprint is shown in the Audited performance metrics table on page 82.

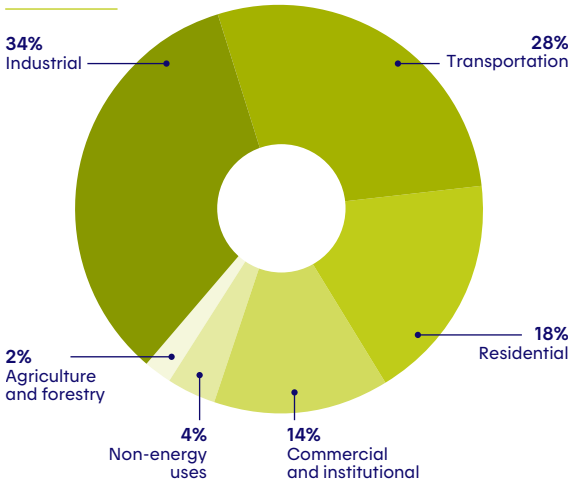
Partnership between Hydro-Québec and Autobus Groupe Séguin

Renewable energy certificates

A renewable energy certificate (REC) represents the renewable electricity produced by a generating station, expressed in megawatthours (MWh). An REC allows a power producer to sell the environmental attributes of its renewable energy generation—represented by an REC—to organizations wishing to achieve carbon-neutrality or to certify products or buildings.

Hydro-Québec's priority is to meet the renewable energy needs of its Québec customers. The growing trend among companies to set carbon-neutral objectives is driving the rising demand for RECs in Québec. We are working hard to reach our objectives of achieving decarbonization in the province and showcasing the renewable nature of our energy. By selling the RECs it has earned to U.S. customers, Hydro-Québec is making a significant contribution to carbon-neutral efforts.

Energy consumption in Québec by sector – 2021[a]



[a] *État de l'énergie au Québec 2021*, HEC Montréal

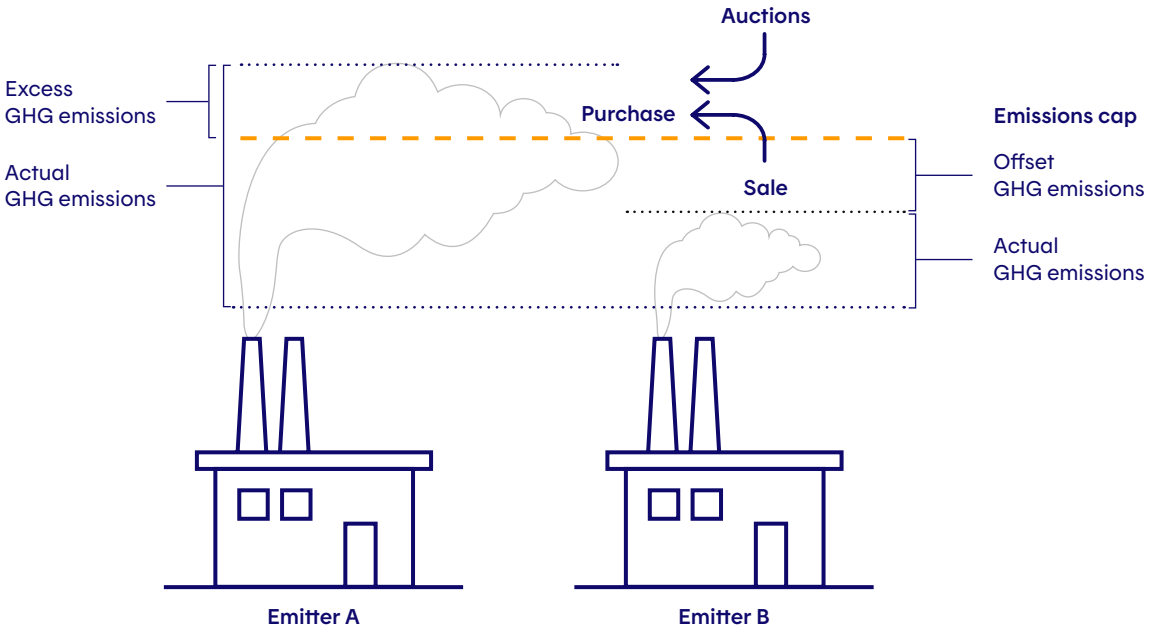
Carbon market

Québec and California are partners in a carbon market. Under Québec's cap-and-trade (C&T) system, organizations such as Hydro-Québec that emit more than 25 kt CO_2 eq. annually must purchase emission allowances to offset their emissions. Hydro-Québec is subject to the C&T system for the following three emission sources: the thermal generating station on Îles-de-la-Madeleine; electricity purchased outside Canada from thermal sources; and the loss of insulating gases from certain facilities.

The C&T system allocates carbon emission allowances based on the tonnes of GHGs that organizations can emit over a given period. At the end of each period, emitters must report their emissions and use their emission allowances to "pay" for them. The limit is lowered every year, with a view to reducing GHG emissions.

On the carbon market, one emission allowance is equal to one tonne of GHGs released into the atmosphere over a given period. All revenues from the sale of emission allowances—over $5 billion to date—have been paid into the Electrification and Climate Change Fund, which supports Québec's transition to a low-carbon economy.

Environmental follow-up at the Romaine complex



THE TRUE NATURE OF A QUÉBEC KILOWATT

The December 2021 issue of *Hydro-Presse* magazine offers up an interesting report on the history of hydropower, which discusses the carbon footprint of a hydropower reservoir. View the articles here or download the app (in French only).

Electric mobility

The years from 1980 to 2000 saw a decline in per-capita GHG emissions, due primarily to the electrification of home heating systems. While emissions have remained relatively stable since 2000, advances in sustainable mobility and Québec's commitment to transportation electrification are clearing the way to a renewed drive to replace hydrocarbons with hydropower.

The Québec government has set clear, ambitious objectives for progressively decarbonizing the transportation industry: electrify 55% of city buses and 65% of school buses by 2030, have 1.5 million electric vehicles on the road by 2030, and ban the sale of new gas-powered vehicles beginning in 2035. To support the transition, Hydro-Québec is putting in place the infrastructure and technologies needed to charge light and commercial electric vehicles.

Point-du-Jour rest area, Lavaltrie

The Electric Circuit

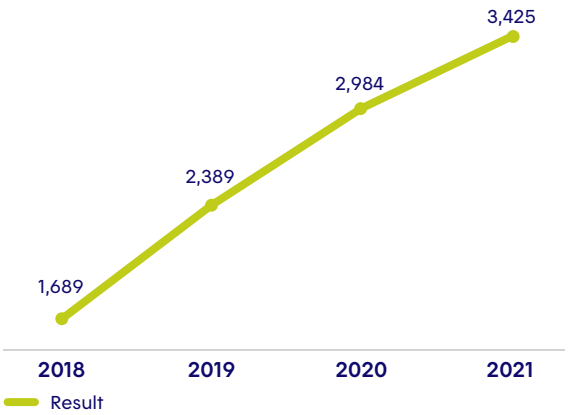
With approximately 3,400 charging stations throughout Québec, including more than 600 fast-charge stations, the Electric Circuit has paved the way for transportation electrification. Developed by Hydro-Québec, the network is expected to include 2,500 fast-charge stations by 2030—that's 160 to 220 new stations a year—and a further 4,500 standard curbside charging stations by 2028. To reach this objective and encourage the installation of charging stations, we have launched a grant program for municipalities, which will be required to provide 24/7 access to charging stations and offer free curbside parking at charging stations between 9 p.m. and 7 a.m.

Since new electric vehicle models offer greater range and have increased charging capacity, we have set up a third test bench for ultrafast charging stations in Laval to test new technologies that can eventually be incorporated into the Electric Circuit.

On the customer experience front, new features have been added to the Electric Circuit mobile app, including compatibility with Apple CarPlay and Google's Android Auto platform. The Trip Planner has also been updated to optimize charging options based on the availability of charging stations, weather, changes in elevation along the route and the vehicle's technical features.

Lastly, in addition to supporting the Association des véhicules électriques du Québec, which is conducting a public awareness campaign, the Electric Circuit is collaborating on an initiative helping approximately 40 driving schools to go electric.

Number of Electric Circuit charging stations



Partnerships

In 2021, Hydro-Québec joined forces with Autobus Groupe Séguin, a Québec family business, to test a new charging solution for a fleet of 60 electric school buses. The pilot project will run throughout the 2021–2022 school year and assess specific parameters for operating and charging electric vehicles. We eventually plan to offer charging solutions for various types of vehicle fleets used in urban transport, school transportation, parcel delivery, freight transportation, and public and municipal services.

Hilo, a Hydro-Québec subsidiary, is developing a home charging solution allowing EV owners to charge their vehicles at any time without affecting grid stability, even during cold snaps. The solution will ensure that we can efficiently handle the rapid rise in EVs on Québec roads. A pilot project is also underway with Elmec, the Shawinigan-based manufacturer of EVduty charging stations, to evaluate and optimize the solution.

This year, Hydro-Québec also signed on as a Principal Partner of Propulsion Québec, the cluster for electric and smart transportation, to support transportation electrification and the development of new mobility solutions.

Car-sharing fleet in the city of Québec

Hydro-Québec's vehicle fleet

Hydro-Québec had originally planned to add 100 light hybrid or plug-in vehicles to our fleet every year, beginning in 2021. However, the decarbonization strategy tabled in 2021 set an even more ambitious target, aiming for a fleet of 2,545 hybrid, plug-in hybrid or all-electric vehicles by 2026, including 55 Ford E-Transit vans—the first in Canada.

By the end of 2021, Hydro-Québec had almost 700 vehicles helping bring down our fleet's carbon footprint.

Québec's first all-electric bucket truck (Lion and Posi-Plus) is currently being manufactured and will join our fleet in 2022. The first 10 all-electric snowmobiles manufactured by Québec company Taiga will also be delivered in 2022.

We launched a new car-sharing platform in 2021, which allows employees to reserve a vehicle online for business travel. Dozens of vehicles are already available at 14 locations across Québec, and new sites will be added in 2022.

1,100
Number of light plug-in hybrid vehicles by 2026

300
Number of specialized electric vehicles by 2030

Reduction of GHG emissions from Hydro-Québec operations

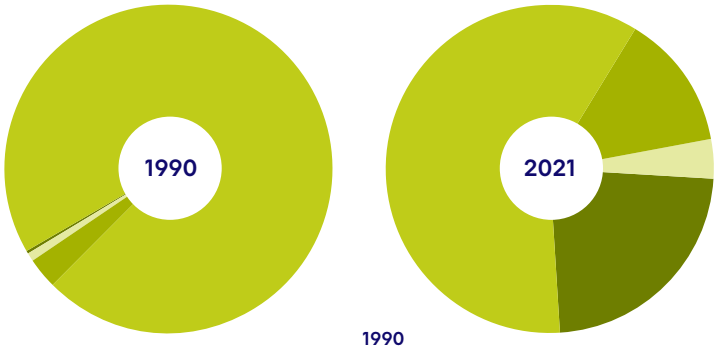
In its *Sustainable Development Plan 2020-2024,* Hydro-Québec aims to achieve carbon-neutrality by 2030. We reiterated that commitment in fall 2021, backed by plans to intensify our decarbonization efforts wherever possible.

In 2021, our GHG emissions totaled 360,711 t CO_2 eq., 60% of which are attributable to the thermal generating stations that power our off-grid systems, and 13% to our vehicle fleet. Our decarbonization strategy aims to cut direct emissions from our operations by 50% by 2030.

Finally, Hydro-Québec joined the steering committee of the Montréal Climate Partnership (MCP), whose mission is to ramp up efforts to decarbonize the city. Drawing inspiration from the world's best engagement models, including Boston's Green Ribbon Commission, the MCP focuses on Montréal's top GHG emission sources. In 2021, we contributed our expertise in two priority areas: buildings and mobility.

Carbon footprint – Changes since 1990

Direct sources (t CO_2 eq.)

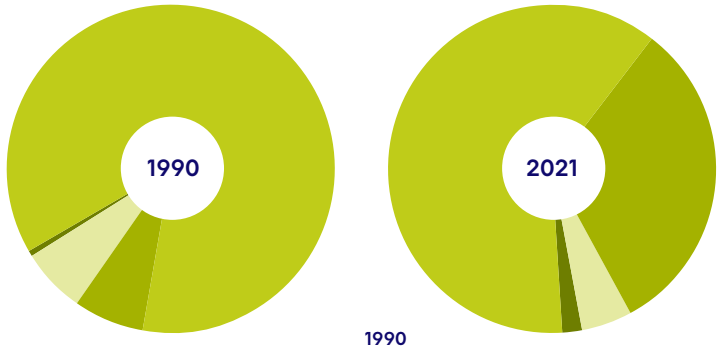


	1990 Total: 1,559,966	2021 Total: 360,711
Thermal generating stations	1,496,967	215,561
Vehicle fleet	48,800	47,989
Aircraft fleet	11,500	14,718
Utility vehicles Propane-fueled lift trucks Fuel use GHG-producing equipment	2,698	82,444

Direct GHG emissions (scope 1)

Overall, our GHG emissions have fallen substantially since 1990. Direct emissions have dropped by 77%. Electricity generation from fossil fuels in off-grid systems remains the main direct source of emissions. The 86% decline in thermal power plant emissions is mainly due to the temporary or permanent shutdown of seven thermal generating stations.

Indirect sources (t CO_2 eq.)



	1990 Total: 3,834,620	2021 Total: 184,605
Electricity purchases	3,309,741	105,430
Life cycle of fuel	259,519	54,232
Power transmission and distribution system losses	249,120	8,290
Business travel	16,240	3,190

Indirect GHG emissions (scopes 2 and 3)

Our indirect GHG emissions (scopes 2 and 3) have fallen significantly—by 95% since 1990. Electricity purchases remain the main indirect source, though associated emissions have decreased by 97%.

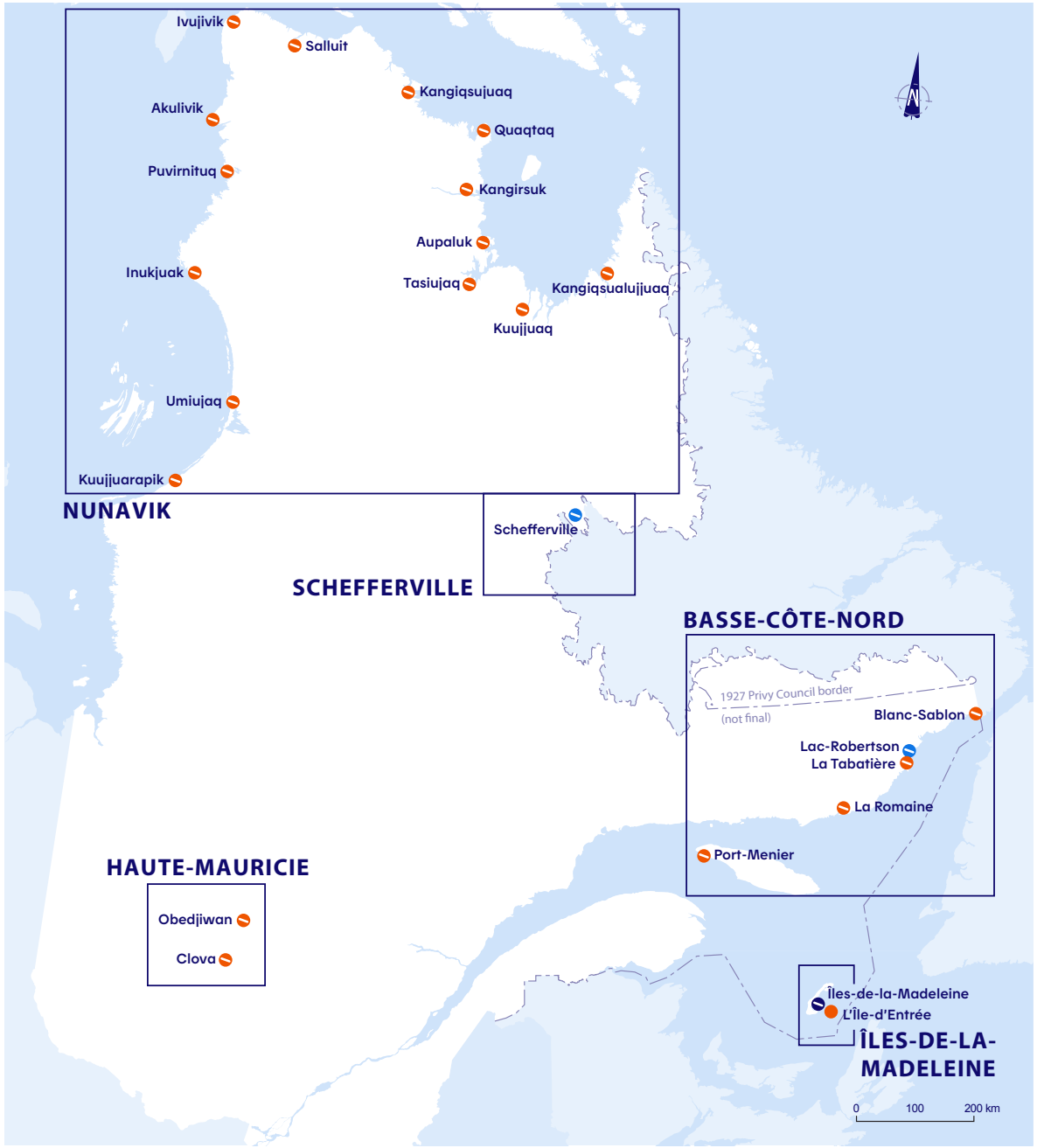
Conversion of off-grid systems

Because off-grid systems are the main source of GHG emissions, Hydro-Québec plans to gradually convert them to renewable energy. In 2021, we carried out work to reduce the emission levels of a number of our off-grid systems, including in Nunavik.

Beginning in 2023, the village of Tasiujaq will be supplied by a new 1.8-MW hybrid generating station. The $55.3-million project is a reliable and economical solution designed to meet the community's needs, integrate renewable energy sources and bring down GHG emissions.

A new 7.25-MW hydropower generating station in Inukjuak is scheduled for commissioning in 2022.

We also continued discussions concerning contracts for renewable energy supplies to the communities of Obedjiwan (biomass) and Kuujjuarapik-Whapmagoostui (wind). The wind power project involved the preliminary installation of a battery designed by EVLO Energy Storage, a Hydro-Québec subsidiary.



STATIONS

- Thermal, diesel-fired
- Thermal, oil-fired
- Hydroelectric

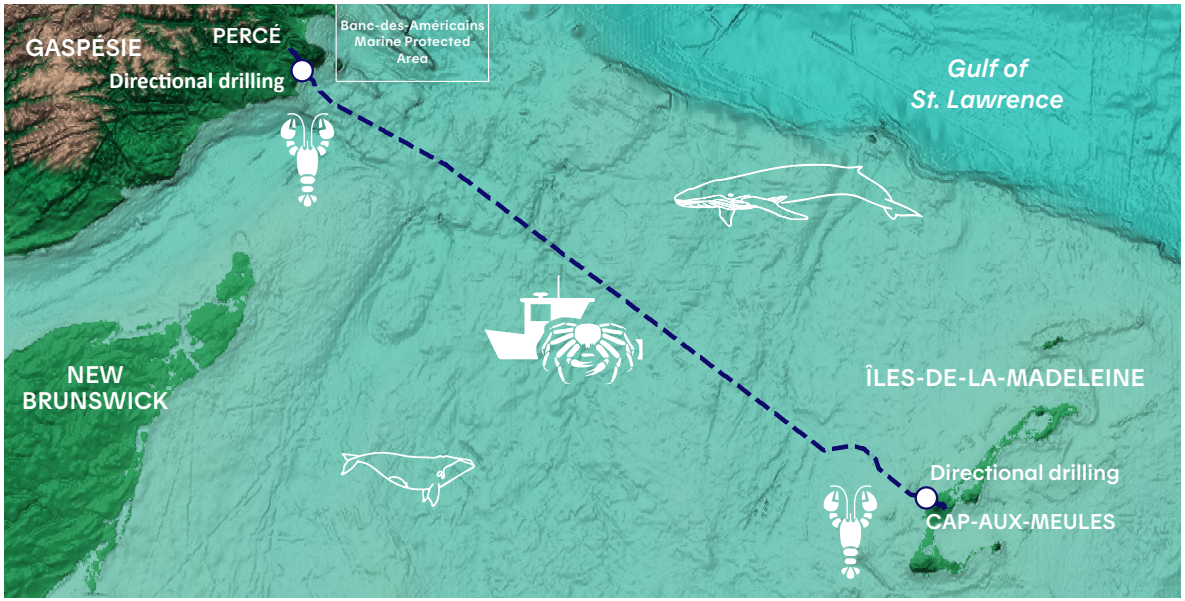
Connecting the Îles-de-la-Madeleine

Hydro-Québec's largest off-grid system, in Îles-de-la-Madeleine, serves 6,600 residential and business customers. In 2021, Îles-de-la-Madeleine thermal generating station, which supplies the system, burned 38 million litres of fuel oil and produced 36.5% of our direct GHG emissions. The Dune-du-Nord wind farm, commissioned in December 2020, helped reduce GHG emissions significantly. In 2021, the generating station used 5 million fewer litres of fuel and cut its GHG emissions by 15% compared to the previous year.

Despite this partial decarbonization, we opted to connect the archipelago to the main electric system through underwater cables in support of our energy transition efforts. The Îles-de-la-Madeleine community is largely in favor of the project.

In 2021, extensive data collection helped ascertain the best route for the underwater cables. It will avoid rugged terrain, protected areas, fragile environments and most of the rocky reefs. Marine geophysical and geotechnical surveys were carried out to protect endangered marine mammals, including North Atlantic right whales and blue whales.

When installing the underwater cables, we will implement several measures in collaboration with local residents to address the top environmental concerns, including disruptions to fishing and boating as well as potential disturbances to endangered marine mammals. Îles-de-la-Madeleine generating station will remain in operation to meet urgent and peak demands, and some of the employees will stay on staff. We will assist the remaining employees as they transition to new positions elsewhere.



Project summary

160 kV
Voltage of the direct-current line

220 km
Length of the underwater section

2
Number of underground sections: one in Gaspésie and one in Îles-de-la-Madeleine

2
Number of converter substations: one in Gaspésie and one in Îles-de-la-Madeleine

2027
Commissioning

GRI 102-11, 305-1, 305-5

Dual energy and building automation

In 2021, Hydro-Québec and Énergir teamed up to help cut the province's GHG emissions from building heating by 50% by the year 2030, compared to 1990 emission levels. The partners' solution involves promoting dual energy with Énergir's residential, commercial and institutional customers to encourage them to use electricity for space and water heating, except during very cold weather. Dual energy helps optimize different energy sources by efficiently managing electricity consumption peaks. Along with an advantageous dual-energy rate, participating customers will receive financial assistance to purchase energy-efficient electrical equipment. The Régie de l'énergie is currently reviewing the proposal.

In addition to offering smart home solutions, Hydro-Québec's subsidiary Hilo plans to extend its services to businesses and institutions to help them lower their energy costs and GHG emissions. In 2021, Hilo joined forces with ACCS, a Québec company specializing in building automation and control systems, to offer comprehensive (design-to-installation) smart building services.

A smart home at our energy technologies laboratory in Shawinigan

Electricity exports

In 2021, our electricity exports helped avoid the release of 6,848,966 t CO_2 eq. from various types of thermal generating stations.

By supplying clean, renewable energy to neighboring systems, we're supporting efforts to reduce GHG emissions beyond Québec's borders. The complementarity of hydropower and intermittent energy sources was confirmed in a report from the United States International Trade Commission, which highlighted the role of hydropower in decarbonizing the northeastern United States.

In September 2021, following a call for proposals issued in connection with New York State's Clean Energy Standard, the New York State Energy Research and Development Authority (NYSERDA) selected Hydro-Québec's electricity and the future Champlain Hudson Power Express (CHPE) line to help reach the state's decarbonization objectives.

The project involves the construction of a new 1,250-MW line to bring 10.4 TWh of renewable energy into New York City every year—approximately 20% of the city's total electricity needs. Over 85% of NYC currently runs on fossil fuels.

The contract with the NYSERDA, signed in November 2021, will be subject to regulatory approvals in 2022.

GHG emissions avoided by net exports of electricity

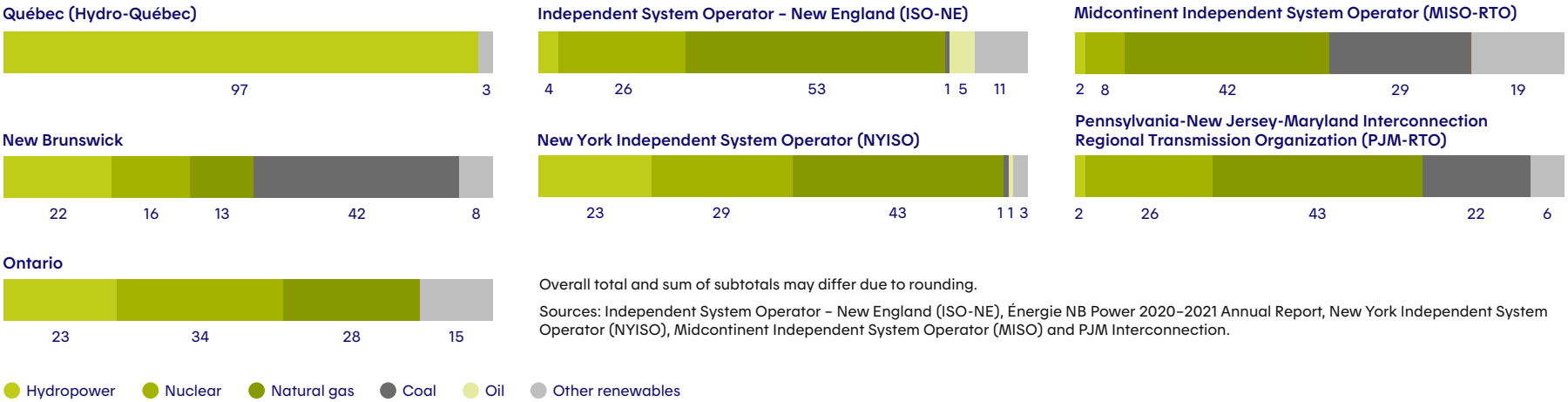
	2018	2019	2020	2021
GHG emissions avoided (kt CO_2 eq.)	7,902	6,949	6,611	6,849
Net exports (TWh)	36.1	33.7	31.3	35.6

The positive differential is gradually waning as the northeastern United States turns to new sources of supply with lower GHG emissions.

Interconnection capacity

	2018	2019	2020	2021
Import capacity (MW)	5,975	6,025	6,025	6,015
Export capacity (MW)	8,212	7,974	8,145	8,190

Main export market energy mixes (%)



Overall total and sum of subtotals may differ due to rounding.

Sources: Independent System Operator – New England (ISO-NE), Énergie NB Power 2020–2021 Annual Report, New York Independent System Operator (NYISO), Midcontinent Independent System Operator (MISO) and PJM Interconnection.

Biodiversity

The UN panel of experts on biodiversity (IPBES) warns that approximately one million plant and animal species are on the verge of extinction. At least 680 vertebrate species have disappeared since the 16th century, and biodiversity continues to erode. Human activity has significantly altered 75% of terrestrial environments and 66% of oceans, which are sustaining increasing cumulative effects impacting the essential ecological services they provide.

Hydro-Québec is keenly aware of the gravity of this environmental issue and has taken steps to protect and enhance biodiversity since our first environment department was created 50 years ago.

A better understanding of the environment

Hydro-Québec's data collection protocols and environmental studies have evolved over the years to reflect our commitment to sustainable development, the regulatory framework, new technologies and the public's growing interest in the environment.

Surveys of terrestrial environments, aquatic environments and wetlands carried out as part of environmental impact assessments, as well as studies conducted with university researchers, have improved our understanding of ecosystems and our knowledge of plant and animal species, particularly special-status species.

SOME OF OUR CONTRIBUTIONS TO BETTER UNDERSTANDING THE ENVIRONMENT

Calculation of the instream flows of Rivière Rupert (yellow sturgeon) and Rivière Romaine (Atlantic salmon) based on hydraulic studies, fish population surveys and traditional Indigenous knowledge

Monitoring of the Atlantic salmon spawner population in the Romaine using a 400-m automated fish weir

Telemetric monitoring of juvenile salmon in the Rivière Romaine using an underwater antenna array

Long-term monitoring of golden eagle populations in the Sainte-Marguerite, Moisie and Romaine watersheds

Monitoring of woodland caribou in the Romaine watershed

Use of environmental DNA to detect salamander populations in Estrie region streams

Use of drones to conduct turtle surveys in Beauharnois

Use of ultrasound recorders to detect acoustic signals from boreal forest bat populations

Addition of new species to inventories (salamanders, tree frogs and toads), and potential use of insects in mitigation measures

Development of methods to relocate rare plant species, improve plant biodiversity in rights-of-way and restore wetlands and fish habitats

Environmental studies and research projects directed by Hydro-Québec's experts have also expanded our knowledge of Québec's ecological, ethnological, archaeological and historical heritage. This information is stored in our databases and shared with the Répertoire du patrimoine culturel du Québec and the Centre de données sur le patrimoine naturel du Québec (CDPNQ).

Chorus frog

Vegetation control

In 2021, Hydro-Québec continued its vegetation control efforts near distribution lines with an investment of $118.7 million ($100.1 million in 2020) and expanded use of mechanized methods. Contractors were accompanied whenever possible to assist them in making the environmental and health and safety decisions required on a daily basis.

Since 2016, the NSERC–Hydro-Québec Industrial Research Chair on Control of Tree Growth has been studying ways to optimize control operations for trees and facilitate the coexistence of vegetation and the power distribution system. Researchers are focusing specifically on functional traits that combine resilience, biodiversity and performance in relation to ecosystem services. As part of an experimental forest, 360 trees from six large-canopy species with specific functional characteristics were planted on Hydro-Québec lots in Saint-Bruno-de-Montarville. The trees possess significant plasticity, which allows them to respond well to operations aimed at minimizing interference with the distribution system. These operations include directional pruning, staking and the installation of caps to inhibit the growth of certain branches.

Projects being conducted by the NSERC/Hydro-Québec Industrial Research Chair in Phytotechnology will further scientific knowledge by helping to improve vegetation control in hydroelectric rights-of-way. One study is looking at which combinations of herbaceous species are most resistant, under various conditions, to invasive species like common buckthorn and Manitoba maple, which present a safety risk to the transmission system. Various seed mixes have been studied and tested on 150 sample plots in actual rights-of-way. Keen to preserve the biodiversity of areas in need of replanting, the experts have developed seed mixes that contain a high proportion of native plants, such as Canada goldenrod, common yarrow and milkweed. These plants provide food, shelter and breeding grounds for pollinators, butterflies, birds and other species that inhabit or visit ecosystems located in rights-of-way.

Enhancement of wildlife habitat

Hydro-Québec helps to preserve and maintain biodiversity by implementing measures to offset the residual impacts of our facilities and developing wildlife enhancement programs.

Starting right from the design phase of our two solar generating stations commissioned in 2021, we included a criterion to assist pollinators. With the exception of access roads, we ensure full vegetation cover to provide habitats where pollinators (butterflies and bees) can find food and shelter from the heat. We will conduct follow-ups in the coming years to assess the success of these measures.

Barrow's goldeneye

The Côte-Nord salmon habitat enhancement program, launched as part of the Romaine hydroelectric complex project, spanned a 10-year period and ended on December 31, 2021. The program involved over 35 partners and resulted in 12 major projects, 22 community projects and 8 research projects for the benefit of Atlantic salmon populations. The major projects in particular gave salmon access to an additional 414 km of rivers. It is estimated that annual recurring production could increase to up to 11,000 adult salmon in the new habitats.

In 2021, as part of the project to repair the Les Cèdres dike, Hydro-Québec created a multi-species spawning ground (8,000 m^2), a feeding area (5,000 m^2) and a trench for a future aquatic grass bed (1,000 m^2). The spawning ground will provide suitable conditions for swift-water species, including walleye, suckers and copper redhorse. The feeding area adjacent to the spawning ground will provide a shallow rocky habitat for small and young fish. Finally, the aquatic bed located downstream will be seeded in summer 2022 and provide a suitable feeding habitat and shelter for phytophile species.

As part of the Micoua–Saguenay line project, 20 nesting boxes were installed in late summer 2021, primarily in the Lac Laflamme and Lac Poulin-de-Courval areas. The nesting boxes will offset the loss of trees that are home to the Barrow's goldeneye, a vulnerable species that nests near small lakes uninhabited by fish and found at high altitudes. Monitoring and maintenance of the nesting boxes will continue for a 10-year period.

Impoundment of Romaine-4 reservoir, the last reservoir in the complex, was completed on July 18, 2021, making it possible to carry out helicopter surveillance for potential issues affecting fauna. Over a 13-month period, we observed signs of wildlife (tracks, trails, gnawed trees, lodges and dams) as well as a few animals along the shoreline (beavers, bears and moose). The rise in water levels did not pose a threat to the wildlife observed.

In 2021, in collaboration with the Fondation de la faune du Québec, Hydro-Québec provided backing for seven new projects as part of our program for the enhancement of natural areas. These projects were carried out by partners in five administrative regions, to which Hydro-Québec contributed a total of $519,950. The projects include enhancing river and forest ecosystems, building infrastructure to expand public access and awareness, and protecting the habitats of vulnerable or threatened plant and animal species.

Ecosystem enhancement projects

Project	Partner(s)	Region
Enhancement and development of the Barbe-Denys-De La Trinité conservation park	Arbre Évolution, Coop de solidarité	Montérégie
Saint-Lucien trails	Municipality of Saint-Lucien	Centre-du-Québec
Enhancement and development of three sites along the Route des milieux humides	Organisme de bassin versant Lac-Saint-Jean	Saguenay–Lac-Saint-Jean
Development of a seeded pasture for grassland birds in the Brossard woods	Nature-Action Québec (NAQ)	Montérégie
Birdwatching park in Saint-Fulgence	Municipality of Saint-Fulgence	Saguenay–Lac-Saint-Jean
Sandpit trail	Municipality of Bolton-Est	Estrie
Enhancement and restoration of natural areas along the Barachois de Malbaie sandbar	Nature Conservancy of Canada	Gaspésie–Îles-de-la-Madeleine

Sustainable Development Plan: Progress summary

Strategy

9. Work toward decarbonizing all of our business activities and markets

SDG*

Target	Status	Explanation
9.1 Avoid 4.6 Mt CO_2 eq. of emissions through our long-term export contracts **Indicator** GHG emissions avoided (Mt CO_2 eq.)	**2.5 Mt CO2 eq. of GHG avoided (2020: 2.5 Mt CO_2 eq.)**	Meeting the export volumes of our long-term contracts allowed us to attain our 2021 target.
9.2 Cut direct emissions of our operations by 35% by 2027 **Indicator** Direct GHG emissions reduced compared to 2018 (%)	**2.2% increase**	We intend to cut our GHG emissions as much as possible. The objective set out in the *Sustainable Development Plan 2020-2024* has been increased by 50%. The new target will be integrated into the next Sustainable Development Plan, in 2022.
9.3 Aim for carbon neutrality by 2030 **Indicator** Development and progress of a carbon-neutral strategy (%)	**Development of a detailed plan of action for the strategy aiming for carbon neutrality by 2030: 100% completed**	Our carbon-neutral strategy targets remaining emissions, which cannot be reduced or eliminated. In 2021, Hydro-Québec developed an internal action plan to achieve carbon neutrality by 2030.

* Sustainable development goal

GRI EU5, 103-2

Sustainable Development Plan: Progress summary

Strategy

10. Equip Quebecers to lower their consumption through better electricity use.

SDG*

Target

10.1 Propose electricity management solutions to our business and residential customers that aim to cut energy use by 2.49 TWh and potentially reduce power demand by 1,523 MW compared to 2019

Indicator

1) Reduction in energy use by business and residential customers (TWh)

2) Potential reduction in power demand (MW)

Status

0.733-TWh reduction in energy use by business and residential customers (2020: 0.4427 TWh)

438-MW[a] potential reduction in power demand (2020: 327 MW)

Explanation

The energy use reduction target for business and residential customers was raised to 3.5 TWh within the timeframe of the Sustainable Development Plan.

Demand response projects and various rate options are helping to achieve our power reduction target. For 2021, the impact of management measures to reduce demand (in MW) included the interruptible electricity rate option, the Demand Response Program for business customers, dynamic pricing, the dual-energy rate and the impact of energy efficiency measures on power demand. The result for the rate is, however, a preliminary assessment.

Recent changes to the Efficient Solutions Program significantly boosted customer participation and generated greater energy savings.

[a] Preliminary data

* Sustainable development goal

GRI 103-2

Sustainable Development Plan: Progress summary

Strategy

11. Enhance and protect biodiversity

SDG*

Target

11.1 **Develop a corporate strategy for enhancing and protecting biodiversity**

Indicator

1) Development of a biodiversity enhancement and protection strategy in 2020

2) Progress on actions identified in the strategy (2021–2024)

Status

Plan of action postponed to 2022 as a result of the global health situation and its impacts on the adoption of new government strategies to enhance and protect biodiversity

Explanation

Through our presence and activities spanning a large portion of Québec, we make a significant contribution to the commitments and actions taken to protect and enhance biodiversity in Québec. Further to discussions with various government organizations and stakeholders, we have defined the vision and objective of our new Biodiversity Strategy 2022–2026. However, as a result of the delays caused by the global health situation and its impact on strategy development, submission of the action plan has been postponed to late 2022, for implementation in 2023.

* Sustainable development goal

GRI 102-43, 103-2

Sustainable Development Plan: Progress summary

Strategy

12. Reduce resource use by applying the principles of the circular economy

SDG*

Target

12.1 Draft and deploy a logistics strategy that applies the best practices of the circular economy

Indicator

1) Development of a logistics strategy in 2020

2) Progress on the actions identified in the strategy (2021–2024) (%)

Status

17% of actions provided in the logistics strategy implemented

Explanation

Hydro-Québec had originally planned to add 100 light hybrid or plug-in vehicles to our fleet every year beginning in 2021. However, the decarbonization strategy tabled in 2021 set an even more ambitious target, aiming for a fleet of 2,545 plug-in hybrid or all-electric vehicles by 2026, including 55 Ford E-Transit vans—the first in Canada. Beginning in 2022, our vehicles will gradually be replaced with electric or plug-in hybrid models once it is technologically and geographically possible to do so.

We launched a new car-sharing platform in 2021 allowing employees to reserve a vehicle online for business travel. Dozens of vehicles are already available at 14 locations across Québec, and new sites will be added in 2022.

Target

12.2 Use tools to integrate a total cost analysis (TCA) of goods and services at time of procurement into our governance

Status

Four of our calls for tenders included a TCA. Five contracts (with terms ranging from three to five years) were awarded pursuant to these calls for tenders, with a total value of nearly $100 million.

Explanation

Hydro-Québec has informed stakeholders of the new framework, implemented the procedure and identified the goods and services for which a TCA has been performed. Five total cost of ownership analyses were considered as part of the acquisition process for prefabricated concrete troughs and various IT solutions.

* Sustainable development goal

GRI 103-2

Audited performance metrics

Indicators	Results			
	2018	2019	2020	2021
Environment				
Power generated – Hydropower (GWh)	175,232	175,086	171,162	160,459
Power generated – Solar (GWh)	0	0	0	8
Power generated – Thermal (GWh)	312	318	310	289
Residual power purchases – Hydropower (GWh)[a]	35,913	34,500	32,843	34,856
Residual power purchases – Wind (GWh)[a]	11,276	11,827	10,991	4,145
Residual power purchases – Biomass/waste reclamation (GWh)[a]	2,038	1,939	1,837	2,121
Residual power purchases – Other (GWh)[a]	668	1,340	1,152	674
Residual power purchases – Total (GWh)[a]	49,895	49,606	46,823	41,796
Total renewables purchased from independent producers (GWh)	16,113	16,427	16,410	15,456
Total residual renewables (generated and purchased) (GWh)[a]	224,459	223,352	216,833	201,589
Power from renewable sources delivered to customers (%)[b]	99.8	99.6	99.6	99.5
Volume of electricity purchased outside Québec (GWh)	31,749	31,600	29,154	31,648
Net electricity generated by Hydro-Québec (GWh)	175,546	175,404	171,472	160,756
Total net electricity generated and purchased (GWh)	225,439	225,010	218,296	202,551
Emissions avoided by net electricity exports (t CO_2 eq.)	7,901,691	6,880,394	6,611,235	6,848,966
Renewable energy certificates sold to third parties (GWh)	635	649	1,232	11,494
Interconnection import capacity (MW/number)	5,975/15	6,025/15	6,025/15	6,015/15
Interconnection export capacity (MW/number)	8,212/15	7,974/15	8,145/15	8,190/15
Reduction in GHG emissions since 1990 (%)	90	90	90	89
Reduction in GHG emissions since 1990 (direct sources) (%)	73	72	73	73
Reduction in GHG emissions since 1990 (indirect sources) (%)	96	96	96	95
Avoided GHG emissions in Québec (% of Québec government target for 2030 compared to 1990 emission level)	–	14	14	14
Total number of vehicles as at December 31	5,236	5,723	5,805	5,702
Number of all-electric, hybrid, plug-in hybrid and dual-energy vehicles[c]	294	399	561	683
Energy efficiency initiatives: Energy saved – Residential customers (GWh)	212	214	225	312
Energy efficiency initiatives: Energy saved – Business customers (GWh)	245	257	218	420
Energy efficiency initiatives: Energy saved – Off-grid systems (GWh)	3	10	0.3	0.4

[a] "Residual" means that the value shown reflects the gross energy purchased less the sale of renewable energy certificates (RECs). For example, in 2021, the residual wind power purchase is based on a gross purchase of 10,997 GWh less the sale of 6,852 GWh in RECs, for a residual total of 4,145 GWh.

[b] Excludes off-grid systems.

[c] Since 2021, all-electric, hybrid, plug-in hybrid, and dual-energy vehicles have been included in this indicator, which was limited to light vehicles in the past. Previous results can therefore not be compared.

GRI 102-15, 102-48, EU2, 103-3, 302-4, 417-1

Indicators		Results			
		2018	2019	2020	2021
Energy efficiency initiatives: Total energy savings (GWh)		460	481	443	733
Energy efficiency results – Administrative buildings (kWh/m^2 gross)		229	233	222	223
Reduction in administrative building power demand during winter peaks (number of buildings/kW)		41/5,941	38/7,259	41/10,431	41/455
Accidental spills reported to the authorities (number)		1,262	1,365	1,122	1,379
Environmental non-compliance notices (number)		26	27	11	40
Insulating mineral oil recovered (thousands of litres)/reuse (%)		5,563/96.2	3,228/95.9	2,837/98.7	5,014/75.3
Water withdrawn (millions of m^3)[d]		9	3	3	3
Area of transmission line rights-of-way treated mechanically (%)		95	93	93	90
Area of dikes and dams treated mechanically (%)		46	73	71	57
NO_x emissions from thermal electricity generation (t)		4,124	4,154	4,214	3,443
SO_2 emissions from thermal electricity generation (t)		1,180	1,169	1 ,180	1,026
Atmospheric emissions compared to the regional average – CO_2 (number of times less)		325	323	334	265[e]
Atmospheric emissions compared to the regional average – SO_2 (number of times less)		153	282	315	24[e]
Atmospheric emissions compared to the regional average – NO_x (number of times less)		240	253	269	9[e]
Carbon footprint (t CO_2 eq.)					
Direct sources (scope 1)					
Generating stations	Thermal power plants	234,441	235,855	228,074	215,561
Mobile sources	Vehicle fleet	51,785	50,131	43,943	47,989
	Aircraft fleet	13,516	12,941	13,605	14,718
	Utility vehicles (e.g., snowmobiles, tractors, snowblowers)	941	1,068	890	886
	Propane-fueled lift trucks	83	88	68	756
Fuel use	System maintenance generators	4,205	14,656	4,699	3,952
	Emergency and jobsite generators	666	554	710	675
	Building heating	673	1,118	966	1,084
Other uses	Equipment containing CF_4 and SF_6	63,009	37,527	74,258	74,258[f]
	Aerosols	428	258	382	0.3
	Equipment containing CFCs and HCFCs	599	459	714	786
	Synchronous compensators	24	24	24	47
Indirect sources (scope 2)					
Energy losses	Power transmission and distribution system losses	8,347	7,415	6,662	8,290

[d] In accordance with the *Regulation respecting the declaration of water withdrawals*, which applies to thermal generating stations and some workcamps using more than 75 m^3 of water per day (excludes withdrawals for PPG Canada).

[e] The decrease is due to the greater accuracy of the method used to calculate the results.

[f] For reasons beyond our control, the data required for the final calculations were not available at the time of publication. We have therefore provided the maximum historical value of the last three years. The official value for 2021 will be presented in the *Sustainability Report 2022*.

Indicators		Results			
		2018	2019	2020	2021
Indirect sources (Scope 3)					
	Electricity purchases[g]	107,907	100,365	93,224	105,430
	Business travel – Employee personal vehicles	5,508	5,153	2,818	3,190
	Vehicles leased long-term	2,265	2,134	1,967	2,612
	Business travel – Trains	14	15	3	1
	Business travel – Commercial airlines	1,762	1,743	351	365
	Helicopters	4,032	5,079	2,620	5,777[h]
	Chartered airplanes	4,784	4,796	3,878	4,709[h]
	Life cycle of fuel	50,803	52,639	48,887	54,232
Total emissions					
	Direct sources (scope 1)	370,370	354,680	368,332	360,711
	Indirect sources (scope 2)	8,347	7,415	6,662	8,290
	Indirect sources (scope 3)	177,076	171,924	153,748	176,315
	Direct and indirect sources	555,792	534,019	528,742	545,317
Social					
Access-to-information requests processed (number)		565	509	455	393
Reputation score		–	7.00	7.38	7.50
Sustainable employee engagement index (%)		85	84	87	88
Overall public satisfaction – Very and quite satisfied (%)		93	94	96	97
Customer satisfaction index – Combined index (scale of 10)		8.2	8.3	8.3	8.4
Average call wait time – Customer relations centers (seconds)		87	104	96	101
Call service level (%)		–	–	85	83
System average interruption duration index (SAIDI) – Distribution system (min/customer)		411	720	256	323
System average interruption duration index (SAIDI) – Transmission system (min/customer)		26	41	49	22
Special payment arrangements for low-income customers (number)		92,882	94,924	36,020	38,884
Special payment arrangements for all residential customers (number)		373,749	378,836	224,157	305,048
Customer claims (number)		4,031	3,501	2,517	2,396
Customer complaints (number)		2,740	2,231	1,611	1,562
Complaints appealed to the Régie de l'énergie (number)		99	90	42	61
Employee Assistance Program – Number of cases opened		2,489	2,644	2,437	2,817

[g] For 2020, a new method taking import times into account was used to more accurately calculate GHG emissions related to electricity purchases from neighboring systems. The data for 2018 and 2019 were also recalculated using the new method. Therefore, previous results cannot be compared.

[h] GHD was unable to audit this indicator because the current data management tool does not permit full verification of the traceability of information required for a proper audit process. An improvement to this tool is planned for 2022.

Indicators	Results			
	2018	2019	2020	2021
Potentially serious incidents (PSIs) (number)	297	291	245	276
Field observations ("Go and See") (number)	23,675	23,699	31,439	32,794
Lost time accident frequency rate (per 200,000 hours worked)	–	1.41	1.00	1.10
Electrical accidents – Incidents (number)	222	199	202	162
Electrical accidents – Deaths (number)	3	4	4	4
Percentage of payroll invested in training	3.1	2.8	2.4	3
Donations and sponsorships ($M)[i]	19.1	18.9	19.3	17.4
Economy				
Number of patents related to energy storage and conversion (held/pending)	533/284	564/378	562/415[j]	729/487
Number of patents related to innovation (held/pending)	275/69	173/50	160/40	142/48
Total procurement of goods and services ($M)/Québec only (%)	2,883/91	3,115/92	3,022/90	3,652/91
Revenue from electricity sales inside and outside Québec ($M)[k]	13,865	13,939	13,324	14,238
Rate increases (%)[k,l]	0.3	0.9	N/A	1.3
Contribution to Québec's gross domestic product (GDP) ($B)[k,m]	–	20.7	20.5	22.7
Net income ($M)[k]	3,192	2,923	2,303	3,564
Dividend ($M)[k]	2,394	2,192	1,727	2,673
Water-power royalties ($M)[k]	705	720	716	757
Public utilities tax ($M)[k]	298	299	304	308
Municipal and school taxes ($M)[k]	39	40	40	39
Funding for educational institutions – Contributions, research chair funding and research contracts ($M)	7.8	6.8	7.5	8.8

[i] Includes Hydro-Québec's donation to Centraide.
[j] The 2020 value was corrected subsequent to the publication of the *Sustainability Report 2020*.
[k] Information taken from Hydro-Québec's *Annual Report 2021* and verified in a separate audit.
[l] April 1 adjustment corresponding to the rate increase for large-power customers (Rate L).
[m] Data based on the most recent information available at the time this report was published.

Advisory Committee on Sustainability

The advisory committee's mandate is to provide an expert, objective and critical opinion on specific topics. It is made up of six people representing our priority stakeholders in the area of sustainability, namely:

Béatrice Alain, Executive Director, Chantier de l'économie sociale

Étienne Berthold, Associate Professor, Department of Geography Institut Hydro-Québec EDS, Université Laval

Marc Cloutier, Executive Director, Association coopérative d'économie familiale de Québec

Marcel Furlong, Prefect of the MRC of Manicouagan and representative of the Fédération québécoise des municipalités

Catherine Gauthier, Executive Director, ENvironnement JEUnesse

Charles Milliard, President and CEO, Fédération des chambres de commerce du Québec

In 2021, the committee met three times to make comments and recommendations, which we are gradually incorporating as we update the relevant documents or as issues evolve.

Summary of committee comments

Coverage of sustainability issues in the Sustainability Report

The committee reviewed several topics and made the following recommendations to better focus data collection efforts and improve activity reporting:

- Add indicators
- Present summary or detailed information, depending on needs
- Reflect Hydro-Québec's influence and duty to set an example
- Take different audiences into account when drafting content

Improvements for the *Sustainability Report 2021*

Further to the committee's comments, the report's interactive features were redesigned to improve navigation on mobile devices. In addition, a new platform is being tested to include more detailed data. These changes aim to:

- Achieve a balance between technical and non-technical content
- Keep or add links to the website to provide access to additional information
- Enhance mobile device interactivity using hyperlinks

Improvements for the *Sustainable Development Plan 2020–2024*

The following recommendations will aid in the preparation of the next edition of the Sustainable Development Plan:

- Add supplementary documents to further detail strategies
- Clarify certain terms, targets and indicators
- Further detail measures or make action plans accessible
- Maintain annual reporting

Management of Hydro-Québec's heritage

Based on a case study review, the committee identified various ways to better showcase the company's heritage, including:

- Increase access to our historical collection by exhibiting it in more ways and in more locations
- Establish criteria to enable municipalities and community organizations to use heritage buildings

GRI 102-42

Task Force on Climate-Related Financial Disclosures (TCFD)

In this section, Hydro-Québec voluntarily discloses financial information on climate-related risks and opportunities along with the measures taken to mitigate those risks. The disclosure is consistent with the recommendations of the TCFD created by the Financial Stability Board, an organization that monitors the global financial system.

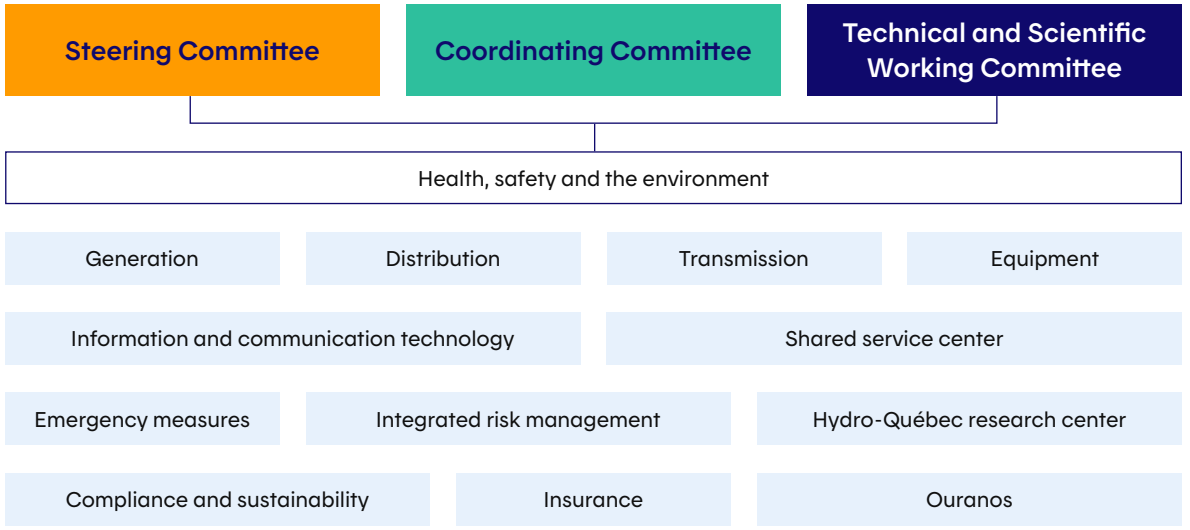
In 2023, we will release our first climate-related financial transparency report, which will help stakeholders understand the extent to which climate risks affect our financial results. The report will revolve around four main thrusts: governance, strategy, risk management and Hydro-Québec indicators and objectives.

Our operations in every area, from electricity generation to its use are closely linked to climatic conditions. Almost all our output depends on the natural water cycle and precipitation patterns. Our electricity transmission and distribution infrastructures are highly exposed to extreme weather events. And because a large portion of the electricity that we deliver is used for heating and cooling, the slightest variation in weather conditions can affect demand and have major financial implications.

Québec's low-carbon energy presents excellent business opportunities in the short and medium term. For example, our hydropower could quickly and effectively help decarbonize northeastern North America. Our clean energy also attracts energy-intensive businesses to Québec. Lastly, it compares favorably to other energy sources used in numerous sectors, from industrial processes to transportation and heating.

Governance in the management of climate change–related physical risks

In light of the impact of climate change on our operations, Hydro-Québec introduced an adaptation process and adopted the governance structure[a] shown below, which provides for quarterly reporting to our Management Committee and Board of Directors. Our goal is to ensure that the needs of all our business segments are taken into consideration, promote the efficient flow of information across management levels and improve decision-making.



[a] Structure in effect on December 31, 2021

The four main strategies laid out in our *Strategic Plan 2020–2026* are directly linked to the issue of climate change.

Strategy	Link to climate change
Drive the efficient decarbonation of Québec	**Opportunity** Electricity is a precious resource. That's why we have to think carefully about how we use it, and take action to reduce waste. Low-carbon electricity promotes electric mobility. In addition to helping Québec decarbonize, Hydro-Québec is setting an example and cut our own emissions by electrifying our fleet of vehicles and converting our off-grid systems powered by fossil fuels to cleaner energy sources.
Prepare our grid for tomorrow's energy and technology needs	**Opportunity** To meet growing demand, we will have to ramp up our renewable energy generating capacity. The rollout of demand response measures will free up system capacity during peak periods, which could reduce our future electricity supply needs. We will also have to keep our power system technologies up to date. **Risk** Because inaction will invariably prove more costly, Hydro-Québec must have an adaptation plan to better understand climate change and mitigate the associated risks. We must change the way we operate our most vulnerable assets, protect the physical integrity of at-risk facilities and raise grid resilience. There will be foreseeable impacts on our planning and on the design, construction and operation of our structures.
Increase Québec's collective prosperity	**Opportunity** Our clean energy meets the growing needs of customers seeking to reduce their carbon footprint. It supports Québec's economic development and creates positive impacts in every region. Our export markets can also take advantage of our clean energy to meet their environmental targets. The load balancing capability of our hydropower generating fleet supports the growth of intermittent renewables like wind and solar. In addition, it will be possible to leverage all the services related to our hydropower, including capacity and ancillary services.
Engage our customers, employees and partners in the achievement of our goals	**Opportunity** Working with partners engaged in the energy transition will make it possible to find optimal solutions to complex issues. We will have to ensure that we maintain our existing expertise and continue to upgrade core competencies in the area of climate change. **Risk** Our infrastructures are distributed over a vast territory and are very sensitive to weather. We must continue to keep the grid reliable and offer quality service at the lowest possible cost.

Risk management

Climate change is a key concern for Hydro-Québec, and some of our business units are already incorporating climate change projections into their planning, forecasting and risk management tools. However, we need a comprehensive climate-change risk management approach to ensure the company's resilience. To that end, we are in the process of developing various mechanisms, some of which are described below.

- We began monitoring the implementation and effectiveness of the measures set out in the adaptation plan in late 2021 with the incorporation of the first actions into our groups' master plans for 2022.
- We added physical climate change risks to our consolidated portfolio of residual business risks for 2022, which we presented to our Management Committee and our Board of Directors' Audit Committee in December 2021.
- In the fall of 2021, we set up a committee to identify and coordinate the management of transition risks and opportunities, as defined by the TCFD, starting in 2022.
- We are taking steps to identify the guidelines and decision-support tools that require modification to integrate climate change risks, and to develop a revision strategy.

The extensive adaptation process undertaken by Hydro-Québec consisted in assessing our main physical risks and finding ways to mitigate them. We identified 26 priority physical risks and assessed them using our risk management tools.

These risks fall into one of these four categories:

- **Design** (10 risks): assets whose current design may no longer be suitable for the new climate reality
- **Operations** (7 risks): inability to operate in accordance with current methods or requirements
- **Outages and asset failure** (5 risks): incidents caused by intense weather events
- **Employee health and safety** (4 risks): deterioration of the work environment caused by climate change

Our commitments aim to mitigate these 26 priority physical risks.

In November 2021, our Board of Directors' Audit Committee took cognizance of a method to quantify climate risks, which the company will be able to develop and apply.

Indicators and objectives

The likelihood of each physical risk and its possible severity will soon be identified, making it possible to assess the potential impact on the company's financial statements. Strategies will then be developed to adjust the way we operate our most vulnerable assets, protect the physical integrity of at-risk facilities and raise grid resilience. We will use indicators to measure the degree to which these objectives are met.

In addition, in early 2021, our Groupe – Gestion intégrée des risques informed the Board of Directors of a GHG emissions indicator—kt of CO_2 per million dollars spent—that could be used in the assessment of Hydro-Québec projects.

Carbon footprint

Hydro-Québec has been practising ISO 14001-compliant environmental management since the late 1990s. All company operations that stand to impact the environment or generate GHG emissions are subject to this standard.

We help avoid far more GHG emissions than we produce, and we play a role in decarbonizing northeastern North America by exporting low-GHG-emitting electricity to neighboring markets.

We provide solutions for transitioning to an economy that pollutes less and is less dependent on fossil fuels (the extraction and consumption of coal, oil and natural gas are the main causes of the current climate crisis). We also offer our customers solutions to advance electric mobility and convert systems powered by fossil fuels to electricity.

GHG emission reduction indicators and targets

Indicator	Target
Avoided GHG emissions in Québec (% of Québec government target for 2030 compared to 1990 emission level)	2026: 20%
Direct emissions from Hydro-Québec operations	2030: 50% reduction
Carbon neutrality	2030

GRI 201-2

Communication on progress

In 2018, Hydro-Québec joined the United Nations Global Compact to affirm our sustainability leadership and ultimately join the ranks of the world's most environmentally responsible companies. This commitment involves pledging to communicate our progress with regard to the Compact's Ten Principles, which revolve around four areas: human rights, labor standards, environmental protection and the fight against corruption.

As specified in our Sustainable Development Plan 2020-2024, we pursue the sustainable development goals of the United Nations Development Programme that are most relevant to our business and projects. Our progress on our 7 goals and 11 targets are presented in each section of this Report.

Human rights

The *Canadian Charter of Rights and Freedoms* protects the rights and freedom considered essential for Canada to remain a free and democratic country. In Québec, human rights are also protected by the *Charter of Human Rights and Freedoms*. This law specifies the areas in which discrimination is prohibited and which grounds of discrimination are prohibited in order to ensure equal rights.

Sustainable Development Plan strategy

2. Do business with responsible suppliers (page 23)

Like all Québec employers, Hydro-Québec must manage its workforce with fairness. The company is also subject to the provincial *Act respecting equal access to employment in public bodies*.

The Supplier Code of Conduct sets out Hydro-Québec's expectations with respect to ethics. Suppliers must act with integrity, honesty and professionalism while respecting human rights and the environment in their business relations with Hydro-Québec.

Labor standards

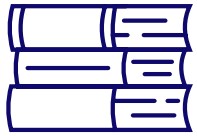
In Québec, working conditions are governed by the *Act respecting labour standards*, which protects employees by imposing minimum acceptable conditions of employment. The Commission des normes, de l'équité, de la santé et de la sécurité du travail ensures that employers comply with the Act.

Our employees receive overall compensation that is competitive and adapted to our social and business environment. We also recognize the importance of work/life balance, which is why we offer our employees a wide range of benefits to help them meet their personal needs. Fully 83% of our workforce is unionized, and eight collective agreements set out their working conditions and provide mechanisms for dealing with grievances and disagreements.

We comply with International Labour Organization occupational health and safety recommendations and conventions. We also observe the laws and regulations in force in Québec in this regard and apply the concept of due diligence.

Hydro-Québec has some 125 joint health and safety committees where union representatives work with management to ensure a healthy, safe work environment for employees. Operating at the local, regional and provincial levels, these committees represent about 80% of our workforce.

Our employees can report risks to personal safety or company assets at any time and obtain advice about ethical concerns. A Corporate Ombudsman and an Employee and Family Assistance Program are also at their disposal.



Sustainable Development Plan strategies

2. Do business with responsible suppliers (pages 23 and 30)
3. Significantly improve our occupational health and safety performance while fostering employee wellness (page 22)
4. Offer an inclusive work environment that reflects Québec's diversity and rally our employees around sustainable development (page 20)

GRI 102-41

Environment

With the exception of our subsidiaries and the Gentilly-2 facilities currently being decommissioned, all company operations are managed using a recognized ISO 14001:2015 environmental management system. This certification confirms that our Corporate Management System, which provides the mechanisms to support a culture of continuous improvement, incorporates sound environmental management practices.

We've also adopted a policy that sets out our environmental commitments. In it, we undertake to meet our compliance obligations, continuously improve our environmental performance and protect the environment. With regard to our operations, our main focuses are:

- Protecting the environment
- Reducing atmospheric emissions
- Preventing contamination
- Harmonizing uses
- Preserving heritage
- Integrating the life cycle approach

Sustainable Development Plan strategies

9. Work toward decarbonizing all of our business activities and markets (pages 66 and 78)
10. Equip Quebecers to lower their consumption through better electricity use (pages 62 and 79)
11. Enhance and protect biodiversity (pages 75 and 80)
12. Reduce resource use by applying the principles of the circular economy (pages 60 and 81)

Anti-corruption

We provide our employees with tools—including self-training, FAQs and a helpline—to help them respect and uphold the company's ethical principles. The Code of Ethics and Rules of Professional Conduct for members of the Board of Directors, Executives of Hydro-Québec and its Wholly-Owned Subsidiaries (in French only) and the Employee Code of Ethics set high standards of judgment and behavior across the full spectrum of our employees' professional activities and reaffirm our core values, which are the following:

- The common good
- Inclusion
- Courage
- Innovation

In 2021, Hydro-Québec obtained ISO 37001:2016 certification for its establishment of an anti-bribery management system. This standard provides guidance to help organizations prevent, detect and fight corruption.

Sustainable Development Plan strategy

2. Do business with responsible suppliers (page 23)

GRI content index – "In accordance – Core option" for *Sustainability Report 2021*

General disclosures

No.	General disclosures	Page	Comments and responses
GRI 101: Foundation 2016			
GRI 101 does not require any particular disclosure			
GRI 102: General Disclosures 2016			
Organizational profile			
GRI 102-1	Name of the organization	1	
GRI 102-2	Primary brands, products and services	3, 11, 12, 48	
GRI 102-3	Location of headquarters	97	
GRI 102-4	Location of operations	48	Regional presence (in French only)
GRI 102-5	Ownership and legal form		Division II of the *Hydro-Québec Act,* "Constitution of the Company," explains the nature of Hydro-Québec's ownership and legal form.
GRI 102-6	Markets served	11, 12, 48	Regional presence (in French only)
GRI 102-7	Scale of the organization	48, 55, 85	
GRI 102-8	Information on employees and other workers	11, 12, 48	Workforce numbers based on contract type are not available. Total numbers of outside workers by employment type, employment contract and region are not available. Regional presence (in French only)
GRI 102-9	Supply chain	8, 9, 36	
GRI 102-10	Significant changes		No significant changes related to this indicator occurred in 2021.
GRI 102-11	Precautionary principle	68, 69, 71, 72, 75	
GRI 102-12	Charters, principles and other initiatives	10, 15-18, 23, 25	
GRI 102-13	Memberships of associations	5	
Strategy and analysis			
GRI 102-14	Statement from senior decision-maker	2	
GRI 102-15	Key impacts, risks and opportunities	11, 12, 82-85	
Ethics and integrity			
GRI 102-16	Ethical behavior	15, 18, 29	
Governance			
GRI 102-18	Governance structure	14, 15, 16	
GRI 102-22	Composition of the highest governance body	14, 15, 16	
GRI 102-23	Chair of the Board of Directors	14	

GRI MATERIALITY DISCLOSURES SERVICE 2022

GRI Mark with regard to the Materiality Disclosures Service, the GRI has established that the presentation of the GRI content index is clear and that the references shown for disclosures 102-40 to 102-49 refer to the corresponding sections in the body of this report. This service was applied to the French version of the report.

Éléments généraux d'information

No.	General disclosures	Page	Comments and responses
Governance			
GRI 102-24	Nominating and selecting board members	14	
GRI 102-32	Board of Director's roles in reviewing or approving the Sustainability Report	14	
Stakeholder engagement			
GRI 102-40	List of stakeholder groups	8, 9	
GRI 102-41	Collective bargaining agreements	90	The percentage of outside workers covered by a collective agreement is not available (sector supplement).
GRI 102-42	Identifying and selecting stakeholders	8, 9, 86	
GRI 102-43	Stakeholder engagement	31, 43, 45, 80	
GRI 102-44	Key topics and concerns	6, 7, 24, 26	
Reporting practice			
GRI 102-45	Entities included	10, 11, 12	
GRI 102-46	Report content and topic Boundaries	7, 10	
GRI 102-47	Material topics	7, 13, 34, 58	
GRI 102-48	Restatements of information	82	A new method taking import times into account was used to calculate GHG emissions related to electricity purchases from neighboring systems.
GRI 102-49	Significant changes		Comment: There has been no significant change with respect to reporting periods, list of material topics or topic Boundaries.
GRI 102-50	Reporting period	10	
GRI 102-51	Date of most recent report		The *Sustainability Report 2020* was published on May 3, 2021.
GRI 102-52	Reporting cycle	10	
GRI 102-53	Contact	97	
GRI 102-54	Claims of reporting	10	
GRI 102-55	GRI content index	92-95	
GRI 102-56	External assurance	96	
Electric utilities sector disclosures			
EU1	Installed capacity	11, 12, 48	
EU2	Net energy output	64, 82	
EU3	Number of customers	12, 48, 52, 53	
EU4	Length of transmission and distribution lines	11, 48	
EU5	Allocation of CO_2e emissions allowances	66, 67, 78	
Management approach			
GRI 103: Management approach 2016			
GRI 103-1	Explanation of the material topic and its Boundary	7, 11, 12, 13, 34, 58	The main material topics related to our economic, environmental and social impacts (see p. 13, 34 and 58) were determined by the materiality analysis (p. 7). Our value chain also includes elements to monitor for each activity that creates value (see pp. 11–12).

Éléments généraux d'information

No.	General disclosures	Page	Comments and responses
GRI 103-2	Management approach and its components	14, 20, 21, 23, 30, 31, 32 33, 35, 46, 49, 51, 55, 56 57, 60, 61, 62, 63, 66, 75 78-81	The report is based on our *Sustainable Development Plan 2020–2024* and its 12 strategies. The plan's strategies are modeled on standard ISO 26000 – Guidance on social responsibility. We considered the key issues covered in the standard and performed a gap analysis of our working methods. From there, we were able to identify the practices to maintain, those to improve and those to prioritize. In parallel, we carried out a broad-based internal consultation to gauge the risks and identify opportunities for improvement. This enabled us to pinpoint what to work on and where to focus our efforts.
GRI 103-3	Evaluation of the management approach	82-85	The Audited performance metrics section presents the indicators and targets that we use to track Hydro-Québec's performance in relation to the economic, environmental and social topics that are the most material. In addition, the quantitative data included in this report are always presented alongside the results of the previous three years to show progress.
Economic performance			
GRI 201: Economic performance 2016			
GRI 201-1	Direct economic value generated and distributed	11, 12, 35, 37, 39, 55, 85	Salaries and employee benefits are considered confidential information and are not released.
GRI 201-2	Climate change	28, 51, 55, 58, 87, 88, 89	
GRI 203: Indirect economic impacts 2016			
GRI 203-1-	Infrastructure investments for local communities	39, 69	
GRI 203-2	Significant indirect economic impacts	11, 12, 35, 44, 55, 84, 85	
GRI 204: Procurement practices 2016			
GRI 204-1	Proportion of spending on local suppliers	36, 39, 85	Regional presence (in French only)
Aspect: Availability and reliability (electric utilities sector disclosures)			
EU10	Planned capacity compared to projected long-term electricity demand	63, 64	
Environment			
GRI 301: Materials 2016			
GRI 301-1	Materials used		Hydro-Québec does not measure the weight or volume of raw materials used.
GRI 302: Energy 2016			
GRI 302-4	Reduction of energy consumption	61, 62, 63, 82, 83	
GRI 303: Water and effluents 2018			
GRI 303-3	Water withdrawal	83	
GRI 304: Biodiversity 2016			
GRI 304-1	Sites near areas of high biodiversity value	75, 76, 77	

Éléments généraux d'information

No.	General disclosures	Page	Comments and responses
GRI 305: Emissions 2016			
GRI 305-1	Direct (Scope 1) GHG emissions	66, 67, 70, 71, 72, 83, 84	
GRI 305-2	Energy indirect (Scope 2) GHG emissions	70, 74, 83, 84	
GRI 305-3	Other indirect (Scope 3) GHG emissions	70, 74, 83, 84	
GRI 305-4	GHG emissions intensity	70, 74, 83, 84	
GRI 305-5	Reduction of GHG emissions	66, 67, 70, 71, 72	
GRI 305-7	Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	83, 84	
GRI 307: Environmental compliance 2016			
GRI 307-1	Number of non-compliances	83	
Social – Labor practices and decent work			
GRI 403: Occupational Health and Safety 2018			
GRI 403-9	Work-related injuries	22, 85	Only the rate of work-related accidents is disclosed. Other information related to this indicator is confidential.
GRI 405: Diversity and equal opportunity 2016			
GRI 405-1	Diversity and equality	19, 20, 21, 27	
Social – Society			
GRI 413: Local communities 2016			
GRI 413-1	Engagement, assessments and development programs	36, 39, 42, 45	
GRI 413-2	Impacts on local communities	40, 45, 47	Regional presence (in French only)
Social – Product responsibility			
Aspect: Customer health and safety			
EU25	Injuries and fatalities	41	Information concerning legal judgments, settlements and pending legal cases of diseases is not available.
GRI 417: Marketing and labeling 2016			
GRI 417-1	Product and service information	82-85	
Aspect: Access (electric utilities sector disclosures)			
EU29	Average power outage duration	49, 84	

External assurance

Mandate

GHD was engaged to conduct an independent evaluation of Hydro-Québec's *Sustainability Report 2021* (the "Report"), which covers the period from January 1 to December 31, 2021. The evaluation aimed both to ensure the compliance of the Report's quantitative performance data and to assess the sustainability-related assurance engagement performed in accordance with the AA1000AS v3 standard in order to determine the nature and extent to which the organization adheres to the AccountAbility AA1000 principles.

Level of assurance and standards

GHD conducted its evaluation to a moderate level of assurance and as a Type 2 engagement, in accordance with AA1000AS v3 and the Global Reporting Initiative (GRI) standards: Core option. The purpose of GHD's evaluation was to demonstrate the reliability of the selected indicators. An engagement performed in accordance with the AccountAbility AA1000 principles sets out to provide stakeholders with assurance on how the organization manages its sustainability performance and presents that performance in its sustainability reports. The Type 2 engagement assesses both the nature and extent to which Hydro-Québec adheres to all four AccountAbility AA1000 principles (Inclusivity, Materiality, Responsiveness and Impact) and verifies the reliability of specific sustainability performance information.

Regarding the GRI reporting principles, the principle of reliability states that the organization must be able to identify the original sources of the information in the report and provide reliable evidence to support assumptions or complex calculations.

Statement of independence

GHD rigorously applies a conflict-of-interest verification protocol to ensure its independence and that of its staff in the execution of evaluation mandates. This verification was performed by independent, experienced and qualified professionals.

Methodology

The list of the main indicators verified can be found on pages 82 to 85. These were verified using a risk-based approach, defined as the set of elements likely to contain errors or omissions that could have a major impact on the final values.

To assess how stakeholders are taken into account in the company's strategies for dealing with sustainability issues, GHD evaluated the methods by which Hydro-Québec:

1. Identifies stakeholders and enables their participation in identifying sustainability issues (principle of Inclusivity)

2. Identifies and prioritizes the sustainability issues most relevant to the organization and its stakeholders (principle of Materiality)

3. Responds to sustainability issues and their impacts (principle of Responsiveness)

4. Monitors, measures and reports on how its actions affect its broader ecosystem (principle of Impact)

GHD verified the data by conducting interviews and document reviews, validating data extraction processes and taking samples of reports, invoices, minutes, emails and documentation supporting the source data in order to verify the traceability and appropriate use of the values presented in the Report. This process aimed to confirm the following:

- The documentation was complete and comprehensible.
- The data collection methods used were justified and appropriate.
- The calculations were appropriate and based on appropriate assumptions.
- Information management systems and their controls were sufficiently robust to minimize the potential for errors, omissions and misinterpretation.

GHD verified the indicators related to greenhouse gases based on the general principles described in the standard ISO 14064-3.

Observations and conclusion

GHD's independent evaluation was performed using the standards and methodology described above. Below are its findings and conclusions.

Inclusivity

Hydro-Québec has demonstrably considered its stakeholders in its governance, strategies and relevant decision-making processes throughout the company. Methods for identifying and understanding its stakeholders have been established, taking into account their capacity to engage as well as their views and expectations. Hydro-Québec uses the information gathered from stakeholders to facilitate understanding, learning and improvement of the organization. Information related to its sustainability performance is conveyed to stakeholders in an appropriate and transparent manner.

Materiality

Hydro-Québec has shown that its methodology is able to identify the most relevant sustainability issues. Detailed criteria are in place for determining and assessing company-wide materiality thresholds and material issues under the guidance of senior management and in compliance with the applicable laws, regulations and internal policies and procedures.

Responsiveness

Hydro-Québec has implemented processes for responding to its stakeholders, particularly government authorities, employees, partners, suppliers and the public. These procedures ensure that stakeholders receive a response that is complete, accurate, timely, accessible and balanced.

Impact

Hydro-Québec has implemented processes to understand, measure, assess and manage its impacts for the indicators established and mentioned in the Report. The company has qualified personnel to implement these processes, which are documented and integrated into the organization's activities.

The evaluation also confirmed that the Report was prepared in accordance with the Global Reporting Initiative (GRI) Standards, i.e., taking into account stakeholders, the sustainable development context, materiality and comprehensiveness.

GHD notes that Hydro-Québec has followed up on a number of the recommendations issued by GHD during its verification of the *Sustainability Report 2020*.

For various reasons related to data management, certain indicators could not be verified. Notes to this effect are included in the Report, and recommendations on improving the data management process have been issued.

With a view to continuously improving sustainability performance, GHD also recommends that Hydro-Québec pursue its efforts to raise awareness internally regarding the importance of implementing and monitoring the many actions and initiatives of the *Sustainable Development Plan 2020–2024*, given their major impact on adherence to AccountAbility AA1000 principles.

GHD affirms that, based on the assurance performed, the information in the Sustainability Report 2021 constitutes a reliable account of Hydro-Quebec's sustainability performance for the period from January 1 to December 31, 2021.

Montréal, March 22, 2022

Nuran Attarmigiroglu, Eng, GDBA
Lead Auditor

SHARE YOUR COMMENTS WITH US

We'd like to know what you think of our report.
Please send us your questions and comments.

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Directions

Units of measure

$M	millions of dollars
$B	billions of dollars
W	watt (a unit for measuring power)
MW	megawatt (one million watts)
Wh	watthour (a unit for measuring electric energy)
kWh	kilowatthour (one thousand watthours)
MWh	megawatthour (one million watthours)
GWh	gigawatthour (one billion watthours)
TWh	terawatthour (one trillion watthours)
V	volt (a unit for measuring voltage)
kV	kilovolt (one thousand volts)
t	tonne (metric ton)
t CO_2 eq.	tonne of CO_2 equivalent
Mt CO_2 eq.	millions of tonnes of CO_2 equivalent

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

Hydro-Québec wishes to thank all the employees
and suppliers whose photos appear in this Report.

www.hydroquebec.com

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Ce document est également publié en français.

Hydro Québec