# NORTHLAND POWER INC.

## **ANNUAL INFORMATION FORM**

For the year ended December 31, 2017

February 22, 2018

## **Table of Contents**

| Introduction and Use of Defined Terms                      | <u>1</u>  |
|--|-----------|
| Forward-Looking Statements                                 | <u>1</u>  |
| Non-IFRS Financial Measures                                | <u>1</u>  |
| Corporate Structure  | <u>2</u>  |
| <u>Overview</u>  | <u>2</u>  |
| General Development of the Business                        | <u>3</u>  |
| Description of Northland's Business                        | <u>5</u>  |
| Capital Structure  | <u>14</u> |
| Dividends  | <u>19</u> |
| Credit Ratings   | <u>20</u> |
| Material Contracts   | <u>21</u> |
| Market for Securities                                      | <u>22</u> |
| Risk Factors   | <u>24</u> |
| Legal Proceedings and Regulatory Actions                   | <u>31</u> |
| Board of Directors and Officers of the Company             | <u>31</u> |
| Cease Trade Orders, Bankruptcies, Penalties or Sanctions   | <u>32</u> |
| Interest of Management and Others in Material Transactions | <u>33</u> |
| Audit Committee  | <u>33</u> |
| Auditors   | <u>34</u> |
| Transfer Agent and Registrar                               | <u>34</u> |
| Additional Information                                     | <u>34</u> |
| Glossary of Terms  | <u>35</u> |
| Schedule "A"   | <u>39</u> |
| Appendix I   | <u>42</u> |
|  |           |

# **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, 2017.

## 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, natural events, construction risks, counterparty risks, operational risks, risks relating to co-ownership, the variability of revenue from generating facilities powered by intermittent renewable resources, power market risks and possible inflation risks and the other factors described in this AIF and in the Management's Discussion and Analysis (MD&A) included in Northland's 2017 Annual Report ("Annual Report"), which can be found on SEDAR at www.sedar.com under Northland's profile and on Northland's website at www.northlandpower.ca. Northland's actual results could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur. The forward-looking statements contained in this AIF are based on assumptions that were considered reasonable on February 22, 2018. 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 and 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 2017 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<br>incorporation | Voting interest<br>as at Dec. 31, 2017 |
|--|---------------------------|--|
| Offshore Wind  |                           |  |
| Northland Deutsche Bucht GmbH (" <b>Deutsche Bucht</b> " or " <b>DeBu</b> ") | Germany                   | 100.0%                                 |
| Buitengaats C.V. and ZeeEnergie C.V. ("Gemini")                              | Netherlands               | 60.0%                                  |
| Nordsee One GmbH (" <b>Nordsee One</b> ")                                    | Germany                   | 85.0%                                  |
| Thermal  |                           |  |
| Iroquois Falls Power Corp. ("Iroquois Falls")                                | Ontario, Canada           | 100.0%                                 |
| Kingston CoGen Limited Partnership ("Kingston")                              | Ontario, Canada           | 100.0%                                 |
| Kirkland Lake Power Corporation (" <b>Kirkland Lake</b> ") <sup>(1)</sup>    | Ontario, Canada           | 100.0%                                 |
| North Battleford Power L.P. ("North Battleford")                             | Ontario, Canada           | 100.0%                                 |
| Spy Hill Power L.P. (" <b>Spy Hill</b> ")                                    | Ontario, Canada           | 100.0%                                 |
| Thorold CoGen L.P. (" <b>Thorold</b> ")                                      | Ontario, Canada           | 100.0%                                 |
| On-shore Renewables  |                           |  |
| Four solar facilities (" <b>Cochrane Solar</b> ")                            | 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. (" <b>McLean's</b> ")                            | Ontario, Canada           | 50.0%                                  |
| Mont-Louis Wind L.P. ("Mont Louis")  | Québec, Canada            | 100.0%                                 |
| Nine wholly-owned 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, 2017 were unchanged from December 31, 2016, with the exception of the acquisition of Deutsche Bucht, an offshore wind project, completed in August 2017 and the sale of DK Windpark Kavelstorf GmbH & Co. KG and DK Bur Burgerwindpark Eckolstädt GmbH & Co. KG, which held interests in two small German on-shore wind farms, completed in November 2017.

# **OVERVIEW**

Northland's business strategy is based on providing a balance of stability and growth to investors. The Company's objective is to maximize long-term shareholder value by providing investors with stable and sustainable dividends and pursuing measured growth. Northland aims to achieve this objective in the independent power industry by expertly managing a robust development pipeline along with effectively managing projects from inception throughout their complete lifecycle, from development, to financing, to construction and to long-term operations.

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 declare regular dividends to Shareholders since becoming publicly traded in 1997.

As at December 31, 2017, Northland owned or had a net economic interest in power-producing facilities with a total capacity of approximately 2,029 MW. Northland's operating assets comprise facilities that produce electricity from natural gas and renewable resources, such as wind or solar power, for sale under Power Purchase Agreements (**PPA**s) or other revenue arrangements with creditworthy customers, typically government-backed power offtakers or agencies. PPAs define the revenue

parameters of a facility and are the primary contributor to providing stable cash flow. PPA terms are typically for ten to 20 years, during which time the PPA counterparty will purchase electricity and electricity related products from the project.

Northland's construction projects as of December 31, 2017 consist of Deutsche Bucht, a 252 MW offshore wind project, located in the North Sea in German territorial waters.

# **GENERAL DEVELOPMENT OF THE BUSINESS**

Northland's principal activity is the development, financing, construction, ownership and operation of independent power projects.

#### Summary of Northland's General Activity

- In December 2017, the Nordsee One offshore wind project achieved final completion, which marked the end of construction and the start of commercial operations, and commenced the term-loan phase of the project debt. 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 December 2017, the Board of Directors declared an increased monthly dividend on Northland's common shares and Class A shares of \$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 payable on January 15, 2018. The Board of Directors intends to review the dividend policy periodically to balance growth requirements and investor preferences.
- In November 2017, Northland completed the sale of its 22 MW German wind farms for approximately €3.7 million.
- In September 2017, Standard and Poor's reaffirmed Northland's credit rating of BBB (Stable).
- In August 2017, Northland acquired the Deutsche Bucht Offshore Wind project and achieved financial close, defined as full equity and debt commitments by Northland and the project debt lenders, respectively. All key construction contracts have been signed and manufacturing of the offshore substation, monopiles and transition pieces has commenced, with project completion expected by the end of 2019. The total estimated project cost is approximately €1.3 billion. Northland has invested approximately \$0.4 billion of corporate funds into the project. Northland has the option to construct two demonstrator turbines utilizing mono suction bucket foundations (the "Demonstrator Project"). The final decision to build the Demonstrator Project will depend on the successful permitting and confirmation of financial feasibility, and is expected to be made in the second half of 2018.
- In August 2017, Northland completed a strategic review process, which concluded that shareholder value would be maximized by Northland continuing in its current form as an independent publicly-traded company.
- 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, and has resulted in reduced greenhouse gas emissions, cost savings for Ontario electricity consumers and improved economics for Northland.
- 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 subsequent to the expiry of its PPA.
- In January 2017, the litigation concerning the interpretation of PPAs related to Iroquois Falls, Kirkland Lake and Cochrane (collectively the "Northland Applicants"), was resolved in the Northland Applicants favour. Refer to "Legal Proceedings and Regulatory Actions Global Adjustment Decision" for further information.
- In November 2016, the Ontario Superior Court of Justice (Commercial List) sanctioned and approved the plan of compromise (the "Plan") proposed by H.B. White Canada Corp. ("White") in conjunction with White's *Companies' Creditors Arrangement Act* (CCAA) proceeding. Implementation of the Plan occurred and Northland received a payment of \$6 million under the Plan. All claims and all liens by White and its subcontractors have been discharged in their entirety and all letters of credit posted to remove the liens from the facilities have been returned in their entirety to Northland.

- In April 2016, the Grand Bend on-shore wind project achieved final completion and declared commercial operations under its 20-year Ontario Feed-In-Tariff (**FIT**) contract. Construction of the project was completed ahead of schedule and under budget, with term conversion in July 2016.
- In October 2015, the last of the solar facilities achieved commercial operations date (COD).
- In September 2015, Kirkland Lake finalized the amendment to the PPA for the 40-year baseload gas-fuelled portion of the facility and secured future pricing terms until 2030. In 2014, Kirkland Lake also signed a new 20-year contract with the Ontario Power Authority (**OPA**, which merged with the IESO in 2015) for the 30 MW gas peaking portion of the facility.
- In June 2015, Northland completed the sale of a 37.5% equity interest in Cochrane Solar to a corporation controlled by its First Nations partners.
- In May 2015, the Cochrane Facility ceased generating electricity for Ontario's power grid subsequent to the expiry of the facility contract.
- In March 2015, the Nordsee One project reached financial close, with all equity contributed to the project and all debt required for the project fully committed by the project lenders.
- In March 2015, the Grand Bend Wind project reached financial close. Northland sold a 50% interest in Grand Bend to a corporation controlled by its First Nations partners.
- In February 2015, Northland sold its 66.7% interest in the 24 MW (16 MW net interest to Northland) advanced stage development wind project located in Frampton, Québec.

### Summary of Northland's Project Financing Activity

- In December 2017, Nordsee One renegotiated the project's €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 totalling \$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, concurrently with final completion, Gemini renegotiated the project's €2 billion senior debt, reducing the weighted average all-in interest rate by 80 basis points and eliminated 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.
- In March 2015, Northland closed on \$342 million of project financing, comprising \$326 million of non-recourse debt and a \$16 million letter of credit, to fund the Grand Bend Wind Farm.
- In March 2015, Nordsee One closed on €966 million of project financing, comprising €903 million non-recourse debt from a syndicate of international financial institutions, including a €63 million facility of contingent debt.
- In March 2015, Northland refinanced the non-recourse bank debt facility for Thorold, comprising \$183 million bank term loan and \$16 million letter of credit facility, in addition to an existing institutional term debt of \$179 million.

## Summary of Northland's Corporate Financing Activity

- In December 2017, Northland's announced the 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 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 April 2016, Northland filed a short form base shelf prospectus with the securities regulatory authorities in each of the provinces of Canada. This filing replaced Northland's previous base shelf prospectus and enabled Northland to offer an aggregate of up to \$500 million of Common Shares, preferred shares, debentures and subscription receipts, or any combination thereof, over a 25-month period.
- In September 2015, Northland's 3.51% Series 1 preferred shareholders converted 1,498,435 cumulative rate reset preferred shares, series 1 ("Series 1 Preferred Shares") into cumulative floating rate preferred shares, series 2 ("Series 2 Preferred Shares").
- In September 2015, Northland closed the financing of a \$100 million corporate letter of credit facility. The facility provides additional capacity to support the letters of credit Northland provides as security for its operating, construction and development activities.
- In March 2015, Northland completed a public offering of Common Shares representing gross proceeds of \$231.0 million (\$221.3 million after costs and underwriters' fees). Concurrently with the public offering, Northland completed a \$50 million additional private placement to a subsidiary of Northland Power Holdings Inc., a company controlled by the Chairman of Northland, James C. Temerty. Northland used the net proceeds to fund a portion of its investment in Nordsee One and Grand Bend, to replenish working capital and for general corporate purposes.
- In February 2015, Northland amended its corporate credit facility to (i) increase the revolving credit facility from \$350 million to \$450 million; (ii) extend the revolving facility maturity date to March 2020; and (iii) change certain financial ratios and sub-limits in order to provide liquidity and support Northland's ongoing development activities.
- In January 2015, Northland announced the closing of a \$157.5 million offering of 4.75% convertible unsecured subordinated debentures maturing on June 30, 2020 ("**2020 Debentures**"). Net proceeds from this offering were used to fund a portion of Northland's investments in Nordsee One and Grand Bend, to replenish working capital and for general corporate purposes.

# **DESCRIPTION OF NORTHLAND'S BUSINESS**

Northland operates, develops and constructs projects across a range of clean and green technologies, such as wind (offshore and on-shore), thermal (natural-gas-fired and biomass) and solar. 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 focussed on pursuing growth in North 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 costs and risks against the probability of success.

## **Electricity Industry Overview**

### Ontario, Canada

Ontario's electricity generation market is currently a hybrid market comprised of both a wholesale spot market and long-term contracts for the purchase of electricity issued or administered by the IESO. On October 26, 2017, the Ontario government released its 2017 Long Term Energy Plan ("LTEP"), which is intended to function as a long-term planning guide for the Province's electricity sector.

The LTEP does not set out any specific procurement targets for the supply of new generation assets. Instead, the LTEP addresses the IESO's ongoing "market renewal" initiative, which is focused on implementing changes to Ontario's current hybrid market model of electricity procurement. 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 in some ways to shift procurement away from the use of long-term power purchase contracts towards a competitive market model that is 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.

## Québec, Canada

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 April 2016, the Québec government presented its Energy Policy aiming, amongst others, to increase the total consumption of energy originating from renewable energy to 61%. In December 2016, the Québec government passed Bill 106 An Act to implement the 2030 Energy Policy (**"Bill 106"**). The combined effect of Bill 106 and the Energy Policy is 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 TEQ recently completed its initial public consultations and it is anticipated to submit its report in 2018.

In addition to operating and managing its heritage electricity pool with a capacity of 165 TWh, Hydro-Québec enters into supply contracts through request for proposals programs or through direct negotiations with power producers, although no recent material hydro-electric or wind request for proposals programs have been launched. Currently, Hydro-Québec has access to over 3,200 MW of wind power capacity and should integrate another over 600 MW of wind projects under construction.

### Saskatchewan, Canada

Most of Saskatchewan's electricity requirements are served by 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 over 4,400 MW, of which approximately 3,600 MW is produced by SaskPower facilities and the remaining 800 MW is produced by independent power producers ("**IPPs**") through long-term PPAs.

Although coal-fired generation is the primary component in Saskatchewan's supply mix, SaskPower has announced a goal of generating 50% of its total generation supply mix from renewable resources by 2030.

In that respect, SaskPower undertook a competition for 10 MW of solar generation. It also engaged in a competitive procurement process for 200 MW of wind generation with the project award to be granted in 2018 and an expected in-service date of 2021. Additional competition for wind and solar is expected to continue over the next ten years. SaskPower expects to install 120 MW of solar by 2025 and 1600 MW of wind power by 2030.

### The Netherlands

In the Netherlands, the electricity market is currently governed by the *Electricity Act 1998*. The national regulatory authority of the electricity market is the Authority for Consumers and Markets ("**ACM**"), who among others, safeguards access to the electricity grid and ensures that the tariffs and conditions for connections and transportation set by grid operators are non-discriminatory. Together with the ACM, the Ministry of Economic Affairs is responsible for energy policy in the Netherlands.

In 2013, several Dutch private and public entities entered into the Energy Agreement for Sustainable Growth ("**Energy Agreement**"), which provides, among other things, that in 2023 (i) the proportion of energy generated from renewable sources is 16%; and (ii) an offshore wind production capacity of 4.45 GW must be operational. The recently formed Dutch government has indicated the intention to (i) lay down its climate goals in a formal climate act, and (ii) enter into a new Climate and Energy Agreement with private and public entities. The government aims to reduce the emission of greenhouse gases by 49% in 2030 from 1990 levels. In 2015, approximately 6% of the national gross supply of energy was from renewable sources. This percentage is targeted to increase to 12.4% in 2020 and to 16.7% in 2023, as stated in the Energy Agreement.

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.

In 2015, the *Offshore Wind Energy Act* came into effect, which introduced a new permit system for the construction of future offshore wind farms. The Act is intended to simplify and expedite the decision-making process for realization of offshore wind projects in order to achieve the renewable energy targets as set out in the Energy Agreement. The Act also provides that the

Minister of Economic Affairs will grant the permit to the applicant, who will receive the SDE subsidy for the site. The permit contains the exclusive right to construct and operate an offshore wind farm.

#### Germany

The energy transition from conventional and nuclear power to renewable power sources remains in effect. At present, approximately 33% of Germany's electrical energy comes from wind, solar, hydro and biomass. The rest is provided by conventional energy sources (in particular soft coal, coal and gas) as well as nuclear energy.

The cornerstones of the above transition are the following:

- the last German nuclear power plant 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.

The next phases of the '*Energiewende*' are comprised of the following three cornerstones:

1. In January 2017, a further revision of the German Renewable Energy Sources Act ("EEG") with a separate Offshore Wind Act ("WindSeeG") regarding the regulation of the expansion of offshore wind came into effect. One of the substantial changes to current law is the replacement of fixed feed-in remuneration for newly constructed wind energy, biomass and solar plants by a market-based tender model. The remuneration for other renewable sources plants, i.e. hydropower or geothermal plants will continue to be determined by law.

This change of the remuneration system is expected to decrease the costs of the governmental remuneration system while leading to more competition and diversity amongst the power producers.

- 2. Electricity market legislation known as the '*Strommarkt 2.0*' came into effect in 2016 and is intended to make German energy supply more reliable, environmentally friendly and cost-efficient by introducing a variety of measures, including:
  - the principle of free pricing of electricity during periods of peak demand and scarcity;
  - permanent monitoring process to maintain the security of electricity supply;
  - introduction of a capacity reserve to safeguard electricity supply against unexpected events; and
  - more providers will receive access to the balancing capacity markets, which are intended to keep the system stable and increase competition and thus reduce costs.
- 3. Finally, the legislation for the digitalization of the '*Energiewende*' for the expansion of smart grids and smart metering entered into force. This legislation is based on European Union guidelines which foresee an installation of smart metering systems by 80% of energy consumers.

To achieve the 2050 targets above, a new system of auctioning power capacities was introduced by the German government under the EEG by using a tendering process for auctioning a specific amount of capacity volume each year. The value to be created is used as the basis for calculating the amount of the payment called market premium. The pricing regime is pay-asbid.

## **Operating Facilities**

Northland's 2017 Annual Report includes the results of Northland's operating facilities, the most significant of which are listed in the section below.

|                              | Gross<br>capacity |       | orthland's<br>omic interest | Contract                                | РРА    | Remaining<br>PPA    | % of 2017<br>Adjusted | % of 2016<br>Adjusted |
|------------------------------|-------------------|-------|-----------------------------|---|--------|---------------------|-----------------------|-----------------------|
|                              | (MW)              | %     | Capacity (MW)               | counterparty                            | expiry | term <sup>(1)</sup> | EBITDA <sup>(2)</sup> | EBITDA <sup>(2)</sup> |
| OFFSHORE WIND:               |                   |       |                             |   |        |                     |                       |                       |
| Gemini <sup>(3)</sup>        | 600               | 60%   | 360                         | Government of<br>The Netherlands        | 2031   | 13.5                | 38%                   | 22%                   |
| Nordsee One                  | 332               | 85%   | 282                         | Government of<br>Germany <sup>(2)</sup> | 2027   | 9.3                 | 14%                   | -%                    |
| THERMAL:                     |                   |       |                             |   |        |                     |                       |                       |
| North Battleford             | 260               | 100%  | 260                         | SaskPower                               | 2033   | 15.4                | 13%                   | 16%                   |
| Iroquois Falls               | 120               | 100%  | 120                         | IESO/OEFC                               | 2021   | 4.0                 | 10%                   | 17%                   |
| Thorold                      | 265               | 100%  | 265                         | IESO                                    | 2030   | 12.2                | 7%                    | 9%                    |
| Kirkland Lake <sup>(4)</sup> | 132               | 77%   | 102                         | IESO/OEFC                               | 2031   | 13.8                | 2%                    | 7%                    |
| Spy Hill                     | 86                | 100%  | 86                          | SaskPower                               | 2036   | 18.8                | 2%                    | 3%                    |
| Kingston                     | 110               | 100%  | 110                         | OEFC                                    |        |                     | 1%                    | 8%                    |
| ON-SHORE RENEWAB             | LES:              |       |                             |   |        |                     |                       |                       |
| Solar Phase I and II         | 90                | 100%  | 90                          | IESO                                    | 2033   | 15.9                | 7%                    | 9%                    |
| Grand Bend                   | 100               | 50%   | 50                          | IESO                                    | 2036   | 18.3                | 3%                    | 2%                    |
| Jardin                       | 133               | 100%  | 133                         | Hydro-Québec                            | 2029   | 11.9                | 2%                    | 3%                    |
| Cochrane Solar               | 40                | 62.5% | 25                          | IESO                                    | 2035   | 17.7                | 2%                    | 3%                    |
| Mont Louis                   | 101               | 100%  | 101                         | Hydro-Québec                            | 2031   | 13.7                | 2%                    | 2%                    |
| McLean's                     | 60                | 50%   | 30                          | IESO                                    | 2034   | 16.3                | 1%                    | 2%                    |
| OTHER:                       |                   |       |                             |   |        |                     |                       |                       |
| Other <sup>(5)</sup>         | 29                | 50%   | 15                          |   |        |                     | (5)%                  | (6)%                  |
| Total or w. average          | 2,458             |       | 2,029                       |   |        | 13.0                | 100%                  | 100%                  |

(1) In years and as at December 31, 2017. Weighted average based on contribution to 2017 adjusted EBITDA.

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

(3) The main source of revenue is ultimately an obligation of the Government of Germany. German electricity production is purchased by local power utilities at predetermined prices under German federal legislation.

(4) 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.

(5) Includes smaller facilities, and management and administration 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**

|                              | Gross project |     | and's economic<br>interest |   | Expected PPA                          |
|------------------------------|---------------|-----|----------------------------|---|---------------------------------------|
| Project                      | capacity (MW) | %   | Capacity (MW)              | Contract counterparty                   | Expected PPA<br>expiry <sup>(1)</sup> |
| Deutsche Bucht Offshore Wind | 252           | 100 | 252                        | Government of<br>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**

| (in millions of dollars)             | 2017                  | 2016    |
|--------------------------------------|-----------------------|---------|
| Offshore wind                        | \$<br><b>714.6</b> \$ | 266.1   |
| Thermal                              | 446.7                 | 641.0   |
| On-shore renewables                  | 211.6                 | 192.1   |
| Other <sup>(1)</sup>                 | 28.4                  | 74.9    |
| Inter-segment revenue <sup>(2)</sup> | (25.1)                | (75.1)  |
| Total                                | \$<br>1,376.2 \$      | 1,099.0 |

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

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

## **Offshore Wind Facilities**

Northland owns and operates approximately 932 MW (with economic interest of 642 MW) of offshore wind facilities located in the North Sea, off the coasts of the Netherlands and Germany. Wind power generation is a form of renewable energy that harnesses and converts kinetic energy of wind into electrical energy. Wind facilities tend to produce more electricity during the winter due to denser air and higher winds compared to the summer.

Offshore wind facilities comprised \$714.6 million of revenues and \$7.1 billion of assets representing 51.9% and 69.3%, respectively, of total revenues and total assets for the year ended and as at December 31, 2017.

#### 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 Van Oord Dredging and Marine Contractors BV (10%). Gemini declared final completion in April 2017.

Gemini has two 15-year subsidy agreements with the Government of the Netherlands, the first subsidy agreement for one half of the turbines commenced March 1, 2016, and the second subsidy agreement for the other half commenced July 1, 2016. The subsidies top up the wholesale market-based revenue generated by Gemini to a fixed, contractual rate per megawatt hour (**MWh**). The subsidies are subject to an annual production ceiling (the "**Gemini Subsidy Cap**"), beyond which, production earns revenue at wholesale market rates. 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 prices fall below the contractual floor price. 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 third or fourth quarter of the calendar year.

Gemini has a 15-year long-term service agreement to provide ongoing maintenance and service on the wind turbines, and other long term arrangements to cover the balance of plant operating costs.

Northland and a Dutch pension fund also provided subordinated loans, with a total outstanding balance of €274.4 million (CAD \$388.8 million) as at December 31, 2017; 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 kilometres 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 (formerly RWE AG), a leader in renewable energy.

Each turbine in Nordsee One is entitled to a feed-in tariff (**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. Turbines were commissioned between April 2017 and December 2017. Nordsee One declared final completion in December 2017.

Nordsee One has a 10-year long-term service agreement to provide ongoing maintenance and service on the wind turbines, and other long-term arrangements to cover the balance of plant operating costs.

## **Thermal Facilities**

Northland owns and operates approximately 973 MW (with economic interest of 943 MW)of thermal generation located in Ontario and Saskatchewan. Thermal facilities generate electricity through the combustion of natural gas that spins turbines coupled to electrical generators. By using natural gas to fuel the gas turbines Northland uses the cleanest-burning fossil fuel. Natural gas combustion results 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 both baseload and dispatchable facilities. Baseload facilities, such as North Battleford and Kirkland Lake, generally operate at contracted output with the objective of generating agreed-upon on-peak and off-peak production volumes and receive a fixed price for all electricity sold. Dispatchable facilities, such as Iroquois Falls, Spy Hill and Thorold, operate either when market conditions are economical or as requested by the PPA counterparty. Dispatchable facilities receive contract payments that are largely dependent on their ability to operate according to contract parameters as opposed to maximizing production or sales. This ensures gross profit is generally stable regardless of production or sales levels. 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.

A facility's PPA may allow for paid 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 thermal facilities purchase natural gas pursuant to supply contracts with creditworthy counterparties and all facilities 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 \$446.7 million of revenues and \$1.6 billion of assets representing 32.5% and 15.3%, respectively, of total revenues and total assets for the year ended and as at December 31, 2017.

The following describes Northland's current wholly-owned operating thermal facilities:

#### NORTH BATTLEFORD

The 260 MW North Battleford Facility is a natural-gas-fired combined-cycle baseload plant located in Saskatchewan. The facility receives monthly capacity-related payments under its PPA based on the facility's ability to deliver electricity during on-peak periods, which are designed to cover all fixed costs, debt service and investment returns. Other tariffs under the PPA compensate the North Battleford Facility for certain variable and fixed costs of production, including the supply and transportation of natural gas, the costs of which are passed through to the PPA counterparty. 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 2033.

#### **IROQUOIS FALLS**

The 120 MW Iroquois Falls Facility is a natural-gas-fired facility operating as a dispatchable facility under an enhanced dispatch contract (**EDC**) entered into with the IESO in 2017 for the balance of the facility's PPA. Under the EDC, which took effect July 1, 2017 and succeeded an interim enhanced dispatch arrangement effective January 1, 2017, Northland is responsible for operating the plant to achieve specified efficiency and reliability levels.

Prior to January 1, 2017, Iroquois Falls sold electricity to the OEFC and operated to deliver the maximum amount of electricity that the OEFC was obligated to purchase under the PPA, except when paid curtailment occurred. Under the previous OEFC contract, Iroquois Falls' ability to produce excess capacity, beyond the electricity volumes stated in its PPA, was used to sell electricity and ancillary services to the Ontario wholesale electricity market.

#### THOROLD

The 265 MW Thorold Facility sells electricity to the IESO under a 20-year PPA contract expiring March 2030 and supplied steam (and previously, electricity) to the adjacent Resolute Thorold Mill ("**Resolute**") also under a 20-year energy supply agreement expiring March 2030. In March 2017, the Resolute Thorold Mill was idled indefinitely and the purchase of steam was suspended. As a result, Northland restated its contract capacity and heat rate under the terms of its PPA, virtually insulating the impact on Thorold's financial performance from Resolute's operational change.

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. Thorold effectively receives a fixed amount (a revenue requirement) under its PPA intended to cover fixed operating costs, debt service and returns on equity. Amounts received from or paid to the IESO to achieve the revenue requirement depend largely upon the difference between actual gross margins earned in the electricity market and margins deemed to have been earned, as defined in the PPA, based on market conditions and contract parameters. The revenue requirement structure ensures Thorold's gross profit from the PPA is generally fixed and largely dependent on its ability to operate according to the contract parameters. Thorold can occasionally earn additional gross profit from the Ontario electricity market during certain operating 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 to SaskPower under the terms of its 25-year PPA expiring 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 investment returns 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.

#### KINGSTON

The 110 MW Kingston Facility sold electricity generated by the facility to the OEFC under a PPA that expired in January 2017. While the PPA was renewable upon request by the Kingston facility for a further term of a minimum of 60 months, to date, the facility has not been able to secure an extension or a replacement contract. Northland continues to evaluate all revenue alternatives and sold electrical capacity into the New York Independent System Operator market during 2017 and continues to do so in 2018 to partially mitigate fixed operating costs. Collectively, Kingston's operations for the year are referred to as the "Kingston Remarketing Initiative".

#### 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 facility. In 2015, Kirkland Lake finalized an amendment of the PPA with the IESO for the 40-year baseload gas-fuelled portion of the facility and secured future pricing terms until 2030. In 2014, an agreement was reached with the IESO on a new 20-year PPA term for the 30 MW peaking facility to 2035.

#### COCHRANE

The 42 MW Cochrane Facility is a natural-gas- and biomass-fired combined-cycle generating station. Cochrane ceased generating electricity for Ontario's power grid due to the expiry of the facility's PPA in May 2015.

### **On-shore Renewables**

Northland's owns and operates 524 MW (with economic interest of 429 MW) of on-shore renewable assets comprised of wind and solar facilities. Compared to thermal generation facilities, on-shore wind power projects are less technically complex, can be constructed in a shorter time frame, have lower operating expenses and generally incur lower equipment maintenance costs.

Northland's on-shore facilities comprised \$127.6 million of revenues and \$778.5 million of total assets, representing 15.4% and 14.6% respectively, of total revenues and total assets for the year ended and as at December 31, 2017.

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

Solar facilities comprised \$84.0 million of revenues and \$724.0 million of assets representing 6.1% and 7.0%, respectively, of total revenues and total assets for the year ended and as at December 31, 2017.

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

#### 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 under the ecoENERGY for Renewable Power program expiring November 2019. Under the terms of its PPA, Jardin shares 75% of the ecoENERGY incentive with Hydro-Québec. Jardin had an operations support agreement (**OSA**) to provide ongoing maintenance and service on the wind turbines and related equipment expiring June 2019. Jardin renegotiated and replaced the existing OSA with a Full Service Agreement (**FSA**) in September 2017, which expires November 2029 and is expected to reduce operating costs.

#### MONT LOUIS

The 100 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 expiring September 2031 and receives an incentive payment from the Canadian government for 10 years expiring April 2021 under the ecoENERGY for Renewable Power program. Under the terms of its PPA, Mont Louis shares 75% of the ecoENERGY incentive with Hydro-Québec. Mont Louis had an OSA to provide ongoing maintenance and service on the wind turbines and related equipment expiring June 2019. Mont Louis renegotiated and replaced the existing OSA with a FSA in September 2017, which expires September 2031 and is expected to reduce operating costs.

#### 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 the FIT Program expiring April 2036. Grand Bend Wind Farm reached commercial operations in April 2016. Grand Bend has a long-term program service agreement to provide ongoing maintenance and service on the wind turbines and related equipment expiring April 2036.

#### 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 the FIT Program expiring April 2034. McLean's has a FSA to provide ongoing maintenance and service on the wind turbines and related equipment expiring May 2024.

#### SOLAR

Northland owns all or a majority interest in 13 individual 10 MW ground-mounted solar facilities. These facilities include Solar (Phase I and II), comprised of nine facilities totalling 90 MW in eastern and central Ontario, and Cochrane Solar, comprised of four facilities totalling 40 MW (25 MW net interest to Northland) located in northern Ontario. Each of the facilities has a 20-year PPA with the IESO, with the PPA for phase I and II expiring November 2033 and the PPA for Cochrane Solar expiring August 2035. The solar facilities are monitored at Northland's renewable energy center in Kingston, Ontario. Operations and maintenance activities are performed in-house for the solar facilities.

In June 2015, Northland completed the sale of a 37.5% equity interest in Cochrane Solar to its First Nations partners funded with a loan from Northland.

### **Projects Under Construction**

#### DEUTSCHE BUCHT OFFSHORE WIND FARM

On August 17, 2017, Northland acquired a 100% equity stake in a 252 MW offshore wind project currently under construction, located in the North Sea, 100 kilometres west of the city of Emden in German territorial waters. Under the *German Renewable Energy Sources Act*, each turbine in the project is entitled to a feed-in tariff for approximately 13 years from commissioning.

All key construction contracts have been signed and manufacturing of the offshore substation, monopiles and transition pieces has commenced, with project completion expected by the end of 2019. The total estimated project cost is approximately €1.3 billion. As of December 31, 2017, Northland has invested approximately \$408.0 million of corporate funds. 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 precompletion revenues.

Northland is investigating the development of two additional demonstration turbines ("**Demonstrator Project**") utilizing suction bucket foundations. The final investment decision for the demonstration turbines is expected in the second half of 2018 and is subject to achieving certain development milestones. If built, they will contribute an additional 17 MW of capacity and increase total project cost by approximately €70 million, including Northland's equity investment by approximately €18 million. The balance of the Demonstrator Project costs would be funded by additional project debt that has already been committed as part of the existing project financing.

# Sale of Asset

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 2017, 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, Europe and Asia. Northland's sustained focus is on purposefully advancing those development opportunities that align with business strategy while prudently managing the cost exposure of earlier-stage projects.

## **Competitive Conditions**

Northland operates generation facilities and is undertaking development activities primarily in North American, European and Asian power markets. The nature and extent of competition Northland faces varies from jurisdiction to jurisdiction. Within these sectors and within renewable and clean energy electricity markets, Northland faces competition from large utilities and other independent power producers. In certain jurisdictions Northland also faces competition from generators who utilize inputs other than 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 Hydro-Québec and SaskPower. 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.

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. 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 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 changes are made, if required, to address non-conformance.

### Employees

As at December 31, 2017, Northland had approximately 290 permanent full-time employees.

# **CAPITAL STRUCTURE**

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

- an unlimited number of Common Shares;
- 42,478,451 Class A Shares;
- 8,067,723 Class B Convertible Shares;
- 8,496,078 Class C Convertible 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 3.57% 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, 2017, Northland had outstanding 174,440,081 Common Shares (2016 - 169,645,251 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 Class B Convertible Shares and Class C Convertible Shares have been converted to Common Shares and may not be reissued.

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 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 windingup 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 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 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% (3.57% as of December 31, 2017). 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 a result of the conversion in 2015, 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 had the right, at their option, to convert their shares into Series 4 Preferred Shares on December 31, 2017, and have such right on December 31 of every fifth year thereafter, subject to certain conditions. There were insufficient shares tendered for conversion on December 31, 2017 to result in the issuance of any Series 4 Preferred Shares.

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:

| In thousands of dollars except as indicated | Loan<br>maturity | Term to maturity | Interest<br>rate | <br>As at<br>Dec. 31, 2017 | As at<br>Dec. 31, 2016 |
|---|------------------|------------------|------------------|----------------------------|------------------------|
| Kirkland Lake                               | 2023             | 5.2              | 2.8%             | \$<br><b>12,322</b> \$     | 8,752                  |
| Jardin                                      | 2029             | 11.9             | 6.0%             | 99,760                     | 105,582                |
| Thorold                                     | 2030             | 12.2             | 7.1%             | 295,168                    | 309,361                |
| Nordsee One                                 | 2030             | 12.5             | 2.2%             | 1,187,434                  | 730,273                |
| Gemini <sup>(1)</sup>                       | 2030             | 12.5             | 3.8%             | 3,094,753                  | 2,764,294              |
| Mont Louis                                  | 2031/2032        | 13.7             | 6.6%             | 97,810                     | 102,392                |
| Solar Phase I                               | 2032             | 14.5             | 4.4%             | 196,794                    | 207,706                |
| Solar Phase II                              | 2032             | 14.5             | 5.4%             | 112,028                    | 114,204                |
| North Battleford                            | 2032             | 15.0             | 5.0%             | 587,727                    | 606,194                |
| Cochrane Solar                              | 2033             | 15.5             | 5.3%             | 181,238                    | 182,588                |
| Deutsche Bucht                              | 2033             | 16.0             | 2.8%             | 205,709                    | _                      |
| McLean's                                    | 2034             | 16.2             | 6.0%             | 129,908                    | 135,200                |
| Grand Bend                                  | 2035             | 17.8             | 4.2%             | 325,645                    | 325,645                |
| Spy Hill                                    | 2036             | 18.2             | 4.1%             | 140,760                    | 143,921                |
| Weighted average or Total                   |                  | 13.4             | 4.0%             | \$<br><b>6,667,056</b> \$  | 5,736,112              |

(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, 2017, \$45.0 million (2016 - \$49.5 million) of letters of credit were issued under facility- or project-level credit agreements.

### **Debt Covenants**

As indicated above, 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 of those entities have outstanding debt arising from incurring non-recourse project finance debt sourced 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 will be retained at the project level until the next distribution date when the benchmark is achieved. For the year ended December 31, 2017, 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, 2017, Northland's corporate credit facilities totaled \$900 million. 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. The corporate credit facilities are summarized in the table below:

| As at December 31, 2017                                  |                  |                 |    |                                    |                                    |               |
|--|------------------|-----------------|----|------------------------------------|------------------------------------|---------------|
| In thousands of dollars                                  | Facility size    | Amount<br>drawn | Ou | Itstanding<br>letters of<br>credit | Available<br>borrowing<br>capacity | Maturity date |
| Syndicated revolving facility                            | \$<br>450,000 \$ | 273,364         | \$ | - \$                               | 176,636                            | March 2020    |
| Syndicated term facility <sup>(1)</sup>                  | 250,000          | 222,451         |    | _                                  | _                                  | March 2019    |
| Bilateral letter of credit facility                      | 100,000          | _               |    | 90,883 \$                          | 9,117                              | March 2019    |
| Export credit agency backed letter of credit<br>facility | 100,000          | -               |    | 89,529                             | 10,471                             | March 2020    |
| Total  | \$<br>900,000 \$ | 495,815         | \$ | 180,412 \$                         | 196,224                            |               |

(1) The term facility was fully drawn to assist in funding Northland's equity investment in Gemini. A partial repayment was made in 2017; however, the amount repaid cannot be redrawn under the term facility.

- The syndicated term facility was extended during 2017 from March 2018 to March 2019. The amount shown reflects the Canadian equivalent based on period-end foreign exchange rates;
- Amounts drawn against the revolving facility include €181.0 million (CAD \$273.4 million) of borrowings related to the acquisition of Deutsche Bucht in August 2017.
- 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;
- Of the \$180.4 million of corporate letters of credit issued as at December 31, 2017, \$89.5 million relate to projects under advanced development or construction.

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

Northland is not subject to the types of debt service coverage ratio, or reserve requirements which apply at the project-level financings, but 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.

#### **Convertible Debentures**

On March 5, 2014, Northland completed a public offering of convertible unsecured subordinated debentures with gross proceeds of \$78.8 million (\$75.3 million after costs and underwriters' fees), with a maturity of June 30, 2019 ("**2019 Debentures**"). The 2019 Debentures are convertible into Common Shares at the option of the holder at a conversion price of \$21.60 per Common Share and are redeemable by Northland on or after June 30, 2017, provided that the trading price of Northland's Common Shares reaches certain levels. Northland may, at its option, satisfy its obligation to pay the principal amount of the 2019 Debentures in Common Shares at maturity.

On January 22, 2015, Northland completed a public offering of the 2020 Debentures with gross proceeds of \$157.5 million (\$150.6 million after costs and underwriters' fees), with a maturity of June 30, 2020. 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 redeemable by Northland on or after June 30, 2018, provided that the trading price of Northland's Common Shares reaches certain levels. Northland may, at its option, satisfy its obligation to pay the principal amount of the 2020 Debentures in Common Shares at maturity.

## DIVIDENDS

#### Sustainability of Dividends

Northland's Board and management are confident that Northland has adequate access to funds to meet its dividend commitment from operating cash flows, corporate funds and, as necessary, its line of credit or external capital.

Northland has established a dividend reinvestment plan (**DRIP**) whereby Shareholders may elect to reinvest their dividends in Common Shares of Northland to be issued from treasury at up to a 5% discount to the market price. While the future participation in Northland's DRIP is undeterminable, average participation since inception has been 26%. Based on a review of comparable companies with similar DRIP programs, management expects that the net result will be a material reinvestment of cash dividends into Northland, improving the efficiency and reducing the cost of raising equity for future projects.

In December 2017, the Board of Directors declared an increased monthly dividend on Northland's common shares and Class A shares of \$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 payable 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.

|           | <u>2017</u> | <u>2016</u> | <u>2015</u> |
|-----------|-------------|-------------|-------------|
| January   | \$0.0900    | \$0.0900    | \$0.0900    |
| February  | 0.0900      | 0.0900      | 0.0900      |
| March     | 0.0900      | 0.0900      | 0.0900      |
| April     | 0.0900      | 0.0900      | 0.0900      |
| May       | 0.0900      | 0.0900      | 0.0900      |
| June      | 0.0900      | 0.0900      | 0.0900      |
| July      | 0.0900      | 0.0900      | 0.0900      |
| August    | 0.0900      | 0.0900      | 0.0900      |
| September | 0.0900      | 0.0900      | 0.0900      |
| October   | 0.0900      | 0.0900      | 0.0900      |
| November  | 0.0900      | 0.0900      | 0.0900      |
| December  | 0.1000      | 0.0900      | 0.0900      |
|           | \$1.0900    | \$1.0800    | \$1.0800    |

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

|           | <u>2017</u> | <u>2016</u> | <u>2015</u> |
|-----------|-------------|-------------|-------------|
| March     | \$0.2196    | \$0.2196    | \$0.3281    |
| June      | 0.2196      | 0.2196      | 0.3281      |
| September | 0.2196      | 0.2196      | 0.3281      |
| December  | 0.2196      | 0.2196      | 0.2196      |
|           | \$0.8784    | \$0.8784    | \$1.2039    |

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

|           | 2017     | <u>2016</u> | <u>2015</u> |
|-----------|----------|-------------|-------------|
| March     | \$0.2040 | \$0.2019    | \$—         |
| June      | 0.2044   | 0.2032      | —           |
| September | 0.2098   | 0.2105      | _           |
| December  | 0.2231   | 0.2086      | 0.2004      |
|           | \$0.8413 | \$0.8242    | \$0.2004    |

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

|           | <u>2017</u> | <u>2016</u> | <u>2015</u> |
|-----------|-------------|-------------|-------------|
| March     | \$0.3125    | \$0.3125    | \$0.3125    |
| June      | 0.3125      | 0.3125      | 0.3125      |
| September | 0.3125      | 0.3125      | 0.3125      |
| December  | 0.3125      | 0.3125      | 0.3125      |
|           | \$1.2500    | \$1.2500    | \$1.2500    |

## **CREDIT RATINGS**

Credit ratings are intended to provide investors with an independent measure of credit quality of an issue of securities.

Northland's corporate rating as rated by Standard & Poor's credit rating agency is currently BBB (Stable), which was reaffirmed in September 2017. In addition, Northland's preferred share rating and unsecured debt ratings on Standard & Poor's global scale and Canada scale are BB+ and P-3 (high), respectively.

A Standard & Poor's issuer credit rating is a forward-looking opinion about an obligor's overall financial capacity (its creditworthiness) to pay its financial obligations. Such opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they come due. Standard & Poor's ratings for long-term debt instrument range from a high of AAA to a low CC. Ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories. According to Standard & Poor's rating system, an obligor rated BBB has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments. A Standard & Poor's rating outlook assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). The outlook may be qualified as Positive, Negative, Stable, Developing or N.M. (Not Meaningful). A Stable rating outlook means that a rating is not likely to change.

The Series 1 Preferred Shares, Series 2 Preferred Shares and Series 3 Preferred Shares have each been given a Canadian scale rating of P-3 by Standard & Poor's. Such P-3 rating is the tenth of twenty ratings used by Standard & Poor's in its Canadian preferred share rating scale (the first rating being the highest and the twentieth rating being the lowest). According to Standard & Poor's, such a P-3 rating indicates that although the obligation is considered to be less vulnerable to non-payment than other speculative issues, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

Northland has paid applicable service fees to Standard & Poor's for the rating of Northland, the Series 1 Preferred Shares, Series 2 Preferred Shares and the Series 3 Preferred Shares along with the annual review thereof.

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.

# MATERIAL CONTRACTS

Northland did not enter into any material contracts in 2017. Prior to 2017, Northland entered into the following contracts which remain in effect as at December 31, 2017:

- (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 limitation as to the aggregate principal amount. There are two series of Debentures currently outstanding, the 2019 Debentures and 2020 Debentures. Refer to the "Capital Structure" section above.

The Debentures are direct obligations of Northland and are not secured by any mortgage, pledge, hypothec or other charge and are subordinated to all Senior Indebtedness. The Debentures rank *pari passu* with every other series of Debentures. The Convertible Debenture Indenture does not limit the ability of Northland to incur additional indebtedness, including additional Senior Indebtedness.

#### 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 dividend reinvestment plan 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 2017:

| Common Shares (TSX: "NPI") | <u>High</u> | Low     | <u>Volume</u> |
|----------------------------|-------------|---------|---------------|
| January                    | \$24.04     | \$23.20 | 3,965,406     |
| February                   | \$24.72     | \$23.51 | 4,496,125     |
| March                      | \$25.04     | \$23.46 | 6,267,368     |
| April                      | \$24.93     | \$23.76 | 4,505,900     |
| Мау                        | \$24.45     | \$22.85 | 6,302,198     |
| June                       | \$24.30     | \$22.68 | 6,488,002     |
| July                       | \$23.70     | \$22.10 | 4,995,856     |
| August                     | \$24.66     | \$21.78 | 7,045,589     |
| September                  | \$24.02     | \$22.81 | 5,022,506     |
| October                    | \$24.72     | \$22.96 | 4,952,709     |
| November                   | \$24.76     | \$23.56 | 4,694,792     |
| December                   | \$24.06     | \$23.06 | 3,516,940     |

The tables below present the monthly reported high and low trading prices and trading volumes of each series of preferred shares during 2017:

| Series 1 Preferred Shares (TSX: "NPI.PR.A") | <u>High</u> | Low     | <u>Volume</u> |
|---|-------------|---------|---------------|
| January                                     | \$18.69     | \$17.47 | 282,253       |
| February                                    | \$19.48     | \$17.52 | 56,987        |
| March                                       | \$19.25     | \$17.96 | 174,492       |
| April                                       | \$19.50     | \$19.10 | 80,355        |
| Мау   | \$19.22     | \$18.59 | 75,110        |
| June  | \$19.30     | \$18.26 | 102,597       |
| July  | \$19.34     | \$18.75 | 152,925       |
| August                                      | \$19.41     | \$18.85 | 141,031       |
| September                                   | \$19.32     | \$18.91 | 132,786       |
| October                                     | \$19.66     | \$19.20 | 33,203        |
| November                                    | \$19.68     | \$19.03 | 89,270        |
| December                                    | \$19.26     | \$18.84 | 48,451        |

| Series 2 Preferred Shares (TSX: "NPI.PR.B") | <u>High</u> | Low     | <u>Volume</u> |
|---|-------------|---------|---------------|
| January                                     | \$19.34     | \$16.89 | 69,511        |
| February                                    | \$18.86     | \$17.62 | 36,295        |
| March                                       | \$18.64     | \$17.85 | 68,427        |
| April                                       | \$19.25     | \$18.56 | 32,853        |
| Мау   | \$19.20     | \$18.00 | 52,981        |
| June  | \$18.84     | \$18.09 | 13,454        |
| July  | \$19.10     | \$18.67 | 12,004        |
| August                                      | \$19.02     | \$18.50 | 19,260        |
| September                                   | \$19.35     | \$18.65 | 19,882        |
| October                                     | \$19.75     | \$19.00 | 23,132        |
| November                                    | \$19.26     | \$19.00 | 38,607        |
| December                                    | \$19.25     | \$18.78 | 23,177        |

| Series 3 Preferred Shares (TSX: "NPI.PR.C") | <u>High</u> | Low     | <u>Volume</u> |
|---|-------------|---------|---------------|
| January                                     | \$23.69     | \$21.99 | 116,074       |
| February                                    | \$23.28     | \$21.84 | 116,752       |
| March                                       | \$23.32     | \$22.21 | 179,433       |
| April                                       | \$23.95     | \$23.00 | 173,258       |
| Мау   | \$23.52     | \$22.80 | 56,223        |
| une   | \$23.50     | \$22.25 | 215,467       |
| uly   | \$23.62     | \$23.22 | 72,673        |
| August                                      | \$23.65     | \$23.11 | 54,579        |
| September                                   | \$24.16     | \$23.30 | 54,108        |
| Dctober                                     | \$24.61     | \$24.02 | 58,281        |
| lovember                                    | \$24.76     | \$24.25 | 51,010        |
| December                                    | \$24.64     | \$24.15 | 208,569       |

The tables below present the monthly reported high and low trading prices and trading volumes of the convertible unsecured subordinated debentures during 2017:

| 2019 Debentures (TSX: "NPI.DB.B") | <u>High</u> | Low      | <u>Volume</u> |
|-----------------------------------|-------------|----------|---------------|
| January                           | \$115.39    | \$113.00 | 7,650         |
| February                          | \$117.79    | \$114.74 | 8,740         |
| March                             | \$118.09    | \$115.00 | 21,490        |
| April                             | \$119.90    | \$114.28 | 27,540        |
| May                               | \$116.00    | \$112.95 | 11,710        |
| June                              | \$114.12    | \$110.50 | 7,770         |
| July                              | \$114.50    | \$110.02 | 20,890        |
| August                            | \$117.00    | \$110.00 | 6,710         |
| September                         | \$114.00    | \$110.75 | 8,320         |
| October                           | \$115.75    | \$110.25 | 8,000         |
| November                          | \$115.94    | \$113.01 | 1,240         |
| December                          | \$113.25    | \$110.00 | 7,400         |
| 2020 Debentures (TSX: "NPI.DB.C") | High        | Low      | <u>Volume</u> |
| January                           | \$116.01    | \$109.00 | 19,930        |
| February                          | \$118.50    | \$109.00 | 29,300        |
| March                             | \$119.45    | \$116.70 | 52,800        |
| April                             | \$118.50    | \$115.22 | 7,510         |
| May                               | \$116.26    | \$113.29 | 34,060        |
| June                              | \$115.20    | \$112.00 | 32,840        |
| yInf                              | \$114.73    | \$111.00 | 67,120        |
| August                            | \$117.10    | \$112.00 | 8,540         |
| September                         | \$115.00    | \$111.78 | 60,370        |
| October                           | \$118.74    | \$111.50 | 7,870         |
| November                          | \$117.25    | \$113.85 | 14,320        |
|                                   |             |          |               |

# **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 2017 Annual Report.

### 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 is 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. In particular, because electricity sales provide nearly all of the revenue generated by Northland's facilities, the failure of a counterparty to meet its contractual 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 those facilities 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 any 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 Company 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 receivable due from insurance providers and receivables due from customers. The maximum exposure to counterparty risk, other than for unfunded credit commitments, is equal to the carrying value of the financial assets. The inability of a 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 off-taker 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.

The 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 PPA monthly revenue requirement will be reduced if Thorold does not operate according to the terms and conditions in the PPA. The revenue requirement may also be reduced by the difference between gross profit deemed under the PPA and 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.

The North Battleford PPA provides a monthly capacity-based payment that may be affected if North Battleford is unable to operate the facility so that the amount of electricity delivered meets minimum levels specified in the PPA based on ambient temperatures. If North Battleford does not meet minimum delivered electricity targets it may be subject to a maximum annual penalty of \$15 million. Under the PPA agreement, 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.

The Spy Hill PPA provides a monthly availability payment that may be affected if Spy Hill is unable to operate when requested by SaskPower. If Spy Hill does not meet minimum availability targets 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 wind facilities' PPAs include financial penalties if the three-year rolling average production for each wind farm is less than a defined 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 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 Risk**

Northland's consolidated financial results reflect profits and cash flows generated by a number of subsidiaries. In prior years financial results and cash flows were broadly distributed across its thermal, on-shore wind and solar portfolio. With the final completion of Gemini in April 2017 and Nordsee One in December 2017, Northland's consolidated results in 2018 will be 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 increase further with the commencement of operations of Deutsche Bucht.

### **Market Power Prices**

Northland is exposed to a degree of market power (merchant) risk at Gemini to the extent the annual average day-ahead spot electricity price in the Netherlands falls below the SDE contractual floor price. If this pricing differential occurs or continues it could negatively impact financial results and cash flow.

There is no material merchant risk at Nordsee One or any of the Canadian facilities.

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 into other markets, or accept an additional degree of merchant risk for future projects.

## 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. To the extent possible, such facilities attempt to match fuel costs setting mechanisms in supply agreements to PPA energy payment formulas. To the extent that fuel costs are not fully matched to PPA energy payments, increases in fuel costs may adversely affect the profitability of the facilities. To the extent there is insufficient fuel supply, the profitability of the facilities may be adversely affected.

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.

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, among other permits. 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.

## 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 cancelled 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, licences and approvals; increases in interest rates; 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, such costs may not be recovered if Northland fails to win the bid.

Recently there have been increasing levels of competition in the electricity industry. This requires developers to pursue earlierstage development prospects (which are inherently riskier), reducing overall project returns, and requiring the acceptance of greater levels and types of merchant price risk, technology development risk, and construction risks to be competitive.

Once a project obtains a PPA, it is considered an advanced stage development project. These 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, licences 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.

## 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 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 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 electric power 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 Standard & Poor's. 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.

The projects Northland is developing, constructing, and operating 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 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.

### **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 events 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 transfer these risks through the use of insurance and/or the inclusion of provisions under applicable construction agreements with contractors. The construction agreements and/or insurance policies may not provide coverage for certain events, or coverage may be insufficient to compensate for all of the losses suffered by a project.

### 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. As such, 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> emissions below applicable permit limits.

For the last several decades, the greenhouse effect and its influence on climate change has caused environmental concern. Certain jurisdictions have implemented legislation or regulations to regulate greenhouse gas (**GHG**) emissions. The Ontario

government's legislation to implement a cap-and-trade program to limit GHG emissions came into effect on January 1, 2017. The Ontario government has also linked its cap-and-trade program to other programs established in the province of Québec and the state of California. Ontario's cap and trade legislation may impose costs on certain of Northland's facilities (primarily Thorold), which may not be recoverable through their PPA possibly resulting in reduced cash flow and asset impairments. Saskatchewan is initiating its own climate change program in 2018.

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 expense, capital expenditures, restrictions and delays in the facilities' activities, the extent of which cannot be predicted.

In addition, several Northland facilities are subject to compliance with North American Electric Reliability Corporation ("**NERC**") reliability standards. NERC is a self-regulatory non-governmental organization which has statutory responsibility to regulate bulk power system users, generation and transmission owners and operators through the adoption and enforcement of standards for secure and reliable operating practices. These standards are rolled out through regional entities responsible for enforcement.

Compliance with NERC standards is a regulatory requirement and in some cases may cause modest increases in facility operating costs. Non-compliance may be identified through self-certification or compliance audits; significant findings could impose penalties on facilities and, in worst case scenarios, removal from the power system until the violation has been remedied. Northland has established a corporate compliance program for its operating facilities requiring compliance with NERC standards (currently encompassing certain facilities within Ontario, Québec and Saskatchewan). As at December 31, 2017, Northland's facilities were in compliance of all applicable NERC standards.

### **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 can 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.

## **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.

## **Cybersecurity and Reliance on Information Technology**

Northland's business activities rely on systems using a high degree of information technology for purposes such as business operations and to remotely monitor and control assets and interface with regulatory agencies, power markets and customers.

The information and embedded systems of key business partners and regulatory agencies are also critical to Northland's operations. Therefore, Northland's business operations, financial reporting, financial condition and results of operations could be materially and adversely impacted by technology failures, cybersecurity incidents or other breaches of information technology security.

### **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 management and construction services.

### **Employer 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.

#### Insurance

Northland procures insurance to address all material insurable risks, including physical property repair or replacement, business interruption insurance, liability insurance and similar coverages. These are based on what Northland believes would be maintained by a prudent manager/owner/operator of similar facilities or projects. 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 offered on an economically feasible basis, 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.

### **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, claims or regulatory proceeding involving Northland that is expected to be material to Northland. The following summarizes the only material legal proceeding Northland was party to in 2017:

#### Global Adjustment Decision

In April 2016, the Ontario Court of Appeal issued its decision in relation to the interpretation of the price escalation for power sold under the power purchase agreements between various Northland entities and the OEFC. In October 2016, Northland received total retroactive payments of approximately \$104.5 million (\$94.7 million net to Northland) from the OEFC, which were recorded as revenue as of the date of receipt. The OEFC sought leave to appeal to the Supreme Court of Canada, however, the appeal was not granted. As a result, Northland entities are entitled to retain all payments received and to continue to earn revenue per Northland's interpretation of the contracts.

## **BOARD OF DIRECTORS AND OFFICERS OF THE COMPANY**

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<br>at Northland | Director<br>since <sup>(1)</sup> | Principal occupation(s) during the past five years   |
|---|--------------------------------|----------------------------------|--|
| James C. Temerty C.M. <sup>(2)(3)</sup><br>Ontario, Canada                                  | Chair and<br>Director          | 1997                             | Chair and Director of Northland.   |
| <b>The Right Honourable John N. Turner, Q.C.</b> <sup>(3)(4)(5)(6)</sup><br>Ontario, Canada | Lead Director                  | 1997                             | Corporate Director; <i>formerly,</i> Partner, Miller<br>Thomson LLP (law firm).  |
| <b>Linda L. Bertoldi</b> <sup>(3)(7)</sup><br>Ontario, Canada                               | Director and<br>Secretary      | 2010                             | Senior Counsel ( <i>formerly,</i> Partner), Borden<br>Ladner Gervais LLP (law firm).   |
| <b>Dr. Marie Bountrogianni</b> <sup>(2)(3)(4)(6)</sup><br>Ontario, Canada                   | Director                       | 2009                             | Dean of the Chang School of Continuing<br>Education at Ryerson University; <i>formerly,</i><br>President and Executive Director of the Royal<br>Ontario Museum (museum). |
| Barry Gilmour <sup>(2)(3)(6)(8)</sup><br>Ontario, Canada                                    | Director                       | 2014                             | Corporate Director; <i>formerly</i> Group Head,<br>Technology and Operations (Bank of Montreal<br>Financial Group).  |
| <b>Russell Goodman</b> <sup>(3)(6)(9)</sup><br>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 (formerly GemSee) Committee, which currently monitors the progress of Deutsche Bucht (Gemini and Nordsee One previously).

- (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.

Name and residence Position held Principal occupation(s) during the past five years **Chief Executive Officer** Chief Executive Officer of Northland; prior to January 2014, President John W. Brace Ontario, Canada and Chief Executive Officer of Northland Paul J. Bradley **Chief Financial Officer** Chief Financial Officer of Northland Ontario, Canada **Chief Operations Officer** Chief Operations Officer of Northland, prior to September 2017, Chief Troy Patton Executive Officer of Northern Power Systems and prior to April 2012, Florida, USA President, Utility Wind of Northern Power Systems Corp. Executive Vice President, Development of Northland; prior to July Mike Crawley **Executive Vice President**, 2015, President, GDF Suez Canada Ontario, Canada Development Executive Vice President, Construction of Northland, prior to August Morten Melin **Executive Vice President**, Midtjylland, Denmark Construction 2017, Vice President, Engineering, Procurement & Construction of Ørsted (formerly DONG Energy) Vice President and General Counsel of Northland Michael D. Shadbolt Vice President and

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

#### Share Ownership

Ontario, Canada

As of January 31, 2018, 58,624,276 Common Shares, representing 34% (2016 - 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% (2016 - 35%) of all voting rights of the Company were owned, directly or indirectly, or controlled by Directors and executive officers of the Company.

**General Counsel** 

## **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 bankrupt, 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.

Mr. Bradley resigned from the board of directors of EarthFirst Canada Inc. ("**EarthFirst**") in 2008. Following his resignation, EarthFirst obtained creditor protection under the *Companies' Creditors Arrangement Act* (Canada).

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, 2018, James C. Temerty, Chair of Northland owns or has control or direction over 56,741,320 Common Shares (representing approximately 32.5% 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 32.9% 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 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, 2017 and 2016, Ernst & Young LLP were paid by Northland and its subsidiaries, approximately \$1.8 million and \$1.7 million, respectively, as detailed below, for services to the Company and its wholly owned subsidiaries.

| For year ended December 31, | 2017                  | 2016  |
|-----------------------------|-----------------------|-------|
| in thousands                |                       |       |
| Audit Fees                  | \$<br><b>1,409</b> \$ | 1,462 |
| Tax Fees                    | 24                    | 3     |
| All Other Fees              | 357                   | 282   |
| Total                       | \$<br><b>1,790</b> \$ | 1,747 |

"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 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 23, 2018.

Additional financial information is provided in the 2017 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.ca

www.northlandpower.ca

# **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 due June 30, 2019.

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

"**ACM**" means Authority for Consumers and Markets, which is the national regulatory authority of the electricity market in the Netherlands.

"Annual Information Form" or "AIF" means Northland's annual information form for the year ended December 31, 2017.

"Annual Report" means Northland's annual report for the year ended December 31, 2017.

"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.

"CEEC" means Canadian Environmental Energy Corporation.

"Chapais" means Chapais Énergie, Société en Commandite.

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

"Class B Convertible Shares" means the Class B convertible shares in the capital of Northland.

"Class C Convertible Shares" means the Class C convertible shares in the capital of Northland.

"Cochrane Facility" means the 42 MW biomass and natural gas fired combined cycle located in Cochrane, Ontario and all ancillary assets.

"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, for 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 the Debenture Trustee.

"CPI" means the Consumer Price Index.

"DBRS" means the Dominion Bond Rating Service.

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

"Debenture Trustee" means Computershare in its capacity as trustee under the Convertible Debenture Indenture.

"**Deutsche Bucht**" or "**DeBu**" means the 252 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 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.

"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 established pursuant to the GEA.

"FIT Program" means the program established by the OPA with respect to renewable energy generation projects pursuant to the GEA.

"GEA" means the Ontario Green Energy and Green Economy Act, 2009.

"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.

"IPPs" means independent power producers.

"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. a 102 MW baseload power plant that came on line in 1991 and a 30 MW peaking facility built in 2004 near Kirkland Lake, Ontario owned by Kirkland Lake Corp., and the Kirkland Lake Facility.

"LTEP" means the Ontario Long-Term Energy Plan.

"LTIP" means the equity-settled share-based compensation program available to employees when Northland projects achieve certain milestones.

"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 100 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.

"Northland Applicants" means collectively Cochrane Power Corporation, Iroquois Falls Power Corp. and Kirkland Lake Power Corp.

"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);

"NUGs" means non-utility generators.

"**OEFC**" 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, the Kingston Power Purchase Agreement, and the Kirkland Lake Power Purchase Agreement.

"OPA" means the Ontario Power Authority, which as of January 1, 2015 merged with the IESO to continue as the IESO.

"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 Iroquois Falls Mill**" means the pulp and paper manufacturing facility owned by Resolute situated close to the Iroquois Falls Facility in Iroquois Falls, Ontario.

"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 *Stimulering 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 kilowatthour 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" means Standard & Poor's Ratings Services, a division of The McGraw Hill Companies (Canada) Corporation.

"summer" means April through September inclusive.

"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);

"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.

"White" means H.B. White Canada Corp.

"winter" means October through March inclusive.

"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 February 22, 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.