

NALCOR ENERGY

Strategic Plan 2020-22 Transparency and Accountability

September 2020



Message from the Boards of Directors

I am pleased to provide the Strategic Plan for Nalcor Energy (Nalcor) on behalf of the Board of Directors.

Nalcor is a category 1 public body under the *Transparency and Accountability Act* and this Strategic Plan was prepared in accordance with the applicable guidelines.

The focus period for this Strategic Plan is 2020-22 (Plan). The Plan content outlines how Nalcor will address the applicable strategic directions of the Government of Newfoundland and Labrador (Government) in relation to the energy sector as communicated by the Minister of Industry, Energy and Technology.

Nalcor's 2020-22 Strategic Plan does not currently reflect directions that may arise following Government's consideration of the Reference to the Newfoundland and Labrador Board of Commissioners of Public Utilities (PUB) on Rate Mitigation Options and Impacts or from the Commission of Inquiry Respecting the Muskrat Falls Project (Inquiry). Therefore, the Plan may require updates to reflect future direction from Government in relation to these two activities.

As the Board of Directors of Nalcor, we are accountable for the preparation of this Plan and for the achievement of the specific goals and objectives contained herein.



Brendan Paddick
Chair
Nalcor Energy

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1. INTRODUCTION

Nalcor, a category 1 public body, is a Newfoundland and Labrador energy company supporting the development of the province's energy resources. The company's business includes the development, generation, transmission and sale of electricity; and energy trading; Nalcor has a corporate-wide framework that facilitates the prudent management of its assets while continuing an unwavering focus on the safety of its workers, contractors and the public.

Nalcor has five business segments at December 31, 2019: Newfoundland and Labrador Hydro (Hydro), Power Development, Power Supply, Offshore Development and Corporate. The 2020-22 Strategic Plan for Nalcor takes into account the strategic directions of the Government in relation to the energy sector. The goals and objectives of Nalcor presented in this document support the achievement of the strategic directions relevant to Nalcor's mandate as set out in legislation to invest in, engage in, and carry out activities in all areas of the energy sector in the province and elsewhere.

In 2019 a stand-alone Crown corporation was established to work directly with the Department of Natural Resources (now Department of Industry, Energy and Technology) to accelerate growth opportunities in the petroleum industry. However, Nalcor Oil and Gas will continue to hold ownership of existing equity interests and will therefore transition to a supporting role in the management of these assets. The new oil and gas corporation will be a category 1 entity and has prepared its own three-year strategic plan in compliance with the *Transparency and Accountability Act* and will table subsequent annual reports.

In 2016, Nalcor's executive structure was reorganized to allow for the separation of Nalcor's regulated business, Hydro, from its unregulated business operations. As a result, Hydro, also a category 1 public body, prepares and submits a three-year strategic plan as required under the *Transparency and Accountability Act*. See Newfoundland and Labrador Hydro, 2020-22 Strategic Plan for further details regarding Hydro's strategic issues for the planning period.

Nalcor's 2020-22 Strategic Plan does not currently reflect directions that may arise following Government's consideration of the Reference to the PUB on Rate Mitigation Options and Impacts or from the Commission of Inquiry Respecting the Muskrat Falls Project (Inquiry). Therefore, the Plan may require updates to reflect future direction from Government in relation to these two activities.

2. STRATEGIC DIRECTIONS

A strategic direction is the articulation of a desired physical, social, or economic outcome that would normally require action by, or involvement of, more than one government entity.

The strategic directions of the Provincial Government for the 2020-22 planning cycle are as follows:

- **A Better Economy**
- **Healthier People**
- **Better Living**
- **A Bright Future**
- **A More Efficient Public Sector**

3. OVERVIEW

Within its five business segments, Nalcor has nine wholly owned subsidiaries: Newfoundland and Labrador Hydro (Hydro), Nalcor Energy Marketing Corporation (NEM), Labrador-Island Link General Partner Corporation (LIL GP), Labrador-Island Link Holding Corporation (LIL Holdco), Muskrat Falls Corporation (MF Corp), Lower Churchill Management Corporation (LCMC), Labrador-Island Link Operating Corporation (LIL OpCo), Labrador Transmission Corporation (Labrador Transco), and Gull Island Power Corporation (GIPCo). GIPCo and Lower Churchill Development Corporation (LCDC) are inactive subsidiaries.

Through its subsidiary, Hydro, Nalcor holds a 65.8 per cent interest in Churchill Falls (Labrador) Corporation Limited (CF(L)Co) and 51 per cent of LCDC. CF(L)Co in turn owns one third of the shares of Twin Falls Power Corporation Limited. In 2012 Nalcor also created the Labrador-Island Link Partnership (LIL Partnership) in accordance with the Labrador-Island Link Limited Partnership Agreement to develop the Labrador-Island Link. LIL Holdco holds all of LIL Partnership's 75 Class A Units and the 1 Class C Unit; LIL GP holds the 1 General Partner Unit; and Emera Newfoundland and Labrador (ENL) Island Link Incorporated holds all of the 25 Class B Units.

Headquartered in St. John's, Nalcor's energy portfolio is located throughout the province. In 2019, Nalcor had over 1,600 employees, with over 60 per cent of these employees located in rural parts of the island and Labrador. The gender composition of Nalcor's employee group was 71 per cent male and 29 per cent female. Nalcor is currently implementing a multi-year action plan to support diversity and inclusion.

In 2019, Nalcor had revenues from continuing operations of \$1,038 million. The majority of Nalcor's revenues are currently generated from electricity sales from Hydro and petroleum sales in Oil and Gas. Approximately 35 per cent of Nalcor's 2019 expenditures from continuing operations relate to fuels and power purchases with operating costs accounting for 25 per cent of expenses; depreciation, depletion and amortization totalling 22 per cent and net finance expense accounting for approximately 10 per cent.

Table 1: Nalcor Energy Consolidated Revenue and Expenses 2019

The table below summarizes the consolidated revenue and expenses of Nalcor for the year ended December 31, 2019 (millions of dollars).

	\$	%
Continuing operations		
Energy sales	1,016	98
Other revenue	22	2
Revenue	1,038	
Fuels	217	24
Power purchased	102	11
Operating costs	230	25
Production, marketing and transportation costs	36	4
Transmission rental	26	3
Depreciation, depletion and amortization	197	22
Exploration and evaluation	33	4
Net finance expense	92	10
Other expense	14	1
Regulatory adjustments	(36)	(4)
Expenses	911	
Profit for the year from continuing operations	127	
Discontinued operations		
Loss for the year from discontinued operations	(1)	
Profit for the year	126	

4. MANDATE

Nalcor

The mandate of Nalcor, established in legislation under the *Energy Corporation Act*, is to invest in, engage in and carry out activities in all areas of the energy sector in the province and elsewhere, including:

- Developing, generating, producing, transmitting, distributing, delivering, supplying, selling, exporting, purchasing and using power from wind, water, steam, gas, coal, oil, hydrogen or other products used or useful in the production of power.
- Exploring for, developing, producing, refining, marketing and transporting hydrocarbons and products from hydrocarbons.
- Manufacturing, producing, distributing and selling energy related products and services.
- Research and development.

On March 11, 2019, Government introduced legislation (*Oil and Gas Corporation Act*) establishing a new oil and gas corporation with a mandate focused on maximizing opportunities for growth in the province's offshore oil and gas industry. As noted above, Nalcor Oil and Gas will continue to hold ownership of existing equity interests and will therefore transition to a supporting role in the management of these assets.

5. BUSINESS SEGMENTS

The activities of Nalcor's five business segments support the fulfillment of the strategic directions of the Government for the energy sector. A description of each business segment is presented below with additional information pertaining to each of Nalcor's strategic issues for the 2020-22 planning period included in the issues section.

Newfoundland and Labrador Hydro

Hydro, a subsidiary of Nalcor, is focused on providing a safe, reliable and least-cost electricity supply to meet current energy needs and accommodate future growth. Through its regulated and non-regulated activities, Hydro is the primary generator of electricity for use in Newfoundland and Labrador.

The majority of Hydro's business is regulated by the PUB and its electricity rates are set through periodic general rate applications. The regulated portion of the company includes the generation, transmission and distribution of electrical power and energy to utility, residential and commercial customers, as well as island industrial customers. The non-regulated activities of Hydro include electricity sales to industrial customers in Labrador West.

Power Development

The development of the 824 megawatts (MW) Muskrat Falls hydroelectric generating facility on the lower Churchill River in Labrador is a key component of the province's energy resources. The clean, stable, renewable electricity provides an opportunity for the province to meet its own domestic and industrial needs in an environmentally-sustainable way, and also export excess electricity to other jurisdictions where the demand for clean, renewable energy continues to grow. Once construction is complete this asset will become part of Nalcor's Power Supply segment.

Power Supply

Power Supply includes CF(L)Co, the Labrador Transmission Assets (LTA), Labrador-Island Link (LIL), Energy Trading, the Menihek Generating Station and the Maritime Link. Nalcor's operation in Churchill Falls is one of the largest underground hydroelectric powerhouses in the world, with a rated capacity of 5,428 MW. Safely operating and maintaining its electricity assets, as well as municipal and community services in support of these electricity assets, drives the Churchill Falls strategy.

The Churchill Falls hydroelectric generating station provides clean, renewable electricity to millions of consumers throughout North America. A significant portion of that electricity is sold to Hydro-Québec under a long-term contract. Churchill Falls sells to Hydro 225 MW for use in Labrador West and 300 MW of Recapture energy for use in the province. Any surplus Recapture not used by Hydro is made available to NEM for export.

The LTA and LIL comprise the new transmission components of Power Supply, and include 1,600 km of transmission lines and associated electrical infrastructure. The LTA is a high voltage alternating current (HVac) transmission line between Churchill Falls and Muskrat Falls. LIL is a 1,100 km high voltage direct current (HVdc) transmission line between Muskrat Falls and Soldiers Pond on the island's Avalon Peninsula. LIL includes a 30 km subsea transmission link connecting Labrador to the island.

Offshore Development

Nalcor is an equity partner in three offshore fields, White Rose, Hibernia Southern Extension and Hebron. A new oil and gas corporation has been created by legislation and will manage these three interests on behalf of Nalcor Oil and Gas. The exploration of new oil and gas, and any new ownership interests in Newfoundland, will be undertaken by the new oil and gas corporation.

Corporate

This business segment includes finance and accounting operations, corporate planning and reporting, corporate communications, shareholder relations, information management, human resources, safety, environment, community investment, business development and all other shared service functions.

6. OTHER ORGANIZATIONAL PRIORITIES

A Clear and Focused Safety Vision

At Nalcor, nothing is more important than the safety of its employees, customers, contractors, and the public. A relentless commitment to safety drives all of Nalcor business segments. Achieving excellence in safety is Nalcor's number one priority and safety is a shared core value. For Nalcor, safety excellence is more than a way of operating; it is an integral part of Nalcor's identity and strategy for the planning period and into the future.

Nalcor has a goal of achieving world-class safety and an injury-free workplace. This is a responsibility that lies with every single person in the organization. In 2019, the Canadian Electricity Association (CEA) honoured Nalcor for its outstanding health and safety achievements. Nalcor was awarded CEA's 2019 President's Award of Excellence for Employee Safety in Generation in the Group 2: 501-999+ full-time equivalent employees. This award is a significant achievement for Nalcor as it is only given to corporate utilities that achieved the top ranking in Total Recordable Injury Frequency among utilities of comparable size in generation, transmission or distribution operations.

Over the last decade, Nalcor has seen steady improvements in its safety performance. Since 2005, there has been a significant decrease in the number and frequency of occupational injuries. The company is busier than it has ever been. There is an unprecedented amount of work in the field and there are many contractors working on Nalcor's sites as we build and integrate new assets. Despite this high volume of activity, Nalcor continues to increase its Safety Observation reporting year-over-year, as the company continues to evolve its Safety Management System.

Throughout the next planning cycle Nalcor will focus on the high risk areas and top trending injuries while ensuring a holistic view of employee safety – this means taking into consideration not only the physical safety of Nalcor employees, but also their mental well-being. To support this, in 2018 Nalcor implemented a Mental Health Strategy and Psychological Health and Safety Policy. This policy sets the guiding principles and approach to mental health as an organization.

While these are significant accomplishments, the company knows to achieve safety and health excellence it must remain focused. Nalcor remains relentlessly committed to safety and health across the company, at all levels, from the front lines to the Board of Directors. As the company continues to move forward on its journey to safety excellence, it will embrace every opportunity for continual improvement.

Positive Environmental Stewards

As Nalcor leads the development of the province's energy resources, the company remains committed to following sound, responsible environmental practices and being positive environmental stewards across all of its lines of business. Through its work, the company focuses on effective and environmentally-sound practices as part of its promise to be environmentally-responsible and sustainable.

Nalcor is proud to have ISO 14001 Certified Environmental Management Systems (EMS) as its framework for governing Nalcor's environmental responsibilities and it is an integral component of the organization's business operations. In 2018, Nalcor, Hydro and Power Supply achieved ISO 14001:2015 registration, including registration of Power Supply Engineering, Menihek and Exploits. This transition to the new version of the ISO 14001:2015 is a substantial accomplishment, given the changes required to both elements of the standard, as well as the commitments that are required to demonstrate.

Another significant achievement for Nalcor in 2018 was the awarding of the Sustainable Electricity Company brand designation for the CEA, a designation established by the CEA based primarily on ISO 26000 Guidance on Social Responsibility. Nalcor is the seventh Canadian electrical utility to receive this award, which recognizes significant achievement in sustainability. The brand designation demonstrates Nalcor's commitment to responsible environmental, social, and economic practices and to the principles of sustainable development.

In 2019, Nalcor completed and submitted all applicable greenhouse gas (GHG) regulatory reports by the prescribed regulatory dates. Once the Muskrat Falls hydroelectric generating facility comes online, the key driver for GHG reduction at Hydro will be the retirement of its Holyrood Thermal Generating Station (HTGS). With the reduction in GHG, Hydro will be able to generate carbon credits, which in turn opens a new revenue stream for the company and may in turn be utilized to mitigate rates. Nalcor also continued to provide environmental oversight on the Muskrat Falls Project and engaged stakeholders to develop communication on safe fish consumption as it relates to methylmercury.

Throughout the 2020-2022 planning period, Nalcor will continue to work with the Government and its stakeholders in support of a low-carbon economy and reducing the carbon foot print. There will also be a focus on the transition of Muskrat Falls Project assets to ensure ongoing environmental stewardship and engagement with stakeholders.

A Vision for Diversity and Inclusion

Nalcor's vision for diversity and inclusion (D&I) focuses on an inclusive and respectful workplace in which employees embrace individual differences and enable each other to reach their full potential. Nalcor's Diversity and Inclusion Council was established in 2011 and has been working on enhancing D&I in the workplace. The company has been implementing strategies to increase the representation of designated groups in its workforce and while the company has made progress, there is still work to be done. In 2016, the company set targets to increase the representation of women in its workforce in occupations in which they are underrepresented. Nalcor has made progress in several key areas, including executive, management and skilled trades. Nalcor continues to focus on increasing representation in engineering and operational areas of the business.

Gender Equity Targets

In addition to target setting, the company is committed to implementing D&I strategies to attract, recruit, develop and retain members of designated groups including Indigenous peoples, persons with disabilities and members of visible minorities. Nalcor has implemented a self-identification survey to assess baseline representation and identify targeted strategies and initiatives to increase the representation of other designated groups in its workforce to ensure an inclusive work environment. The company has also reviewed recruitment and talent management processes through a D&I lens.

Nalcor has a D&I Champions Committee and Women's Leadership Network, which hold events and activities throughout the year to promote a diverse and inclusive work environment. This year, Nalcor held its second annual D&I Day and continues to recognize key D&I calendar days, such as International Women's Day, National Indigenous Peoples Day and International Day of Persons with Disabilities.

Nalcor recognizes that building a diversity culture and achieving targets is a journey and the company continues to focus on implementing strategies that will set the organization up for sustained success. In the coming years, this will continue to include a focus on increasing representation of designated groups, further integration of D&I in processes and policies, and supporting an inclusive and respectful work environment.

GENDER EQUITY TARGETS

OCCUPATIONAL GROUP	WOMEN				TARGETS
	2016	2017	2018	2019	
Executive	15%	15%	24%	30%	30%
Management	27%	32%	33%	34%	35%
Engineers (Including Engineers in Training)	24%	21%	21%	22%	30%
Technicians and Technologists	5%	6%	6%	7%	10%
Field Supervisors	3%	5%	5%	5%	6%
Skilled Trades (Including Apprentices)	2%	4%	6%	6%	10%
Manual Workers	16%	16%	17%	19%	20%

*Notes: Includes Nalcor Energy and subsidiaries representation as of December 2019.

Fiscal Strength

The diversity of Nalcor's operations sees the company advancing capital projects; selling electricity in export markets; generating, distributing and maintaining the provincial electricity grid; and, investigating the expansion of provincial energy resources for future benefit. As Nalcor advances its mandate, the company operates in the global energy industry and it must strike the balance between capitalizing upon growth opportunities from provincial energy resources for future benefit while ensuring strict management of costs, acting always in the best interests of taxpayers and ratepayers. In doing so, Nalcor prepares long-term robust asset management plans to ensure prudent investments and long-term reliable supply, while reviewing expansion opportunities against the broader context of the existing energy portfolio and the cost-benefit analysis in proceeding.

7. VALUES

Employees of Nalcor are committed to building a bright future for Newfoundland and Labrador, unified by the following core values:

- **Open Communication** – fostering an environment where information moves freely in a timely manner.
- **Accountability** – holding ourselves responsible for our actions and performance.
- **Safety** – 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 manner to achieve excellence.
- **Respect and Dignity** – appreciating the individuality of others by our words and actions.
- **Leadership** – empowering individuals to help guide and inspire others.

8. PRIMARY CLIENTS

In addition to the clients of its subsidiary, Hydro, Nalcor's clients include:

- Partners in oil and gas projects (Hebron, White Rose, Hibernia Southern Extension)
- Emera Energy
- Supply and service companies in the energy sector

9. THE VISION

To develop and manage the province's energy resources safely and responsibly for the maximum benefit of the people of the province.

10. ISSUES

Nalcor drives performance excellence in its business segments and functional support areas through its planning and performance monitoring processes. Nalcor focuses on five key areas - safety leadership, environmental leadership, business excellence, people and community. These focus areas drive goals, objectives and operational activities throughout the company.

The strategic issues outlined below will be addressed by Nalcor to realize its mandate. Consistent with the underlying philosophy of the multi-year performance-based planning required under the provisions of *Transparency and Accountability Act*, these issues are at a governance level and reflect the priorities of Nalcor and support the Government's strategic directions for the energy sector. Other issues and focus areas, such as safety and environmental leadership, will continue to drive operational activities of Nalcor and its business segments and support efforts to address the issues outlined.

Issue 1: Electricity Supply and Reliability

Issue 2: Value from Electricity and Rate Mitigation

Issue 3: Oil and Gas Interests, Oversight

11. GOALS AND OBJECTIVES

Issue 1: Electricity Supply and Reliability

Nalcor's mandate, as established in legislation under the *Energy Corporation Act*, is to invest in, engage in, and carry out activities in all areas of the energy sector in the province and elsewhere. In carrying out this mandate, Nalcor is responsible for developing the province's natural resources to provide Newfoundlanders and Labradorians with a secure and reliable source of electricity to meet their ongoing needs. Through its subsidiary Hydro and its Churchill Falls business segments, Nalcor also undertakes a robust asset management program to ensure ongoing capital investments and maintenance of existing electricity assets to ensure long-term reliable operation of these assets.

Muskrat Falls Project

Throughout 2019, Nalcor continued to advance the construction and commissioning of the generation and transmission components of the Muskrat Falls Project to secure a reliable source of clean, renewable power for electricity customers in the province. With the integration of Muskrat Falls into the provincial electricity system, 98% of our province's electricity supply will come from renewable energy sources. Construction on all components of the project significantly advanced through 2019, reaching over 99 per cent overall construction completion at the end of the year.

Power Development (Generation) – Overall construction of the generation reached over 98 per cent complete at the end of 2019. All dams are in operation, the reservoir has been created, and all required civil concrete has been poured. At the Muskrat Falls site, all water retaining structures are complete and reservoir impoundment (raising the level of the water upstream of the Muskrat Falls facilities) to the full operating supply level of around 39 metres was completed in September 2019. In the powerhouse, two of the four turbine and generator units were installed and work continues with the assembly and installation of the third and fourth turbine and generator units. Commercial operation for all four units is expected by end of 2020.

Power Supply (Transmission) – Construction and commissioning of all LTA assets is complete and by mid-2019 the Churchill Falls HVac extension and switchyard, the Muskrat Falls HVac switchyard and the two, 250 km transmission lines from Churchill Falls to Muskrat Falls were turned over to Nalcor Operations.

On LIL, all construction is complete on the 1,100 km transmission line from Muskrat Falls to Soldiers Pond, including the Strait of Belle Isle Marine Cable Crossing and turned over to Nalcor Operations. All construction and commissioning of the Soldiers Pond HVac switchyard is complete and turned over to Nalcor Operations. Construction of the HVdc Converter Stations at both Muskrat Falls and Soldiers Pond, as well as the Synchronous Condenser Facility at Soldiers Pond, is substantially complete and testing of LIL in monopole was completed in June 2019. Bipole software development and resolution of issues identified during commissioning of the synchronous condensers is ongoing. Overall construction of LIL is more than 99 per cent complete. High power testing and commissioning of LIL will continue in 2020.

During the 2020-22 planning period, final commissioning and integration of all assets within the Muskrat Falls Project will be completed and turned over to Nalcor Power Supply Operations. Project close-out will also be complete.

Churchill Falls - Asset Management

The Churchill Falls hydroelectric generating station is one of the largest underground hydroelectric power facilities in the world, with a rated capacity of 5,428 MW. Safely operating and maintaining its electricity assets, as well as municipal and community services, drives the Churchill Falls strategy.

As of 2019, Churchill Falls has been in operation for 48 years. With the plant and related infrastructure aging, asset management is critical to keeping assets in reliable operating condition to provide reliable service to customers for the long term and to ensure assets are fully functional well beyond the expiry of current contractual commitments in 2041. From 2005-2019, Nalcor Energy Churchill Falls invested \$554 million to upgrade or replace Churchill Falls assets, with annual capital expenditures increasing during the period by 630 per cent to \$66.5 million in 2019.

Taking steps to ensure the continued performance of the Churchill Falls facilities through planning and strategic investment will drive the company's strategy for the 2020-2022 planning period and beyond. A long-term asset management plan has been developed that reflects the level of service required of the plant combined with key asset information including condition assessments and operating and maintenance experience. Currently, capital investments for 2020-2022 planning period are forecast to be in excess of \$197 million.

In advancing the Muskrat Falls Project, including integration of Muskrat Falls generation and transmission assets into the provincial electricity system and interconnection with the North American grid, and continuing to invest in Churchill Falls assets, Nalcor is ensuring a secure and reliable source of electricity and supports the strategic direction of Government related to Energy Security and Reliability.

Issue 1: Electricity Supply and Reliability	
Goal By December 31, 2022, Nalcor will have increased the province’s supply of clean renewable energy and strengthened its long-term security and reliability.	
Indicators	<ul style="list-style-type: none"> ▪ Completed the Muskrat Falls Project and fully integrated into the provincial electricity system ▪ Utilization of the transmission lines connecting the province to the North American grid ▪ Continued to invest in Churchill Falls assets
Objective By December 31, 2020, Nalcor will have advanced capital projects that will increase the province’s supply of clean renewable energy and strengthened its security and reliability.	
Indicators	<ul style="list-style-type: none"> ▪ Completed construction for the generation assets of the Muskrat Falls Project ▪ Commissioned all Muskrat Falls generating units and transitioned to operations ▪ Completed integration of all generation and transmission assets into Nalcor Operations ▪ Established Operating and Maintenance requirements for operation of the transmission and generation facilities ▪ Reviewed and updated five-year capital plan ▪ Completed planned 2020 capital investment in CF(L)Co assets
Objective By December 31, 2021, Nalcor will have progressed capital projects for enhancement of the long-term security and reliability of the province’s electricity supply.	
Objective By December 31, 2022, Nalcor will have made continued advancements toward increasing the province’s supply of clean renewable energy and its long-term security and reliability.	

Issue 2: Value from Electricity and Rate Mitigation

As Nalcor carries out its mandate to develop the province's energy resources, it is keenly aware of the impact its operations have on electricity costs. Capital and financing costs associated with Nalcor's capital projects - through its subsidiary Hydro and, in particular, the Muskrat Falls Project - are not only backed by taxpayers but also passed along to customers in the form of increased electricity rates. These rates have a significant impact on the provincial economy. During the planning period, Nalcor must also consider the opportunities for minimizing costs of capital while also increasing revenue from its operations. These measures will provide opportunities to manage and mitigate electricity rates for customers post Muskrat Falls.

In 2018, the Government engaged the PUB to investigate options to mitigate the impact of Muskrat Falls costs on electricity rates, including cost savings and revenue opportunities. To support their work, the PUB engaged Liberty Consulting Group and Synapse Energy Economics. Throughout 2019, Nalcor and Hydro Executive teams and Boards worked diligently in supporting Government and the PUB in their reviews of options to manage rates for customers.

In September 2019, Liberty and Synapse delivered their final reports to the PUB, with the PUB then issuing these reports to the public. Supporting this work and responding to the PUB's and the consultants' questions has been an ongoing priority across the board and the executive team. Nalcor is committed to working collaboratively with the provincial Government to implement opportunities that will manage and mitigate electricity rates for customers following integration of the Muskrat Falls Project into the provincial electricity system. This will be a priority throughout the 2020-22 planning period.

To extract maximum value from its electricity portfolio, Nalcor, through NEM actively trades and sells the province's surplus power to customers in external energy markets. The Energy Trading portfolio includes surplus Churchill Falls Recapture power, long-term transmission rights, and agreements with Hydro for the provision of external electricity marketing services. Upon completion of the Muskrat Falls hydroelectric generating facility, a significant portion of the province's annual renewable energy generation will be exported. Value maximization is a priority with NEM's 24/7 focus on movements in both internal and external markets.

Energy marketing is a core competency for Nalcor, an organization with significant hydroelectric generation resources. The value NEM brings to Hydro and Nalcor through the marketing of planned surpluses (i.e., Recapture and Muskrat Falls energy), the market intelligence gained in managing this function will provide critical knowledge and inform Nalcor's future and vast resource development opportunities. Following completion of the Muskrat Falls Project and excluding contractual commitments to Hydro-Québec and Emera, Nalcor will be the fifth largest electricity exporter in Canada out of a field of more than 50. Following expiry of Hydro-Québec Power Contract in 2041, Nalcor would by far be the largest electricity exporter in Canada.

Being prepared and able to market such energy through an established and experienced in-house marketing arm is critical to Nalcor maximizing value for Hydro and the province now and into the future. Successful extra provincial marketing of energy exports will increase funds available for rate mitigation.

Other opportunities for maximizing revenue exist. With respect to Churchill Falls, the Renewed Power Contract that automatically came into effect in September 2016 following termination of the original Power Contract, provides for the sale of a significant portion of power from the Churchill Falls facility to Hydro-Québec for a 25-year term. In July of 2013, Hydro-Québec filed a Motion in Quebec Superior Court seeking a Declaratory Judgement with respect to interpretation of the Renewed Power Contract. Following CF(L)Co's appeal of the original Quebec Superior court decision on this case, a decision of the Quebec Court of Appeal was issued on June 20, 2019, which partially overturned the decision of the Superior Court. The Court of Appeal ruled that Hydro-Québec is entitled to only a fixed annual quantity of energy known as "Continuous Energy" and confirmed that Hydro-Québec does not have an exclusive right to all energy produced at Churchill Falls other than the Recapture and Twin Falls blocks of energy. In accordance with this ruling, CF(L)Co has the right to energy in excess of Continuous Energy when it can be produced at the Churchill Falls facility.

While excess energy will likely not be available every year, CF(L)Co has the opportunity to generate new revenue by selling this excess energy when it can be produced under new commercial arrangements, while still respecting its existing commercial obligations. The decision of the Court of Appeal is final as neither party sought leave to appeal within the permitted time period. Now that the interpretation of the Renewed Power Contract has been finalized by the Courts, the exact quantity of Continuous Energy is a matter which is currently under negotiation between CF(L)Co and Hydro-Québec. In addition to potential sales of excess energy from the existing Churchill Falls facilities, investment in upgrades in capacity and increased efficiency at the plant also present opportunities to generate incremental revenues and profit for CF(L)Co.

Nalcor’s activities to extract maximum value from its electricity portfolio, monitoring and assessing market opportunities for expansion of its portfolio and working with the Government to implement opportunities that will manage and mitigate electricity rates for customers all serve to support the strategic direction of Government of maximized value.

Issue 2: Value from Electricity and Rate Mitigation	
Goal By December 31, 2022, Nalcor will have advanced efforts to maximize the overall value from the electricity resources for the people of the province.	
Indicators	<ul style="list-style-type: none"> ▪ Identified and advanced the commercial, legal, financial and regulatory processes required to implement rate mitigation outcomes
Objective By December 31, 2020, Nalcor will have assessed options to increase value from electricity resources in the province.	
Indicators	<ul style="list-style-type: none"> ▪ Monitored and assessed market opportunities for expansion of the provinces electricity portfolio ▪ Supported opportunities to maximize overall value from electricity resources ▪ Advanced commercial, legal, financial and regulatory processes to implement rate mitigation outcomes ▪ Continued to implement measures to maximize portfolio value such as targeting higher priced markets and times to exceed the energy price benchmark ▪ Assessed and engaged potential customers on identified export market and industrial customer opportunities
Objective By December 31, 2021, Nalcor will have advanced opportunities to extract maximum value from the province’s electricity resources.	
Objective By December 31, 2022 Nalcor will have further advanced efforts and opportunities to extract maximum value from the province’s electricity resources in support of rate mitigation.	

Issue 3: Oil and Gas Interests, Oversight

On March 27, 2018, the Government announced its intent to establish a stand-alone Crown corporation to work directly with the Department of Natural Resources (now Department of Industry, Energy and Technology) to accelerate growth opportunities in the petroleum industry. On March 11, 2019, the Government introduced legislation *Oil and Gas Corporation Act* establishing a new oil and gas corporation with a mandate focused on maximizing opportunities for growth in the province's offshore oil and gas industry. The new corporation, on top of managing the existing offshore equity interests, will drive exploration by attracting new investment, maximizing returns through equity investments, and enhancing local supply chain opportunities by leveraging existing capabilities; positioning the province as a globally preferred location for oil and gas development. Bull Arm Fabrication Inc. will become a subsidiary of the new corporation, and will continue to hold the lease for the Bull Arm Fabrication Site. Bull Arm's employees will transition to the new oil and gas corporation and support this effort.

Throughout 2019, Nalcor continued to work with the Government to transition the relevant areas of the business to the new oil and gas corporation. An implementation working group was established to facilitate the transition (effective January 1, 2020) and to develop a Management Services Agreement (MSA). The MSA stipulates that the ownership of the existing offshore assets (White Rose, Hibernia Southern Extension and Hebron) will remain with Nalcor Oil and Gas as a source of revenue, but will be managed by the new oil and gas corporation. Nalcor Oil and Gas will continue to be responsible for approving the annual work plan and budget for existing assets, based on recommendations of the new oil and gas corporation.

During the 2020-22 planning period, Nalcor Oil and Gas will be focused on working with its partners to transition various oil and gas functions of the business over to the new oil and gas corporation, and administering the MSA with the new corporation. This will entail carrying out activities as set out in the MSA and clarifying the roles and responsibilities of both organizations in relation to the provinces oil and gas industry.

Issue 3: Oil and Gas Interests, Oversight	
Goal By December 31, 2022, Nalcor will have supported the new oil and gas corporation in its role as manager of Nalcor Oil and Gas assets.	
Indicators	<ul style="list-style-type: none"> ▪ Supported the establishment of the new oil and gas corporation as a stand-alone entity ▪ Supported the new oil and gas corporation in its role as manager of Nalcor Oil and Gas assets, as per the terms of the MSA ▪ Ensured the appropriate administration of the MSA
Objective By December 31, 2020, Nalcor Oil and Gas will have provided support to the new oil and gas corporation in the implementation of a Management Services Agreement between Nalcor and the new oil and gas corporation.	
Indicators	<ul style="list-style-type: none"> ▪ Advanced the MSA ▪ Established clear roles and responsibilities between Nalcor Oil and Gas and the new oil and gas corporation
Objective By December 31, 2021, Nalcor will have continued to support efforts to further advance the establishment of the new oil and gas corporation.	
Objective By December 31, 2022, Nalcor will have supported the new oil and gas corporation in its role as manager of Nalcor Oil and Gas assets.	

Appendix 1

STRATEGIC DIRECTIONS

A strategic direction is the articulation of a desired physical, social, or economic outcome that would normally require action by, or involvement of, more than one government entity.

The strategic directions of the Government for the 2020-22 planning cycle are as follows:

- **A Better Economy**
- **Healthier People**
- **Better Living**
- **A Bright Future**
- **A More Efficient Public Sector**

Appendix 2

ENERGY PORTFOLIO

