



# Newfoundland and Labrador Hydro Sustainability Report

2020

# OUR CORPORATE SUSTAINABILITY REPORT 2020

## About This Report

Newfoundland and Labrador Hydro (Hydro) is committed to meeting the expectations of our stakeholders as an organization that contributes to our province. To ensure we are sustainable in that contribution, we commit to identifying priority areas for our business and operations.

Our annual Sustainability Report outlines our sustainability performance for the year, with information organized according to our corporate objectives. Through consultation with our stakeholders, key areas of interest were identified using a materiality assessment – a tool that helped us reflect on our work practices and allowed us to measure how well we balance the expectations of our stakeholders as well as our business, social, economic and environmental needs.

Our first materiality assessment was completed in 2015 and we have committed to revisiting our material topics (also known as our priority areas) every five years, so in 2020, we completed the assessment again, with input and feedback from various stakeholder groups. Our updated priority areas for the next five years are now finalized and presented in this report.

We are constantly working to achieve success in these priority areas and are continuing to make progress we can be proud of.

On June 23, 2021, the Government of Newfoundland and Labrador announced that Nalcor Energy operations would be moving under Newfoundland and Labrador Hydro. While this report encompasses highlights and information from our 2020 reporting year, our organization will be referenced throughout as Newfoundland and Labrador Hydro (Hydro)\*.

\*Formally, Nalcor Energy.



## Our Sustainability Priorities



### SAFETY AND HEALTH

- Occupational health and safety for employees and contractors
- Emergency preparedness and response
- Public health and safety
- Safety and health culture
- Occupational health, hygiene and wellness



### ENVIRONMENT

- Environmental management system improvement and expansion
- Climate change mitigation and adaptation
- Integration of reliable and cost-effective renewable energy sources in isolated communities
- Emission reduction and displacement
- Heritage management
- Fish and wildlife management



### BUSINESS EXCELLENCE

- Fiscal responsibility, transparency and accountability
- Improving asset management business systems
- Reliability and resource adequacy
- Responsible procurement
- Electrification and development of clean energy projects
- Electricity rates/financial affordability for customers
- Business continuity and cyber security



### PEOPLE

- Equity, diversity and inclusion
- Employee engagement
- Talent attraction, development and retention
- Code of conduct and business ethics
- Organizational effectiveness and change management



### COMMUNITY

- Indigenous partnerships and stakeholder engagement
- Customer satisfaction
- Community investment

**EACH OF OUR EMPLOYEES COME TO  
WORK EVERY DAY WITH A CONSCIOUS  
INTENT TO MAKE OUR PROVINCE  
MORE SUSTAINABLE TODAY, AND FOR  
GENERATIONS TO COME.**

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## MESSAGE FROM THE PRESIDENT AND CEO



I continue to be impressed by, and proud of, everyone working throughout Hydro and across our province as we demonstrate we are an organization that listens, engages and delivers upon the expectations of the people of Newfoundland and Labrador. I believe a renewed and strengthened Hydro will be a provincial utility we can all continue to be proud of.

As a Crown corporation, we are on our way to delivering almost one hundred per cent renewable energy for the people of our province, but we want to ensure we are sustainable as well as renewable. That's why we are proud to present this report on behalf of all our employees and in recognition of our commitment to the province.

A measure of a people and an organization is how they respond to challenge. Our society and our organization faced a major challenge in managing the COVID-19 pandemic. During the pandemic, I witnessed the people of our company commit to seamlessly deliver an essential service to our customers. Our team also continued work on the Muskrat Falls project despite the challenges we faced in our larger community. Moreover, I witnessed our dedicated team execute this work with our sustainability goals in mind, something which fills me with immense pride. Our people delivered and we stand ready to continue to sustainably deliver going forward.

Hydro powers the people of this province; people who deserve safe, reliable, least-cost electricity. We do this responsibly and sustainably, developing our province's energy resources together.

As a company with operations throughout Newfoundland and Labrador, we recognize the impact we can have on the communities where we live and operate. Our teams come to work every day with a conscious intent to make our business and province more sustainable for our families and neighbours today, and for generations to come.

In 2018, we received the Sustainable Electricity Company™ designation from the Canadian Electricity Association (CEA), demonstrating our commitment to environmental, social and

economic practices and to the principles of sustainable development. We were the sixth company to receive such a designation in Canada and this designation reflected how we had been operating for years prior. We continue our unwavering commitment to develop and sustainably manage Newfoundland and Labrador's resources in a way that considers the safety and stewardship of our communities.

In 2020, our team reviewed our priority sustainability areas and, through engagement with stakeholders, we updated areas of focus for the next five years, as per our CEA designation commitment. We are excited to share these with you in this report.

In June of 2021 I was honoured to take on the role of President and CEO of this company as government works with us to evolve our organization to better benefit the people we all serve. I look forward to continuing to work with our Boards of Directors, our phenomenal team of employees across the company, our provincial government partners, our customers and our many diverse stakeholders throughout the industry and community.

We are dedicated to continual improvement in all of our practices in 2021 and beyond. We hope this report will give you some insight into our actions to help ensure a sustainable future for Newfoundland and Labrador.

Jennifer Williams  
President and CEO  
Newfoundland and Labrador Hydro



## SUSTAINABILITY DESIGNATION

In 2018, Newfoundland and Labrador Hydro (formerly Nalcor Energy) achieved the Sustainable Electricity Company™ brand designation under the CEA. Under this designation, we are committed to the principles of Environmental Stewardship as defined by ISO 14001, and Social Responsibility under ISO 26000.<sup>1</sup>

Sustainability is defined as our commitment to environmental and social responsibility, as well as to ensuring we are following good governance and reporting on our sustainability priority areas. Our chosen sustainability priority areas reflect this responsibility and revolve around the pillars of safety, environment, business excellence, people and community.

The designation confirms, via an external review, our commitment to responsible environmental, social and economic practices and to the principles of sustainable development. Every five years, a verification audit is completed by the CEA to ensure we uphold our standards and commitments as required.

As a Crown corporation, we are accountable to the provincial government (our shareholder) and the people of Newfoundland and Labrador. Our Code of Business Conduct and Ethics strengthens our commitment to professional, sustainable and ethical business practices, guiding our Board of Directors<sup>2</sup> and all of our employees.



<sup>1</sup>ISO 14001 and ISO 26000 are internationally recognized management systems that define a methodology for a business to manage portions of its business.

<sup>2</sup>For our full board structure, please see our 2020 Annual Report.





# ABOUT NEWFOUNDLAND AND LABRADOR HYDRO

## WHO WE ARE

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

## OUR VISION AND VALUES

Unified by our core values, we are a proud, diverse energy company whose people are committed to building a bright future for Newfoundland and Labrador.

### OPEN COMMUNICATION

Fostering an environment where information moves freely in a timely manner.

### ACCOUNTABILITY

Holding ourselves responsible for our actions and performance.

### SAFETY

Upholding our relentless commitment to protecting ourselves, our colleagues and our community.

### HONESTY AND TRUST

Being sincere in everything we say and do.

### TEAMWORK

Sharing our ideas in an open and supportive way as we work towards excellence.

### RESPECT AND DIGNITY

Appreciating the individuality of others in our words and actions.

### LEADERSHIP

Empowering ourselves and our colleagues to help guide and inspire others.







Safety excellence is an integral part of our corporate identity. The families of our employees rely on us to ensure their loved ones make it home safely every single day. We commit ourselves to safe and responsible operations so the communities in which we operate, and the Newfoundlanders and Labradorians living in those communities, can have the confidence that our work is always completed with their safety top of mind.

# SAFETY & HEALTH

## PRIORITIES

- Occupational health and safety for employees and contractors
- Emergency preparedness and response
- Public health and safety
- Safety and health culture
- Occupational health, hygiene and wellness



**Our teams led the planning and implementation of the Pandemic Response and Recovery Plan in response to the COVID-19 pandemic as we delivered an essential service across the province**



**The Muskrat Falls generation team worked more than 14 million hours without a lost-time injury**



**Our continuous commitment to safety in 2020 saw our lowest All Injury Frequency ever and we achieved our best lead/lag ratio to date**



**We were awarded the 2020 CEA President's Award for Employee Safety for the second consecutive year**



**Live Line safety techniques and training reduced potential outages for our customers by approximately 272,700 hours throughout 2020**



**Our first ever virtual offering of the annual Safety Summit, focused on Cultivating Calm During the Coronavirus and was virtually attended by over 500 employees**



## OCCUPATIONAL HEALTH AND SAFETY FOR EMPLOYEES AND CONTRACTORS

### CONTRACTOR SAFETY MANAGEMENT

As part of our commitment to safety and to enhance our contractor data management processes, our company and all of our subsidiaries are now using ISNetworld, an online contractor and supplier management platform. Used to help manage companies' record-keeping needs and improve reporting, this management tool has become increasingly common in several industries. Any contractor wishing to bid on "high risk" work for our company was required to subscribe to ISNetworld by June 1, 2021.

Implementing ISNetworld will ensure companies that do business with us are compliant with our health and safety standards and policies. This tool will track

contractor health and safety performance, and provide a more effective, efficient and timely contractor selection and procurement process, while also helping meet regulatory compliance and safety qualification requirements.

### LIVE LINE PROGRAM

Using Live Line maintenance techniques reduces customer outages, expands the maintenance and upgrade season to year-round and improves power line technician recruitment and retention by exercising their core trade techniques. We have been engaged in the Live Line Program since 2018 and have made significant strides in training and qualifying line crews throughout the province. We use experts to establish a training and qualification program that is aligned with CAN/ULC-S801-14 and are



Participants of the Live Line Program following COVID-19 safety protocols.

deliberate in re-establishing rubber glove, bare hand and transmission/distribution hot stick techniques.

Despite the additional precautions and procedures related to COVID-19, Live Line techniques reduced potential outages for our customers by approximately 272,700 hours throughout 2020.

## EMERGENCY PREPAREDNESS AND RESPONSE



### MAKING RE-ENTRY SAFE FOR EVERYONE

As the province moved through the COVID-19 Provincial Alert Level system implemented by the Department of Health and Community Services, we worked closely with our shareholder, as well as with stakeholder groups across the province. Our Pandemic Recovery Plan outlined how employees could safely return to the workplace while maintaining public health measures to prevent transmission of the virus. Of primary concern was the movement of workers in and out of our sites in Labrador. Given increased vulnerability due to isolation and demographics, we planned with an abundance of caution to ensure workers and contractors going to work on-site would not impact the health of our local communities.

We had many projects that were deemed essential to continue and our safety experts worked to ensure those employees were kept safe through the use of personal protective equipment (PPE), modified work schedules and physical distancing regulations. Testing protocols were implemented for workers travelling to the Muskrat Falls site and quarantine schedules were maintained for workers from outside the province.

Our team assessed the safe capacity in each of our buildings, which were outfitted with physical distancing signage including decals on floors, walls and in elevators. Where distancing wasn't possible, plexiglass partitions were installed. Meeting rooms and common areas were assessed to determine maximum capacity while virtual meetings were encouraged whenever possible.

Our Pandemic Recovery Plan included guidelines and regulations aligned with the public health alert levels and allowed managers and supervisors to make the safest working decisions for their teams.

Given the variety of buildings, sites and work environments our employees work in each day, the task of ensuring every eventuality was planned for fell to our COVID-19 team.







## PUBLIC HEALTH AND SAFETY

### SAFETY IN OUR COMMUNITIES

This year, we supported the Happy Valley-Goose Bay Ground Search and Rescue Team's (GSRT) purchase of a Fast Rescue Jet Boat. This craft will improve the effectiveness of GSRT's search and rescue capabilities in the region.

Members of Hydro's Safety team held electrical safety training for volunteer fire departments in Burgeo in 2020 and Hawke's Bay in 2021, and also delivered a course on electrical safety for firefighters at the annual Fire & Emergency Services training school.

Other community safety initiatives included supporting the purchase of an Automated External Defibrillator by the North West River Volunteer Fire Department, as well as safety signage for the Grand River Snowmobile Club and the Labrador Hunting and Fishing Association.



Safety signage for the Grand River Snow Mobile Club.



## SAFETY AND HEALTH CULTURE

### SAFETY EXCELLENCE AT THE HEART OF OUR SAFETY CULTURE

Safety excellence is more than a way of operating—it's an integral part of our identity. Each and every employee shares the responsibility of making sure we all make it home safely at the end of the day.

For the second consecutive year, the CEA presented us with their President's Award of Excellence for Employee Safety in Generation in Group 2, an award given to electricity providers that achieve top-ranking Total Recordable Injury Frequency amongst comparable utilities. This acknowledgement is a true testament to our employees and partners who prioritize safety on our worksites every single day.



### 2020 CEA President's Award of Excellence for Employee Safety

It is this relentless commitment to safety and a continual improvement mindset that provides a safe working environment for our employees. We recognize the importance of establishing, promoting and maintaining a physically and psychologically healthy and safe work environment, and are committed to preventing injury and illness among our workers.

In 2020 this commitment led to our lowest All Injury Frequency (AIF) ever and we achieved our best lead/lag ratio to date.



## OCCUPATIONAL HEALTH, HYGIENE AND WELLNESS



### OUR FIRST VIRTUAL SAFETY SUMMIT

In 2020, our annual Safety Summit went virtual due to COVID-19 restrictions. While this meant our usual day-long event with multiple speakers and sessions wouldn't be possible, it did provide the opportunity to livestream our keynote speaker to employees across the province. New York Times best-selling author Neil Pasricha presented the timely and engaging session, "Cultivating Calm During the Coronavirus Chaos." Responding to the spike in anxiety, stress and mental health challenges as a result of the pandemic, Neil provided more than 500 viewers with concrete methods to face the challenges and thrive in our "new normal."



Neil Pasricha virtually presents his session on Cultivating Calm During the Coronavirus Chaos

### MENTAL HEALTH MATTERS

The importance of mental health support was made even more evident in 2020 as we dealt with the changes and uncertainty brought about by the global pandemic. For several years, we have made mental health awareness and training a priority across our organization. As a result, we were able to provide support and resources for our employees from the very start, as well as throughout the pandemic.

In addition to promoting the services of our Employee and Family Assistance Program (EFAP), we provided mental health strategies in our regular employee communications, on our intranet and during virtual meetings. We also implemented the Guarding Minds at Work survey, which assesses psychological health and safety work-related risk factors.



We are fortunate to live and work in a province with an abundance of natural resources. We are passionate about developing and managing our natural environment in a sustainable way. Our employees understand the importance of finding ways to minimize our environmental impact while tackling climate change and inspiring others to do the same.

# ENVIRONMENT

## PRIORITIES

- Environmental management system improvement and expansion
- Climate change mitigation and adaptation
- Integration of reliable and cost-effective renewable energy sources in isolated communities
- Emission reduction and displacement
- Heritage management
- Fish and wildlife management



100% of our environmental targets were completed in 2020



We were awarded the CEA 2020 Continuous Performance Improvement Award for our Migratory Bird Program



Remediation of more than 300 stream crossings and work in 170 quarries along LTA and LIL access roads



Established procedures for the inspection, handling and relocation of stranded fish during controlled spills at Churchill Falls



57 archaeological sites were recovered within the footprint of the Muskrat Falls project through a multi-year comprehensive historic resources management program



633 residential and 78 business customers received direct installation or kit drop offs - totalling 8,852 products including LED specialty bulbs, smart power-strips and weather-stripping products



## ENVIRONMENTAL MANAGEMENT SYSTEM IMPROVEMENT AND EXPANSION

### REACHING OUR ENVIRONMENTAL TARGETS

As part of our ISO 14001 registration, we are required to demonstrate our commitment to continuous improvement of our environmental performance.

To measurably demonstrate this requirement each year, we set environmental targets across the company, as well as an overall corporate target. This process has been recognized by our internal and external auditors as a reliable measurement of our environmental management system. In 2020, 104 targets were developed across various areas of our business, and we set a corporate goal to complete 95 per cent of these targets.

At the end of March 2020, the environmental targets were put at risk due to the global pandemic—with impacts

to travel and other restrictions. Where many employees on our environmental teams have a dual role with the safety department, they were focused on supporting and implementing the measures needed to ensure employees could safely complete priority work.

The first step to mitigate this risk was a full analysis of each area's targets. We then provided a report to the environmental representatives committee. Based on this information, a recovery plan was put in place for at-risk targets. At year end, 100 per cent of the targets across the company were successfully achieved.

### EMS EXPANSION

Throughout 2020, work continued to add our new lines of business and new assets under the Power Supply Certified ISO 14001:2015 Environmental Management System (EMS). This included developing aspects related to oversight of the Maritime Link and Phase I EMS development for the Labrador-Island Transmission Link (LIL) Assets and Muskrat Falls. Our Energy Marketing team has completed their final phase of EMS development and an ISO 14001 registration audit was completed in early 2021.

COMPLETION OF  
**100%**  
OF OUR ENVIRONMENTAL TARGETS



## CLIMATE CHANGE MITIGATION AND ADAPTATION

### CREATING PROACTIVE PLANS FOR CLIMATE CHANGE MITIGATION AND ADAPTATION

Climate change adaptation is an important area of advancement in ensuring future reliability and resilience of the electricity system. We have established a Climate Change Mitigation and Adaptation working group to understand and analyze the potential impacts of climate change and what we will likely experience in the future. The working group is creating proactive plans to take advantage of opportunities and to avoid and prepare for impacts.

In 2020, the working group continued efforts on climate change mitigation and adaptation, which included:

- Developing requirements for an in-house engineering training series on climate change mitigation
- Compiling an inventory of critical assets
- Reviewing risk registers to ensure climate change risks and opportunities were identified
- Reviewing our Emergency Response Plans conducted for Churchill Falls for inclusion of climate change adaptation
- Activities related to mitigation which are covered under separate sections of this report





## INTEGRATION OF RELIABLE AND COST-EFFECTIVE RENEWABLE ENERGY SOURCES IN ISOLATED COMMUNITIES

### MARY'S HARBOUR MAKING THE MOST OF RENEWABLE ENERGY

For many rural and remote communities in Newfoundland and Labrador, diesel fuel is the sole source of electricity, being the most affordable, reliable option for firm supply. But in Mary's Harbour on the southern Labrador coast, other solutions are springing up. One proponent is pursuing opportunities that reduce the community's reliance on fossil fuels by adding new, renewable energy sources—including the province's first-ever utility-scale solar farm.

St. Mary's River Energy has worked with us for the past few years to make this project a reality. They completed the first phase in 2018, refurbishing a previously decommissioned 240 kilowatt (kW) hydroelectric power plant, which we integrated into the existing local isolated electricity grid. Mary's Harbour residents are now supplied with energy produced from the plant.

Work is now underway on the next phase: building a 190 kW solar photovoltaic plant with 335 kW of lithium-ion battery storage. St. Mary's River Energy will own and operate the solar farm which, when complete, will use energy from the sun to produce and store electricity to be used by local homes and businesses.

The combination of solar and hydroelectricity will reduce the amount of diesel burned in Mary's Harbour by up to 30 per cent annually, and provide renewable power sources that benefit the community.



*The sun rises over the St. Mary's River Energy solar farm, ready to produce and store energy for use in the community.*

### STREETLIGHT UPGRADES PROVIDE IMPROVED LIGHTING AND ENERGY SAVINGS IN REMOTE COMMUNITIES

Over the past few years, we have been replacing traditional streetlights with modern, energy-saving light-emitting diode (LED) fixtures in communities that rely on diesel power for their electricity.

On average, LED streetlights last much longer and use about 60 per cent less electricity than traditional High-Pressure Sodium streetlights. Plus, LED fixtures have an average lifespan of 15-20 years, resulting in significant savings in both energy and maintenance costs.

Hydro first tested this initiative through a 2015 pilot project in Nain where 125 streetlights were replaced with LEDs. In that community alone, the retrofit has yielded savings of approximately 45 megawatt (MW) hours of electricity annually, offsetting the need for us to purchase nearly 12,000 litres of diesel fuel that would otherwise be required to generate the same amount of electricity.



*LED streetlights, like the one shown here, use about 60 per cent less electricity than traditional fixtures.*

After seeing this degree of success in Nain, we began replacing the streetlights in all diesel-powered communities around the province. By the end of 2020, this resulted in approximately \$110,000 in savings annually, less maintenance, increased energy efficiency and reliability and better-quality lighting for customers. Going forward, we plan to install LED streetlights in all service areas whenever existing traditional fixtures require replacement.



## EMISSION REDUCTION AND DISPLACEMENT

### ENERGY EFFICIENCY PROGRAMS FOR OUR COMMUNITIES

We partnered with Newfoundland Power to deliver the takeCHARGE program, offering rebate programs encouraging residential and commercial customers to reduce their electricity usage. Reducing the amount of electricity used means reducing GHG emissions associated with fossil fuel-based electricity generation. Our residential portfolio included five programs: insulation, thermostats, heat recovery ventilators (HRV), instant rebates and the Residential Benchmarking Program. These programs were offered jointly with Newfoundland Power, and an additional Isolated Systems Community Energy Efficiency Program was offered solely by Hydro.

Hydro's Isolated Systems Community Energy Efficiency Program is specifically targeted to residential and commercial customers in Hydro's Isolated Diesel systems. The objective of the program is to provide outreach, education and energy efficient products free of charge to residential and business customers in the diesel system communities within Newfoundland and Labrador. In 2020, the total annual energy savings achieved as a result of our external energy conservation program was 526.9 MWh/year.

**526.9 MWh**  
ENERGY SAVED IN 2020  
THROUGH OUR ENERGY  
CONSERVATION PROGRAMS

### WATER SAVING TECHNOLOGIES

In 2020, 633 residential and 78 business customers received a free kit drop off, or direct installation of 8,852 products including water saving technologies, LED specialty bulbs, smart power-strips and weather stripping. The water saving technologies included high-performance showerheads and kitchen and bathroom faucet aerators that reduce household domestic water heating load through the reduction of faucet and showerhead flow rates. While completing this work, information was collected about the type of lighting, heating and appliances in the homes and businesses, which will be used for future program planning. We evaluated the program to ensure product savings and installation processes are following best practices now, and providing value in the future.





## HERITAGE MANAGEMENT

Heritage management includes the preservation of the past, present and future. There are two aspects of heritage management: historic resources management and land use studies. This helps us understand and increase awareness of our history and preserve cultural traditions for future generations.

### HISTORIC RESOURCE PRESERVATION

It was important to us to commit to preserving the rich history and resources of the Muskrat Falls area. In close consultation with the Government of Newfoundland and Labrador's Provincial Archaeology Office, we completed a comprehensive historic resources management program between 2012 and 2017. In total, 57 archaeological sites were recovered within the footprint of the project, and the results of this recovery program have contributed significant new data and understanding of the history of the lower Churchill River from pre-contact to 20<sup>th</sup> century human occupation. The findings have also contributed to the understanding of the land-use history of diverse cultural groups, including Amerindian, EuroCanadian and Labrador Settler.

Most of the recovered sites date to the pre-contact period or contain pre-contact components. The pre-contact period is known as the period prior to the arrival of Europeans to North America and contact with Indigenous people. These pre-contact sites are clustered at Muskrat Falls, Sandy Banks, Gull Lake and Gull Rapids. More than half of these sites, including all of those on the North Spur, the Sandy Banks area, Gull Lake and some on the south side of Muskrat Falls, date from 2000 to 1400 Before Present (BP). The pre-contact sites recovered on the south side of Muskrat Falls present a very different and much more complex picture, with settlement appearing to have begun between 2500 and 3000 BP. These early occupations may have begun shortly after Muskrat Falls formed. However, the most intensive period of occupation appears to have been between 2000 and 1400 BP.

*Historic Resources field technician works gridded area on the FFCI-02 site on Gull Lake in 2015. (Photo courtesy of Stantec Consulting Ltd.)*

The Muskrat Falls historic resources management program recovered more than 86,000 artifacts that are extremely significant to the heritage management of the history of the lower Churchill River area. All artifacts that were recovered from the program were turned over to The Rooms following the conclusion of the program in 2018.

Historic occupation in the 19<sup>th</sup> century is well-documented in the sites recovered in the Churchill Valley. The largest of these was the Hudson Bay Company (HBC) outpost at Sandy Banks, in operation between 1839 and 1876. Sandy Banks was the first HBC post to be completely excavated in Atlantic Canada, and yielded a large assemblage of artifacts.



*View looking East across site FgCg-01 Locus B during Historic Resources Recovery Work in 2015. (Photo courtesy of Stantec Consulting Ltd, Lower Churchill Hydroelectric Development Project 2015 Historic Resources Assessment and Recovery Program Report, Stantec May, 2016)*

*Selected Projectile Points recovered from sites on the south side of Muskrat Falls in 2012. (Photo courtesy of Stantec Consulting Ltd, Stantec Consulting Limited 2014a. 2012 Historic Resources Assessment and Recovery Field Program. Report)*

### LAND-USE ACTIVITY PRESERVATION

To safely navigate around the Muskrat Falls hydroelectric facility, a portage route was re-established over the North Spur following the completion of construction activities. The portage trail provides a connection between the upstream and downstream section of the lower Churchill River around the facility, and provides a means for river users to continue their land-use activities along the lower Churchill River.

Signage has been installed in three languages at various locations on the North Spur to guide users along the route. The portage route will be maintained during operations of the facility and a floating safety boom is deployed across the river to guide river users to the upstream portage access point and to prevent further downstream progress.



*Sign for the portage route on the North Spur at Muskrat Falls.*





## FISH AND WILDLIFE MANAGEMENT

### UNDERSTANDING METHYLMERCURY

**What Is Methylmercury?** Mercury is naturally present in soil, air, plants and animals, lakes and rivers, as well as in many of the foods we eat every day. When reservoirs are created for hydroelectric dams, soils and vegetation are flooded, and naturally occurring mercury in the soils are converted into a different form known as methylmercury.

Vegetation in the flooded area (plants, leaves, moss, etc.) provides food for bacteria that convert mercury into methylmercury. As a result, methylmercury levels increase in reservoirs and downstream of reservoirs at hydroelectric developments after water levels rise with flooding. However, these increases are temporary.

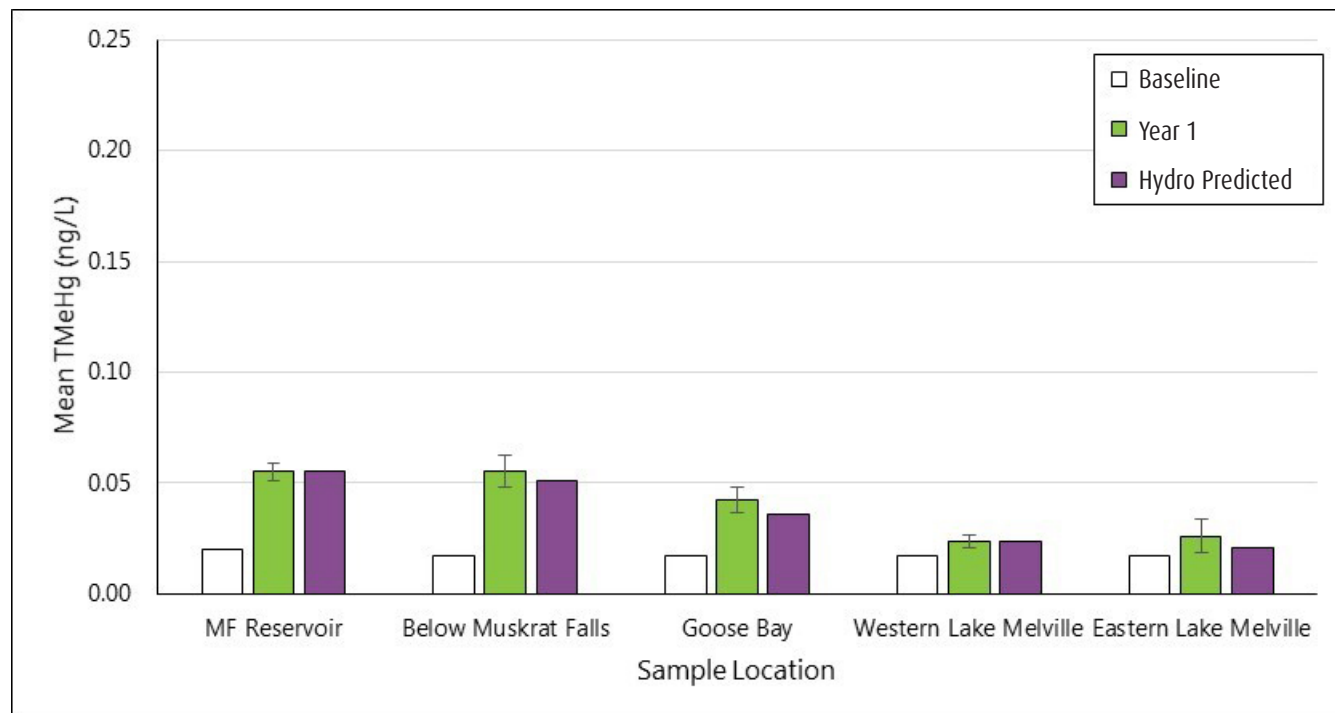
Protecting the health and safety of people living in the project area is our priority. Our team is focused on understanding methylmercury in the lower Churchill River system, particularly downstream of Muskrat Falls.

We continue to work closely with technical experts and consultants from across the country on this complex topic, and years of research and data have been collected in the local

area to help inform decisions made about the project. One of the recommendations made by the Independent Expert Advisory Committee (IEAC) was to conduct additional water and sediment sampling in the lower Churchill River and Lake Melville to determine if levels of methylmercury increase as we increase the water level in the Muskrat Falls reservoir (called impoundment).

In 2016, and before any changes were made to the water levels in the river, additional sampling for methylmercury began upstream of the Muskrat Falls facility and as far downstream as Rigolet. Since that time, almost 2,000 samples have been collected and analyzed from 13 locations.

Experts say that methylmercury concentrations in water reach their peak quickly after impoundment and then begin to decline. The measured values in water for the first full year after impoundment (September 2019 to August 2020) are very similar to those previously predicted by the scientists we engaged as part of work undertaken for the IEAC, and are within safe consumption limits.



The chart shows the mean average water sample results of total methylmercury versus those predicted for the first year after impoundment (September 2019 to August 2020). These values are consistent with what was predicted and expected in the first year following the creation of the reservoir.



Scientists taking water and fish samples along the lower Churchill River.

operate. We believe that we can safely and reliably supply electricity while protecting our environment, in particular our local bird populations. We also believe that we can be a leader in protection, research and knowledge sharing within our industry.

To this end, we have implemented many projects and programs focused on protecting migratory birds and biodiversity. We have created standard operating procedures that allow us to operate and maintain our transmission lines and work in our electrical yards and stations while protecting migratory birds and their nests. Through a partnership with Birds Canada, we support ongoing migratory bird research that will benefit the province as a whole. We have also adjusted the lighting in our coastal facilities to mitigate impacts to coastal seabirds.



In 2020, our efforts were recognized by the CEA who awarded us with their Sustainable Electricity Program's 2020 Continuous Performance Improvement Award for our Migratory Bird Program. This award is given to a company that has demonstrated a commitment to sustainability performance improvement through new projects, programs and initiatives.

In addition to water sampling, fish samples are also collected every year for target species from the area. Based on the fish species and its diet, increases would not be expected to happen until three to five years after impoundment.

Monitoring and the sharing of data is important for people who harvest country food in and around the lower Churchill River, and we are committed to conducting ongoing monitoring to inform and protect the health of people in the area. To date, the data collected from the lower Churchill River and downstream supports the conclusion that country foods are safe, and that people should continue to eat their traditional food the same way they always have.

### NATIONAL RECOGNITION FOR OUR MIGRATORY BIRD MANAGEMENT

While the generation and transmission of electricity is the foundation of our business, we are also committed to supporting and protecting the communities in which we

### MANAGING OUR IMPACTS ON FISH AND FISH HABITAT

As a result of the 2019 reservoir spilling at Churchill Falls and engagement with the Department of Fisheries and Oceans (DFO), several activities were undertaken in 2020 to manage our impacts on fish and fish habitat. As part of our continual improvement program under our Environmental Management System, we established procedures for the inspection, handling and relocation of stranded fish during controlled spills of water through spillways.

A review was completed of legislation and CEA documents related to handling and relocating stranded fish. Our existing standard operating procedure was modified to reflect updated procedures and best practices for handling and relocating stranded fish following controlled spills and a specific fish stranding and relocation plan was developed. DFO was engaged to review the standard operating procedure and the relocation and stranding plan, and provided feedback which was incorporated into our final documents.





One of the newly installed bridges along LIL with erosion protection.

### REHABILITATION OF ACCESS ROADS AND QUARRIES FOR LTA AND LIL

As a part of the remediation program for the Labrador-Island Transmission Link (LIL) and the Labrador Transmission Assets (LTA), more than 300 stream crossings were remediated. Of these, half required upgrading of the culvert size or the addition of an overflow culvert to meet regulatory requirements. In a couple of locations, we were required to install a new bridge. Remediation efforts also included the placement of material to prevent the occurrence of sedimentation and erosion events.

The remediation program also included work in approximately 170 quarries in Newfoundland and Labrador. Remediation in these quarries included blocking access to quarry sites (to help reduce illegal dumping), draining standing water, encouraging revegetation and ensuring the slope of the terrain meets regulatory requirements.

On-site environmental monitors provided “boots on the ground” along the more than 1,400 km of transmission line to ensure environmental protection measures were in place and that our regulatory requirements were being met or exceeded.

### STAR LAKE HYDROELECTRIC PROJECT

The Star Lake Hydroelectric Project is a 15 MW hydroelectric generating station located at the outlet of Star Lake. The construction of this hydroelectric dam resulted in the flooding of Star Lake and its associated tributaries.

The operation of the project began in October 1998 through the Star Lake Hydro Partnership. Abitibi-Consolidated, the majority owner of the Partnership, ceased operation of the Grand Falls Paper Mill in 2008 and, in December of that year, the Government of Newfoundland and Labrador expropriated the timber/water rights and assets formerly held by Abitibi-Consolidated on the island of Newfoundland. The expropriation included the Star Lake Hydroelectric Project, which the Government of Newfoundland and Labrador transferred direct management and operations control over to our team.

The agreement included the continuation of the Fish Habitat Compensation Plan (FHCP) as identified under the Fisheries Act Authorization for the Project. The predominant offsetting

measure in the FHCP was the development of an egg incubation and rearing facility to stock Star Lake with wild brook trout. This stocking program has been implemented since 1998 in partnership with the Environment Resources Management Association (ERMA), a local non-profit group.

There have been difficulties obtaining sufficient numbers of broodstock from Star Lake to supply an adequate number of eggs for the artificial spawning and rearing program. As a result of these challenges fulfilling the FHCP, we agreed with DFO to explore alternative habitat offsetting options.

In 2020, with the assistance of an external consulting firm, we initiated a review of alternative habitat offsetting options to fulfill the requirements of the Fisheries Act Authorization. The review was intended to be the first stage in identifying potential alternative habitat offsetting opportunities. Detailed design, including methods, habitat offset area, costing and timelines were not included in the review as this level of detail will be determined at a later date once a habitat offsetting opportunity has been selected.

Three potential scenarios were assessed. The first scenario was the status quo, where the artificial spawning and rearing program remains unchanged. The second scenario was the supplementation of the artificial spawning and rearing program with additional eyed eggs or fingerlings to attempt to improve fish populations within Star Lake. The third option was the identification of new external habitat offsetting opportunities to improve fish habitat or fish populations in an area beyond Star Lake. DFO’s hierarchy of types of offsetting measures and associated guiding principles, combined with selected feasibility measures, were used as evaluation criteria for external habitat offsetting opportunities.

Six habitat restoration and enhancement opportunities and one complementary measure opportunity were recommended for further investigation. In 2021, Hydro had follow-up discussions with DFO, and further field investigations into the viable enhancement opportunities. The preferred FHCP alternative will be presented to DFO as part of a formal offsetting plan proposal by the end of 2021.



We believe it is not only what we achieve, but how we achieve it, that allows us to be proud of what we accomplish. We are dedicated to bettering our processes, our abilities and our organization as we move together towards a more sustainable future for Newfoundland and Labrador.

# BUSINESS EXCELLENCE

## PRIORITIES

- Fiscal responsibility, transparency and accountability
- Improving asset management business systems
- Reliability and resource adequacy
- Responsible procurement
- Electrification and development of clean energy projects
- Electricity rates/financial affordability for customers
- Business continuity and cyber security



Despite COVID-19 implications, power was produced for the first time at Muskrat Falls. The first of four generating units was placed into full service, and delivered power from Muskrat Falls to island customers over LIL.



Surplus energy from Muskrat Falls was sold over the Maritime Link to export markets in Atlantic Canada.



We remained focused on the well-being of our workers while adjusting to ensure reliable operation of our generation and transmission facilities through Snowmageddon and COVID-19.



We imported approximately 173 GWh of lower-cost energy last year from various regions across Eastern Canada and the Northeastern United States for the benefit of electricity customers in the province.



We announced the province’s first Electric Vehicle fast-charging network, in partnership with the provincial and federal governments, which includes 14 charging locations from St. John’s to Port aux Basques.



We marked the 50<sup>th</sup> anniversary of the commissioning of the Holyrood Thermal Generating Station.





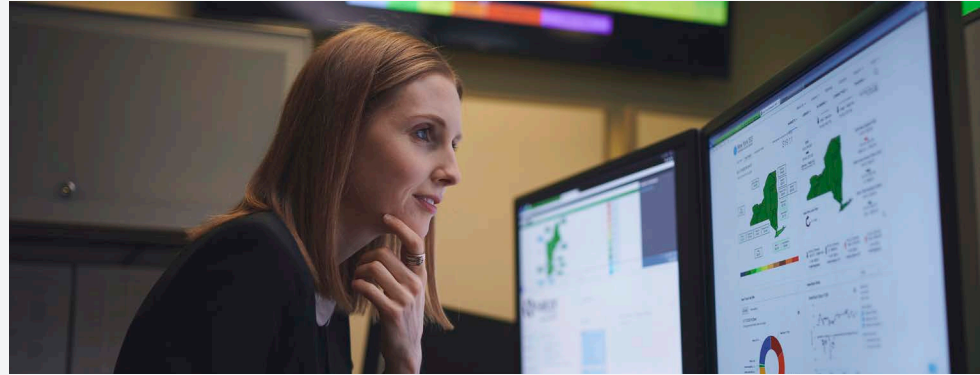
## FISCAL RESPONSIBILITY, TRANSPARENCY AND ACCOUNTABILITY

### OUR ENERGY MARKETING TEAM

Our Energy Marketing Team works 24/7 to maximize the value of power exported from Newfoundland and Labrador to external markets in Eastern Canada and the United States. The team continuously pursues opportunities to optimize exports of the province's surplus electricity, while maintaining our steadfast focus on reliable and flexible service to our customers.

Over the past year, our team also worked 24/7 alongside the Muskrat Falls Project to schedule energy for Muskrat Falls and LIL commissioning activities, which occurred over the last quarter of 2020.

We continue to work with our industry counterparts to make cost-saving energy purchases over the Maritime Link for the



benefit of our electricity customers. Using our market knowledge and capabilities, we imported approximately 173 GWh of lower-cost energy last year from various regions across Eastern Canada and the Northeastern United States to help displace fuel consumption at the Holyrood Thermal Generating Station.

Shortly after the commissioning of the first generating unit at Muskrat Falls, our Energy Marketing team began exporting Muskrat Falls power that was over and above the energy we needed. This was an important milestone. As the remaining assets come online, the volume of exports our team manages will be nearly three times the levels seen in years past.

### EFFICIENCY AND EFFECTIVENESS PLAN

Our approach to identifying efficiency and effectiveness savings was advanced in 2020 with the completion of planned deliverables related to work management and execution, technology planning, capital planning, Exploits operations, contracting and procurement and human resource management.

In a November 2020 report to the Board of Commissioners of Public Utilities (PUB), we committed to total cumulative operating and maintenance cost savings of \$9.0 million by 2024<sup>3</sup> related to the corporation's efficiency and effectiveness activities.

3. These cost savings are benchmarked against the 2019 Test Year. Savings targets may not result in an absolute reduction in future test year costs due to potential offsets (prudent cost increases, inflation and other cost changes).

### REPLACING CRITICAL TRANSFORMERS IN CHURCHILL FALLS

Churchill Falls has established a strategic plan partnering with the Original Equipment Manufacturer (OEM) to replace its critical transformers using a risk-based approach as part of its long-term plan. Depending on a yearly updated assessment, Churchill Falls prioritizes their transformer work each year to ensure an efficient spend of capital budget on the replacement and rehabilitation of the fleet. Each year this work ranges in activities from transformer replacement, bushing replacement, leak repairs and oil remediation to ensure sustained production in a safe and reliable manner.

**\$48,300,000**  
INVESTED IN CAPITAL  
INFRASTRUCTURE FOR  
CHURCHILL FALLS IN 2020



## IMPROVING ASSET MANAGEMENT BUSINESS SYSTEMS

### BUSINESS EXCELLENCE - ASSET MANAGEMENT

#### Readiness Assessment

In 2020, we began an Asset Management Readiness Assessment to determine how we can advance the maturity of our Asset Management System, and how we can further align the system with the ISO 55000 Asset Management standard. This on-going assessment will identify areas of improvement and provide us with information on any resulting benefits which could be obtained from these improvements and a prioritized action plan.

#### Work Management

Throughout 2020, we continued a multi-year effort to improve the short-term maintenance planning and scheduling capabilities of our electrical system, with a focus on increasing productivity and the effectiveness of our maintenance activities. This initiative involves the ongoing redevelopment of work processes, a phased introduction of new work scheduling software and organizational realignment across our organization.



## RELIABILITY AND RESOURCE ADEQUACY

### HYDRO TEAMS STEP UP DURING THE STORM OF THE CENTURY

On January 16, 2020, our province was preparing for a winter storm, one that carried much uncertainty but was expected to be significant. Our teams were actively preparing, as they always do.

All generation assets were tested and made available to serve our customers, crews were stationed in key areas, equipment was tested, snow machines and vehicles were fueled and preparedness and safety information was being actively shared with customers. What materialized was a storm like many have never witnessed before, and most likely never will again. The storm is now commonly known as Snowmageddon.

Many of our teams worked very long hours, unable to make shift changes due to the conditions, and others had to head out to restore customers who were without power. Others were behind the scenes providing support. After the first few days of response, our crews also stepped in to help Newfoundland Power.

In February, we received a visit from the Honourable Siobhan Coady, then Minister of Natural Resources, who joined teams at Hydro Place to give thanks for the planning, commitment and hard work, not just during the storm, but in the months and years leading up to the storm. Planning and preparedness ensured that our system performed exactly as it should—providing a reliable supply of electricity to our customers.



*Due to the extreme volume of snow that fell during the blizzard, electrical equipment at many sites, like the transformer shown above in Holyrood, quickly became covered in snow.*

### CAPITAL PROJECTS

Important capital projects were completed in 2020 to ensure the province's key electricity assets are in reliable operating condition now and into the future.

**\$85,500,000**

INVESTED IN CAPITAL  
INFRASTRUCTURE FOR HYDRO IN 2020

#### Wabush Terminal Station Upgrades

We are completing significant capital improvements at the terminal station in Wabush, a vital part of our electrical system in Labrador, and critical in providing electricity to residents, businesses and major industrial customers in the region.

Most of the station assets are original equipment installed in the mid-1960s and require refurbishment. Capital upgrades continued in 2020, providing greater flexibility and improving the reliability of power supply to Labrador West, as well as ensuring a safe and reliable working environment for employees.

#### Breaker Replacement

We have continued to conduct a multi-year program to replace or refurbish aging breakers. A total of eight breakers were replaced or refurbished and energized, successfully and safely, which helps ensure our terminal stations are operating reliably to deliver power to our customers when and where they need it.



## HOLYROOD THERMAL GENERATING STATION CELEBRATES 50 YEARS OF DEDICATED SERVICE

2020 marked the 50<sup>th</sup> anniversary of the commissioning of the Holyrood Thermal Generating Station, one of the first major pieces of infrastructure built to power our province.

On December 15, 1970, the Honourable Joseph R. Smallwood, then Premier of Newfoundland and Labrador, officially opened the generating plant in Holyrood with two units online at 300 MW.

The Holyrood Plant was the island’s second major source of generation, with the first being the Bay d’Espoir Hydro Generating Plant, which celebrated a 50-year milestone in 2017.

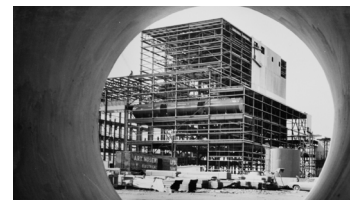
After the Bay d’Espoir Plant and the associated transmission infrastructure were completed, demand for electricity on the island—created by both residential and industrial sectors —increased significantly.

In 1980, the third unit at Holyrood was brought online, adding an additional 150 MW of power generation.

Today, the Holyrood Thermal Generating Station continues to serve customers on the island. To run reliably, the Holyrood Plant is staffed by many critical specialists including operators, electricians, welders, instrument technicians, chemists, environmental staff, warehouse workers, clerks, engineers and many other trades and professions.

Much of the work performed at Holyrood is unique. As the only thermal generating plant of its size in the province, it has required that our teams develop cutting-edge skills and expertise.

While the electricity system in Newfoundland and Labrador is once again going through significant change and development, the Holyrood Thermal Generating Station will always remain a significant part of the history of our provincial electricity system.



Photos above show construction of the Holyrood plant in the late 1960s. The smokestacks of units 1 and 2 are 91m tall and the stack on unit 3 is 110m tall.

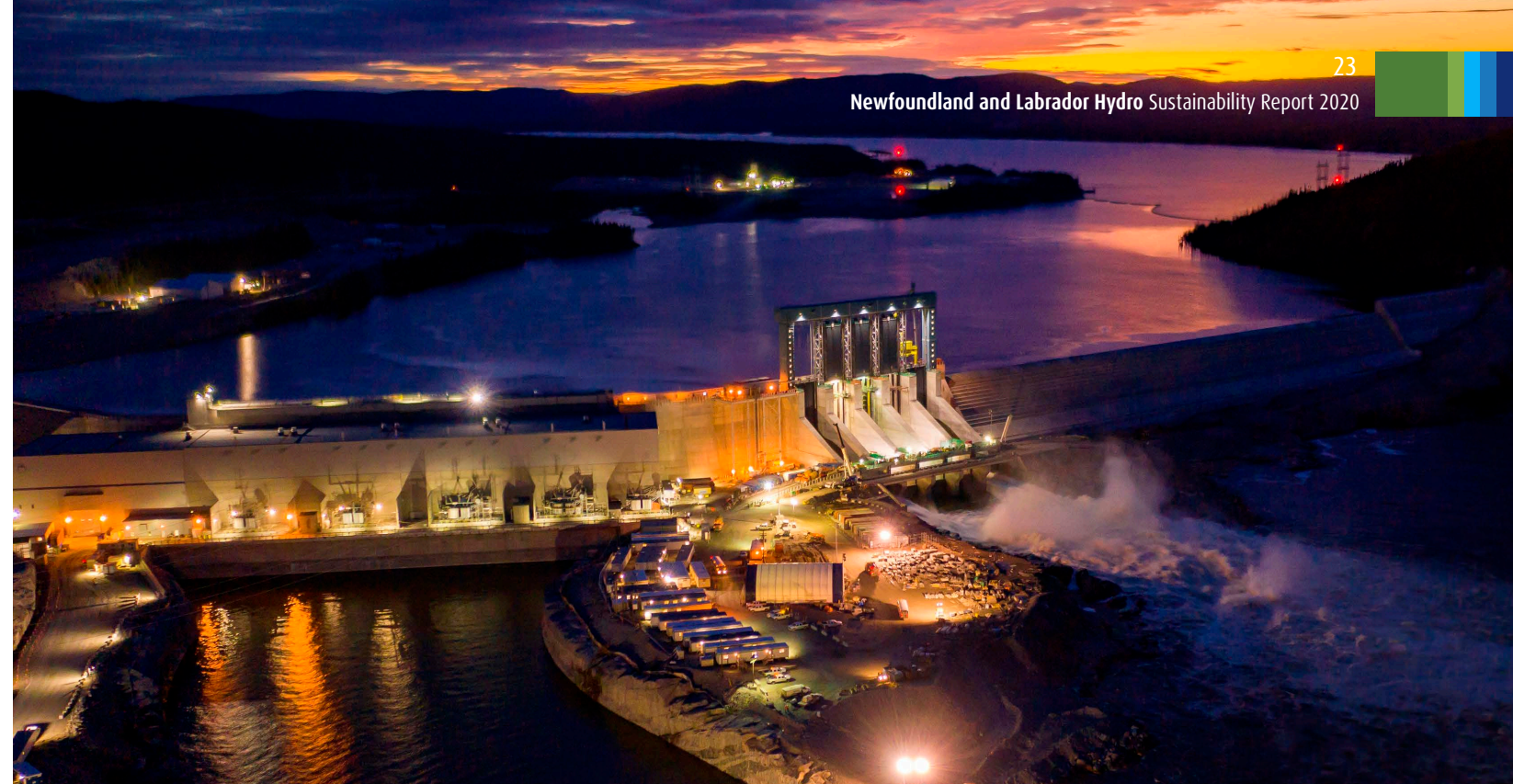
## RESPONSIBLE PROCUREMENT

### SECURING PPE DURING A GLOBAL PANDEMIC

When COVID-19 first became a reality for Newfoundland and Labrador, strategic collaboration among appropriate stakeholders was key to ensure employees had the appropriate personal protective equipment (PPE).

Having PPE for employees in the field and at our generating facilities was essential to ensure we could still work safely and provide customer service to the residents of Newfoundland and Labrador. In the middle of a global pandemic, when supplies were limited, Supply Chain along with our Health and

Safety teams worked with local suppliers to quickly secure PPE to ensure we had the proper equipment required to keep employees, coworkers and customers safe. These PPE supplies were then compiled into kits and distributed through Materials Control to all our sites that required kits in fleet vehicles, site offices and remote locations.



## ELECTRIFICATION AND DEVELOPMENT OF CLEAN ENERGY PROJECTS

### MUSKRAT FALLS PROJECT PROGRESS THROUGH COVID-19 PANDEMIC

Through collaborative leadership and teamwork, we made excellent progress on the Muskrat Falls Project in 2020. In early March, our project teams adapted quickly to the rapidly changing COVID-19 pandemic, shutting down project operations and temporarily putting our work sites into care and maintenance mode to keep people safe. Following the easing of COVID-19 public health restrictions in the province, and armed with extensive safety and health protocols, we safely and gradually resumed commissioning activities in early June.

However, four months of lost construction time, a reduced workforce and lost productivity resulted in impacts to project cost and schedule. Prior to the escalation of the COVID-19 pandemic, the project remained on track to be completed within the 2017 budgeted construction costs. In September, the facilities capital budget was increased by \$75 million to \$10.2 billion. The overall project capital cost, including financing and interest costs, is now \$13.1 billion. The timeline for completion of the project was also extended approximately one year.

History was made in September as we generated power for the first time at Muskrat Falls and delivered electricity to customers in Labrador. In December, following this significant milestone, the first flow of electricity from Muskrat Falls to Soldiers Pond over LIL successfully delivered up to 150 MW of power

to island customers. Later that same month, the first of four generating units was turned over from project construction to our operations team, who are now responsible for the unit. The Muskrat Falls generation team is continuing to make progress on commissioning of the remaining three units, which are expected to come into service by the end of 2021.

We also moved forward on the commissioning of the 1,100 km LIL between Muskrat Falls and Soldiers Pond. The LIL was constructed as a bipole transmission line, meaning it has two wires and can deliver power over one or both wires. During the pandemic, LIL contractor continued with software development and, despite a setback following the malfunction of some electrical equipment in August, commissioning of pole 1 was restarted in November. Commissioning of pole 2 began in early 2021, followed by commissioning of both poles as a typical bipole system.

With power flowing from Muskrat Falls over LIL, the project contributed to the energy supply for island customers for the very first time. It also provided us with the opportunity to sell surplus power to external markets, thereby increasing our revenue from export sales. In December, our Energy Marketing team exported 6 GWh of Muskrat Falls energy over the Maritime Link between the island and Nova Scotia, with power flowing to Atlantic Canada and beyond.



## HYDRO ADVANCES THE PROVINCE'S FIRST FAST-CHARGING NETWORK FOR ELECTRIC VEHICLES

Electric vehicle (EV) travel in Newfoundland and Labrador received a significant boost in 2020, when we announced the first provincial fast-charging network in partnership with the provincial and federal governments.

The network includes 14 charging locations from St. John's to Port aux Basques, enabling electric vehicle owners to travel long distances across the island portion of the province and removing one of the largest barriers to ownership cited by consumers. With this network, EV users will have access to fast chargers at locations averaging every 70 km along the TCH, as well as one charger in Gros Morne National Park. Once complete, the project will see the installation of 62.5 kW Direct Current Fast Chargers, located at popular rest stops and service stations, with sufficient power to fast-charge an electric vehicle to 80 per cent in under an hour.

Establishing the fast-charging network is an important first step to making EV use more accessible all around the province. This initiative provides an opportunity for increased domestic ownership of electric vehicles that will both help reduce carbon emissions, and support the province's electrification efforts.

The first charging station in our provincial network came online in Holyrood at the end of 2020, marking a critical milestone in the journey to make EV use more feasible in the province. As of August 2021, all charging locations were online and fully



In July, 2020, Hydro President and CEO Jennifer Williams joined Minister Siobhan Coady and Minister Seamus O'Regan to announce details of the province's first EV fast-charging network.

available. Additional locations are anticipated around the island and in Labrador through future expansion of the network, pending regulatory approval.

We are excited to advance this initiative, support a greener future for our province and provide clean, renewable, road-trip-ready energy.

## ELECTRIC VEHICLE EXPANSION IN CHURCHILL FALLS FLEET

We currently have three EVs in our Churchill Falls fleet. We purchased the first one in 2018 and the two others in 2019 and 2020. These units are placed in our fleet pool to allow any employee to use them. The compact size of the town often requires many short trips throughout the day, and these units are receiving significant use. They also play a key role in underground access to the powerhouse as they emit no exhaust. We have received positive feedback from our workers—to the point of requesting the EVs specifically. We have a "First-Out" rule with our EV, and do our best to see that they receive maximum usage.

We are currently constructing a new Municipal Services Building in Churchill Falls, and have incorporated six level-two charging stations in the build to support a future expansion to our electric vehicle fleet. Our next goal is to support our work crews with electric pickups when a suitable unit is available. We are committed to promoting environmental stewardship through innovation and greener initiatives.



## ELECTRICITY RATES/FINANCIAL AFFORDABILITY FOR CUSTOMERS

### ONE TIME BILL CREDIT FOR CUSTOMERS

On May 14, 2020, in coordination with the Government of Newfoundland and Labrador, we introduced an initiative to help electricity customers deal with the financial impacts of COVID-19.

Customers who would normally see electricity rates adjusted on July 1 each year, instead received a one-time credit on their electricity bill for 2020.

The credit was based on our expected fuel savings at the Holyrood Thermal Generating Plant. The decrease in oil prices

worldwide in 2020 meant it would cost us less to produce electricity, and those savings were passed on directly to our customers.

For 2020, the one-time bill credit replaced the annual July 1 electricity rate adjustment that normally occurs through the Rate Stabilization Plan. The credit provided customers with our expected savings upfront, providing relief on electricity bills at the time, rather than spreading out the forecasted fuel savings over the usual 12-month period.



## BUSINESS CONTINUITY AND CYBER SECURITY

### BUSINESS CONTINUITY AMID THE COVID-19 PANDEMIC

As part of our corporate response to the COVID-19 pandemic, the Environmental Services and Sustainability department developed business continuity plans to identify risks associated with social distancing, travel and external site visits to our operations. One risk identified early was the ability to conduct audits as part of the requirements for the ISO 14001:2015 standard, and to maintain our Environmental Management System Certification.

As a result, through early planning and coordination with both internal and external audit companies, our department was able to pivot to a remote audit process with ease and gain the necessary support internally through assistance from our Information Management and Information Systems departments. Utilizing corporate digital tools such as Content Manager, web conferencing, videoconferencing and transmission of data through email and desktop sharing, we efficiently and effectively provided the necessary evidence required by the ISO Standard. Our teams were able to successfully conduct internal and external audits and maintain our ISO 14001:2015 Certification through early detection of risks and collaboration throughout our organization.

Our industrial cybersecurity risks are tracked through a risk register program that is continuously improved for proactive cyber threat detection, incident response and supports to maintain the safety and reliability of our operations. In 2020, we completed improvements in several areas including an initiative to implement network segmentation of our Operational Technology (OT) environments (which is an industry best practice), the implementation of threat detection appliances in strategic sites and the implementation of next-generation firewalls.

### DELIVERING DURING A YEAR LIKE NO OTHER

For everyone, 2020 was a year of unprecedented challenges. In Newfoundland and Labrador, it began with "Snowmageddon," a severe winter blizzard, and was followed by the global pandemic.

In responding to COVID-19, health and safety remained our first priority. As a company, we made certain we were always in step with the guidance and requirements of government and health authorities for safe work practices.

We remained focused on the well-being of our workers while adjusting to ensure reliable operation of our generation and transmission facilities. Many of our employees are responsible for overseeing and carrying out critical work; those employees remained in the field and at our facilities, ensuring we could continue to reliably and safely deliver electricity. We were also

### CYBER ATTACKS: A MODERN INDUSTRIAL THREAT

As modern industrial cyber attacks can affect physical asset functionality, Newfoundland and Labrador's Industrial Cybersecurity Program directly contributes to the protection of worker safety and the reliability of power system operations.



strategic in planning and prioritizing the execution of critical capital projects. Above all, we made sure that our people were going home safe at the end of each workday.

To best support our customers throughout the COVID-19 pandemic, we elevated our customer service efforts and provided flexible bill payment options, details on interest relief, updates and answers to frequently asked questions as well as other helpful information.

In spite of the challenges, we ended 2020 with positive results:

**Strong safety performance.** Despite the added disruptions and the many adjustments that had to be made, we achieved our lowest All Injury Frequency rate to date.

**Success in serving customers.** Our reliability performance was strong overall, and we continued to keep our customers' needs first and foremost in everything we did. All critical work and winter readiness work was completed, and we experienced no bulk supply interruptions for our customers.

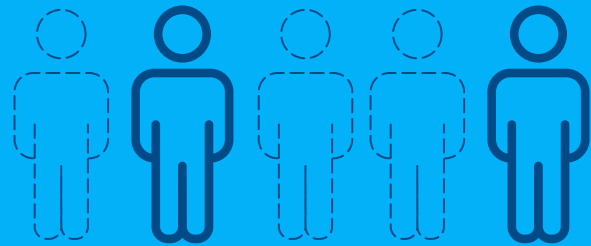
**We remained focused** on managing and reducing costs to benefit our customers.

the situation internationally and nationally to ensure we were prepared for a number of possible scenarios.

On March 14, the province announced its first case of COVID-19, and our Pandemic Plan moved into the emergency phase. This was accompanied by workplace quiet mode, travel restrictions and other control measures necessary to preventing the spread of the virus to our worksites. On March 18, any employee who could work from home was asked to do so. Facilities that were required to remain active were fitted with protective measures (e.g., plexiglass to separate work stations), employees were provided with the necessary PPE, regulations were implemented to ensure physical distancing, and preparations were made to ramp down operations across the Muskrat Falls Project and initiate care and maintenance mode—despite the fact that this would potentially put the project behind schedule. In all cases, decisions were made to ensure the health and safety of our workers, our contractors and the communities and people of our province.

As the pandemic persisted, and our employees continued to work from home or with limited contact at our workplaces, we knew that the mental health of our employees and their families was something that we could not overlook. To this end, we organized regular communications focused on how to deal with mental health issues, rolled out health and wellness challenges aimed at keeping people active and continued with our annual (virtual) Safety Summit at which the keynote speaker addressed how to deal with the chaos related to COVID-19.

As the year came to a close, many employees had transitioned back to working in our buildings—albeit under strict health and safety guidelines.



### COVID-19: AN UNPRECEDENTED YEAR

In early 2020, COVID-19 was beginning to spread throughout the world, and we knew it was only a matter of time before it would reach Canada and Newfoundland and Labrador. Given the importance of health and safety to our organizational culture, we quickly put together a team of employees from across all lines of business to determine what we would need to ensure that our business and employees were properly equipped to deal with the virus and the threat of a global pandemic.

Watching the impact being felt in other provinces, the team (led by corporate Health and Safety) quickly determined that the potential impact to our operations was vast and set about making sure we were prepared. To ensure critical work would continue even in the event of a shutdown, departments created business continuity plans; IT worked to ensure all employees able to work remotely had the tools they needed; Procurement worked to secure the required COVID-19 personal protective equipment (PPE) and cleaning supplies for our facilities; and Health and Safety updated the corporate Pandemic Plan, developed and implemented control measures and monitored

# PEOPLE

## PRIORITIES

- Equity, diversity and inclusion
- Employee engagement
- Talent attraction, development and retention
- Code of conduct and business ethics
- Organizational effectiveness and change management



Our people are the foundation of our company, and together we are creating an inclusive and diverse workforce with a culture that enables people to feel comfortable and engaged at work. We are committed to taking action to make sustainable progress in everything we do and everywhere we operate.



We profiled the theme “Let’s Talk Allyship” through various D&I events and initiatives



Through the 2020 Women in Trades & Technology Scholarship Program, we partnered with WRDC to award six \$1,500 scholarships to women across the province



We continued our efforts to attract and retain women in leadership, operations and engineering positions, and supported their advancement in these roles



Approximately 90% of the 2020 Lower Churchill Project workforce were Newfoundlanders and Labradorians



A number of our employees participated in Prosci’s Change Management Certification Program





## EQUITY, DIVERSITY AND INCLUSION

### GENDER EQUITY TARGETS

In 2017, we set gender equity targets to support the advancement of women into leadership roles and positions where women are typically under-represented. To support these targets, along with our broader commitment to encourage opportunities for women and other designated groups, including Indigenous Peoples, Persons with Disabilities and members of visible minorities, we apply a diversity and inclusion lens to our recruitment process, and collaborate with community partners to attract a diverse pool of qualified candidates.

OCCUPATIONAL GROUP	REPRESENTATION OF WOMEN				
	2017	2018	2019	2020	TARGETS
<b>Executive</b>	15%	24%	30%	22%	30%
<b>Management</b>	32%	33%	34%	33%	35%
<b>Engineers</b> (Including Engineers in Training)	21%	21%	22%	25%	30%
<b>Technicians and Technologists</b>	6%	6%	7%	8%	10%
<b>Field Supervisors</b>	5%	5%	5%	4%	6%
<b>Skilled Trades</b> (Including Apprentices)	4%	6%	6%	7%	10%
<b>Manual Workers</b>	16%	17%	19%	20%	20%

\*Includes Hydro and subsidiaries representation as of December 2020.

Although we recognize that there is still more work to be done, we continued to make progress in our established targets through 2020.

### ANNUAL DIVERSITY AND INCLUSION DAY - LET'S TALK ALLYSHIP

We held our third annual Diversity and Inclusion (D&I) Day in October. The theme, "Let's Talk Allyship," reminded employees that our workplace, and the world as a whole, is made better by diversity, inclusion and collaboration. An ally can be defined as someone who stands with underrepresented groups to support, empower or advocate for those who may not have access to the same opportunities or resources as themselves, or others. It is up to all of us to make a conscious effort to be an ally every day.

Moving to a virtual offering because of the pandemic, our D&I Champions Committee and Women's Leadership

Network offered three informative webinars on how to be an ally to underrepresented groups. The Association for New Canadians (ANC) discussed racism, discrimination and the experience that newcomers to the province can have, while sharing tangible ways to combat racism and be an ally. A local Red Seal electrician, Joann Greeley, shared her personal experience as a woman in trades and offered ways to be an ally to women within our industry. Finally, a speaker on justice, equity and human rights, Kim Katrin, incorporated strategies and best practices into their discussion with employees about what it means to be an ally.

The D&I Champions Committee also heard feedback from employees that they

wanted to hear more from leadership on D&I matters, so members of the executive team, the board and union executive, came together in a video to discuss what allyship means to them. In addition, employees were asked to complete their personal D&I Commitment and display it in their workspace.

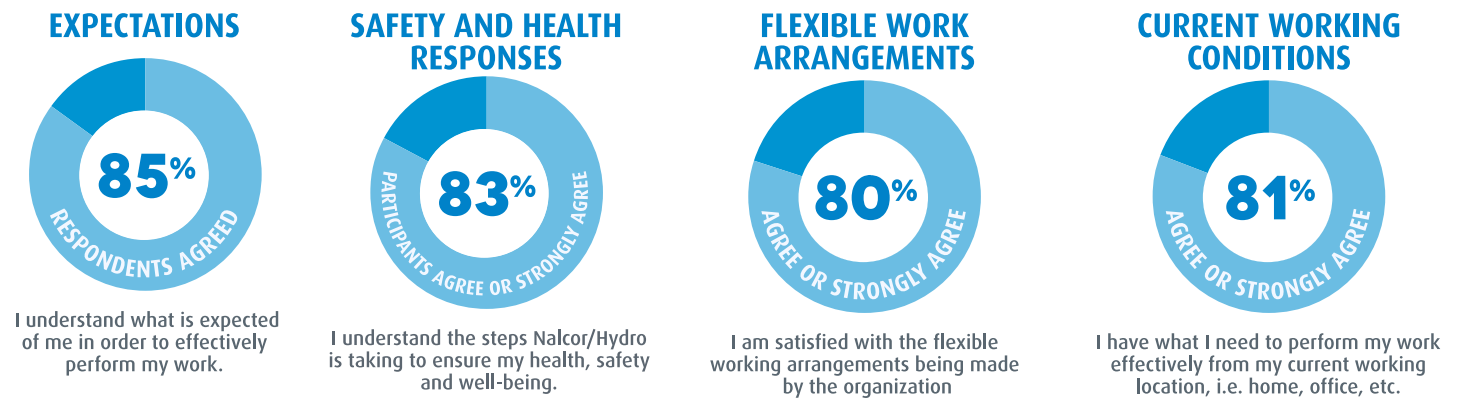


## EMPLOYEE ENGAGEMENT

### CHECKING IN WITH OUR EMPLOYEES DURING A GLOBAL PANDEMIC

While working through the COVID-19 pandemic, we checked in with employees throughout 2020 to better understand how they were doing. Pulse surveys allowed employees to provide anonymous input on their perceptions of health and safety, organizational support, expectations and working conditions and offered a platform to ask questions or provide comments.

Overall, employees shared that they understood the steps taken to ensure their health, safety and well-being, that they understood expectations and were satisfied with the flexible arrangements provided to them. They also expressed that their working conditions allowed them to work effectively through this time of change. We are pleased to know that our employees felt safe and supported throughout the pandemic, as it was one of our key focuses.



### DIVERSITY AWARENESS CALENDAR PROMOTION

Throughout the year we recognize specific groups, cultures or causes to help raise employee awareness and promote an inclusive work environment. We support people from all backgrounds and promote diversity and inclusion. This is embedded in our organizational values and relies on individual action and support. This is a journey we have undertaken as an organization and every employee, those who identify with a minority group and those who do not, has a role to play in creating an inclusive workplace where each and every person can bring their whole self to work.

#### IN 2020 WE HELD EVENTS, RAISED FLAGS AND PROMOTED COMMUNITY EVENTS FOR:

- Pink Shirt Day
- International Women's Day
- National Indigenous Peoples Day
- Multiculturalism Day
- Pride Celebrations
- Purple Ribbon Day
- International Day of Persons with Disabilities





## TALENT ATTRACTION, DEVELOPMENT AND RETENTION

### 2020 TRADES AND TECHNOLOGY SCHOLARSHIPS FOR WOMEN

In partnership with the Women in Resource Development Corporation (WRDC), in 2020 we awarded six \$1,500 scholarships to female students enrolling in select trades and technology programs at College of the North Atlantic.

We're committed to building a workforce that is diverse and representative of the communities where we live and work. As a utility, we fully recognize that women are often under-represented in many technical roles and skilled trades. Through initiatives like the WRDC Women in Trades Scholarships, our goal is to help close the gap by providing women with the support they need to launch successful careers in the trades.



## CODE OF CONDUCT AND BUSINESS ETHICS

### OUR CODE OF BUSINESS CONDUCT AND ETHICS

We are committed to professional and ethical business practices. To support this, our Board of Directors adopted the Code of Business Conduct and Ethics (the Code) for all employees which promotes expected standards of conduct and provides guidelines on conflict of interest and ethical business practices and conduct. The Code gives general guidance on how to avoid and report potential conflicts of interest and unethical business conduct, and links together many existing policies and legislation like our harassment policy, conflict of interest and Occupational Health and Safety legislation as well as addresses safety programs like the Internal Responsibility System.

### TRAINING AND DEVELOPMENT

In 2020, we continued to provide meaningful training and development opportunities to our employees. A key focus area was renewing our mandatory training requirements for employees and supervisors in Diversity and Inclusion and our Code of Conduct and Business Ethics courses.

We also actively promoted webinars on a variety of topics that were hosted by our community partner, the Canadian Center for Diversity and Inclusion (CCDI).

Our Code of Business Conduct and Ethics online training course is mandatory for all employees and must be renewed every two years. In 2020, all new employees were required to complete the course as part of their onboarding and orientation program. The Diversity, People and Programs (DPP) team worked directly with the supervisors of existing employees that were required to renew the course. Compliance for course completion and renewal was monitored by the DPP team using our Learning Management System (LMS).



## ORGANIZATIONAL EFFECTIVENESS AND CHANGE MANAGEMENT

### TRAINING AND DEVELOPMENT

In 2020, a number of employees, including managers, supervisors and human resources representatives participated in Prosci's Change Management Certification Program.

The outcome of the program was to develop the knowledge, skills and tools needed to drive successful change initiatives, including:

- Defining change management
- Explaining the value of change management
- Applying the Prosci ADKAR® Model to facilitate individual change
- Applying the Prosci 3-Phase Process for organizational change
- Activating roles that contribute to change success
- Formulating the foundation of a Change Management Plan to address specific project initiatives



Giving back to our communities is a critical part of who we are as employees and as a company. Through our Community Investment Program (CIP), we support registered not-for-profit organizations with donations, volunteer hours and in-kind work and contributions. Being an engaged, valued corporate citizen is important to us and we are delighted to work with and support organizations across our province.

# COMMUNITY

## PRIORITIES

- Indigenous partnerships and stakeholder engagement
- Customer satisfaction
- Community investment



We provided safety equipment and expertise in its usage to local communities



Our 2020 transactional survey showed customer satisfaction was 83.8% from 1,638 respondents



Hydro's 2020 Residential Customer Satisfaction Survey showed 90% of our customers satisfied with our service



We continued to support organizations in the communities where we live and operate throughout the province, with a special focus on helping those most affected by COVID-19



We donated \$10,000 toward research aimed at finding solutions for improving firefighting methods and equipment used in rural areas of Newfoundland and Labrador



We implemented a three-phase plan to upgrade the trail system used to view the Churchill Falls





## INDIGENOUS PARTNERSHIPS AND STAKEHOLDER ENGAGEMENT

### RELATIONSHIPS WITH INDIGENOUS GOVERNMENTS AND COMMUNITIES

We acknowledge that our organization operates on the traditional lands of the Indigenous Peoples of Newfoundland and Labrador. Partnerships and positive relationships with Indigenous People are a consistent priority for us.

### AGREEMENTS WITH INDIGENOUS GOVERNMENTS

We have agreements in place with both Innu Nation and NunatuKavut Community Council (NCC). The Lower Churchill Project also signed an Impact and Benefits Agreement (IBA) with Innu Nation in 2011 which includes:

- Employment and training participation objectives for construction and operations
- Workplace policies and cultural accommodations
- Business participation targets
- A joint environmental management committee with Innu that is responsible for environmental policies, EMS and consideration of Innu knowledge
- Project royalties

In 2017, we entered into a six-year Community Development Agreement (CDA) with the NCC which includes:

- Direct investment into community capacity and sustainability
- Environmental-related monitoring, reporting and mitigation, with the inclusion of NCC Indigenous traditional knowledge for the Muskrat Falls Project and the Labrador Transmission Project
- Initiatives for renewable energy generation
- Workplace environment and cultural accommodations
- Training, employment and business opportunities

Implementation of these agreements is ongoing and is a key consideration on how we conduct our business.

### Our Commitment to Meaningful Engagement

In 2020, we participated in numerous virtual meetings/sessions with Indigenous governments, organizations and individuals. These engagements included meetings with our CEO and Indigenous leadership which were imperative in ensuring Indigenous governments and communities were up to date on COVID-19 protocols at our facilities.

Open and respectful communication is central to building and sustaining positive beneficial relationships. Our Director of Indigenous Affairs and Community Relations is located in Happy Valley-Goose Bay and this office has provided an effective conduit and meaningful, accessible consultation and communication with our Indigenous partners.

### Supporting Indigenous Communities

Participating in Indigenous community initiatives is one way we support and show respect for what is important to our Indigenous partners and the people in the Indigenous communities in which we operate. In 2020, we continued our support for community events and programs.

Orange Shirt Day is held annually on September 30, and opens the door to global conversation on all aspects of Residential Schools. It is an opportunity to generate meaningful discussion about the effects of Residential Schools and the massive impact they have left behind. This year we supported the purchase of orange shirts for students in the Innu Communities of Sheshatshiu and Natuashish.

We provide continued support for Sheshatshiu Innu First Nation's annual gathering at Gull Island. This event is about returning to traditional lands that have supported Innu for generations and remain a significant spiritual site for Innu Nation members. Other partnerships included support for the Labrador Friendship Centre (in Happy Valley-Goose Bay servicing the North and South Coasts of Labrador), First Light (formally St. John's Friendship Centre), and various food sharing initiatives in Innu, Nunatsiavut, and NunatuKavut communities.



Due to COVID-19, there were no organized sports planned in the province for the summer months, with the exception of golf and tennis. We were approached by residents in Sheshatshiu and Happy Valley-Goose Bay to start an Indigenous Youth Golf program. Upon discussion with Innu Leadership, we moved forward with our support to provide Junior Golf Memberships, Golf Clubs, a Junior Golf Learning Centre as well as shirts, hats and weekly prizes for this program.

Residents of the region also expressed interest in upgrading the trail to view the Churchill Falls, a trail of interest to both Indigenous and non-Indigenous people of Labrador. In 2020, we began the process of upgrading the trail, starting with a

vegetation management program and other improvements. This work completes Phase I of three, with Phase II consisting of trail infrastructure improvements to include walkways, bridges and lookout points along with enhanced safety barriers at some locations. Phase III will include Indigenous signage reflecting the cultural significance of the falls with translations in both Sheshatshiu and Natuashish dialects of Innu Amin.

Other initiatives include our continued support of the construction of the Labrador Wellness Centre in Happy Valley-Goose Bay, and sponsorship of the annual Trapline Marathon in Labrador.



## CUSTOMER SATISFACTION



### GAUGING CUSTOMER SATISFACTION

Hydro has been conducting two varieties of surveys to gauge customer satisfaction with our service for a number of years. Our primary survey, conducted annually, targets residential customers one year and general service customers the next, to obtain feedback on our service delivery and to identify opportunities to improve service to them. In addition, a transactional survey is conducted each quarter of customers who have recently reached out to us on an issue and asks how they felt about the encounter. Both surveys are conducted by third party providers and results are forwarded to us when completed.

Our primary survey contacts a random sample of customers selected to give fair representation across our operating territory. The surveys are usually conducted by telephone but have also been offered online. Customers are asked to rate their level of satisfaction on a variety of our service delivery attributes such as reputation, service reliability and overall satisfaction with the company. The survey also asks questions about how our customers feel about specific items such as outage notification and updating, how people contact us and service options such as e-bill or pre-authorized payment options.

Our 2020 residential customer satisfaction survey reported an overall score of 90 per cent of our customers saying that they were satisfied with our service. Scores submitted on specific categories such as Reliability and Self-Serve options increased from our past survey. Customer feedback did highlight the need for us to continue to improve our communication with them and this is a focus in our work plan moving forward.

Since January 2017, we have been conducting surveys of customers who have recently interacted with company staff on any number of issues. Customers are asked specific questions about their discussion with us, and their responses are recorded to determine how satisfied they were with that particular encounter. Our 2020 transactional survey final score of customer satisfaction was 83.8 per cent from a total survey pool of 1,638 respondents.





## COMMUNITY INVESTMENT

### SUPPORTING COMMUNITIES DURING COVID-19

In March, when COVID-19 arrived in the province, it became clear that the most vulnerable members of our community were feeling the greatest impact. We made the decision to refocus our corporate efforts to support organizations caring for those most in need through food banks, community shelters, mental health supports and health care organizations. Throughout the year, with this new model in place, we were able to provide our support as the province moved through the various stages of the pandemic ensuring we helped the most people possible.



### HELPING IMPROVE THE FUTURE OF FIREFIGHTING IN RURAL COMMUNITIES



Many communities in Newfoundland and Labrador rely on volunteer fire departments to protect their residents and properties when fire strikes, including many of our facilities. But as populations in a number of areas are aging and declining, it is becoming increasingly difficult to find volunteers and respond efficiently.

To address these challenges, the Fisheries and Marine Institute and the provincial fire commissioner's office are conducting research aimed at finding solutions for improving firefighting methods and equipment used in rural areas of Newfoundland and Labrador.

We are providing an initial \$10,000 in funding toward the research through our Community Investment Program. We will also be sharing our valuable knowledge and experience in electrical fire safety in later phases of the two-year project.

### CHURCHILL FALLS DONATES EMERGENCY FIRE PUMP TO A COMMUNITY IN NEED



*Matthew Brenton, Fire & Security Officer, ensures Black Tickle trainees get hands-on experience learning how to use their new emergency fire pump.*

After hearing news of a house fire in Black Tickle, Labrador, in early 2020, the Churchill Falls Fire and Security Department donated surplus equipment to the community. On October 23, an emergency water pump and 600 feet of fire hose were delivered to the community that, until then, had no fire emergency equipment. The Department also provided training to community members on how to safely use the donated equipment.

## Newfoundland and Labrador Hydro Sustainability Policy



At the heart of Newfoundland and Labrador Hydro's business is our people. We know our friends, family, and neighbours are counting on us and we work hard every day for them. We live and work here because of all that our province has to offer, we are proud of the role we play in our province, and we are committed to being responsible corporate citizens.

We understand that our daily operations impact the communities in which we operate. We take our responsibility to Newfoundland and Labrador seriously, and work each day to minimize our impact and ensure that we develop our resources in a sustainable way for the maximum benefit of the people of our province.

Hydro is committed to providing a timely review of sustainable business operating procedures and practices. We commit to track, measure and report on our performance of the implementation of sustainability practices with a commitment of continual improvement.

To succeed in our goals, we have committed to demonstrating excellence in the following areas:

#### Safety and Health - Environment - Business Excellence - People - Community

To achieve this, Hydro will:

- Make sustainability a priority.
- Undertake activities and operations in a manner that strikes an appropriate balance between needs of current and future generations.
- Actively encourage economic efficiencies in operations that are consistent with sustainable practices.
- Promote a safe and healthy work environment.
- Consider the life cycle of projects related to our business, including their economic, environmental and social footprint.
- Establish sustainability indicators to enable accountability, communicate specific goals and measure progress.
- Prepare and regularly update a sustainability plan with specific goals and objectives.
- Report annually on progress to our Board of Directors and all stakeholders.

**Jennifer Williams**  
President and CEO, Newfoundland and Labrador Hydro

Date: September 2021





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