

# NEWFOUNDLAND AND LABRADOR HYDRO SUSTAINABILITY REPORT 2022

# **ABOUT** THIS REPORT

At Newfoundland and Labrador Hydro (Hydro) we believe it's not only what we achieve, but how we achieve it, that allows us to be proud of what we accomplish.

We know the significant impact our operations can have on the people of our province and on our environment. To help manage our impact, we are committed to sustainably meeting the expectations of our stakeholders.

As part of this commitment, we produce our annual Sustainability Report to highlight our sustainability performance and priorities for the year. This provides us with the opportunity to reflect on our strategy, assess our progress and share our achievements. We are dedicated to improving our processes, our abilities and our organization as we move towards a more sustainable future for Newfoundland and Labrador, together.

Read more about our Sustainability Journey 📎

Learn more about who we are and what we do 🕥

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NEWFOUNDLAND AND LABRADOR HYDRO

### SUSTAINABILITY REPORT 2022

# **OUR SUSTAINABILITY PRIORITIES**

Learn more about how we define our sustainability priorities





- Business Continuity and **Cyber Security**
- Customer Satisfaction
- Affordable Electricity Rates for Customers
- · Fiscal Responsibility, Transparency and Accountability • Responsible Procurement
- Improving Asset Management Business Systems (Including Life Cycle Approach)
- Indigenous Partnerships and Stakeholder Engagement
- Reliable and Adequate Resources



- Code of Conduct and **Business Ethics**
- Community Investment
- Emergency Preparedness and Response
- Employee Engagement
- Equity, Diversity and Inclusion

- Organizational Effectiveness and Change Management
- Public Health and Safety
- Safety and Health Culture
- Talent Attraction, Development and Retention



- Climate Change Mitigation and Adaptation
- Electrification and Development of Clean Energy Projects
- Emission Reduction/ Displacement
- Environmental Management System Improvement and Expansion

- Fish and Wildlife Management
- Heritage Management
- Integration of Reliable and Cost Effective Renewable Energy Sources in Isolated Communities

# **MESSAGE FROM THE** PRESIDENT AND CEO

**IENNIFER WILLIAMS** 

2022 was a year of reflection for Newfoundland and Labrador Hydro. We spent a significant amount of time engaging with our stakeholders and partners - including our employees, Indigenous partners, the Government of Newfoundland and Labrador and our customers - to better understand their expectations of us a Crown utility. As a result, we developed a renewed vision, values and a new three-year strategic plan that reflects who we are and what we are embracing as priorities.

During the development of our new 2023-2025 Strategic Plan, we made an intentional shift to embed our Sustainability Strategy into our Corporate Strategy. This shift demonstrates our commitment to prioritizing and integrating sustainability into our critical business operations. We want to ensure the decisions and actions of our employees will create long-term, sustainable benefits for the people of this province.

Looking ahead to the future, our three new strategic themes - Serving Our Province, Working Together and Enabling Sustainable Growth - will guide the implementation of our sustainability commitments to our stakeholders and partners. Although our energy landscape and organization are evolving, we maintain our unwavering commitment to provide a greener future for generations of Newfoundlanders and Labradorians to come.

I'm pleased to present this report on behalf of all our employees and in recognition of the commitment, passion and pride that they bring to the work they do every day. I hope it will help provide you with some further insight into how we work to support a sustainable future for Newfoundland and Labrador.

I look forward to continuing to work with our Boards of Directors, our phenomenal teams of employees across this province, Indigenous partners, the Provincial Government, our customers and the stakeholders throughout the communities we serve, as we deliver on our commitments, together.

President and CEO

Newfoundland and Labrador Hydro



Hydro is the people's utility that you can count on - providing safe, cost-conscious, reliable electricity while harnessing sustainable energy opportunities to benefit the people of Newfoundland and Labrador.

# WHY WE'RE HERE

You're working hard to build the best possible life for your families and communities and we're proud to be a part of that.

> You may not always see what we do, but we see you. In fact, you're why we're here.

We're thinking about your safety and wellbeing. We want our electricity to power your life without a worry. We want our employees to feel good about coming to work every day to serve you.

We are leading the way to a green, sustainable future for our province. We're looking at opportunities and carefully evaluating ideas before we make decisions – to ensure they're in the best interest of all of us.

> We know what a privilege and responsibility we have so we never stop thinking about tomorrow.

We are energy you can count on.

We are Hydro.

# **OUR SUSTAINABILITY** COMMITMENT



At the heart of our business is our people. We know our friends, family, and neighbours are counting on us and we work hard every day to deliver on our commitments to them.

We live and work here because of all that our province has to offer so we take our responsibility seriously. We work each day to minimize our impact and ensure we develop Newfoundland and Labrador's resources in a sustainable way for the maximum benefit of the people of our province.

With this in mind, we are committed to providing a timely review of our sustainable business operating procedures and practices. We commit to measuring, monitoring and reporting on our performance and to strive for continual improvement.

We commit ourselves to serving our province and working together to enable a sustainable future for all.

# To achieve this, we are committed to:

- Making sustainability a priority
- Promoting a safe and healthy work environment
- Reporting annually on progress to our Boards of Directors and all stakeholders
- Actively encouraging economic efficiencies and sustainable practices in our operations
- Developing and implementing our corporate strategy with specific sustainability goals and objectives

- Establishing sustainability indicators to enable accountability, communicate specific goals and measure progress
- Considering the life cycle of projects related to our business including their economic, environmental and social footprint
- Undertaking activities and operations in a way that strikes an appropriate balance between the needs of current and future generations

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# SERVING OUR PROVINCE

We are the people's utility, proudly producing the electricity that powers lives and businesses in every community across Newfoundland and Labrador, and beyond, every day.

We serve this province and bring value to our economy with energy that's cost-conscious, safe and reliable. That is our purpose – regardless of geography, time or weather.

Responding to our province's changing needs is our duty. Whether we're working hard behind the scenes, or lending a hand in the community, we are energy you can count on.

# PLANNING FOR TODAY AND OUR FUTURE

We aim to align ourselves with Environment and Climate Change Canada and the goal for a netzero electricity sector by 2035 - and we are well positioned to meet this goal. Each year, more of our province's residents and businesses are making changes to help us migrate to a net-zero economy by 2050. We are seeing the accelerated adoption of electric vehicles and more of our residents are switching to electric home heating. Electrification is also prevalent in our province's industrial sector to ensure sustainable operation.

The projected amount of net-zero electricity needed to absorb these growing needs by 2050 is not currently developed in our province. Action is required to meet the demand for net-zero electricity over the next three decades and new sources of supply are required. We have recommended a phased approach to meeting this demand and we are exploring options such as Bay d'Espoir Unit 8, which would provide 154 megawatts (MW). New capacity, combined with excess energy available from Muskrat Falls Generating Station, would positively position our province to take the next step to support decarbonization, with net-zero solutions in our own backyard.

In the meantime, we recognize our dedicated teams that support the operation of the Holyrood Thermal Generating Station and our gas turbine fleet. These teams continue to work to keep these critical assets available and ensure reliability for our customers until new electricity supply decisions are made, approved and constructed.

READ our full 2022 Reliability and Resource Adequacy Update

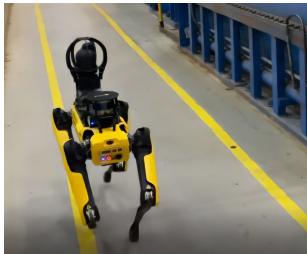
### **OUR STRATEGIC GOALS**

In December, we launched our Corporate Strategic Plan for 2023-2025. The strategic directions outlined in this plan will help prepare us to rise to the challenge of our evolving energy landscape and harness the opportunities before us.

We are eager to work together with our employees, customers, Indigenous partners and stakeholders to positively contribute to a sustainable, economically bright future for our province.

LEARN MORE about how our organization will deliver on our strategic priorities





TOP: Our teams from Whitbourne, Churchill Falls, Soldiers Pond and Muskrat Falls worked together to complete live line training.

BOTTOM: This dog-like robot was put through its paces at our plant in Holyrood recently, helping the team there inspect critical equipment.

# POWERING OUR PROVINCE: INNOVATIVE PRACTICES AND TECHNOLOGY HELP US PROVIDE SAFE, RELIABLE ELECTRICITY FOR NEWFOUNDLAND AND LABRADOR

# A Robot Dog? It's Just One Example of a New Technology Being Put to the Test At Hydro

Meet Spot. This four-legged robot was wandering around the Holyrood Thermal Generating Station recently, taking part in trial runs of this innovative technology.

READ MORE about how robots, drones and other devices are helping make asset inspection and monitoring both smarter and safer

### **Live Line Work Helps Avoid Customer Outages**

In August, teams from Whitbourne, Churchill Falls, Soldiers Pond and Muskrat Falls worked together during live line training, on our HVdc and HVac steel structures with trainers from Manitoba Hydro International. This specialized training helps our line workers safely maintain, upgrade and repair power lines, when needed, without the inconvenience of an outage.

NEWFOUNDLAND AND LABRADOR HYDRO



**HVdc** stands for high voltage direct current. Our HVdc transmission line is used for transporting large amounts of electricity over an extremely long distance - for example, from our generating stations in Labrador to electrical substations on the island, where it can be converted into consumable energy for homes/businesses.

**HVac** stands for high voltage alternating current. Our HVac transmission lines are also used to bring large amounts of electricity from our various generation stations to substations throughout the province, but across shorter distances.



# **SERVING OUR PROVINCE IN 2022:**

- We invested \$260 million dollars into our assets to ensure long-term reliability as we continue to power our province.
- We reported an 89% residential customer satisfaction rate.
- We provided continued support for rate mitigation efforts, including closing the Federal Loan Guarantee (FLG3) financing with proceeds of \$1 billion.
- We generated \$123.1 million in revenue from electricity export sales to markets in New England, New York, Ontario, New Brunswick and Nova Scotia.

- We generated over \$8.5 million in revenue through the sale of Greenhouse Gas performance credits.
- We helped Newfoundlanders and Labradorians transition towards a greener future through a number of programs:
  - 1,025 homes made the switch from oil to electrical home heating;
  - More than 375 drivers made the switch to electric vehicles; and
  - Applications were approved for 37 new chargers for businesses through our Commercial EV Charger Rebate Program.



Bright minds and diverse perspectives make up our team of dedicated energy professionals. We keep each other safe, listen to one another, support new ideas and collaborate with respect.

Our collective energy allows us to confidently navigate change and passionately serve each other, the people of our province, and beyond, every day. Together, we are building a strong future.

# **REVITALIZED PURPOSE AND VALUES, UNITE OUR OPERATIONS**

In 2021, when the Provincial Government announced that our business operations would be operating under Newfoundland and Labrador Hydro, we knew it was time for a refresh. Throughout 2022, we consulted with our employees through round table discussions and focus groups to get a sense of what Hydro meant to them and where they see us heading into the future. We discovered common threads that connect us all and, with that understanding, we wove those common threads through our new brand, vision and values.

We are all working together to serve our province and enable sustainable growth as we strive to be energy you can count on.

**READ MORE about us, our vision and our values** 





### **ENERGY FROM THE HEART**

We launched our Energy from the Heart community program to connect organizational giving to our new values, contributing to employee engagement and team building. We are building brand equity, reputational awareness and credibility through cohesive, intentional program elements.

We helped celebrate the 10<sup>th</sup> anniversary of our community partners at Ronald McDonald House **Charities Newfoundland and Labrador with** expanded support to help build a new Family Time Park - a fully accessible playground and outdoor space for guests.

## **ENERGY YOU CAN COUNT ON: RESPONDING WHEN WE'RE NEEDED MOST**

Our teams are always ready to respond. Despite weather or geographical challenges - behind the scenes or on the front lines - they are always working hard to keep the lights on for our customers.

**READ MORE about how our teams step up** when they are needed most



# THE ENERGY BEHIND OUR ELECTRIC VEHICLE (EV) NETWORK

Our employees are truly the energy that powers our business. The work happening with our EV Network is just one, fantastic example of this.

In October, two of our employees, Gord Hibbs and Linus Kelly, received the Leadership in Conservation and Electrification Award, Utility Employee Luminary Award. This is a well-deserved recognition of their outstanding work on the initial development and expansion of our provincial EV fast charging network. Gord and Linus' dedication demonstrates how we can all be a part of a more sustainable future powered by clean, renewable energy.

Our teams were also awarded the International Association of Business Communicators (IABC) Newfoundland and Labrador Pinnacle Award for our EV marketing program.

### LEARN MORE about EVs 🔊



## ELECTRICITY CANADA LIFESAVING AWARD

On July 20, during a routine road trip to the Northern Peninsula for maintenance activities at the Shoal Cove Transition Compound, three of our employees came upon a two-car accident.

With first aid training and access to first aid kits in their company vehicles, they knew they could help. As the first to arrive on the scene they took immediate action to provide support.

The initiative and compassion shown by these employees is a phenomenal example of the values we all strive to embody here at Hydro. Jaycee Grandy, Greg Higdon and Chad Jefford were awarded the Electricity Canada Lifesaving Award for their courage and bravery in an emergency response incident.





TOP: Linus Kelly and Gord Hibbs receive the Leadership in Conservation and Electrification, Utility Employee Luminary
Award in October.

воттом: Chad Jefford, Jaycee Grandy and Greg Higdon stepped up to help at the scene of an accident in July.

Our President and CEO, Jennifer Williams, received the 2022 Woman of Renewable Energy Award from WiRE recognizing her efforts to empower and pave the way for other women in the renewable energy sector





### **OUR COMMITMENT TO AN INCLUSIVE WORKPLACE**

At Hydro we are committed to Equity, Diversity and Inclusion (EDI). We believe we can achieve more, together, and value the diverse perspectives that come from our collaborative workforce.

Our multi-faceted approach to support EDI in the workplace includes establishing and monitoring gender targets, offering education and learning sessions with guest speakers and those with lived experience, as well as observing EDI related days throughout the year. These initiatives work together to support EDI while providing opportunities to enhance knowledge, share information, engage our employees and help create a feeling of belonging.

This year our internal Diversity and Inclusion Champions Committee worked to ensure "Everyone is Welcome at Hydro" decals were in place in the main areas of our offices and worksites across the province as a visual reminder of our commitment to being a welcoming and inclusive workspace for EVERYONE.

Employees in our offices on the Avalon, came together to walk in the St. John's Pride Parade.

# **WORKING TOGETHER** IN 2022:

- We combined Safety and Energy from the Heart priorities to help bring an emergency preparedness workshop to our newest Canadians through our partnerships with the Canadian Red Cross and Association of New Canadians.
- Our employees helped us donate over \$48,000 in food and monetary contributions to Kids Eat Smart Newfoundland and Labrador. That's 48,000 breakfasts for school breakfast clubs across the province through our annual Energy Breakfast.
- We saw our lowest High Potential Incidents numbers in the past six years a true testament to our employees as they work safely, to keep the lights on for our customers.
- A new app was launched for employees through our Employee and Family Assistance Program to provide easy access to EFAP services along with other wellness programs and activities.

# **ENABLING** SUSTAINABLE **GROWTH**

We pursue innovative, efficient ways to power lives and enable responsible growth and development.

With abundant renewable energy, we make thoughtful and balanced decisions. We listen to who we serve, actively engage, draw on our experiences, and lean on deep knowledge and expertise.

People count on our energy, so we're determined to harness opportunities that promote a sustainable future for our province for generations to come.

## **WORKING TOGETHER TOWARDS A SUSTAINABLE FUTURE**

In 2022, we developed a new commercial framework for Independent Power Producers (IPP) in isolated communities to help offset the financial aspect of renewable projects – this allows us to reduce fuel consumption while also keeping customer rates as affordable as possible.

This commercial framework was developed in consultation with Indigenous partners and involves Hydro purchasing energy at 90 per cent of the avoided fuel costs in each community. The agreement also allows the IPP to retain rights to any renewable energy credits, a financial offset which can only further help their projects.

Our teams provide technical expertise and support studies related to the development of these renewable projects within our isolated systems and we will continue to work with these groups to help minimize carbon emissions and costs as they plan new developments. We are honoured to fulfill our obligation to support Indigenous groups, local community members and other IPP as they develop projects that will help build a more sustainable future for our province. It's always better when we can all work together.

### THE GREEN ENERGY ECONOMY

This year we supported the Provincial Government in the evaluation of hydrogen projects and in developing and launching the Crown Lands Nomination and Bid Process for Wind Energy Projects. Government confirmed our approach to studying the interconnection of such projects with our existing provincial electricity

**LEARN MORE about how renewable energy** generated by Newfoundland and Labrador's wind will be converted into green hydrogen by Energy NL

## FROM SONG BIRDS TO SEABIRDS: **WORKING TOGETHER TO PROTECT OUR FEATHERED FRIENDS**

So much of our work has the potential to impact our environment so our teams do everything they can to ensure we can make this impact as positive as possible.

**READ MORE about how our teams work with** both provincial and national partners to protect birds throughout our province





Our teams operate the fish bypass systems at Grand Falls and Bishop's Falls, which help safely guide juvenile Atlantic salmon migrating downstream, away from our hydroelectric power canal and turbines, and back to the main river channel.

The fish passage system at our Grand Falls dam facility was first installed in 1997, but with deterioration over time to the wooden, steel and concrete components of the flume, it was in need of a full overhaul. Throughout 2021 and 2022, our teams carried out extensive work to rebuild the bypass structure and help ensure success for the annual Exploits salmon run.

We are always happy to work with our community, government and conservation partners, like Environmental Resources Management Association (ERMA), to ensure our fish passage systems work effectively to safeguard salmon movement.



Members of ERMA's board of directors and staff visited our dam in Grand Falls to hear more about the newly rebuilt fish bypass.

The bypass and louvre system at our Grand Falls dam facility is critical for successful fish migration on the Exploits every year. The newly rebuilt bypass is a big improvement that will benefit the salmon population.

Peter Robbins, Senior Manager of Production for Hydro Generation





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### **CONSCIENTIOUS CONSTRUCTION**

# **Coordinating Caribou Migration Patterns**

An Environmental Assessment (EA) is one of many factors that weigh into any construction activities our organization undertakes, and the new transmission line currently under construction for Marathon Gold was no exception. Because the line is situated in the general area of the Buchan's caribou herd migration path, the potential effects of construction on their patterns was at the centre of the EA for this project.

To help mitigate any disruption to their natural movements, Marathon Gold placed radio telemetry/ GPS collars on approximately 40 caribou from this herd. The information from these collars allows us to track the general location of the herd and provide information on their movement – if they're stationary or moving along their migration corridor.

During the fall, our teams received daily updates on the location and movements of the collared animals, which allowed us to coordinate field activities and construction around the herd to avoid interrupting their migration patterns.

### **Protecting Potential Historic Resources**

Another component of this same EA was a preliminary assessment of the archaeological potential of the area and 37 sites were identified as a medium to high potential for historic resources.

As a result, a field level study began, in conjunction with Marathon Gold, Miawpukek First Nation, Qalipu First Nation and the Provincial Archaeology Office, to investigate these sites further. There were no finds with respect to historic resources identified during the program. While it was decided that no further investigation was required for the project, we are committed to working collaboratively with our partners to ensure any potential historical resources are approached in an ethical and sustainable manner.



The Nunatsiavut Government completed four solar installations in Northern Labrador including the 24 kW system at the Nain JS Community Centre, pictured here.

# RENEWABLE INTEGRATION IN NORTHERN LABRADOR

For many rural and remote communities across our province, diesel fuel is the sole source of electricity, as the most affordable, reliable option for firm supply. We continue to be interested in pursuing more renewable energy sources in isolated communities and are working with several communities and Indigenous partners to support projects focused on renewable energy integration.

In August, the <u>Nunatsiavut Government</u> celebrated the last of four solar installations in Northern Labrador when the 24 kilowatt (kW) system at the Nain JS Community Centre was completed. This followed the completion of a 15 kW system at the Rigolet Community Centre, a 10 kW system at the Postville Community Centre and a 24 kW system at the Hopedale Nanuk Centre. That's 73 kW of combined additional solar generation for these communities!

We're pleased to support these projects and the great work happening by local organizations and partners to bring renewable energy to rural communities across our province.

# **ENABLING SUSTAINABLE GROWTH** IN 2022:

- We received Electricity Canada's, Sustainable Electricity Award in the category of Advancement of an Integrated Approach to Sustainability for our efforts in energy efficiency.
- ➤ Under our ISO 14001:2015 registered Environmental Management System we met 98% of our Environmental Management System targets.
- > We continued our commitment to monitor and report on methylmercury in the Lower Churchill Reservoir and downstream.
- We partnered with takeCHARGE! to help add another 9 fast charging locations throughout the province, including the first EV fast chargers in Labrador.
- We saw our public EV charging stations used almost 8,600 times.
- We delivered enough energy to enable more than 850,000 electric kilometres across our province, through our public charging network.

## **Newfoundland and Labrador Hydro**

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