

**NORTHLAND POWER INC.**

**ANNUAL INFORMATION FORM**

**For the year ended December 31, 2018**

**February 21, 2019**

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## INTRODUCTION AND USE OF DEFINED TERMS

All capitalized terms used in this Annual Information Form (“**Annual Information Form**” or “**AIF**”) have the meanings assigned to them under the heading “Glossary of Terms”, unless otherwise defined. All currency amounts in this AIF are in Canadian dollars unless otherwise indicated. Unless otherwise noted, the information contained in this AIF is given as at or for the year ended December 31, 2018.

## FORWARD-LOOKING STATEMENTS

*This AIF contains certain forward-looking statements that are provided for the purpose of presenting information about management’s current expectations and plans. Readers are cautioned that such statements may not be appropriate for other purposes. Forward-looking statements include statements that are predictive in nature, depend upon or refer to future events or conditions, or include words such as “expects,” “anticipates,” “plans,” “believes,” “estimates,” “intends,” “targets,” “projects,” “results of litigation and arbitration,” “forecasts” or negative versions thereof and other similar expressions or future or conditional verbs such as “may,” “will,” “should,” “would” and “could.” These statements may include, without limitation, statements regarding future adjusted EBITDA, free cash flows, dividend payments and dividend payout ratios; the construction, completion, attainment of commercial operations, cost and output of development projects; the resolution of arbitration or litigation claims; plans for raising capital; and the future operations, business, financial condition, financial results, priorities, ongoing objectives, strategies and outlook of Northland Power Inc. (“**Northland**” or the “**Company**”) and its subsidiaries. These statements are based upon certain material factors or assumptions that were applied in developing the forward-looking statements, including the design specifications of development projects, the provisions of contracts to which Northland or a subsidiary is a party, management’s current plans and its perception of historical trends, current conditions and expected future developments, as well as other factors that are believed to be appropriate in the circumstances. Although these forward-looking statements are based upon management’s current reasonable expectations and assumptions, they are subject to numerous risks and uncertainties. Some of the factors that could cause results or events to differ from current expectations include, but are not limited to, revenue contracts, counterparty risks, contractual operating performance, variability of revenue from generating facilities powered by intermittent renewable resources, offshore wind concentration, natural gas and power market risks, operational risks, permitting, construction risks, project development risks, financing risks, interest rate and refinancing risks, liquidity risk, credit rating risk, currency fluctuation risk, variability of cash flow and potential impact on dividends, taxation, natural events, environmental, health and worker safety risks, market compliance risk, government regulations and policy risks, international activities, reliance on information technology, labour relations, reputational risk, insurance risk, risks relating to co-ownership, bribery and corruption risk, legal contingencies, and other factors described in this AIF and in the Management’s Discussion and Analysis (**MD&A**) included in Northland’s 2018 Annual Report (“**Annual Report**”), which can be found on SEDAR at [www.sedar.com](http://www.sedar.com) under Northland’s profile and on Northland’s website at [northlandpower.com](http://northlandpower.com). Northland’s actual results could differ materially from those expressed in, or implied by, these forward-looking statements and the events anticipated by the forward-looking statements may not transpire or occur. The forward-looking statements contained in this AIF are based on assumptions that were considered reasonable as at February 21, 2019. Other than as specifically required by law, Northland undertakes no obligation to update any forward-looking statements to reflect events or circumstances after such date or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results, or otherwise.*

## NON-IFRS FINANCIAL MEASURES

This AIF includes references to Northland’s adjusted earnings before interest, income taxes, depreciation and amortization (“**adjusted EBITDA**”), free cash flow, applicable payout ratio and per share amounts, measures not prescribed by International Financial Reporting Standards (**IFRS**) and therefore, do not have any standardized meaning under IFRS and may not be comparable to similar measures presented by other companies. These measures should not be considered alternatives to net income (loss), cash flow from operating activities or other measures of financial performance calculated in accordance with IFRS. Rather, these measures are provided to complement IFRS measures in the analysis of Northland’s results of operations from management’s perspective. Management believes that adjusted EBITDA, free cash flow and applicable payout ratio and per share amounts are widely accepted financial indicators used by investors and securities analysts to assess the performance of a company, including its ability to generate cash through operations.

Readers should refer to the MD&A included in the 2018 Annual Report for an explanation of key non-IFRS measures and for a reconciliation of consolidated net income (loss) under IFRS to reported adjusted EBITDA and a reconciliation of cash provided by operating activities under IFRS to reported free cash flow.

## CORPORATE STRUCTURE

Northland Power Inc. is a corporation governed by the *Business Corporations Act* (Ontario). The head and registered office of Northland is located at 30 St. Clair Avenue West, Suite 1200, Toronto, Ontario, M4V 3A1.

The following is a list of Northland's principal subsidiary entities, showing the jurisdiction where they were incorporated or otherwise established and Northland's direct or indirect voting interest. Further information on key operating facilities is provided in "Description of Northland's Business".

	Place of incorporation	Voting interest as at Dec. 31, 2018
<b>Offshore Wind</b>		
Northland Deutsche Bucht GmbH ("Deutsche Bucht" or "DeBu")	Germany	100.0%
Buitengaats C.V. and ZeeEnergie C.V. ("Gemini")	Netherlands	60.0%
Nordsee One GmbH ("Nordsee One")	Germany	85.0%
<b>Thermal</b>		
Iroquois Falls Power Corp. ("Iroquois Falls")	Ontario, Canada	100.0%
Kingston CoGen Limited Partnership ("Kingston")	Ontario, Canada	100.0%
Kirkland Lake Power Corporation ("Kirkland Lake") <sup>(1)</sup>	Ontario, Canada	100.0%
North Battleford Power L.P. ("North Battleford")	Ontario, Canada	100.0%
Spy Hill Power L.P. ("Spy Hill")	Ontario, Canada	100.0%
Thorold CoGen L.P. ("Thorold")	Ontario, Canada	100.0%
<b>On-shore Renewables</b>		
Four solar facilities ("Cochrane Solar")	Ontario, Canada	62.5%
Grand Bend Wind L.P. ("Grand Bend")	Ontario, Canada	50.0%
Saint-Ulric Saint-Léandre Wind L.P. ("Jardin")	Québec, Canada	100.0%
McLean's Mountain Wind L.P. ("McLean's")	Ontario, Canada	50.0%
Mont-Louis Wind L.P. ("Mont Louis")	Québec, Canada	100.0%
Nine solar facilities ("Solar")	Ontario, Canada	100.0%

(1) Northland indirectly controls 100% of the voting interest of Kirkland Lake, while third-parties have non-voting ownership interests. Northland's effective net economic interest in Kirkland Lake is approximately 77%.

Northland's ownership interests as at December 31, 2018, were materially unchanged from December 31, 2017, with the exception of the sale of its interest in a facility which ceased operations in 2015 and a 28 MW facility located in Chapais, Québec.

## OVERVIEW

Northland's vision is to be a top clean and green developer, owner, constructor and operator of sustainable infrastructure assets, inspiring our people to achieve a sustainable and prosperous future for all of our stakeholders.

Northland's business strategy is centered on establishing a significant global presence as a sustainable energy producer. Northland aims to increase shareholder value by leveraging its expertise and early mover advantage in relevant markets to create and operate high-quality, sustainable infrastructure assets supported by revenue contracts that deliver predictable cash flows. Northland leverages its operational knowledge and the application of appropriate technology to boost operational performance, with the goal of reducing the impact of energy usage on the environment. Northland aims to inspire its people to achieve excellence in everything they do, embracing and living Northland's values on a daily basis.

Northland has been delivering on customers' needs for energy since 1987 by developing, building, owning and operating clean (natural gas) and green (wind, solar and biomass) power projects. Northland has developed or acquired a diversified portfolio

of power generation facilities in Canada and Europe that produce long-term stable cash flows, allowing the Company to pay regular dividends to Shareholders since becoming publicly traded in 1997.

As at December 31, 2018, Northland owned or had a net economic interest in power-producing facilities with a total capacity of approximately 2,014 MW. Northland's operating assets comprise facilities that produce electricity from renewable resources, such as wind or solar power, as well as clean burning natural gas and biomass, for sale under Power Purchase Agreements (**PPAs**) or other revenue arrangements with creditworthy customers, typically government-backed power off-takers or agencies. PPAs define the revenue parameters of a facility and are the primary contributor to providing stable cash flow.

Northland's construction projects as of December 31, 2018 consist of Deutsche Bucht, a 269 MW offshore wind project, located in the North Sea in German territorial waters.

## NORTHLAND'S GENERAL ACTIVITIES

### Summary of Business Activities

- The Deutsche Bucht offshore wind project is progressing according to schedule and is on budget. As of the date of this MD&A, offshore installation of 31 monopile foundations was completed. As part of the rights and assets acquired in 2017, Northland had an option to construct two demonstrator turbines utilizing 'mono bucket' foundations (the "**Demonstrator Project**"). In July 2018, the Demonstrator Project reached financial close. The Demonstrator Project will contribute an additional 17 MW of capacity to the base 252 MW project for a total of 269 MW and result in total project costs of approximately €1.4 billion (CAD \$2.0 billion). The two mono bucket foundations are scheduled to be installed with the balance of plant during 2019 with project completion expected by the end of 2019.
- During the second quarter of 2018, the Hai Long project, owned by Northland and its 40% partner, Yushan Energy, were allocated a total of 1,044 MW (626 MW net to Northland) by the Bureau of Energy of Taiwan under a Feed-in-Tariff ("**FIT**") program and an offshore wind auction program. The combined allocations advance the project's ability to execute 20-year PPAs, subject to permitting and financial close. Refer to the "Development Prospects" section for additional information.
- In December 2017, the Nordsee One offshore wind project achieved final completion ("**final completion**"), marking the end of construction and the start of commercial operations. The project was completed on schedule and under its total budget of €1.2 billion. Concurrently with final completion, Nordsee One renegotiated the project's €840 million senior debt, reducing loan margins by 150 basis points.
- In August 2017, Northland acquired the Deutsche Bucht offshore wind project and achieved financial close ("**financial close**"), defined as full equity and debt commitments by Northland and the project debt lenders, respectively. Northland has invested approximately \$0.4 billion of corporate funds into the project.
- In July 2017, Iroquois Falls executed an Enhanced Dispatch Contract (**EDC**) with the Independent Electricity System Operator (**IESO**) for the balance of the Iroquois Falls PPA. The EDC took effect July 1, 2017, succeeding an interim enhanced dispatch arrangement entered into effective January 1, 2017.
- In April 2017, the Gemini offshore wind project achieved final completion. The project was completed ahead of schedule and under its total budget of €2.8 billion.
- In January 2017, the Kingston Facility ceased generating electricity for Ontario's power grid, upon expiry of its PPA. Subsequently, the Kingston Facility commenced selling electrical capacity into the New York Independent System Operator market.
- In January 2017, the litigation regarding PPAs related to Iroquois Falls, Kirkland Lake and Cochrane was resolved in Northland's favour.
- In April 2016, the Grand Bend on-shore wind project achieved final completion and declared commercial operations under its 20-year Ontario FIT contract. Construction of the project was completed ahead of schedule and under budget, with term conversion in July 2016. Term conversion ("**term conversion**") is defined as the conversion of a project construction loan to a term loan upon the satisfaction of a set of conditions.

## Summary of Corporate Activities

- In December 2018, Northland completed the early redemption of its 5.0% extendible convertible unsecured subordinated debentures, Series B, due June 30, 2019 (“**2019 Debentures**”). There was approximately \$77.0 million aggregate principal amount of the 2019 Debentures outstanding when the redemption notice was issued on November 16, 2018. Holders converted \$54.1 million of their 2019 Debentures into 2,504,670 new Common Shares prior to the December 21, 2018 redemption date. Northland redeemed the remaining \$22.9 million of the 2019 Debentures in cash.
- In December 2018, the Toronto Stock Exchange (“**TSX**”) accepted Northland’s notice of intention to proceed with a normal course issuer bid (“**NCIB**”) commencing December 17, 2018 and ending December 16, 2019. Pursuant to the NCIB, Northland may purchase for cancellation up to 8,000,000 common shares representing approximately 4.5% of Northland’s issued and outstanding common shares. In accordance with TSX rules, any daily purchases (other than pursuant to a block purchase exemption) on the TSX under the NCIB are limited to a maximum of 87,031 common shares, which represents 25% of the average daily trading volume on the TSX for the six months ended November 30, 2018.
- In November 2018, Northland reduced the discount at which shares are issued under its Dividend Re-investment Plan (“**DRIP**”) from 5% to 0%. Additionally, Northland began sourcing shares for purposes of the DRIP through market purchases, but reserves the right to issue shares from treasury. This change was effective for the dividend paid on December 14, 2018.
- In October 2018, Standard and Poor’s (“**S&P**”) reaffirmed Northland’s credit rating of BBB (Stable).
- In June 2018, Northland entered a new \$1.25 billion corporate credit facility with a syndicate of financial institutions. The new credit facility consists of a \$1 billion revolving facility and \$250 million term loan, and replaced Northland’s previous \$700 million syndicated credit facility (which comprised a \$450 million revolving facility and \$250 million term loan). The revolving facility will be used to fund development opportunities and acquisitions, provide letters of credit to secure obligations that would otherwise be funded in cash, and for general corporate purposes including working capital. Northland also amended and restated its \$100 million corporate bilateral letter of credit facility and replaced its export credit agency-backed corporate letter of credit, in both cases to align key covenants and terms with the new syndicated corporate facility.
- In May 2018, Northland renewed and increased its base shelf prospectus which enables the Company to offer an aggregate of up to \$1 billion of debentures, preferred shares, common shares and subscription receipts, or any combination thereof, over a 25-month period. The increase is commensurate with the relative growth of the Company and provides financial flexibility and efficient access to the Canadian capital markets.
- In December 2017, Northland announced a new fixed dividend rate of 5.08% on its Cumulative Rate Reset Preferred Shares, Series 3 (“**Series 3 Preferred Shares**”) for the five years commencing December 31, 2017 and ending December 30, 2022. Series 3 Preferred Shares holders had an option to elect to convert all or part of their Series 3 Preferred Shares, on a one-for-one basis, into variable rate Cumulative Rate Reset Preferred Shares, Series 4 (“**Series 4 Preferred Shares**”); however, because fewer than one million shares elected to be converted, no conversions occurred and therefore no Series 4 Preferred Shares were issued.
- In December 2017, the Board of Directors increased the monthly dividend on Northland’s Common Shares and Class A shares to \$0.10 per month (\$1.20 annually), an increase of 11% from the previous dividend of \$0.09 per month (\$1.08 annually), commencing with the dividend paid on January 15, 2018.
- In September 2017, S&P reaffirmed Northland’s credit rating of BBB (Stable).
- In June 2017, Northland obtained a \$100 million corporate letter of credit facility supported by an export credit agency guarantee. The facility provides additional capacity to support the letters of credit Northland is required to provide as security for its international development activities.
- In July 2016, S&P reaffirmed Northland’s credit rating of BBB (Stable).

## Summary of Project Financing Activities

- In July 2018, the Deutsche Bucht Demonstrator Project achieved financial close, increasing its borrowing capacity under the Deutsche Bucht non-recourse construction and term loan by €62.8 million subject to the same interest rate and maturity.
- In March 2018, Northland upsized the debt on its first six solar projects by \$15.0 million subject to same interest rate and maturity. Northland used the proceeds to fully repay the outstanding principal balance on Mont Louis' loan from Investissement Québec originally maturing in 2032.
- In December 2017, Nordsee One renegotiated its €840 million senior debt, reducing loan margins by 150 basis points.
- In August 2017, Deutsche Bucht closed on a €988.0 million non-recourse project financing, as well as a €54.0 million facility of contingent debt.
- In August 2017, Northland restructured the project debt totaling \$299.6 million relating to seven of its solar facilities, reducing loan margins by 50 basis points and eliminating certain reserve requirements.
- In April 2017, Gemini renegotiated its €2 billion senior debt, reducing the loan margin by 80 basis points and eliminating a cash sweep provision.
- In March 2016, Northland closed on \$25 million of bank financing for Kirkland Lake, comprising a \$15 million term loan and a \$10 million letter of credit facility (since reduced to \$4 million), to fund plant upgrades associated with the baseload PPA contract extension negotiated in 2015.

## DESCRIPTION OF NORTHLAND'S BUSINESS

Northland primarily develops, constructs and operates sustainable infrastructure projects across a range of clean and green technologies, such as wind (offshore and on-shore), solar and thermal (natural-gas-fired and biomass). Clean-burning natural-gas-fired plants provide reliable baseload and dispatchable power, grid support and backup for renewable generation as needed by the customer. Northland remains focused on pursuing growth in North America, Latin America, Europe and Asia, in addition to other jurisdictions that meet Northland's risk management criteria. Northland manages its development processes prudently by regularly balancing the probability of success against associated costs and risks.

### Electricity Industry Overview

#### Canada

##### Ontario

Ontario's electricity generation market is currently a hybrid market which comprises both a wholesale spot market and long-term contracts for the purchase of electricity issued or administered by the IESO. The IESO's market renewal initiatives are intended to, among other things: (i) introduce a competitive market for suppliers of electricity by way of an incremental capacity auction; (ii) introduce a financially-binding day-ahead market and a single scheduling market as a replacement to the IESO's existing day-ahead commitment process; and (iii) investigate the potential for allowing Ontario generators to earn revenue by exporting capacity to other jurisdictions. The IESO's proposed changes are intended to shift procurement away from the use of long-term power purchase contracts towards a competitive market model utilized in other jurisdictions. Other operational, technical and rule changes are proposed as part of the IESO's market renewal initiative.

Northland actively participates in the Market Renewal Working Group, which represents stakeholder interests. The IESO's "market renewal" initiatives are ongoing and certain high-level design decisions have been made; however, very few market rules have been amended although amendments are expected to be decided in the coming year.

In 2018, Ontario's new provincial government passed the *Cap and Trade Cancellation Act, 2018*, which wound-down Ontario's greenhouse gas cap and trade program. Canada's federal carbon tax replaced Ontario's cap and trade program beginning January 1, 2019. The federal carbon tax acts as a "backstop" program that only applies to provinces and territories that do not have their own carbon pricing system that aligns with the federal requirements. The federal carbon tax system is composed of two parts: (i) a charge on fossil fuels (e.g., gasoline, diesel, propane, natural gas) paid by registered distributors (fuel producers and distributors) beginning in April, 2019 (administered by the Canada Revenue Agency), and (ii) an output-based pricing system for large industrial emitters in certain provinces beginning January 2019. Since gas fired generators in Ontario were not direct

participants in Ontario's cap-and-trade program, the cancellation of that program minimally effected these generators (natural gas distribution charges have been adjusted to reflect the cancellation).

### **Saskatchewan**

Most of Saskatchewan's electricity requirements are served by the Saskatchewan Power Corporation ("**SaskPower**"), a provincial Crown corporation and vertically-integrated utility. SaskPower maintains an extensive power system that consists of generation, transmission and distribution infrastructure assets with a total available capacity of 4,493 MW, of which 3,542 MW is produced by SaskPower facilities and the remaining 951 MW is produced by independent power producers ("**IPPs**") primarily through long-term PPAs.

Although gas and coal-fired generation together form the primary component in Saskatchewan's supply mix, SaskPower has a goal of generating 50% of its total generation supply mix from renewable resources by 2030 and a goal to reduce its greenhouse gas emissions from 2005 levels by 40% by 2030. In that respect, SaskPower completed a competition for 200 MW of wind generation capacity by 2021 and 10 MW of utility-scale solar generation. Additional competitions and programs for wind, biomass, co-generation, combined-cycle natural gas and other low-emission technology projects are expected from SaskPower in 2019.

### **Québec**

The electricity industry in Québec is structured around two government bodies: Hydro-Québec, one of the largest electric utilities in North America with broad powers to generate, supply and deliver electricity in Québec, and the Régie de l'énergie, the provincial regulator responsible for reconciling the public interest, consumer protection and the fair treatment of electricity carriers and distributors.

In December 2016, the Québec government passed Bill 106 an Act to implement the 2030 Energy Policy ("**Bill 106**"). The combined effects of Bill 106 and the Energy Policy are to emphasize the Québec government's goal of decreasing its economy's dependence on fossil fuels and increasing its reliance on cleaner forms of energy. Bill 106 also created Transition énergétique Québec ("**TEQ**"), whose mission is to support, stimulate and promote energy transition, innovation and efficiency and to coordinate the implementation of all of the programs and measures necessary to achieve the energy targets defined by the government. The TEQ released its initial 2017–2020 Action Plan that defines its objectives as well as sets forth a number of measures with respect to Québec's energy transition.

## **The Netherlands**

In the Netherlands, the electricity market is currently governed by the *Electricity Act 1998*. In December 2016, a new legislative proposal, the Energy Transition Act, for a revised Dutch Electricity and Gas Act was sent to the Dutch Parliament. Part of the Energy Transition Act came into effect in 2018 and the rest is expected in 2019.

One of the main objectives of the Energy Transition Act is to remove obstacles and bottlenecks for the energy transition. To achieve these objectives, the Energy Transition Act includes provisions on energy experiments and temporary tasks of system operators, investment plans and quality assurance systems, redundancy provisions, cross-shareholding by national transition system operators, closed distribution systems, removal of the duty to connect new homes to the gas network and other provisions.

The Dutch government indicated it intends to: (i) lay down its climate goals in a formal climate act; and (ii) enter in to a new Climate Agreement with private and (semi-)public organizations. The government aims to reduce the emission of greenhouse gases by 49% in 2030 from 1990 levels.

The most important financial incentive in the Netherlands to achieve the renewable energy targets is the subsidy under the Ministerial regulation, *Stimulering Duurzame Energieproductie* (Stimulation of Sustainable Energy Production) ("**SDE**"). The SDE subsidizes the difference between the production costs of 'green' energy and 'grey' energy (i.e. from fossil fuels) for 8, 12 or 15 years depending on the technology, in the form of a subsidy per kilowatt-hour of energy produced.

The Offshore Wind Energy Act regulates the permit system for the exclusive right to construct and operate a future offshore wind farm. In principle, the permit for constructing and operating an offshore wind farm is awarded through a tender. The Offshore Wind Energy Act provides for a procedure for tenders including an application for SDE subsidy as well as for a procedure for non-subsidized tenders. In a tender procedure including SDE subsidy, the applicant with the lowest subsidy price wins the tender. In a non-subsidized tender, the applications will be ranked on the basis of the following criteria: (i) the knowledge and experience of the parties involved; (ii) the quality of the design for the wind farm; (iii) the capacity of the wind farm; (iv) the social costs; (v) the quality of the identification and analysis of the risks; and (vi) the quality of the measures to ensure cost-efficiency.



The tender for Hollandse Kust (Zuid) sites I and II in December 2017 was the first tender which started with the subsidy-free round. If no party had participated in the subsidy-free round, then the subsidy round would be opened. The next tender for Hollandse Kust (Zuid) sites III and IV will open in March 2019 with the subsidy-free round.

## Germany

The energy transition from conventional and nuclear power to renewable power sources remains in effect. At present, approximately 36% of Germany's electrical energy comes from wind, solar, hydro and biomass. The remainder is provided by conventional energy sources (in particular soft coal, coal and gas) as well as nuclear energy.

The cornerstones of this energy transition are:

- German nuclear power plants will be shut down by 2022;
- 80% of the German electrical power supply will be generated by renewable energy sources by 2050;
- emissions of greenhouse gases will be reduced by 80% to 95% by 2050;
- Germany will become less dependent on oil and gas imports; and
- use of energy will become more efficient (covering areas such as the building sector, the heating sector, etc.).

As a result of these changes, a power supply system with a high ratio of feature-dependent energy sources, such as wind and solar power, is increasingly resulting in an abundance of wind or solar power on the grid.

### **Results of the Second Offshore Wind Auction**

The second auction was initiated by the Federal Network Agency (*Bundesnetzagentur*) in April 2018. In total, a volume of 1.6 GW was awarded in the auction. The lowest bid to win a tender was 0,00 ct/kWh, the highest was 9,38 ct/kWh. The average bid to win a tender of 4.66 ct/kWh was significantly higher than the average in 2017 of 0.44 ct/kWh.

### **Future Auction System**

With the finalization of the second auction, the transitional period for the offshore wind auctions (commissioning of the wind farm between 2021 and 2025) has ended. For future offshore wind farm projects, a “central model” (commissioning from 2026 onwards) will apply: the *Bundesnetzagentur* together with the Federal Maritime and Hydrographic Agency (*Bundesamt für Schifffahrt und Hydrographie*) will designate areas for wind farms in an area development plan, which will set out (i) where wind farms are being constructed in the future and (ii) when and how these areas are going to be connected to the grid. The area development plan will become the most important planning instrument for future offshore wind projects. Bidders will have to compete for the construction of wind farms in such areas set out in the area development plan. Auctions will take place once a year.

In general, owners of existing offshore projects that have not been successful in the auctions during the transitional period, will lose their project rights. The areas for which these projects were planned, can be part of an auction in the central model again. If such area then wins the tender, the Wind Sea Act provides for a right of entry for the previous owners. Under certain conditions, they can take over the tender of the other bidder with the conditions of the other bidder's bid. The evaluation of such possibility of a right of entry can therefore be valuable for the previous owners.

## Taiwan

Taiwan's electricity industry is structured around Taiwan Power Company Limited (“**Taipower**”), a state-owned public utility company under supervision of the Ministry of Economic Affairs (“**MOEA**”) and the Bureau of Energy (“**BOE**”). Taipower has its own extensive generation facilities (including from nuclear, coal, gas and onshore wind energy sources), and is also the owner and operator of the national grid and the monopoly wholesaler/retailer of electricity in Taiwan. The market is open to independent power producers and several rounds of procurement have occurred, in which IPPs were invited to tender for the supply of thermal generation to Taipower. As a result, foreign entities have successfully invested in power plants in Taiwan.

In 2009, Taiwan passed the Renewable Energy Development Act (“**REDA**”) to promote and incentivize the development of renewable energy. The REDA authorizes the MOEA to set targets for the promotion of renewable energy and the target share of renewable installed capacity among the various types of renewable energy for a period of 20 years from the effective date of the REDA and to offer incentive feed-in tariffs. Renewable energy currently comprises approximately 5% of all generation but the government has renewable energy policy goals to raise this to 20% by 2025. Specifically, the government is targeting development of 20 GW of solar and 6.5 GW of offshore wind and 1.2 GW of on-shore wind by 2025. In order to achieve these

goals, the government has introduced policies and regulatory regimes to facilitate project development. In the case of solar, this has included making public land available for tender and allowing farm land no longer suitable for farming to be rezoned for solar projects. In the case of offshore wind, this included introducing a Site Planning regime which permits developers to secure sites for their projects and grid selection (by project merit) and grid auction (by tendered price) regimes for developers to compete for and secure grid connection for their projects according to their committed year of completion and available grid capacity. Taipower is expected to expand grid capacity to ensure that projects are able to connect and supply to the national grid in their year of completion. It is proposed that a further tender round (by tendered price) be held for the development of offshore wind projects for completion dates 2026 - 2030 but the details and timing of the tender round remain to be finalized and announced.

Projects will sell their generation to Taipower based on the incentive feed-in tariff or tendered tariff price for a 20-year term and Taipower's prescribed form of power purchase agreement. Taipower, as national grid operator, is required by law to purchase all renewable energy generation.

In January 2017, the Electricity Law was amended to allow renewable energy generators to sell generation directly to end users under corporate power purchase agreements and wheeling agreements through the national grid. Non-renewable generation may still only be sold to Taipower and not directly to end users. The amendment provided additional support for renewable energy generation including preferential rates for dispatching/transmission fees, priority over grid connection and exemption from reserve capacity requirements for generation below certain capacity.

## Operating Facilities

Northland's 2018 Annual Report includes the results of Northland's operating facilities, the most significant of which are listed in the section below.

	Gross capacity (MW)	Northland's economic interest %	Capacity (MW)	Contract counterparty	PPA expiry	Remaining PPA term <sup>(1)</sup>	% of 2018 Adjusted EBITDA <sup>(2)</sup>	% of 2017 Adjusted EBITDA <sup>(2)</sup>
<b>OFFSHORE WIND:</b>								
Gemini	600	60%	360	Government of The Netherlands	2031	12.5	34%	38%
Nordsee One	332	85%	282	Government of Germany	2027	8.3	26%	14%
<b>THERMAL:</b>								
North Battleford	260	100%	260	SaskPower	2033	14.4	12%	13%
Iroquois Falls	120	100%	120	IESO/OEFC	2021	3.0	8%	10%
Thorold	265	100%	265	IESO	2030	11.2	7%	7%
Kirkland Lake <sup>(3)</sup>	132	77%	102	IESO/OEFC	2030/2035	14.7	1%	2%
Spy Hill	86	100%	86	SaskPower	2036	17.8	2%	2%
Kingston	110	100%	110	N/A	N/A	—	—%	1%
<b>ON-SHORE RENEWABLES:</b>								
Solar	90	100%	90	IESO	2033	14.9	6%	7%
Grand Bend	100	50%	50	IESO	2036	17.3	3%	3%
Jardin	133	100%	133	Hydro-Québec	2029	10.9	2%	2%
Cochrane Solar	40	62.5%	25	IESO	2035	16.7	2%	2%
Mont Louis	101	100%	101	Hydro-Québec	2031	12.7	2%	2%
McLean's	60	50%	30	IESO	2034	15.3	1%	1%
<b>OTHER:</b>								
Other <sup>(4)</sup>	—		0				(6)%	(5)%
<b>Total or w. average</b>	<b>2,429</b>		<b>2,014</b>			<b>12.0</b>	<b>100%</b>	<b>100%</b>

(1) In years and as at December 31, 2018. Weighted average based on contribution to 2018 adjusted EBITDA.

(2) Represents the approximate percentage of total reported adjusted EBITDA for the respective year generated by each operating facility.

(3) Fees and dividends earned by Northland from Kirkland Lake are considered intercompany amounts and are eliminated on consolidation. However, in the calculation of reported adjusted EBITDA, Northland includes those fees and dividends earned rather than the adjusted EBITDA.

(4) Primarily includes general and administrative costs net of investment income.

Except as otherwise noted, all contract counterparties are of investment grade as rated by one or more rating agencies.

## Project under Construction

Project	Project capacity (MW)	Contract counterparty	Expected PPA expiry <sup>(1)</sup>
Deutsche Bucht Offshore Wind	269	Government of Germany <sup>(2)</sup>	2032

(1) Based on 12.7 years from expected COD.

(2) The main source of revenues is ultimately an obligation of the Government of Germany.

## Revenue by Segment

<i>(in millions of dollars)</i>	2018	2017
Offshore wind	\$ 931.1	\$ 714.6
Thermal	406.0	450.5
On-shore renewables	214.3	211.6
Other <sup>(1)</sup>	99.5	24.7
Inter-segment revenue <sup>(2)</sup>	(95.2)	(25.1)
<b>Total</b>	<b>\$ 1,555.7</b>	<b>\$ 1,376.3</b>

(1) Includes management and operations fees, investment income, general and administrative, and development expenditures.

(2) Inter-segment revenue is eliminated on consolidation.

## Offshore Wind Facilities

In addition to the Deutsche Bucht offshore wind project under construction, Northland owns and operates approximately 932 MW (642 MW net Northland interest) of offshore wind facilities located in the North Sea, off the coasts of the Netherlands and Germany. Wind power generation harnesses renewable wind energy by converting the kinetic energy of wind into electrical energy. Wind facilities tend to produce more electricity during winter due to denser air and higher winds compared to summer.

Offshore wind facilities comprised \$931.1 million of revenues and \$7.4 billion of assets representing 59.9% and 71.3%, respectively, of total revenues and total assets for the year ended and as at December 31, 2018.

### **GEMINI OFFSHORE WIND FARM**

Gemini is a 600 MW (360 MW net Northland interest) offshore wind farm located in the North Sea approximately 85 km off the northeast coast of the Netherlands. Gemini is owned by a consortium of entities including affiliates of Northland (60%), Siemens Financial Services (20%), N.V. HVC (10%) and Alte Leipziger-Hallesche insurance group (10%). Alte Leipziger-Hallesche insurance group acquired their interest in the Gemini project from Van Oord Dredging and Marine Contractors BV in April 2018. Gemini declared final completion in April 2017.

Gemini has subsidy agreements with the Government of the Netherlands which expire in 2031. The subsidies top up the wholesale market-based revenue generated by Gemini to a fixed, contractual rate per megawatt hour (**MWh**) and are subject to an annual production ceiling (the "**Gemini Subsidy Cap**"), beyond which, production earns revenue at wholesale market prices. In addition, the top up to a fixed contractual rate is subject to a floor price, thereby exposing Gemini to market price risk when the wholesale market prices fall below the contractual floor price of €44/MWh. Based on expected wind resources and resultant electricity production volumes, the Gemini Subsidy Cap and the associated earnings are expected to be achieved during the fourth quarter of the calendar year.

Gemini has a long-term service agreement ("**LTSA**") to provide ongoing maintenance and service on the wind turbines with the original equipment manufacturer that results in stable and predictable wind turbine operating costs over the term of the agreement, which expires in 2032, as well as other long-term arrangements to cover the balance of plant operating services and costs.

Northland and a Danish pension fund also provided subordinated loans, with a total outstanding balance of €309.8 million (CAD \$484.4 million) as at December 31, 2018; Northland holds 40% of the subordinated loans that earn an interest rate of 12.0%, which changes to a rate of 9.0% after June 2019.

### **NORDSEE ONE OFFSHORE WIND FARM**

Nordsee One is a 332 MW (282 MW net Northland interest) offshore wind farm located in the North Sea, 40 km north of Juist Island in German territorial waters. In 2014, Northland acquired an 85% equity stake in Nordsee One as well as two early-stage development opportunities. The remaining 15% equity interest in the wind farms is held by innogy SE (formerly RWE AG). Nordsee One declared final completion in December 2017.

Each turbine in Nordsee One is entitled to a FIT subsidy for approximately 10 years from the date of its commissioning under the German *Renewable Energy Sources Act*, which is added to the wholesale market rate, effectively generating a fixed unit price for energy sold. The subsidy compensates for certain production curtailments required by the system operator. Under the German *Renewable Energy Sources Act*, while the tariff compensates for certain production curtailments required by the system operator, Nordsee One does not receive the tariff if market power pricing remains negative for longer than six consecutive hours.

Nordsee One has a LTSA, which expires in 2027, as well as other long-term arrangements to cover the balance of plant operating services and costs.

## **Thermal Facilities**

Northland owns and operates approximately 973 MW (943 MW net Northland interest) of thermal generation located in Ontario and Saskatchewan, Canada. Northland's thermal facilities generate electricity through the combustion of natural gas that spins turbines coupled to electrical generators. Natural gas is the cleanest-burning fossil fuel, resulting in lower atmospheric emissions of sulphur dioxide, small particulate matter, carbon monoxide, NO<sub>x</sub>, and greenhouse gases such as reactive hydrocarbons and carbon dioxide, than the combustion of other fossil fuels. Northland's Kirkland Lake facility generates electricity using biomass in addition to natural gas.

Northland's thermal assets comprise primarily dispatchable facilities, each with unique contractual parameters. Dispatchable facilities operate either when market conditions are economical or as specified by the PPA counterparty. These facilities receive contract payments that are largely dependent on the availability to operate according to contract parameters as opposed to maximizing production. Iroquois Falls, Thorold, Spy Hill, off-peak hours production at North Battleford and certain generators at Kirkland Lake operate as dispatchable facilities. A peaker facility is a type of dispatchable facility that may be required to operate for as little as a few days a year or a few hours a day at times of peak electricity demand depending on seasonal factors or grid load.

In contrast to dispatchable facilities, baseload facilities generally operate at a contracted output and receive a fixed price for electricity sold. On-peak hours production at North Battleford and certain generators at Kirkland Lake operate as baseload.

The contractual structures of Northland's thermal facilities generally ensure the facility's gross profit is generally stable regardless of production or sales levels so long as the plant is available. Under certain PPAs, a facility may be reimbursed for certain costs of sales by the counterparty. North Battleford, Thorold and Spy Hill have contractual structures that effectively allow for a flow-through of certain variable production costs, primarily the supply and transportation of natural gas, and therefore gross margins are not significantly affected by changes in volume of electricity produced or in natural gas costs.

A facility's PPA may allow for economic curtailments, whereby the power offtaker may pay the facility to produce less than available electricity, which can result in lower sales and operating costs and equal or higher gross profit for the facility.

All operating thermal facilities purchase natural gas pursuant to supply contracts with creditworthy counterparties and have long-term gas turbine maintenance agreements, which include various provisions such as routine maintenance, repairs, upgrades and improvements. All Northland thermal facilities hold all necessary permits and approvals required for operations and have an environmental monitoring and reporting system in place.

Thermal facilities comprised \$406.0 million of revenues and \$1.5 billion of assets representing 26.1% and 14.4%, respectively, of total revenues and total assets for the year ended and as at December 31, 2018.

The following describes Northland's operating thermal facilities:

### ***NORTH BATTLEFORD***

The 260 MW North Battleford Facility is a natural-gas-fired combined-cycle plant located in Saskatchewan. The facility receives monthly capacity-related payments under its PPA with SaskPower based on the facility's ability to deliver baseload electricity during defined on-peak periods, which are designed to cover all fixed costs, debt service and return on equity. During off-peak periods, North Battleford may be dispatched to operate at less than baseload. The PPA provides protection against changes in the market price of natural gas since all fixed fuel costs and most variable fuel costs are passed through to SaskPower. Northland is responsible for operating the plant to achieve specified efficiency and reliability levels. The contractual structure of the facility is designed to ensure predictable, stable and sustainable cash flows over the entire 20-year term of the PPA, expiring June 2033.

Following enhancements to North Battleford's generation equipment, Northland amended its PPA with SaskPower effective January 2, 2019, thereby contracting North Battleford to provide incremental capacity as operating reserve. Management expects the amendment to result in an increase of approximately \$2 million to net income, adjusted EBITDA and free cash flow annually for the remainder of the PPA.

### ***IROQUOIS FALLS***

The 120 MW Iroquois Falls Facility is a natural gas-fired facility operating as a dispatchable facility under an EDC entered into with the IESO in 2017 for the balance of the facility's PPA which expires in December 2021. Under the EDC, Northland is responsible for operating the plant to achieve specified efficiency and reliability levels.

## **THOROLD**

The 265 MW Thorold Facility sells electricity to the IESO under a 20-year PPA contract expiring March 2030. Thorold is a dispatchable facility that generally produces electricity only when market conditions are economical but has a contract structure designed to largely insulate it from volume risk and volatility in electricity and natural gas prices. Under its PPA, Thorold earns a fixed amount from the IESO intended to cover fixed operating costs, debt service and return on equity. The structure ensures Thorold's gross profit under the PPA is generally fixed and largely dependent on its ability to operate according to the contract parameters. Thorold can earn additional gross profit from the Ontario electricity market during favourable market conditions.

## **SPY HILL**

The 86 MW Spy Hill Facility is a natural-gas-fired peaking facility located in Saskatchewan on land leased from SaskPower. It generates electricity and provides grid stability under the terms of its 25-year PPA with SaskPower which expires October 2036. Spy Hill's PPA is designed to ensure predictable, stable and sustainable cash flows by providing monthly payments that cover all fixed costs, debt service and return on equity and by passing fuel costs to SaskPower, thus insulating the facility against changes in natural-gas market prices. Northland is responsible for operating the plant to achieve specified efficiency and reliability levels. Upon the expiry of the Spy Hill PPA, SaskPower has the option to purchase the facility for \$1.

## **KIRKLAND LAKE**

The 132 MW Kirkland Lake Facility comprises a 102 MW natural gas and biomass-fired baseload power plant and a 30 MW natural gas peaking (dispatchable) power plant. Kirkland Lake's baseload power plant has a 40-year PPA with the IESO, which expires August 2030, while the peaking power plant has a 20-year PPA with the IESO, expiring August 2035. Under the dispatchable PPA, Kirkland Lake receives fixed monthly capacity payments regardless of dispatch levels. The baseload PPA provides protection against changes in the market price of natural gas since all fixed fuel costs and most variable fuel costs are passed through to the IESO.

## **KINGSTON**

The 110 MW Kingston Facility's long-term PPA expired in January 2017, and subsequent to which, the Ontario market electricity prices have generally been insufficient to operate the facility in the Ontario market. Northland continues to evaluate all revenue alternatives and sell electrical capacity into the New York Independent System Operator market through participation in seasonal auctions.

## **On-shore Renewables**

Northland owns and operates 524 MW (429 MW net Northland interest) of on-shore renewable assets comprised of on-shore wind and solar facilities, located in Ontario and Québec. On-shore wind projects are similar in nature operationally to offshore wind; however, with lower operating costs and generally lower equipment maintenance costs.

Northland's solar facilities use solar photovoltaic technologies to convert sunlight into electricity. Solar power facilities have much lower fixed operating expenses per unit of capacity than thermal or wind facilities. Electricity production from solar facilities tends to be less variable than wind but is limited to available sunlight, which is generally higher in the summer than in the winter.

Northland's on-shore wind facilities comprised \$130.3 million of revenues and \$644.4 million of total assets, representing 13.8% and 13.2% respectively, of total revenues and total assets for the year ended and as at December 31, 2018.

Northland's solar facilities comprised \$84.0 million of revenues and \$724.0 million of assets representing 5.4% and 7.0%, respectively, of total revenues and total assets for the year ended and as at December 31, 2018.

The following describes Northland's on-shore renewable facilities:

### **SOLAR**

The 90 MW Solar facility comprises nine ground-mounted solar facilities totaling 90 MW located in eastern and central Ontario. Each of the facilities has a 20-year PPA with the IESO expiring November 2033. Solar is not an IESO market participant and thus cannot be dispatched nor subject to curtailment by the IESO. Operations and maintenance activities are performed in-house for Solar and a long-term parts agreements exists with the original equipment manufacturer.

## **GRAND BEND**

Grand Bend Wind Farm is a 100 MW (50 MW net Northland interest) wind farm located in Grand Bend, Ontario and co-owned through a 50/50 partnership with First Nations partners. Grand Bend has a 20-year PPA with the IESO awarded under its FIT program expiring April 2036. Grand Bend is subject to curtailment by the IESO with up to 2,500 MWh of annual un-paid curtailment, over which, curtailment is paid the contracted FIT rate. Grand Bend has a LTSA, which expires in April 2036.

## **JARDIN**

The 133 MW Jardin Wind Farm is located on leased agricultural land in the Gaspésie region of Québec. Jardin has a 20-year PPA with Hydro-Québec to supply electricity expiring November 2029 and receives an incentive payment from the Canadian government for 10 years, expiring November 2019, under the ecoENERGY for Renewable Power program. Under the terms of its PPA, Jardin provides 75% of the ecoENERGY incentive to Hydro-Québec and retains the balance. Jardin has a LTSA which expires in November 2029.

## **COCHRANE SOLAR**

Cochrane Solar, comprising four facilities totaling 40 MW (25 MW net interest to Northland) located in northern Ontario, is a IESO market participant and is thus dispatchable and subject to curtailment by the IESO. This economic curtailment is limited to 125 MWh per facility per year with a contract lifetime maximum of 1500 MWh per facility, with any curtailment above these limits paid at the full FIT rate. Each of the facilities has a 20-year PPA with the IESO expiring August 2035. Operations and maintenance activities are performed in-house for Cochrane Solar and a long-term parts agreements exists with the original equipment manufacturer.

## **MONT LOUIS**

The 101 MW Mont Louis Wind Farm is located on public land leased from the Québec government in the Gaspésie region of Québec. Mont Louis has a 20-year PPA with Hydro-Québec to supply electricity, which expires September 2031, subject to an annual escalation, and receives an incentive payment from the Canadian government expected to expire in April 2021, under the ecoENERGY for Renewable Power program. Under the terms of its PPA, Mont Louis provides 75% of the incentive payment with Hydro-Québec and retains the balance. Mont Louis has a LTSA which expires September 2031.

## **MCLEAN'S MOUNTAIN**

McLean's Mountain Wind Farm is a 60 MW (30 MW net Northland interest) facility located on leased land on Manitoulin Island, Ontario, co-owned through a 50/50 partnership with its First Nations partner. McLean's has a 20-year PPA with the IESO awarded under its FIT program which expires April 2034 and is subject to an annual escalation. McLean's is subject to curtailment by the IESO with up to 1,500 MWh of annual un-paid curtailment, over which, curtailment is paid the contracted FIT rate. McLean's has a LTSA which expires May 2024.

## **Projects Under Construction**

### **DEUTSCHE BUCHT OFFSHORE WIND PROJECT**

In August 2017, Northland acquired the 252 MW Deutsche Bucht offshore wind project, currently under construction, from a European developer and, concurrently with the acquisition, achieved financial close. The project is located in the North Sea, 100 kilometres west of the city of Emden in German territorial waters. Northland has invested approximately \$408.0 million of corporate funds into the project. The balance of the project cost will be funded with the €988.0 million non-recourse project finance debt entered into at financial close, and pre-completion revenues. Under the German *Renewable Energy Sources Act*, each turbine in the project is entitled to a FIT subsidy for approximately 13 years from its commissioning date, equating to approximately €184/MWh for 8 years and €149/MWh for the remainder.

The Deutsche Bucht offshore wind project is progressing according to schedule and is on budget. As of the date of this MD&A, offshore installation of 31 mono pile foundations was completed. As part of the rights and assets acquired in 2017, Northland had an option to construct two demonstrator turbines utilizing 'mono bucket' foundations. In July 2018, the Demonstrator Project reached financial close. The Demonstrator Project will contribute an additional 17 MW of capacity to the base 252 MW project for a total of 269 MW and result in total project costs of approximately €1.4 billion (CAD \$2.0 billion). The two mono bucket foundations are scheduled to be installed with the balance of plant during 2019 with project completion expected by the end of 2019.

## Sale of Assets

In September 2018, Northland, through its subsidiaries, completed the sale of its indirect interest in a 28 MW biomass-fired power facility located in Chapais, Québec (“**Chapais**”) for total cash proceeds of \$1.9 million and a promissory note.

In March 2018, Northland, through its subsidiaries, completed the sale of its interest in the idled Cochrane thermal facility.

In November 2017, Northland completed the sale of its 22 MW German wind farms for approximately €3.7 million.

## Development Prospects

Northland actively pursues new power development opportunities that encompass a range of clean technologies, including natural gas, wind, solar and hydro, to provide a sustainable source of energy in various geographic regions and political jurisdictions. Northland believes this diversified strategy mitigates the risk of adverse changes to local demographics or governmental policies.

During 2018, Northland continued to expand its earlier-stage development pipeline, pursuing opportunities that meet the Company’s investment criteria in targeted markets including but not limited to, North America, Latin America, Europe and Asia. Northland’s sustained focus is on purposefully advancing those development opportunities that align with its business strategy while prudently managing the cost exposure of earlier-stage projects.

### **HAI LONG OFFSHORE WIND PROJECT**

During the second quarter of 2018, the Hai Long project, owned by Northland and its 40% partner, Yushan Energy, were allocated a total of 1,044 MW (626 MW net to Northland) by the Bureau of Energy of Taiwan under a Feed-in-Tariff (“**FIT**”) program and an offshore wind auction program. The combined allocations advance the project’s ability to execute 20-year PPAs, subject to permitting and financial close. Key aspects of the Hai Long project are presented below:

Sub-project	Awarded	MW Procured (Gross)	MW Procured (Net) <sup>(1)</sup>	Year of Grid Connection	Type of Procurement
Hai Long 2A	April 2018	300	180	2024	FIT
Hai Long 2B	June 2018	232	139	2025	Auction
Hai Long 3	June 2018	512	307	2025	Auction
<b>Total</b>		1,044	626		

(1) Represents Northland’s 60% economic interest.

## Competitive Conditions

Northland operates power generation facilities and focuses its development activities primarily in North America, Latin America, Europe and Asia. The nature and extent of competition Northland faces varies from jurisdiction to jurisdiction. Within the renewable and clean energy markets, Northland primarily faces competition from large utilities, other independent power producers and in certain jurisdictions, competition from generators who utilize non-renewable and clean sources to generate electricity including coal, nuclear and oil.

In every jurisdiction in which it operates, Northland depends primarily upon the sale of its power to credit-worthy counterparties under long-term PPAs or similar revenue stability mechanisms. Such counterparties include European government entities or utilities and agencies in Canada, such as the IESO in Ontario and provincially-owned utilities such as SaskPower and Hydro-Québec. Long-term PPAs are generally the result of a competitive request for proposals process or a FIT program established by the relevant agencies or utilities in which Northland’s competitors may also participate.

In the development of new projects, recent competitive auction processes in Europe resulted in developers willing to accept significant merchant price risk in order to secure power projects. Should this industry trend continue, Northland may choose to enter the commercial and industrial sector for future projects, accept an additional degree of revenue volatility, enter into shorter contracts, enter into new geographical markets, or a combination thereof.

The cost to construct and operate a project, and the type and characteristics of governmental programs to support clean and renewable projects are important drivers of energy pricing and competition in most international energy markets. Numerous factors may affect governmental policy and its support of clean and renewable energy development which in turn can affect the availability of opportunities for independent power producers, including Northland, to develop new power projects.



Northland manages the risk posed by such competitive conditions through its ongoing strategic planning process, its geographically diverse portfolio of projects, its disciplined approach to project development, its proven track-record, in-market presence, financial structuring and the experience of its management team.

## **Maintenance of Capacity**

To maintain its production capacity, defined as electricity production measured in megawatts or a facility's availability to operate, Northland (i) invests in durable assets that have a long physical life; (ii) undertakes regular predictive and preventive maintenance; and (iii) makes improvements to major equipment when economically viable.

For most thermal facilities, gas turbines are maintained by long-term maintenance contracts that include provisions for routine inspections, maintenance and repairs, as well as overhauls of the hot gas path components at periodic intervals equivalent to approximately three operating years and major turbine overhauls at intervals equivalent to approximately six operating years based on their operating hours for the baseload operating facilities with the interval period typically being longer for the dispatchable facilities depending on their stop/start cycles. These overhauls return the gas turbines to essentially as-new condition.

For renewable facilities, on-shore and offshore wind turbines are also maintained by original suppliers and/or service providers under contract. For offshore wind facilities, maintenance of the balance of plant is undertaken by various contractors. Inverters at the solar sites are covered under long-term warranties and parts agreements with the original equipment manufacturer, while solar panels are no longer under warranty. The cost of parts and maintenance under these contracts is included in operating expenses.

## **Environmental Matters**

Northland's facilities are subject to environmental laws and regulations and must maintain licences, permits and approvals established by governmental authorities and regulatory agencies in good standing. Northland is also required to comply with local and municipal approvals and actively works to establish and maintain positive relationships with the communities in which its facilities are located.

Each facility is designed, constructed and operated to meet or exceed environmental standards for air emissions, sound, and use of water and other resources. Northland has internal processes and procedures to monitor environmental conditions, changes in regulations, and to ensure each facility remains in compliance with applicable laws, codes, standards and industry practices. Changes in regulation are monitored and adjustments are made, as required, to address non-conformance.

## **Employees**

As at December 31, 2018, Northland had 363 (2017 - 298) permanent full-time employees. The increase in employee headcount from December 31, 2017 was primarily due to Northland assuming management of its Nordsee One facility from the project entity and bringing the majority of the Nordsee One employees into Northland.

## CAPITAL STRUCTURE

Northland's Articles authorize the Corporation to issue the following classes of shares:

- an unlimited number of Common Shares;
- 42,478,451 Class A Shares; and
- an unlimited number of Preferred Shares, issuable in series, of which:
  - 6,000,000 have been designated as 3.51% Series 1 Preferred Shares;
  - 6,000,000 have been designated as 4.35% Series 2 Preferred Shares;
  - 4,800,000 have been designated as 5.08% Series 3 Preferred Shares; and
  - 4,800,000 have been designated as Series 4 Preferred Shares.

As at December 31, 2018, Northland had outstanding 179,201,743 Common Shares (2017 - 174,440,081 Common Shares), 4,501,565 Series 1 Preferred Shares, 1,498,435 Series 2 Preferred Shares, 4,800,000 Series 3 Preferred Shares, Nil Series 4 Preferred Shares and 1,000,000 Class A Shares.

The following is a summary of the rights, privileges, restrictions and conditions attached to Northland's outstanding securities:

### Description of the Common Shares

Holders of Common Shares are entitled to one vote in respect of each Common Share held at any meeting of the shareholders of Northland except meetings at which only the holders of a specified class or series of shares of Northland are entitled to vote. Subject to the rights of holders of Preferred Shares or any series thereof, and other shares of Northland ranking in priority to the Common Shares, the holders of Common Shares are entitled to receive dividends as and when declared by the Board of Directors in its discretion from time to time. In addition, subject to the prior rights of holders of Preferred Shares or any series thereof, and other shares of Northland ranking in priority to the Common Shares, the holders of the Common Shares are entitled to that portion of the balance of the assets of Northland equal to the ratio that the outstanding number of Common Shares is to the aggregate of the number of Common Shares outstanding and the product of the number of Class A Shares outstanding and the Class A Conversion Rate (as defined in the Company's articles) upon the liquidation, dissolution or winding-up of Northland or other distribution of assets of Northland among its shareholders.

### Description of the Class A Shares

The Class A Shares are entitled to one vote per share and carry specified appointment rights for directors of Northland as described below. The Class A Shares, all of which are held by Northland Power Holdings Inc. (**NPHI**), are non-transferable, except on a reorganization of NPHI. On liquidation, subject to the rights of the Preferred Shares and the Common Shares, the holders of the Class A Shares share in the distribution of the balance of the assets of Northland.

NPHI, as the only holder of the Class A Shares can exercise special appointment rights for directors as long as it holds Class A Shares and the thresholds described in the Articles are met. If NPHI converts all of the Class A Shares that it holds into Common Shares, it will no longer have special director appointment rights.

So long as NPHI is controlled directly or indirectly by James C. Temerty and the aggregate number of votes attributed to the Class A Shares and the NPHI-held Common Shares represents at least 15% of the votes attributed to the Voting Shares outstanding, holders of the Class A Shares will have the right to elect 49% of the directors of the Company and if such NPHI ownership threshold is less than 15% but at least 10% of the Voting Shares, then NPHI's right to elect directors of the Company is reduced to 40% of the directors.

If NPHI is controlled directly or indirectly by a Temerty Entity (but not Mr. Temerty), and the aggregate number of votes attributed to the Class A Shares and Temerty Entity Held Common Shares represents at least 20% of the votes attributed to the Voting Shares outstanding, then holders of the Class A Shares will have the right to elect up to 49% of the directors of the Company, or 40% of the directors of the Company if the ownership threshold is less than 20% but at least 15%.

NPHI can decide whether to exercise the special director election rights for any particular director election. If NPHI exercises the special director election rights for a particular election, then the holders of the Common Shares are entitled to elect the balance of the directors. If NPHI does not elect to exercise, the holders of the Class A Shares vote with the holders of the Common Shares for all directors.

## Description of the Preferred Shares as a Class

### ***Issuance in Series***

The Board of Directors may from time to time issue preferred shares in one or more series, each series to consist of such number of shares as will before issuance thereof be fixed by the Board of Directors who will at the same time determine the designation, rights, privileges, restrictions and conditions attaching to that series of preferred shares.

### ***Voting***

Subject to applicable corporate law, the preferred shares of each series shall be non-voting and not entitled to receive notice of any meeting of shareholders, provided that the designation, rights, privileges, restrictions and conditions may provide that if Northland shall fail, for a specified period, which is at least two years, to pay dividends at the prescribed rate on any series of the preferred shares, thereupon, and so long as any such dividends shall remain in arrears, the holders of that series of preferred shares shall be entitled to receive notice of, to attend and vote at all meetings of shareholders, except meetings at which only holders of a specified class or series of shares are entitled to attend.

### ***Dividends***

Payments of dividends and other amounts in respect of the preferred shares will be made by Northland to Canadian Depository for Securities (CDS), or its nominee, as the case may be, as registered holder of the preferred shares. As long as CDS, or its nominee, is the registered holder of the preferred shares, CDS, or its nominee, as the case may be, will be considered the sole owner of the preferred shares for the purposes of receiving payment on the preferred shares.

### ***Tax Election***

Northland will elect, in the manner and within the time provided under Part VI.1 of the Tax Act, to pay or cause payment of the tax, under Part VI.1 at a rate such that the corporate holders of preferred shares will not be required to pay tax under Part IV.1 of the Tax Act on dividends received on such shares.

## Series 1 and 2 Preferred Shares

In 2010, Northland issued 6.0 million Series 1 Preferred Shares at a price of \$25.00 per share, for gross proceeds of \$150 million. The annual dividend rate was reset on September 30, 2015 to 3.51%, from 5.25% previously, and will reset every five years thereafter at a rate equal to the then five-year Government of Canada bond yield plus 2.80%. The holders of the Series 1 Preferred Shares are entitled to fixed cumulative dividends, payable quarterly, as and when declared by the Board of Directors.

The holders of Series 1 Preferred Shares have the right, at their option, to convert their shares into Series 2 Preferred Shares on September 30, 2020, and on September 30 of every fifth year thereafter, subject to certain conditions. On September 30, 2015, 1,498,435 of the 6,000,000 Series 1 Preferred Shares were converted on a one-for-one basis into Series 2 Preferred Shares. Consequently, Northland has 4,501,565 Series 1 Preferred Shares outstanding. Series 1 Preferred Shares are redeemable on September 30, 2020, and will be redeemable on September 30 of every fifth year thereafter.

The Series 2 Preferred Shares carry the same features as the Series 1 Preferred Shares, except that holders are entitled to receive quarterly floating-rate cumulative dividends, as and when declared by the Board of Directors, at an annual rate equal to the then three-month Government of Canada treasury bill yield plus 2.80% (4.31% as of December 31, 2018). The holders of Series 2 Preferred Shares will have the right to convert their shares back into Series 1 Preferred Shares on September 30, 2020, and on September 30 of every fifth year thereafter. As at December 31, 2018, Northland has 1,498,435 Series 2 Preferred Shares outstanding.

## Series 3 and 4 Preferred Shares

In 2012, Northland issued 4.8 million Series 3 Preferred Shares at a price of \$25.00 per share, for gross proceeds of \$120 million. The annual dividend rate was reset on December 31, 2017 to 5.08%, from 5.00% previously, and will reset every five years thereafter at a rate equal to the then five-year Government of Canada Bond yield plus 3.46%. The holders of the Series 3 Preferred Shares are entitled to fixed cumulative dividends, payable quarterly, as and when declared by the Board of Directors.

The holders of the Series 3 Preferred Shares have the right, at their option, to convert their shares into Series 4 Preferred Shares on December 31, 2022, and have such right on December 31 of every fifth year thereafter, subject to certain conditions.

There currently are no Series 4 Preferred Shares outstanding. The Series 4 Preferred Shares, if issued at subsequent conversion dates, will carry the same features as the Series 3 Preferred Shares, except that holders will be entitled to receive quarterly

floating-rate cumulative dividends, as and when declared by the Board of Directors at an annual rate equal to the then 90-day Government of Canada treasury bill yield plus 3.46%.

## Non-Recourse Interest-Bearing Loans and Borrowings

Northland generally finances facilities through secured credit arrangements at the subsidiary level that are non-recourse to Northland. These loans and borrowings (net of transaction costs and /or fair value adjustments) are summarized below:

<i>In thousands of dollars except as indicated</i>	Loan maturity	Term to maturity	Interest rate	As at Dec. 31, 2018	As at Dec. 31, 2017
Kirkland Lake	2023	4.2	2.8%	\$ 12,712	\$ 12,322
Jardin	2029	10.9	6.0%	93,485	99,760
Thorold	2030	12.2	7.1%	279,274	295,168
Nordsee One	2030	11.5	2.2%	1,149,657	1,187,434
Gemini <sup>(1)</sup>	2030	11.5	3.8%	3,010,917	3,094,753
Mont Louis	2031	12.7	6.6%	78,203	97,810
Solar (Phase I Financing)	2032	13.5	4.4%	200,065	196,794
Solar (Phase II Financing)	2032	13.5	5.4%	105,833	112,028
North Battleford	2032	15.0	5.0%	565,914	587,727
Cochrane Solar	2033	14.5	5.3%	172,551	181,238
Deutsche Bucht	2033	15.0	2.8%	755,669	205,709
McLean's	2034	15.2	6.0%	124,416	129,908
Grand Bend	2035	16.8	4.2%	325,645	325,645
Spy Hill	2036	17.2	4.1%	137,231	140,760
<b>Weighted average or Total</b>		13.4	4.1%	<b>\$ 7,011,572</b>	<b>\$ 6,667,056</b>

(1) Includes the amount drawn on the senior debt and the third-party portion of subordinated debt.

In order to make distributions, under the terms of each facility's credit arrangement, Thorold, Spy Hill and North Battleford maintain a 'major maintenance reserve' to help smooth the cash flow impact of periodic costs arising from major maintenance inspections and overhauls. The major maintenance reserve can be funded with cash or a letter of credit. Some facilities are also required under certain conditions to maintain a debt service reserve, which can be funded with cash or a letter of credit as well.

In addition to the loan balance summarized above, as at December 31, 2018, \$43.5 million (2017 - \$45.0 million) of letters of credit were issued under facility- or project-level credit agreements.

## Debt Covenants

Northland generally conducts its business indirectly through its subsidiaries and is dependent on receipt of cash from those entities to pay cash dividends to common, preferred and Class A shareholders and to defray its corporate expenses. Certain entities sourced non-recourse project finance debt at the subsidiary entity to fund a significant portion of construction costs. Under the credit agreements or trust indentures for such debt, distributions of cash to Northland are typically prohibited if a loan is in default or if a project fails to achieve its minimum benchmark DSCR, in which case excess cash is retained at the project level until the next distribution date when the benchmark is achieved. For the year ended December 31, 2018, Northland and its subsidiaries were not in default with respect to any loan agreements and were in compliance with all debt covenants.

## Corporate Credit Facilities

As of December 31, 2018, Northland's corporate credit facilities totaled \$1.2 billion. The facilities are available for general corporate purposes, to support operational, construction and development opportunities and to provide letters of credit issued on behalf of Northland or its subsidiaries.

- In June 2018, Northland entered into a new \$1.25 billion corporate credit facility with a syndicate of financial institutions. The new credit facility consists of a \$1.0 billion revolving facility and \$250 million term loan and replaced Northland's previous \$700 million syndicated credit facility (which comprised a \$450 million revolving facility and \$250 million term loan).

Concurrent with the closing of the new syndicated corporate credit facility, Northland replaced its corporate bilateral letter of credit facility with a similar facility and amended and restated its export credit agency-backed corporate letter of credit facility, to align key covenants and terms with the new syndicated credit facility.

- In August 2018, Northland borrowed €70.0 million under its syndicated revolving facility, bringing the balance to €200.0 million. Northland applied these proceeds plus cash on hand to repay the \$250.0 million remaining balance under the term loan. The term loan cannot be redrawn and has been canceled.
- The \$100 million letter of credit facility maturing March 2020, which Northland entered into during 2017, is supported by an export credit agency guarantee and allows successive annual renewals at Northland's option, subject to lender and export credit agency approval. The facility supports Northland's international activities.

The corporate credit facilities are summarized in the table below:

As at December 31, 2018						
In thousands of dollars						
	Facility size	Amount drawn	Outstanding letters of credit	Available borrowing capacity	Maturity date	
Syndicated revolving facility	\$ 1,000,000	\$ 312,720	\$ 87,026	\$ 600,254	Jun. 2023	
Syndicated term facility <sup>(1)</sup>	—	—	—	—	—	
Bilateral letter of credit facility	100,000	—	99,877	\$ 123	Mar. 2020	
Export credit agency backed letter of credit facility	100,000	—	49,132	50,868	Mar. 2020	
<b>Total</b>	<b>\$ 1,200,000</b>	<b>\$ 312,720</b>	<b>\$ 236,035</b>	<b>\$ 651,245</b>		

(1) The \$250 million syndicated term loan facility was repaid in full in August 2018 and cannot be redrawn.

- Of the \$236.0 million of corporate letters of credit issued as at December 31, 2018, \$49.1 million relate to projects under advanced development or construction.

Northland's corporate credit facilities include provisions that allow for successive annual renewals at Northland's option, subject to approval by the lenders as applicable.

Northland's corporate financings are not subject to the types of DSCR, or reserve requirements which apply at the project-level financings but Northland is required to maintain certain covenants including a minimum fixed charge coverage ratio and a maximum ratio of net debt to EBITDA based on specified financial measures and components.

## Exposure to LIBOR and EURIBOR (Euro Interbank Offered Rate)

LIBOR and EURIBOR are the two key global benchmark rates used to determine interest rates and value government and corporate bonds, loans, currency and interest rate swaps and many other financial products. Regulators are expected to discontinue the use of EURIBOR after January 2020 and LIBOR after 2021. In the meantime, respective financial agencies, regulators and participants are working to develop replacement benchmarks, construct forward-looking term structures, ensure market liquidity and address documentation concerns to ensure an orderly transition.

Northland does not have debt or instruments indexed to LIBOR, but does have exposure to EURIBOR at its European offshore wind projects with €3.1 billion of loans and interest rate swaps outstanding as at December 31, 2018 (Gemini: €1.9 billion; Nordsee One: €0.7 billion; and Deutsche Bucht: €0.5 billion). There is also EURIBOR exposure on €200 million of borrowings under the corporate revolving credit facility.

Management is studying potential impacts across the business. Initial observations indicate European offshore wind exposure to EURIBOR (where interest is paid on loans and offsetting interest rate swap amounts are both based on EURIBOR) would be mitigated if the same replacement rate is applied to the loans and interest rate swaps. Management will continue to monitor and manage the situation closely.

## Convertible Debentures

In December 2018, Northland completed the early redemption of its 5.0% extendible convertible unsecured subordinated debentures, Series B, due June 30, 2019 ("**2019 Debentures**"). There was approximately \$77.0 million aggregate principal amount of the 2019 Debentures outstanding when the redemption notice was issued on November 16, 2018. Holders converted \$54.1 million of their 2019 Debentures into 2,504,670 new Common Shares prior to the December 21, 2018 redemption date. Northland redeemed the remaining \$22.9 million of the 2019 Debentures in cash.

In January 2015, Northland issued \$157.5 million of 4.75% convertible unsecured subordinated debentures maturing on June 30, 2020 (“**2020 Debentures**”) with net proceeds of \$150.6 million after costs and underwriters’ fees. The 2020 Debentures are convertible into Common Shares at the option of the holder at a conversion price of \$21.60 per Common Share and are presently redeemable by Northland provided that the trading price of Northland’s Common Shares reaches certain levels. On or after June 30, 2019 but prior to the maturity date, Northland may redeem the 2020 Debentures subject to the early redemption provisions in the Convertible Indenture. At maturity, Northland may, at its option, repay the principal amount in cash or through the issuance of Common Shares.

## DIVIDENDS

### ***Sustainability of Dividends***

Northland’s Board and management are confident that Northland has adequate access to funds to meet its dividend commitment, including operating cash flows and corporate funds.

Northland has a Dividend Re-investment Plan (**DRIP**) whereby Shareholders may elect to reinvest their dividends in Common Shares of Northland. In November 2018, Northland reduced the discount at which shares are issued under its DRIP from 5% to 0%. Additionally, Northland began sourcing shares for purposes of the DRIP through market purchases, but reserves the right to issue shares from treasury. This change was effective with the dividend paid on December 14, 2018. Northland elected to update its DRIP as a result of sufficient liquidity for its near-term funding requirements.

In December 2017, the Board of Directors declared an increase to dividends on Northland’s Common Shares and Class A shares to \$0.10 per month (\$1.20 annually), an increase of 11% from the prior dividend of \$0.09 per month (\$1.08 annually) commencing with the dividend paid on January 15, 2018. The Board of Directors reviews the dividend policy periodically as part of Northland’s overall capital allocation strategy to balance growth requirements and investor preferences.

### ***History of Dividends***

The following table shows per Common Share and Class A Share cash dividends declared monthly for the past 3 years.

	<b><u>2018</u></b>	<b><u>2017</u></b>	<b><u>2016</u></b>
January	<b>\$0.1000</b>	\$0.0900	\$0.0900
February	<b>0.1000</b>	0.0900	0.0900
March	<b>0.1000</b>	0.0900	0.0900
April	<b>0.1000</b>	0.0900	0.0900
May	<b>0.1000</b>	0.0900	0.0900
June	<b>0.1000</b>	0.0900	0.0900
July	<b>0.1000</b>	0.0900	0.0900
August	<b>0.1000</b>	0.0900	0.0900
September	<b>0.1000</b>	0.0900	0.0900
October	<b>0.1000</b>	0.0900	0.0900
November	<b>0.1000</b>	0.0900	0.0900
December	<b>0.1000</b>	0.1000	0.0900
	<b>\$1.2000</b>	\$1.0900	\$1.0800

The following table shows per Series 1 Preferred Share dividends declared quarterly for the past 3 years.

	<b><u>2018</u></b>	<b><u>2017</u></b>	<b><u>2016</u></b>
March	<b>\$0.2196</b>	\$0.2196	\$0.2196
June	<b>0.2196</b>	0.2196	0.2196
September	<b>0.2196</b>	0.2196	0.2196
December	<b>0.2196</b>	0.2196	0.2196
	<b>\$0.8784</b>	\$0.8784	\$0.8784

The following table shows per Series 2 Preferred Shares dividends declared quarterly since the fourth quarter of 2015.

	<u>2018</u>	<u>2017</u>	<u>2016</u>
March	<b>\$0.2262</b>	\$0.2040	\$0.2019
June	<b>0.2474</b>	0.2044	0.2032
September	<b>0.2584</b>	0.2098	0.2105
December	<b>0.2716</b>	0.2231	0.2086
	<b>\$1.0036</b>	\$0.8413	\$0.8242

The following table shows per Series 3 Preferred Share dividends declared quarterly for the past 3 years.

	<u>2018</u>	<u>2017</u>	<u>2016</u>
March	<b>\$0.3175</b>	\$0.3125	\$0.3125
June	<b>0.3175</b>	0.3125	0.3125
September	<b>0.3175</b>	0.3125	0.3125
December	<b>0.3175</b>	0.3125	0.3125
	<b>\$1.2700</b>	\$1.2500	\$1.2500

## CREDIT RATINGS

Credit ratings are intended to provide investors with an independent assessment of the credit quality of an issue or issuer of securities and do not speak to the suitability of particular securities for any particular investor. A security rating or a stability rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time by the rating organization.

Northland's corporate credit rating as rated by S&P is currently BBB (Stable), which was reaffirmed in October 2018. In addition, Northland's preferred share rating on S&P's global and Canada scale is BB+.

An S&P issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, focusing on the obligor's capacity and willingness to meet its financial commitments as they come due. S&P's rating methodology considers a number of factors, including but not limited to: Northland's business and financial risks, actual and projected financial ratios, corporate liquidity and debt levels, corporate and project financing strategies, the quality and diversity of cash flows and track record of operations and construction.

Northland pays fees to S&P for its issuer credit rating and preferred shares rating along with the annual review thereof.

## MATERIAL CONTRACTS

Northland did not enter into any material contracts in 2018 as defined under National Instrument 52-102. Prior to 2018, Northland entered into the following contracts which remain in effect as at December 31, 2018:

- (a) the Convertible Debenture Indenture and related supplemental indentures; and
- (b) the Pre-emptive Rights, Tendering and Voting Agreement, dated December 8, 2010, between a predecessor of the Company and NPHI, described below.

### The Convertible Debenture Indenture

The Convertible Debenture Indenture permits the issuance of Debentures without limiting the aggregate principal amount or limiting Northland's ability to incur additional indebtedness, including Senior Indebtedness. Following the redemption of the 2019 Debentures on December 21, 2018, only the 2020 Debentures are currently outstanding. The 2020 Debentures are a direct obligation of Northland and are not secured by any mortgage, pledge, hypothec or other charge and are subordinated to all Senior Indebtedness. Refer to the "Capital Structure" section above.

## Pre-emptive Rights, Tendering and Voting Agreement

The Pre-emptive Rights, Tendering and Voting Agreement provides that, for so long as James C. Temerty and/or a Temerty Entity controls NPHI and for so long as NPHI and James C. Temerty and/or the Temerty Entities collectively hold, directly or indirectly, not less than 20% of the issued and outstanding Common Shares and Class A Shares, taken together, no Common Shares or securities convertible into or exchangeable for Common Shares will be issued by Northland and no option or other right for the purchase of or subscription for any such securities will be granted unless NPHI is offered the opportunity to purchase such securities in such issuance on a pro-rata basis, but only to the extent necessary to maintain its proportional fully diluted interest in Northland. The pre-emptive right of NPHI will not apply to: (i) the issue of any Common Shares outstanding pursuant to any rights to acquire such Common Shares that were outstanding as of January 1, 2011; (ii) any employee or executive compensation arrangement; and (iii) the DRIP of Northland.

If an offeror makes a take-over bid for the Common Shares, including Common Shares issuable upon conversion, exercise or exchange of securities that are convertible into or exchangeable for Common Shares without the payment of additional consideration ("**Exchangeable Securities**") (other than Common Shares held by the offeror or an affiliate of the offeror), and the offeror within 120 days after the date of the take-over bid acquires pursuant to that offer not less than 90% of the Common Shares outstanding and issuable pursuant to the Exchangeable Securities, taken together (other than Common Shares and Common Shares issuable upon the exchange, conversion or exercise of any outstanding Exchangeable Securities held at the date of the take-over bid by or on behalf of or issuable to the offeror or associates or affiliates of the offeror), NPHI will be required to convert its Class A Shares into Common Shares so that the offeror will have the right to compulsorily acquire such Common Shares.

In addition, if a special resolution of the holders of the Common Shares and Class A Shares, voting together, is passed to: (i) amend the articles of Northland if the holders of the Common Shares and Class A Shares would be entitled to a class vote solely because the change is (a) to add to the rights or privileges of any class or series of shares having rights or privileges equal or superior to the Common Shares or Class A Shares or (b) to make any class or series of shares equal to or superior to the Common Shares or Class A Shares; or (ii) to approve an amalgamation or an arrangement which would have such effect, and such change does not affect the Class A Shares in a different manner from the Common Shares, then NPHI will cast its votes, or sign a written resolution in connection with such class vote in favour of the amendment to the articles, the amalgamation or arrangement, as the case may be.

## MARKET FOR SECURITIES

The table below presents the reported monthly high and low trading prices and trading volumes of the Common Shares during 2018:

Common Shares (TSX: "NPI")	High	Low	Volume
January	\$23.64	\$22.75	6,024,800
February	\$22.83	\$21.35	5,837,033
March	\$23.18	\$21.54	7,088,920
April	\$23.52	\$22.64	3,973,759
May	\$24.59	\$23.00	9,369,981
June	\$24.86	\$23.86	6,596,310
July	\$25.33	\$23.45	6,982,685
August	\$24.05	\$21.11	7,369,423
September	\$23.13	\$21.50	8,065,686
October	\$21.80	\$20.02	7,897,761
November	\$22.46	\$19.91	7,300,107
December	\$23.22	\$20.80	6,999,291



The tables below present the monthly reported high and low trading prices and trading volumes of each series of preferred shares during 2018:

<b>Series 1 Preferred Shares (TSX: "NPI.PR.A")</b>	<b><u>High</u></b>	<b><u>Low</u></b>	<b><u>Volume</u></b>
January	\$20.05	\$19.07	66,619
February	\$20.05	\$19.70	36,827
March	\$19.87	\$19.05	35,955
April	\$19.78	\$19.15	44,913
May	\$20.36	\$19.30	149,055
June	\$20.10	\$19.70	37,069
July	\$20.64	\$19.75	31,795
August	\$20.79	\$20.28	101,885
September	\$20.62	\$20.09	69,250
October	\$20.43	\$17.81	69,359
November	\$19.32	\$17.22	125,952
December	\$17.77	\$15.00	127,791

<b>Series 2 Preferred Shares (TSX: "NPI.PR.B")</b>	<b><u>High</u></b>	<b><u>Low</u></b>	<b><u>Volume</u></b>
January	\$20.63	\$19.15	42,468
February	\$20.65	\$20.07	32,622
March	\$20.27	\$19.46	17,501
April	\$19.89	\$19.45	18,506
May	\$20.43	\$19.51	43,815
June	\$20.10	\$19.80	21,493
July	\$20.67	\$20.00	7,560
August	\$20.98	\$20.40	5,675
September	\$21.00	\$20.54	15,789
October	\$23.38	\$19.14	29,500
November	\$20.15	\$17.15	32,455
December	\$18.87	\$15.06	15,266

<b>Series 3 Preferred Shares (TSX: "NPI.PR.C")</b>	<b><u>High</u></b>	<b><u>Low</u></b>	<b><u>Volume</u></b>
January	\$24.79	\$24.30	106,472
February	\$24.75	\$24.22	40,019
March	\$24.73	\$24.00	41,124
April	\$24.59	\$23.90	30,631
May	\$24.60	\$24.06	29,956
June	\$24.45	\$23.92	32,060
July	\$24.11	\$23.42	198,897
August	\$24.45	\$23.71	98,538
September	\$24.46	\$23.67	55,620
October	\$23.97	\$20.77	63,953
November	\$21.97	\$20.20	97,884
December	\$21.50	\$19.00	190,257

The tables below present the monthly reported high and low trading prices and trading volumes of the convertible unsecured subordinated debentures during 2018:

<b>2019 Debentures (TSX: "NPI.DB.B")</b>	<b><u>High</u></b>	<b><u>Low</u></b>	<b><u>Volume</u></b>
January	\$112.00	\$107.50	6,140
February	\$108.33	\$103.25	5,050
March	\$109.50	\$105.00	11,130
April	\$109.50	\$106.90	3,510
May	\$113.50	\$108.00	54,510
June	\$116.00	\$111.37	58,990
July	\$117.11	\$111.00	44,830
August	\$111.18	\$104.50	2,110
September	\$106.73	\$103.02	2,920
October	\$103.60	\$100.25	3,580
November	\$104.50	\$100.68	43,660
December (redeemed December 21, 2018)	\$107.50	\$101.00	144,290
<b>2020 Debentures (TSX: "NPI.DB.C")</b>	<b><u>High</u></b>	<b><u>Low</u></b>	<b><u>Volume</u></b>
January	\$113.00	\$109.01	14,510
February	\$130.00	\$106.21	8,230
March	\$111.96	\$106.00	16,280
April	\$112.13	\$108.86	20,600
May	\$116.50	\$110.00	23,130
June	\$116.36	\$113.50	57,580
July	\$118.30	\$114.05	48,280
August	\$114.00	\$108.31	10,150
September	\$111.29	\$106.93	22,670
October	\$111.63	\$104.04	9,920
November	\$108.79	\$103.46	42,860
December	\$110.50	\$105.50	28,720

## RISK FACTORS

Northland's overall risk management approach seeks to mitigate risk, when economically feasible, in order to maintain stable predictable and sustainable cash flow to pay dividends to Shareholders.

The following are certain risk factors that affect Northland and its businesses. The following information is only a summary of such risk factors and is qualified in its entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this AIF and the MD&A included in the 2018 Annual Report.

### **Related to Ownership and Operation of Assets**

#### ***Contracts***

The majority of Northland's consolidated revenue is generated under long-term PPAs or revenue subsidy contracts at its facilities, with initial terms of 10 to 25 years, although the remaining PPA terms for certain facilities are considerably shorter.

As Northland's PPAs expire, Northland may or may not be able to extend them or enter into new contracts or other revenue arrangements in the same or new markets. The renegotiation of certain contract provisions could entail capital investments for plant modifications and/or result in reduced facility profitability due to lower sales volumes, different operating modes or reduced margins. Northland may not be able to extend the existing PPAs or enter into new contracts or other revenue arrangements.

#### ***Contract Counterparties***

The amount of cash flow received by Northland is dependent upon the counterparties to Northland's long-term contracts fulfilling their contractual obligations and energy market system operators fulfilling their regulatory obligation. In particular, because electricity sales provide nearly all of the revenue generated by Northland's facilities, the failure of a counterparty or system operator to meet its contractual or regulatory obligations would have an adverse effect on cash flow.

Northland's operating facilities contract with third-party equipment maintenance and service providers, primarily related to gas turbine and wind turbine inspections as well as equipment service and maintenance. The failure of provider to meet its obligations could cause that equipment to experience downtime or increased maintenance costs which could reduce cash flows.

Northland and its subsidiaries engage contractors and third-party suppliers for equipment and services during the construction of new facilities. The failure of a supplier to meet its obligations could cause Northland to experience construction delays and/or cost overruns. Failure could also prevent those projects from meeting obligations under PPAs or financing agreements. Multiple physical and contractual interfaces may also increase the risks to the facility from an overall project management perspective. Increase in risks related to multiple physical and contractual interfaces include risks pertaining to coordination, compatibility errors, liability caps, warranties on an individual work package basis, delays, cost overruns, performance failures and litigation.

Financial counterparty risk arises primarily from holding cash and cash equivalents at banks and financial institutions, counterparty exposure arising from derivative financial instruments with banks, financial institutions and other derivative providers, unfunded credit commitments from banks and financial institutions, claims receivables due from insurance providers and receivables due from customers. The maximum financial exposure to counterparty risk, other than for unfunded credit commitments, is equal to the carrying value of the financial assets. The inability of a financial counterparty to perform under agreements with Northland could have a material impact on Northland's assets, liabilities, earnings and/or cash flow.

#### ***Operating Performance***

The contractual structure of the revenue agreements at Northland's operating subsidiaries requires them to operate based on certain contractual parameters, for example when requested by the offtaker or at minimum output or availability levels. If facilities are unable to operate according to their contractual parameters this could result in penalties or other financial impacts that could negatively impact financial results and cash flow.

North Battleford's PPA provides a monthly capacity-based payment that may be affected if North Battleford is unable to deliver minimum levels of electricity based on ambient temperatures specified. If North Battleford does not meet minimum delivered electricity targets it may be subject to a maximum annual penalty of \$15 million. SaskPower can terminate the PPA in certain circumstances in the event that North Battleford fails to perform certain of its obligations under the contract and claim damages in respect thereof.

Iroquois Falls' EDC includes provisions that would require the facility to generate under certain circumstances. If Iroquois Falls did not operate according to its contractual parameters, it would be subject to a decrease in revenue or associated penalties.

Thorold's PPA monthly revenue payments will be reduced if Thorold does not operate according to the terms and conditions in the PPA. Monthly revenue payments are also reduced based on the gross profit deemed under the PPA based on a structure that is meant to keep the facility neutral with respect to revenue earned from the combined PPA and market revenue. The facility's actual revenue may then be impacted, positively or negatively, by the difference between gross profit deemed under the PPA compared to the actual gross profit Thorold earned from the Ontario electricity market. Thorold has historically operated at or above contractual levels, but there is a risk that external market factors or maintenance issues may reduce Thorold's ability to do so in the future.

Spy Hill's PPA provides a monthly availability payment that may be affected if Spy Hill is unable to meet minimum availability requirements. If Spy Hill does not meet the PPA minimum availability requirements it may be subject to a maximum annual penalty of \$4 million. Under the PPA agreement, SaskPower can terminate the PPA in certain circumstances in the event that Spy Hill fails to perform certain of its material obligations under the contract.

Jardin and Mont Louis' PPAs include financial penalties if the three-year rolling average production for each wind farm is less than a defined target. The penalty is calculated based on the shortfall from the target. In addition, there is a reduction in the electricity price for production that exceeds 120% of the target. There are no production obligations for the McLean's or Grand Bend wind facilities.

The solar facilities' PPAs do not contain production obligations that affect payments to the solar facilities beyond the loss of revenue from reduced production.

There are no minimum production obligations at the Gemini and Nordsee One offshore wind farms.

### ***Variability of Renewable Resources and Climate Change***

The wind and solar resources at Northland's wind and solar farms will vary. Although management believes that the resource surveys and historical production data collected demonstrate that the sites are economically viable, historical data and technical predictions could prove not to reflect accurately the strength and consistency of the resources in the future. In addition, weather patterns may change as a result of global climate change, which could adversely affect electricity generation. If there is reduced wind or solar resources, the underlying financial projections regarding the amount of electricity to be generated by the renewable farms may not be met, and cash flow and the ability to meet debt service obligations could be adversely affected.

### ***Offshore Wind Concentration***

Northland's consolidated financial results reflect profits and cash flows generated by a number of subsidiaries. Northland's consolidated results are significantly driven by the performance of its offshore wind farms, with over 50% of consolidated adjusted EBITDA and consolidated free cash flow generated by Gemini and Nordsee One. This will further increase with the expected commencement of operations of Deutsche Bucht in 2019.

### ***Market Power Prices***

Gemini and Nordsee One are exposed to a degree of market power (merchant) risk to the extent the annual average day-ahead spot electricity price in their respective markets falls below the contractual floor price for Gemini or below zero for longer than six hours for Nordsee One. If this pricing differential remains for an extended period it could negatively impact financial results and cash flow. Additionally, production in excess of the annual Gemini Subsidy Cap earns revenue at wholesale market prices. Refer to *Description of Northland's Business* section in this AIF for additional information.

Northland is also exposed to merchant risk at facilities, such as Kingston, that do not have a fixed-price revenue contract.

Recent competitive auction processes in Europe resulted in developers willing to accept significant merchant price risk in order to secure power projects. Northland has typically sought contracted cash flows. Should this industry trend continue, Northland may choose to enter the commercial and industrial sector for future projects, accept an additional degree of revenue volatility, enter into shorter contracts, enter into new geographical markets, or a combination thereof.

### ***Fuel Supply, Transportation and Price***

Certain natural-gas-fired facilities and the biomass facilities owned or managed by Northland may be affected by the availability, or lack of availability, of a stable supply of fuel at reasonable or predictable prices. Although these facilities attempt to match fuel cost setting mechanisms in supply agreements to PPA energy payment formulas, increases in fuel costs or insufficient fuel supply can nonetheless adversely affect the profitability of the facilities.

The amount of energy to be generated at certain facilities is highly dependent on suppliers under certain natural gas fuel supply agreements fulfilling their contractual obligations. The loss of significant fuel supply agreements or an inability or failure by any supplier to meet its contractual commitments could have an adverse impact on the facilities' ability to produce electricity, which would, in turn, reduce the expected cash flow. In addition, any failure by the entities that transport or deliver natural gas to the respective facilities may have an adverse impact on cash flow. To the extent possible, Northland's gas-fired facilities attempt to contract with creditworthy counterparties and/or source gas through index-based pricing from liquid trading hubs with numerous potential alternate suppliers. Northland also actively maintains relationships and commercial agreements with several suppliers so that if one supplier fails in their obligations, Northland engages another to meet the facility needs.

Upon the expiry or termination of existing fuel supply agreements, Northland will be required to either renegotiate these agreements or source fuel from other suppliers. Northland may not be able to renegotiate these agreements or enter into new agreements on similar or otherwise desirable terms.

### ***Operations and Maintenance***

Northland's facilities are subject to operational risks that could have an adverse effect on cash flow, including premature wear or failure of major equipment due to defects in design, material or workmanship.

### ***Permitting***

All of Northland's facilities (both under construction or in operations) are required to maintain permits issued by governments and agencies that govern overall facility construction or operations and place limits on the discharge or use of air, noise, water and emissions, and other permitted parameters. If Northland is unable to renew existing permits or enter into new permits, then there may be adverse effects, such as loss of revenue and/or capital expenditures to enable long-term operations, potentially under different operating profiles.

### ***Insurance***

Northland procures insurance to address material insurable risks such as property damage, business interruption and liability. Insurance coverage decisions are based on what Northland believes would be maintained by a prudent manager/owner/operator of similar facilities or projects and certain contractual obligations. Northland reviews and benchmarks its insurance program annually, or as regularly required, to ensure terms and limits are at or above industry standards. Northland's insurance is subject to deductibles, limits and exclusions that are customary or reasonable given the cost of procuring insurance, current operating conditions and insurance market conditions. Such insurance may not continue to be available or available at economically feasible costs. Some events that could give rise to a loss or liability may not be insurable, and the amounts of insurance may not be sufficient to cover each and every loss or claim that may occur involving the assets or operations of the facilities, projects or Northland. Insurance coverage of project assets and facilities are generally prescribed by project financing agreements.

### ***Reliance on Third Parties***

In the normal course of business, and in addition to the reliance upon counterparties as described under the heading "Contract Counterparties" above, Northland routinely relies on third parties with respect to construction services and subsequently, maintenance services during the operating phase of the project.

## **Construction**

There is a risk that delays and/or material cost overruns will be incurred in the course of the construction of Northland's current and future development projects. There is also a risk that a project under construction could be stopped or canceled and/or a contractor could fail to complete its contractual obligations. There is further risk that the projects, once constructed, will not immediately perform as intended. Any significant delays in construction, cost overruns, project cancellations, or project shortfalls as a result of construction activities may have an adverse impact on Northland's operations and financial performance.

## **Development Prospects and Advanced Stage Development Projects**

Northland incurs early-stage development costs before it can determine whether a prospective project is technically and financially feasible and before Northland has rights or ownership of the project. The nature of some of these expenditures is speculative. Northland may also be required to advance funds, enter into commitments and/or post performance bonds or other security in the course of acquiring or developing prospects. There are a number of factors that could cause a prospective development project to fail, including: inability to secure favourable sites; inability to secure PPAs; failure to obtain permits, consents, licenses and approvals; increases in interest rates or unfavourable currency fluctuations; inability to acquire suitable equipment and construction services at a favourable price; inability to attract project financing, and the inability to mitigate

other critical risks. Significant costs related to prospective development projects may be incurred in preparation for the associated bidding process and such costs may not be recovered if Northland fails to win the bid.

Northland pursues earlier-stage development prospects which are inherently riskier than late stage developments. In addition, increased competition in the industry and changes in the ways Northland's customers procure power require the acceptance and management of increasing amounts of merchant price risk, technology development risk, and construction risks. If these risks manifest in a material manner, overall project returns could be adversely impacted.

Projects may fail to reach financial close, and all investments, cost commitments and credit support provided up to that point, which could be material, may be lost or unrealizable. Factors that could cause an advanced stage development project to fail include: (i) failure to obtain permits, consents, licenses and approvals; (ii) increases in interest rates; (iii) inability to finalize equipment and construction contracts or services or financing agreements; (iv) inability to obtain financing; and/or, (v) the inability to mitigate other critical risks.

## **Related to Financing**

### ***Financing***

Northland expects to employ non-recourse project financing to fund material portions of acquisitions, investments, refinancing, capital expenditures or expansion projects. However, there may not be sufficient capital available on acceptable terms. In addition, if a loan provided to a Northland subsidiary enters into default, this might cause Northland to lose its investment in the project.

Most of Northland's facilities and projects have construction or term loans or other financing arrangements in place with various lenders. These financing arrangements are typically secured by project assets and contracts, as well as Northland's equity interests in the project operating entity. The terms of these financing arrangements generally impose many covenants and obligations on the part of the project operating entity and other borrowers, guarantors and sponsors. In many cases, a default by any party under a project operating agreement (such as a PPA) will also constitute a default under the project's term loan or other financing arrangement. Failure to meet certain financial covenants, to comply with the terms of the term loans or financing arrangements, or the occurrence of an event of default, may prevent cash distributions by the project or the project operating entity and may entitle the lenders to demand repayment and enforce their security against project assets. In addition, if an event of default occurs, lenders are entitled to take possession of the equity interests in project operating entities that have been pledged to such lenders by the sponsors. The interruption of cash distributions from a project or the loss of an equity interest in a project could have a material impact on Northland's financial results and cash flow.

Northland has historically financed its equity investment in new projects through a combination of one or more of: corporate funds, cash flow from operations, borrowings under its corporate credit facilities, and issuance of capital markets instruments such as convertible debentures, preferred shares and common equity. Sufficient capital may not be available on acceptable terms to fund such an investment. An increase in corporate leverage may result in a higher risk of a default if Northland is unable to comply with covenants and obligations required under the corporate financing documentation.

### ***Interest Rates and Refinancing***

Interest rate fluctuations are of particular concern to a capital-intensive industry such as the electricity infrastructure business. For instance, the credit spread portion of floating interest rate loans cannot be fixed beyond an initial term and could increase materially at loan maturity, thus reducing a project's cash flow. The ability to refinance, renew or extend debt instruments is dependent on the capital markets at the time of maturity, and the condition and prior performance of the asset, which may affect the availability, pricing or terms and conditions of replacement financing.

Northland generally hedges the interest rate on its corporate term facility borrowings, although interest rates remain variable on shorter-term borrowings under the revolving facility. Northland is also exposed to refinancing risk on its corporate credit facilities.

A significant rise in interest rates or credit spreads may materially increase the cost of Northland's development projects. This may potentially prevent certain opportunities from proceeding because the economics may no longer be feasible at higher rates, possibly resulting in asset impairment.

## ***Liquidity***

Liquidity risk arises through an excess of financial obligations over available financial assets at any point in time. Impairments in Northland's asset values or cash flows could result in Northland not having sufficient funds to settle a transaction on a due date; Northland could be forced to sell financial assets at a value that is less than what they are worth; or Northland could be unable to settle or recover a financial asset at all.

Northland is also subject to internal liquidity risk since it conducts its business activities through separate legal entities (subsidiaries and affiliates) and is dependent on receipts of cash from those entities to defray its corporate expenses (including corporate debt interest and principal payments) and to make dividend payments to Shareholders.

## ***Credit Rating***

Northland is currently rated BBB with a stable outlook by S&P. Certain projects with non-recourse project bonds have credit ratings by DBRS. There is a risk that Northland's or its subsidiaries' credit ratings may be adversely affected by changes in ratings criteria or methodology, by adverse financial or operational performance, or by other factors. Any downgrade of or other adverse rating action affecting Northland could adversely affect the trading price of Northland securities or the trading markets for Northland securities, Northland's ability to obtain or maintain unsecured credit with various parties, and lender confidence. The risk of a negative credit rating action at a subsidiary could affect future lending considerations.

## ***Currency Fluctuations***

Northland receives payments in Euros in respect of the Gemini and Nordsee One wind farms and, in the future, the Deutsche Bucht project. Northland also has payment obligations in U.S. dollars, primarily related to the service agreements for gas turbines. Certain development expenses may also be denominated in U.S. dollars or other currencies. Northland also continues to explore new geographies which introduce additional currency exposures. Exchange rate fluctuations between the Euro or the U.S. dollar and the Canadian dollar may affect Northland's financial results and cash flow.

Northland's development, construction and operating activities may utilize equipment purchased from foreign suppliers. Northland's risk management approach is to hedge such foreign exchange risks where economically feasible. However, fluctuations in exchange rates relative to the Canadian dollar could have a material impact on the cost of this equipment and thus have a negative impact on the feasibility of one or more of the projects. In addition, projects Northland is developing may require expenditures, advances, equity investments or provide project distributions that are denominated in foreign currencies. Fluctuations in exchange rates relative to the Canadian dollar could have a material impact on the amount of equity investment required or the Canadian dollar equivalent of project distributions which may have a negative impact on the feasibility of one or more development projects.

## ***Variability of Cash Flow and Potential Impact on Dividends***

The actual amount of cash flow to service dividends to Shareholders will depend on numerous factors, including the financial performance of Northland's subsidiary operations, ability to meet debt covenants and obligations, working capital requirements, future capital requirements, participation in Northland's DRIP and tax related matters.

The payment and the amount of dividends declared, if any, are at the discretion of the Board and will depend on the Board's assessment of Northland's outlook for growth, capital expenditure requirements, funds from operations, potential opportunities, debt position and other conditions that the Board may consider relevant at such future time, including applicable restrictions that may be imposed under Northland's credit facilities and on the ability of Northland to pay dividends. The amount of future cash dividends, if any, could also vary depending on adverse impacts from a variety of factors, including fluctuations in energy prices, capital expenditure requirements, debt service requirements, operating costs and foreign exchange rates. The market value of the Common Shares may decline if Northland's cash dividends decline in the future and that market value decline may be material.

## ***Taxes***

Income and sales tax laws in the jurisdictions in which Northland and its subsidiaries do business could change in a manner that adversely affects Northland and its shareholders. Northland is also subject to various uncertainties concerning the interpretation and application of domestic and international laws that could affect its profitability and cash flows. Whenever possible, Northland negotiates change-in-law provisions in its contracts that include sales tax to limit the negative impact of such changes.

## Related to Regulations and Compliance

### *Environmental, Health and Safety*

Northland's facilities are subject to numerous and significant laws, including statutes, regulations, bylaws, guidelines, policies, directives and other requirements governing or relating to, among other things: air emissions; the storage, handling, use, transportation and distribution of dangerous goods and hazardous and residual materials, such as chemicals; the prevention of releases of hazardous or other unsuitable materials into the environment; the prevention, presence and remediation of hazardous materials in soil and groundwater, both on- and off-site; land use and zoning matters; workers' and public health and safety matters; and matters relating to the protection of migratory birds and endangered species. The operation of the facilities carries an inherent risk of environmental, health and safety liabilities (including potential civil actions, compliance or remediation orders, fines and other penalties) and may result in the facilities being involved from time to time in administrative and judicial proceedings relating to such matters, which could have a materially adverse effect on Northland's business, financial condition and results of operations.

All of Northland's generating equipment is designed to produce NO<sub>x</sub> and other air contaminant emissions below applicable permit limits.

As the greenhouse effect's impact on climate change has raised environmental concern, certain jurisdictions have implemented legislation or regulations to regulate greenhouse gas (GHG) emissions. Although the Ontario government rescinded the previous cap-and-trade program intended to limit GHG emissions in late 2018, the government has indicated it will implement a new climate protection initiative in 2019. Saskatchewan has also legislated restrictions on GHG emissions, but excluded the electricity sector from its main program. In the absence of a provincial GHG program, the Canadian government plans to impose a federal GHG program, which came into effect January 1, 2019. Regardless of which provincial or federal GHG program is applicable, the financial exposure at most of Northland's thermal facilities is minimal either because it has been reduced by restructuring the PPAs to allow a pass through of compliance costs as part of the daily electricity price bid for facilities or because the existing PPAs already allowed for recovery of compliance costs from the counterparty.

Although management believes the operation of each of the facilities is currently in material compliance with applicable environmental laws, licenses, permits and other authorizations required for the operation of the facilities and although there are environmental monitoring and reporting systems in place with respect to all facilities, more stringent laws or regulations may be imposed, there may be more stringent enforcement of applicable laws or that such systems may fail, which may result in material expenditures or fines. Failure by the facilities to comply with any environmental, health or safety requirements or increases in the cost of such compliance, which could be a result of unanticipated liabilities or expenditures for investigation, assessment, remediation or prevention, could possibly result in additional expenses, capital expenditures, restrictions and delays in the facilities' activities, the extent of which cannot be predicted.

### *Reliability and Market Compliance*

Northland has established an Internal Compliance Program (ICP) for its operating facilities that must demonstrate compliance with North American Electric Reliability Corporation ("NERC") standards and regional market rules (such as an independent electricity system operator). Northland's compliance obligations currently encompass certain facilities within Ontario, Québec and Saskatchewan.

NERC is a non-governmental international regulatory authority whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the electrical grid, subject to oversight by the Federal Energy Regulatory Commission (FERC) and governmental authorities in Canada. NERC's jurisdiction includes users, owners, and operators of the bulk power system, and in Canada, its standards are enforced through regional entities. Several of Northland's facilities are subject to reliability and market rule compliance in the jurisdictions in which they operate.

Compliance with NERC standards and regional market rules may cause modest increases in facility operating costs to maintain compliance. Non-compliance may be identified through self-certification or compliance audits by the regulatory agency or by Northland employees, in which case Northland can self report the non-compliance, perform a root cause analysis and mitigate the non-compliance. If a significant finding is identified it could result in a financial penalty on facilities, and, in worst case scenarios, removal from the power system until the violation has been remedied. As at December 31, 2018, Northland remains in good standing with market regulators regarding its compliance with the various market rules and regulations.

### *Government Regulations and Policy*

Northland and its development and construction projects, and operating facilities are subject to policies, laws and regulations, established by various levels of government and government agencies. These are subject to change by the governments or their agencies or the courts and are administered by agencies that may have discretion in their interpretation. Future legal and



regulatory changes or interpretations may have a material effect on Northland, its development prospects, its development and construction projects, and its operating facilities.

### ***International Activities***

Northland's activities outside of Canada are subject to risks inherent in undertaking international activities. These risks could involve matters arising out of the policies of foreign governments, imposition of special taxes or similar charges by government bodies, restrictions on carrying on business or the revocation or non-issuance of licenses to carry on business by a foreign government, foreign exchange fluctuations and controls, civil disturbances and deprivation or unenforceability of contract rights or the taking of property without fair compensation. Foreign properties, operations and investments may be adversely affected by local political and economic developments, including nationalization, laws affecting foreign ownership, government participation, royalties, duties, rates of exchange, exchange controls, currency fluctuation, taxation and new laws or policies as well as by laws and policies of Canada affecting foreign trade, investment and taxation.

### ***Cybersecurity, Data Protection and Reliance on Information Technology***

Northland's business activities rely to a high degree on information technology and systems for business operations, remote monitoring and controlling of assets, communicating with regulatory agencies, energy markets and customers, financial management and human resource systems, amongst others.

A system failure, loss of data, cybersecurity incident or breach could result in disruption of business activities, operational delays and downtimes, information losses, significant remediation costs, increased cybersecurity costs, lost revenues, diminished competitive advantage, penalties for non-compliance with privacy and security laws, effectiveness of controls over financial reporting, litigation and reputational harm affecting customer, employee and investor confidence, which could materially adversely affect Northland's business, financial condition, and operating results. Losses may be incurred related to these factors beyond the limits or coverage of current insurance and existing provisions for such losses may not be sufficient to cover the ultimate loss or expenditure.

The Audit Committee is responsible for the oversight of the Company's cybersecurity and data protection protocols and implementation as related to the business and operational systems. Under the Audit Committee's supervision, management maintains a disaster recovery plan, technical and process controls, enforcement and comprehensive monitoring of systems and networks designed to prevent, detect and respond to unauthorized activity in the Company's systems. Protocols are also in place for annual awareness training for all employees on data privacy and protection, while access to personal data is controlled through physical as well as IT security mechanisms.

Northland's customers, counterparties, business partners, employees and suppliers also face risks of unauthorized access to their information systems that may contain information related to the Company. Northland has not experienced a cybersecurity attack of a material nature to date. However, considering the growing sophistication of attacks, the complexity and evolving nature of the threats, as well as the unpredictability of timing, nature and scope of disruptions from such threats, measures taken by Northland may be insufficient to counter any such unauthorized access to information systems, or that measures are sufficient to avoid, or mitigate the impact of, a system failure.

### **Natural Events**

Northland's facilities and projects are exposed to the elements such as wind, water and, in the case of the offshore wind projects, movement of the sea floor. They are also susceptible to extreme weather conditions and natural disasters such as hurricanes, tornadoes, lightning storms and icing events that can cause downtime, construction delays, production losses and/or damage to construction and production equipment. Natural events may also make it impossible for operations and maintenance crews to access the disabled equipment to deliver parts and provide services.

Northland is exposed to weather risk and subsurface risk during the construction of its offshore wind farms. Northland attempts to mitigate these risks through the purchase of insurance and/or the inclusion of provisions under applicable construction agreements with contractors. However, insurance policies and/or construction agreements may not provide coverage for certain events, or coverage may be insufficient to compensate for all of the losses suffered by a project. Such insurance may not continue to be available or available at economically feasible cost.

## **Related to Organization and Structure**

### ***Relationship with Stakeholders***

Certain joint venture partners, stakeholders or communities with which Northland has arrangements may have, or may develop, interests or objectives which are different from or even in conflict with those of Northland. Any such differences could lead to development, construction or operations issues that could negatively impact the success of Northland's projects. The Company is sometimes required through the permitting and approval process to notify, consult and/or accommodate and obtain consent from various stakeholder groups, including landowners, indigenous or aboriginal peoples and municipalities. Any unforeseen delays or issues in this process may negatively impact Northland's ability to complete any given project on time or at all.

### ***Employee Retention and Labour Relations***

Northland's senior management and other key employees play a significant role in its success. The loss of the services of any of these persons for any reason could negatively impact Northland's business and operations. Further, the loss of any of our key employees could be negatively perceived in the capital markets. Recruiting and retaining qualified personnel is critical to our success. Management may not be able to retain these personnel on acceptable terms given the competition among companies for similar personnel.

In the event of a labour disruption such as a strike or lockout, the ability of Northland's facilities to generate income may be impaired. Employees at Iroquois Falls and Kirkland Lake are unionized. In the event of a strike or lock-out, the ability of Iroquois Falls or Kirkland Lake to operate may be limited and their abilities to generate cash available for distribution may be impaired, negatively impacting Northland's results. Employees at Northland's other facilities are not unionized.

### ***Reputation***

Northland's reputation is important to its continued success. There is a risk that events could occur, or be alleged to have occurred, that could affect how the general public, governments, counterparties, employees or other stakeholders of Northland perceive the Company. Negative impacts from a weakened or compromised reputation could result in loss of revenue, loss of future opportunity or loss of key employees, any of which could adversely affect Northland.

The actions of employees, when not sanctioned or expressly contrary to Northland policies, could harm Northland's reputation, and result in potential liability for Northland.

### ***Co-ownership***

Northland relies on other investors in its non-wholly owned subsidiaries, including Gemini, Nordsee One, Kirkland Lake, Grand Bend, McLean's and Cochrane Solar, to fulfill their commitments and obligations in respect of the project/facility. There is a risk that one or more other investors will be unable or unwilling to fulfill its obligations in respect of the project/facility. In such a case, the facility's operations may be adversely impacted and therefore Northland's cash flows from the project could be negatively impacted.

### ***Bribery and Corruption***

Northland's activities are subject to risks associated with potentially unauthorized payments to government officials (domestic or foreign) in order to obtain an expedited or a favourable outcome to a permit, approval, action or similar requirement of a government official. All such unauthorized payments to government officials (domestic or foreign) would be in contravention of Northland's anti-corruption/anti-bribery policy ("**ABAC Policy**"). The ABAC Policy includes ongoing employee and contractor education and training, due diligence on third-party service providers and business partners, and anti-corruption and anti-bribery contract provisions with third-parties as a condition of doing business with Northland.

### ***Legal Contingencies***

Northland and its subsidiaries may be named as a defendant in various claims and legal actions. Refer to "Legal Proceedings and Regulatory Actions" for further information.

## **LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

Litigation, claims and regulatory issues and proceedings arise from time to time in the ordinary course of business for Northland. To the knowledge of Northland, there is no currently outstanding litigation, claim or regulatory proceeding involving Northland that is expected to be material to Northland.

## BOARD OF DIRECTORS AND OFFICERS OF NORTHLAND

The following table presents the members of Northland's Board of Directors, their principal occupations during the five preceding years and the year they first became Trustees/Directors. Each Director is appointed to serve until the next annual meeting of Common Shareholders or until his or her successor is elected or appointed.

Name and residence	Positions held at Northland	Director since <sup>(1)</sup>	Principal occupation(s) during the past five years
<b>James C. Temerty C.M.</b> <sup>(2)(3)</sup> Ontario, Canada	Chair and Director	1997	Chair and Director of Northland
<b>The Right Honourable John N. Turner, Q.C.</b> <sup>(3)(4)(5)(6)</sup> Ontario, Canada	Lead Director	1997	Corporate Director; <i>formerly</i> , Partner, Miller Thomson LLP (law firm)
<b>Linda L. Bertoldi</b> <sup>(3)(7)</sup> Ontario, Canada	Director and Secretary	2010	Senior Counsel ( <i>formerly</i> , Partner), Borden Ladner Gervais LLP (law firm)
<b>John W. Brace</b> Ontario, Canada	Director	2018	Corporate Director; <i>prior to August 2018</i> , Chief Executive Officer of Northland; <i>prior to January 2014</i> , President and Chief Executive Officer of Northland
<b>Dr. Marie Bountrogianni</b> <sup>(2)(3)(4)(6)</sup> Ontario, Canada	Director	2009	Dean of the Chang School of Continuing Education at Ryerson University; <i>formerly</i> , President and Executive Director of the Royal Ontario Museum (museum)
<b>Barry Gilmour</b> <sup>(2)(3)(6)(8)</sup> Ontario, Canada	Director	2014	Corporate Director; <i>formerly</i> Group Head, Technology and Operations (Bank of Montreal Financial Group)
<b>Russell Goodman</b> <sup>(2)(3)(6)(9)</sup> Québec, Canada	Director	2014	Corporate Director; <i>formerly</i> , Partner at PricewaterhouseCoopers LLP

(1) Includes service under Northland's predecessor, Northland Power Income Fund and its subsidiary.

(2) Member of Compensation Committee.

(3) Member of the NorBu Committee, which monitored the progress of Deutsche Bucht (and Nordsee One previously), until its mandate was merged with the Board's.

(4) Member of the Audit Committee.

(5) Chair of the Governance and Nominating Committee and Lead Director.

(6) Independent Director.

(7) Member of Governance and Nominating Committee.

(8) Chair of Compensation Committee.

(9) Chair of Audit Committee.

The following table presents Northland's executive officers, their positions held with the Company and their principal occupations during the past five years.

Name and residence	Position held	Principal occupation(s) during the past five years
<b>Mike Crawley</b> Ontario, Canada	President and Chief Executive Officer	President and Chief Executive Officer of Northland; <i>prior to August 2018</i> , Executive Vice President, Development of Northland; <i>prior to July 2015</i> , President, Engie Canada ( <i>formerly</i> GDF Suez Canada)
<b>Paul J. Bradley</b> Ontario, Canada	Chief Financial Officer	Chief Financial Officer of Northland
<b>Troy Patton</b> Ontario, Canada	Chief Operations Officer	Chief Operations Officer of Northland, <i>prior to September 2017</i> , Chief Executive Officer of Northern Power Systems
<b>Morten Melin</b> Midtjylland, Denmark	Executive Vice President, Construction	Executive Vice President, Construction of Northland, <i>prior to August 2017</i> , Vice President, Engineering, Procurement & Construction of Ørsted ( <i>formerly</i> DONG Energy)
<b>Michael D. Shadbolt</b> Ontario, Canada	Vice President and General Counsel	Vice President and General Counsel of Northland

## **Share Ownership**

As of January 31, 2019, 59,446,355 Common Shares, representing 33% (2017 - 35%) of the total outstanding Common Shares, were beneficially owned, directly or indirectly, or controlled by the Directors and executive officers of the Company. Including Class A Shares, 34% (2017 - 35%) of all voting rights of the Company were owned, directly or indirectly, or controlled by Directors and executive officers of the Company.

## **CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS**

To the knowledge of Northland and other than as described below, none of the directors or executive officers of Northland: (a) is, as at the date of this AIF, or has been, within the 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company that: (i) was subject to a cease trade order (or similar order) issued while the person was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade order (or similar order) issued after the person ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer; (b) is, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director or executive officer of any company that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (c) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the person.

While Mr. Patton was chief executive officer of Northern Power Systems Corp. ("**Northern Power**"), he and Northern Power chief financial officer were the subject of a management cease trade order followed by a cease trade order issued by the Ontario Securities Commission as a result of failure by Northern Power to file, by the statutory deadline, audited financial statements and related annual filings for the year ended December 31, 2015. The failure arose as a result of an error in the timing of recognizing revenue for wind turbine sales resulting in the necessity to restate Northern Power's financial statements. The financial statements were subsequently filed and the cease trade orders lifted.

To the knowledge of the Company, none of the Directors or executive officers of Northland, nor any shareholder holding a sufficient number of securities of Northland to affect materially the control of Northland: (i) has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

## **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Except as disclosed in this Annual Information Form, none of the Directors or executive officers of Northland, or any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of Northland's outstanding voting securities, or any associate or affiliate of any of the foregoing persons or companies, has or has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect Northland.

As of January 31, 2019, James C. Temerty, Chair of Northland owns or has control or direction over 57,625,884 Common Shares (representing approximately 32.2% of the outstanding Common Shares) and 1,000,000 Class A Shares (representing 100% of the Class A Shares). If all of the Class A Shares were converted into Common Shares, Mr. Temerty would beneficially own or have control or direction over 32.5% of the then outstanding Common Shares.

## AUDIT COMMITTEE

Northland's Board has established an Audit Committee composed of Messrs. Goodman and Turner and Ms. Bountrogianni, all of whom are independent, as defined in National Instrument 52-110 *Audit Committees* (the "**Audit Committee Rule**"). The Audit Committee of Northland meets with representatives of management to discuss internal controls, financial reporting issues, risk management, and auditing matters related to Northland. Northland's Board has adopted an Audit Committee Charter which sets out terms of reference for the Audit Committee consistent with the Audit Committee Rule. The Audit Committee Charter is attached as Schedule "A" to this Annual Information Form.

All of the members of the Audit Committee are financially literate and Northland's Board has determined that all members of the Audit Committee are independent - in each case as required by the Audit Committee Rule. The relevant experience of each of the Audit Committee members is as follows:

**Russell Goodman (Chair)** - Mr. Goodman is a Chartered Professional Accountant who is a director and Chair of Audit Committees of Gildan Activewear Inc. and Metro Inc. Previously, Mr. Goodman was a partner for 24 years at PricewaterhouseCoopers LLP and Price Waterhouse LLP.

**The Right Honourable John N. Turner** - Mr. Turner was formerly a partner at the law firm of Miller Thomson LLP. Prior to joining Miller Thomson LLP, Mr. Turner served in the House of Commons for almost 25 years. Mr. Turner is a former Prime Minister of Canada and former federal Minister of Finance, among a number of other government positions he has held.

**Dr. Marie Bountrogianni** - Ms. Bountrogianni is the Dean of The Chang School of Continuing Education at Ryerson University. Prior to joining Ryerson University, Ms. Bountrogianni was President and Executive Director of the Royal Ontario Museum. Ms. Bountrogianni is a former Minister of Intergovernmental Affairs, among a number of other government positions she has held.

The Audit Committee is required to approve all audit services and pre-approve all non-audit services provided to Northland by its external auditor. Fees paid by Northland to its external auditors, Ernst & Young LLP are disclosed below.

A copy of the Audit Committee Charter is included as Schedule "A" and is filed on SEDAR and can be reviewed and obtained from [www.sedar.com](http://www.sedar.com) under Northland's profile.

## AUDITORS

Ernst & Young LLP, Chartered Accountants, Ernst & Young Tower, 100 Adelaide Street West, PO Box 1, Toronto, Ontario, Canada are the auditors of Northland. Ernst & Young LLP is independent in accordance with the rules of professional conduct of the various provincial institutes of chartered accountants.

### **Audit and Other Fees**

For the years ended December 31, 2018 and 2017, Ernst & Young LLP were paid by Northland and its subsidiaries, approximately \$1.77 million and \$1.79 million, respectively, as detailed below, for services to the Company and its wholly owned subsidiaries.

<b>For year ended December 31,</b>	<b>2018</b>		<b>2017</b>	
<i>in thousands</i>				
Audit Fees	\$	1,701	\$	1,409
Tax Fees		—		24
All Other Fees		72		357
<b>Total</b>	<b>\$</b>	<b>1,773</b>	<b>\$</b>	<b>1,790</b>

"Tax Fees" includes international payroll tax services and "All Other Fees" include translation services and advisory services primarily related to hedge accounting.

## TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Shares, Convertible Debentures, Series 1 Preferred Shares, Series 2 Preferred Shares and Series 3 Preferred Shares of Northland is Computershare, 100 University Avenue, Toronto, Ontario.

## ADDITIONAL INFORMATION

Additional information relating to Northland may be found on SEDAR at [www.sedar.com](http://www.sedar.com) under Northland's profile. Additional information, including directors' and officers' remuneration and indebtedness, and principal holders of Common Shares, is contained in Northland's Management Information Circular filed in connection with the Annual Meeting of Common Shareholders currently scheduled for May 22, 2019.

Additional financial information is provided in the 2018 Annual Report, including the MD&A therein.

### Contact:

Northland Power Inc.  
30 St. Clair Ave. West, Suite 1200,  
Toronto, Ontario M4V 3A1  
(416) 962-6262  
[investorrelations@northlandpower.com](mailto:investorrelations@northlandpower.com)  
[northlandpower.com](http://northlandpower.com)

## GLOSSARY OF TERMS

The following is a glossary of certain terms used in this Annual Information Form.

**"2019 Debentures"** means the 5.00% convertible unsecured subordinated debentures, Series B of Northland, redeemed on December 21, 2018.

**"2020 Debentures"** means the 4.75% convertible unsecured subordinated debentures, Series C of Northland due June 30, 2020.

**"Annual Information Form"** or **"AIF"** means Northland's annual information form for the year ended December 31, 2018.

**"Annual Report"** means Northland's annual report for the year ended December 31, 2018.

**"Audit Committee Rule"** means National Instrument 52-110 Audit Committees.

**"Board of Directors"** or **"Board"** means the board of directors of Northland.

**"Buitengaats C.V."** means the Dutch limited partnership that along with ZeeEnergie C.V., owns Gemini.

**"Class A Shares"** means the Class A shares in the capital of Northland.

**"Cochrane"** means Cochrane Power Corporation.

**"Cochrane Solar"** includes four ground-mounted solar facilities: Northland Power Solar Long Lake LP, Northland Power Solar Empire LP, Northland Power Solar Martin's Meadows LP and Northland Power Solar Abitibi LP, in which Northland has a 62.5% ownership.

**"COD"** means the commercial operations date.

**"Cogeneration"** means the simultaneous production of electricity and thermal energy in the form of heat or steam from a single fuel source.

**"Common Shares"** means the common shares in the capital of Northland.

**"Common Shareholders"** means the holders of the Common Shares.

**"Company"** or the **"Corporation"** or **"Northland"** means Northland Power Inc.

**"Computershare"** means Computershare Trust Company of Canada.

**"Convertible Debenture Indenture"** means the trust indenture dated August 26, 2004, as amended and restated as of October 14, 2009, as supplemented by a first supplemental indenture dated October 15, 2009, as supplemented by a second supplemental indenture dated January 1, 2011, as supplemented by a third supplemental indenture dated March 5, 2014 and as supplemented by a fourth supplemental indenture dated January 22, 2015 between Northland and Computershare in its capacity as trustee under the Convertible Debenture Indenture.

**"DBRS"** means the Dominion Bond Rating Service.

**"Debenture"** means debentures issued pursuant to the Convertible Debenture Indenture.

**"Deutsche Bucht"** or **"DeBu"** means the 269 MW offshore wind project currently under construction located 100 km west of the city of Emden in German territorial waters.

**"DRIP"** means the dividend reinvestment plan.

**"DSCR"** means debt service coverage ratio.

**"EBITDA"** means earnings before interest, taxes, depreciation and amortization, as adjusted.

**"EDC"** means an enhanced dispatch contract.

**"EEG"** means Germany's *Renewable Energy Sources Act*.

**"Exchangeable Securities"** means securities that are convertible into or exchangeable for Common Shares without the payment of additional consideration.

**"Final completion"** means the end of construction of a project and the start of commercial operations.

**"Financial close"** means full equity commitment by Northland and debt commitment by the project debt lenders.

**“First Nations”** means the aboriginal tribes or nations located in Ontario, including, as applicable, the Taykwa Tagamou Nation and Wahgoshig First Nation, the Giiwedin Noodin First Nation, Aamjiwnaang First Nation and Bkejwanong Territory (Walpole Island First Nation) and United Chiefs and Councils of Mnidoo Mnising First Nation.

**“FIT”** means the Feed-in Tariff.

**“Gemini Offshore Wind Farm”** or **“Gemini”** means the 600 MW offshore wind farm located 85 km off the North East coast of the Netherlands.

**“GHG”** means greenhouse gas.

**“Grand Bend”** means collectively the Grand Bend LP and Grand Bend Wind Farm.

**“Grand Bend LP”** means the Grand Bend Wind L.P., which owns the Grand Bend Wind Farm.

**“Grand Bend Wind Farm”** means the 100 MW wind project located in Grand Bend, Ontario.

**“Hydro-Québec”** means Hydro-Québec, a Québec Crown Corporation.

**“IESO”** means the Independent Electricity System Operator for Ontario.

**“IFRS”** means International Financial Reporting Standards.

**“IPP”** means independent power producer.

**“Iroquois Falls”** means collectively Iroquois Falls Corp. and the Iroquois Falls Facility.

**“Iroquois Falls Corp.”** means Iroquois Falls Power Corp., which owns the Iroquois Falls Facility.

**“Iroquois Falls Facility”** means the 120 MW natural-gas fired Cogeneration facility located in Iroquois Falls, Ontario, and all ancillary assets.

**“Jardin”** means collectively the Jardin d’Éole Facility and Jardin LP.

**“Jardin d’Éole Facility”** or **“Jardin Wind Farm”** means the 133 MW wind farm located near the municipalities of Saint-Ulric, Saint-Léandre and Matane, Québec.

**“Jardin LP”** means Saint-Ulric Saint-Léandre Wind L.P., a Québec limited partnership which owns the Jardin d’Éole Facility.

**“kilowatts”** means 1,000 watts of electrical energy.

**“Kingston”** means collectively the Kingston Facility and Kingston LP.

**“Kingston Facility”** means the 110 MW electricity and steam generating facility and all ancillary assets located near Kingston, Ontario and owned by Kingston LP.

**“Kingston LP”** means Kingston CoGen Limited Partnership, a limited partnership established pursuant to the laws of Ontario.

**“Kirkland Lake”** means collectively Kirkland Lake Power Corp., and the Kirkland Lake Facility.

**“Kirkland Lake Facility”** means the 102 MW baseload power plant and a 30 MW peaking facility near Kirkland Lake, Ontario owned by Kirkland Lake Power Corp.

**“LTSA”** means a long-term service agreement for the ongoing maintenance and service on wind turbines and related equipment typically with the original equipment manufacturer primarily at onshore wind facilities.

**“McLean’s”** means collectively McLean’s LP and McLean’s Mountain Wind Farm.

**“McLean’s LP”** means McLean’s Mountain Wind L.P.; a 50-50 partnership between Northland and the United Chiefs and Councils of Mnidoo Mnising First Nations.

**“McLean’s Mountain Wind Farm”** means the 60 MW wind farm located on Manitoulin Island, Ontario and owned by McLean’s LP.

**“Mont Louis”** means collectively Mont Louis LP and Mont Louis Wind Farm.

**“Mont Louis LP”** means Mont-Louis Wind L.P., which owns the Mont Louis Wind Farm.

**“Mont Louis Wind Farm”** means the 101 MW wind farm located near the town of Mont Louis in the Gaspé region of Québec.

**“MW”** means 1,000 kilowatts of electrical energy.



**“Nordsee One”** means Nordsee One GmbH, which owns Nordsee One and relates to the 332 MW (282 MW net interest to Northland) offshore wind farm located in the North Sea, 40 km north of Juist Island in German territorial waters.

**“North Battleford”** means collectively North Battleford LP and North Battleford Facility.

**“North Battleford Facility”** means the 260 MW electricity generating facility located near North Battleford, Saskatchewan and owned by North Battleford LP.

**“North Battleford LP”** means North Battleford Power L.P., a limited partnership established pursuant to the laws of Ontario.

**“NO<sub>x</sub>”** means nitrogen oxides, a by-product of fossil fuel electricity generation.

**“NPHI”** means Northland Power Holdings Inc., an Ontario corporation and parent of Northland until July 15, 2009.

**“NPHI-held Common Shares”** means those Common Shares held by NPHI and/or James C. Temerty for which NPHI has provided to the Board such reasonable evidence as the Board may require regarding the ownership of the Common Shares held by NPHI and James C. Temerty together with an undertaking from the registered holder thereof not to exercise the voting rights attached to such Common Shares in connection with the election of directors (for the purpose of this definition, Common Shares are considered held by a person if that person has beneficial ownership of, or control and direction over, such Common Shares);

**“OEEFC”** means Ontario Electricity Financial Corporation, the successor to Ontario Hydro as continued by the *Electricity Act, 1998* (Ontario) that holds all rights, obligations and liabilities related to the Iroquois Falls Power Purchase Agreement, and the Kirkland Lake Power Purchase Agreement.

**“PPA”** means a power purchase agreement.

**“Preferred Shares”** means collectively Series 1 Preferred Shares, Series 2 Preferred Shares, Series 3 Preferred Shares, and Series 4 Preferred Shares.

**“Resolute”** means Resolute Forest Products Inc.

**“Resolute Thorold Mill”** means the recycled newsprint mill owned by Resolute located in Thorold, Ontario.

**“RWE”** means RWE innogy GmbH.

**“SaskPower”** means Saskatchewan Power Corporation.

**“SDE”** means *Stimulerende Duurzame Energieproductie* in Dutch, which subsidizes the difference between the production costs of ‘green’ energy and ‘grey’ energy for 5, 12 or 15 years depending on the technology, in the form of a subsidy per kilowatt-hour of energy produced.

**“Senior Indebtedness”** means all direct indebtedness of Northland (whether outstanding as at the date of the Convertible Debenture Indenture or thereafter incurred) which, by the terms of the instrument creating or evidencing the indebtedness, is not expressed to be pari passu with, or subordinate in right of payment to, the Debentures.

**“Series 1 Preferred Shares”** means the cumulative rate reset preferred shares, series 1 in the capital of Northland.

**“Series 2 Preferred Shares”** means the cumulative floating rate preferred shares, series 2 in the capital of Northland.

**“Series 3 Preferred Shares”** means the cumulative rate reset preferred shares, series 3 in the capital of Northland.

**“Series 4 Preferred Shares”** means the cumulative floating rate preferred shares, series 4 in the capital of Northland.

**“Shareholders”** means Common Shareholders and the holder of Class A Shares.

**“Solar”** includes nine ground-mounted solar facilities in Eastern and Central Ontario; Northland Power Solar Crosby LP, Northland Power Solar McCann GP LP, Northland Power Solar Rideau Lakes LP, Northland Power Solar Burks Fall East LP, Northland Power Solar Belleville North LP, Northland Power Solar Belleville South LP, Northland Power Solar Glendale LP, Northland Power Solar North Burgess LP, Northland Power Solar Burks Falls West LP, which are fully-owned by the Company.

**“Spy Hill”** means collectively the Spy Hill Facility and Spy Hill LP.

**“Spy Hill Facility”** means the 86 MW electricity generating facility located near Spy Hill, Saskatchewan and owned by Spy Hill LP.

**“Spy Hill LP”** means Spy Hill Power L.P., a limited partnership established pursuant to the laws of Ontario.

**“Standard & Poor’s” or “S&P”** means Standard & Poor’s Ratings Services, a division of The McGraw Hill Companies (Canada) Corporation.

**“Tax Act”** means the *Income Tax Act* (Canada) and the regulations thereunder.

**“Temerty Entity”** includes The Temerty Family Foundation, the spouse of James C. Temerty, a child of James C. Temerty or the estate of James C. Temerty;

**“Temerty Entity Held Common Shares”** means those Common Shares held by a Temerty Entity for which NPHI has provided to the Board such reasonable evidence as the Board may require regarding the ownership of the Common Shares held by Temerty Entities together with an undertaking from the registered owners thereof not to exercise the voting rights attached to such Common Shares in connection with the election of directors (for the purpose of this definition, Common Shares are considered held by a person if that person has beneficial ownership of, or control and direction over, such Common Shares);

**“Term conversion”** means the conversion of a project construction loan to a term loan upon the satisfaction of a set of conditions.

**“Thorold”** means collectively Thorold LP and the Thorold Facility.

**“Thorold LP”** means Thorold CoGen LP, an Ontario limited partnership which owns the Thorold Facility.

**“Thorold Facility”** means the 265 MW cogeneration facility owned by Thorold LP located in Thorold, Ontario, 120 kilometres southwest of Toronto near the US border.

**“TSX”** means the Toronto Stock Exchange.

**“Voting Shares”** means Common Shares and the Class A Shares.

**“ZeeEnergie C.V.”** means the Dutch limited partnership that along with Buitengaats C.V., owns Gemini.

Words importing the singular include the plural and vice versa and words importing any gender include all genders.

## SCHEDULE “A”

### Audit Committee Charter of Northland Power Inc.

#### ***Purpose of the Audit Committee***

The Audit Committee (the “**Committee**”) is appointed by the Board of Directors (the “**Board**”) to assist the Board in fulfilling its oversight responsibilities for Northland Power Inc. (the “**Corporation**”) with respect to the accounting and financial reporting requirements, the system of internal controls and management information system, risks and risk management policies, the external audit process, and monitoring compliance with laws and regulations applicable to the Corporation, any other corporations, trusts, partnerships or other entities which may be owned or controlled by the Corporation (the “**Entities**”).

The Audit Committee shall report the results of its activities and associated recommendations to the Board with respect to the financial statements and other certifications and filings of the Corporation.

#### ***Meetings and Procedures***

The Audit Committee shall meet at least four times a year or more frequently if necessary.

Meetings of the Audit Committee may be held at the call of the Chair of the Committee (the “**Chair**”) or upon request by two members on two days’ prior notice to all members or, by agreement of all members of the Committee, without notice and may be held at the offices of the Corporation or at such other location as the Chair may determine. Meetings may also be held by conference telephone call where all members of the Committee can hear each other. A quorum for all meetings of the Audit Committee shall be two members. The Chair shall be responsible for agendas for the Committee and agendas and briefing materials shall be prepared and circulated in advance of the meeting.

The Audit Committee may determine its own procedures and shall keep minutes of its proceedings and report on its activities at each meeting of the Board.

#### ***Audit Committee Responsibilities***

##### *(i) Annual Review of Audit Committee Charter*

The Audit Committee shall maintain this Audit Committee Charter which sets out the Committee’s mandate and responsibilities, and review at least annually this Charter to ensure that it conforms to the requirements of National Instrument 52-110 (the “**Audit Committee Rule**”) and the requirements of any other relevant securities regulations.

##### *(ii) The External Auditor*

Management is responsible for the preparation of the financial statements of the Corporation and, as applicable, the Entities. The external auditor is responsible for auditing those financial statements.

The Audit Committee is directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor’s report, or performing other audit, review or attest services for the Corporation, including the resolution of disagreements between management and the external auditor regarding financial reporting. The Audit Committee must recommend to the Board:

- (A) the external auditor to be nominated for the purpose of preparing or issuing an auditor’s report or performing other audit, review or attest services for the Corporation and the Entities; and
- (B) the compensation of the external auditor.

The Audit Committee shall require the external auditor to report directly to the Audit Committee and shall monitor the independence and performance of the external auditor of the Corporation through annual and periodic comprehensive assessments. Based upon the annual and periodic comprehensive assessments, the Audit Committee shall recommend the reappointment or replacement of the auditors to the Board. The Audit Committee shall monitor the integrity of the financial statements of the Corporation, the financial reporting processes and systems of internal controls.

The Audit Committee must review and approve the hiring policies, as applicable, of the Corporation and the Entities regarding partners, employees and former partners and employees of the present and former external auditor of the Corporation.

(iii) *Pre-Approval of All Audit and Non-Audit Services*

The Audit Committee shall approve all audit and pre-approve all non-audit services to be provided to the Corporation and, as applicable, the Entities by the Corporation's external auditor. The Audit Committee may delegate to one or more of its members the authority to pre-approve all non-audit services, provided that: (i) the Audit Committee establishes pre-approval policies that are detailed as to the particular service; and (ii) any such pre-approval of non-audit services by any member to whom such authority has been delegated must be presented to the Audit Committee at its first scheduled meeting following such pre-approval.

The Audit Committee satisfies the pre-approval requirement if: (i) the aggregate amount of non-audit services that were not pre-approved is reasonably expected to be no more than 5 per cent of total fees paid to the external auditor during the fiscal year in which the services are provided; (ii) the services were not recognized as non-audit services by the Corporation at the time of the engagement; and (iii) the services are immediately brought to the attention of the Audit Committee and approved, prior to the completion of the audit.

(iv) *Review of Financial Statements and other Filings*

The Audit Committee shall review the Corporation's financial statements, management's discussion and analysis, annual and interim earnings press releases, and disclosures of forward-looking information, and shall determine whether to recommend approval thereof to the Board before such documents are publicly disclosed on behalf of the Corporation.

The Audit Committee shall be satisfied that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, financial forecasts, and must assess the adequacy of such procedures on an annual basis.

(v) *Compliance with Laws and Regulations*

The Audit Committee shall receive regular reports with respect to compliance with laws and regulations having a material impact on the financial statements including tax matters.

(vi) *Complaints and "Whistle Blowers"*

The Audit Committee shall establish procedures for:

- (A) the receipt, retention and treatment of complaints received by the Corporation and the Entities regarding accounting, internal accounting controls, or auditing matters; and
- (B) the confidential, anonymous submission by employees of the Corporation or of the Entities of concerns regarding questionable financial reporting, accounting or auditing matters.

***Composition of the Audit Committee***

(vii) *Number of Members*

The Audit Committee shall be composed of at least three directors of the Corporation, appointed by the Board from time to time. Each member of the Audit Committee shall continue to be a member until a successor is appointed unless the member resigns, ceases to be qualified to serve or ceases to be a director. The Chair of the Audit Committee shall be appointed by the Board.

(viii) *Financial Literacy*

Every member of the Audit Committee must be financially literate. An Audit Committee member who is not financially literate may be appointed to the Audit Committee, provided that such a member becomes financially literate within a reasonable period of time following his or her appointment.

**"Financially literate"** means having the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements.

(ix) *Independence*

Each member of the Audit Committee must be a director who is independent for the purpose of the Audit Committee Rule, that is a director who has no direct or indirect material relationship with the Corporation or the Entities, as applicable, other than interests and relationships arising from the holding of shares of the Corporation. A material relationship means a relationship which could, in the view of the Board, reasonably interfere with the exercise of a member's independent judgment. Appendix I to this Charter describes in greater detail the requirements under the Audit Committee Rule and other applicable

securities laws in effect as at the date of this Charter concerning the circumstances in which an individual is considered to have a material relationship with an issuer.

(x) *Position Description - Audit Committee Chair*

The fundamental responsibility of the Chair of the Audit Committee is to effectively manage the duties of the Audit Committee with respect to the Corporation:

Key Responsibilities of the Chair

- ensures that the Audit Committee is properly organized, functions effectively and meets its obligations and responsibilities
- establishes the frequency of Audit Committee meetings and reviews such frequency from time to time, as considered appropriate, or as requested by the Board or the Audit Committee
- presides at Audit Committee meetings
- establishes the agenda and related matters for Committee meetings
- liaises and communicates with the Chair of the Board as necessary to co-ordinate input from the Audit Committee for Board meetings
- liaises and communicates with the Corporation's external auditors and internal control service providers as necessary
- on behalf of the Audit Committee, reports to the Board on Committee meetings
- serves as a person to whom confidential disclosures may be made under the Corporation's Financial Integrity Policy

***Authority and Resources of the Audit Committee***

The Audit Committee has the authority to:

- (a) engage independent counsel and other advisors as it determines necessary to carry out its duties. For greater certainty the Audit Committee has the authority to retain, at the Corporation's expense, special legal, accounting or such other advisors, consultants or experts it deems necessary in the performance of its duties;
- (b) set and pay the compensation for any advisors employed by the Committee. The Corporation or the Entities shall at all times make adequate provisions for the payment of all fees and other compensation, approved by the Committee, to the external auditor in connection with the issuance of its audit report, or to any consultants or experts employed by the Committee;
- (c) communicate directly with the internal and external auditors; and
- (d) conduct any investigation which it considers appropriate, and to communicate directly with and have direct access to the internal and external auditor as well as officers and employees of the Corporation and the Entities, as applicable.

***Risk Management and Insurance***

The Audit Committee shall review at least annually significant risk management strategies for the Corporation and the Entities and exposure in the following areas and such other areas as the Committee may deem appropriate from time to time:

- (i) foreign currency, interest rates, liquidity and commodity hedging strategies;
- (ii) insurance coverage; and
- (iii) enterprise risk.

Approved by the Board of Directors on November 6, 2018.

# APPENDIX I

## MEANING OF INDEPENDENCE

### *Part A: Meaning of Independence*

1. An Audit Committee member is independent if he or she has no direct or indirect material relationship with the issuer.
2. For the purposes of subsection (1), a “**material relationship**” is a relationship which could, in the view of the issuer’s Board of Directors, be reasonably expected to interfere with the exercise of a member’s independent judgement.
3. Despite subsection (2), the following individuals are considered to have a material relationship with an issuer:
  - (a) an individual who is, or has been within the last three years, an employee or executive officer of the issuer;
  - (b) an individual whose immediate family member is, or has been within the last three years, an executive officer of the issuer;
  - (c) an individual who:
    - (i) is a partner of a firm that is the issuer’s internal or external auditor,
    - (ii) is an employee of that firm, or
    - (iii) was within the last three years a partner or employee of that firm and personally worked on the issuer’s audit within that time;
  - (d) an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual;
    - (i) is a partner of a firm that is the issuer’s internal or external auditor,
    - (ii) is an employee of that firm and participates in its audit, assurance or tax compliance (but not tax planning) practice, or
    - (iii) was within the last three years a partner or employee of that firm and personally worked on the issuer’s audit within that time;
  - (e) an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of the issuer’s current executive officers serves or served at that same time on the entity’s compensation committee; and
  - (f) an individual who received, or whose immediate family member who is employed as an executive officer of the issuer received, more than \$75,000 in direct compensation from the issuer during any 12 month period within the last three years.
4. For the purposes of clauses (3)(c) and (3)(d), a partner does not include a fixed income partner whose interest in the firm that is the internal or external auditor is limited to the receipt of fixed amounts of compensation (including deferred compensation) for prior service with that firm if the compensation is not contingent in any way on continued service.
5. For the purposes of clause (3)(f), direct compensation does not include:
  - (a) remuneration for acting as a member of the board of directors or of any board committee of the issuer, and
  - (b) the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.
6. Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because the individual or his or her immediate family member
  - (a) has previously acted as an interim chief executive officer of the issuer, or
  - (b) acts, or has previously acted, as a chair or vice-chair of the board of directors or of any board committee of the issuer on a part-time basis.
7. For the purpose of Part A, an issuer includes a subsidiary entity of the issuer and a parent of the issuer.

**Part B: Additional Independence Requirements**

8. Despite any determination made under Part A, an individual who
  - (a) accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the issuer or any subsidiary entity of the issuer, other than as remuneration for acting in his or her capacity as a member of the Board of Directors or any Board committee, or as a part-time chair or vice-chair of the Board or any Board committee; or
  - (b) is an affiliated entity of the issuer or any of its subsidiary entities,is considered to have a material relationship with the issuer.
9. For the purposes of subsection (1), the indirect acceptance by an individual of any consulting, advisory or other compensatory fee includes acceptance of a fee by
  - (a) an individual's spouse, minor child or stepchild, or a child or stepchild who shares the individual's home; or
  - (b) an entity in which such individual is a partner, member, an officer such as a managing director occupying a comparable position or executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the issuer or any subsidiary entity of the issuer.
10. For the purposes of subsection (1), compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.