



Northland Investor Presentation

September 2017

Forward-Looking Statements Disclaimer



This written and accompanying oral presentation contains certain forward-looking statements which 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", "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 or adjusted EBITDA, cash flows and dividend payments, the construction, completion, attainment of commercial operations, cost and output of development projects, plans for raising capital, and the future operations, business, financial condition, financial results, priorities, ongoing objectives, strategies and outlook of Northland and its subsidiaries. This information is 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, 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, construction risks, counterparty risks, operational risks, the variability of revenues from generating facilities powered by intermittent renewable resources and the other factors described in the "Risks and Uncertainties" section of Northland's 2016 Annual Report and 2016 Annual Information Form, which are both filed electronically at www.sedar.com and Northland's website 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 presentation are based on assumptions that were considered reasonable at time of delivery. 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.

All figures are presented in Canadian dollars unless otherwise indicated.

Northland - Overview



Over 30 years of successfully developing, constructing and operating independent power projects and delivering superior returns to our shareholders since inception

Strong development team & pipeline

- Disciplined approach to capture strategic development opportunities
- Significant prospects across multiple markets and technologies

World class construction expertise

- On time, on budget focus
- Over \$10 billion of assets constructed since inception and currently under construction

Solid operating results

- Operating availability over 96%
- Excellent health, safety and environment record

Robust financials

- Strong and growing results
- \$1.08 dividend (\$0.09/month)
- BBB stable credit rating
- 98% revenues from long-term power contracts

• 35% ownership interest underscores management alignment

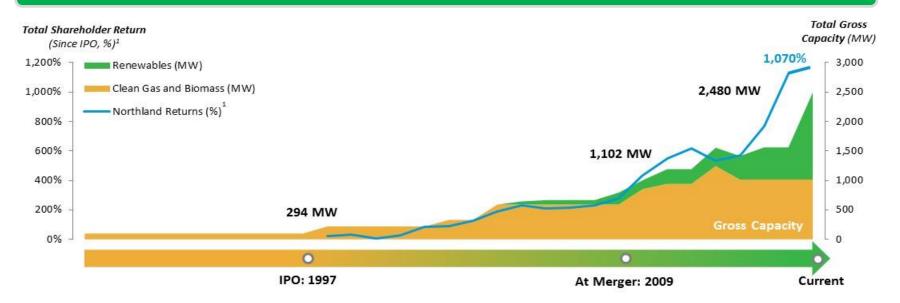
- Combined **over 200 years** of power industry experience
- Recently added experienced executives to the team

management team

Evolution of Northland



Grown from a local Canadian-based developer to a International Power Producer



Early Growth Phase



Power generation projects in Ontario, Canada

Income Fund Phase



Canada-wide expansion; new technologies and larger-scale projects

Current

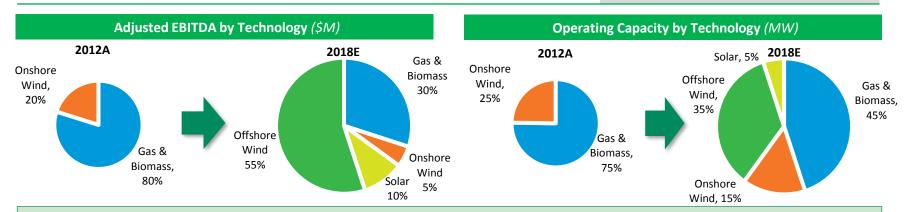


International expansion;
Leverage greenfielding
expertise into new
high-growth markets

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Northland's Strong and Growing Results

	2012 ¹	2017 ²	CAGR	
Assets	\$2.5 B	\$9.2 B	33%	↑
Enterprise Value	\$3.6 B	\$10.9 B	28%	↑
Market Capitalization	\$2.2 B	\$4.0 B	15%	1
Operating Capacity (Gross)	1,242 MW	2,148 MW	13%	1
Operating Capacity (Net)	1,005 MW	1,754 MW	13%	1
Share Price	\$18.67	\$23.10	12%³	1
# Corporate Offices	1	4	36%	1



Since 2012, Adjusted EBITDA has substantially increased due to technological diversification and regional expansion

^{1.} As at December 31, 2012

As at June 30, 2017

^{3.} This number represents the 5-Year Total Shareholder Return (includes capital appreciation and dividend reinvestment)

Northland's Asset Diversification





Geographic Regions:	Operating	Construction
Canada	1,526 MW	-
Netherlands	600 MW	-
Germany	22 MW	584 MW
Total (Gross)	2,148 MW	584 MW
Total (Net) ¹	1,754 MW	534 MW

	Geographic Regions:	Operating	Construction
4	Thermal	943 MW	-
-<	Wind	696 MW	584 MW
*	Solar	115 MW	-
	Total (Gross)	2,148 MW	584 MW
	Total (Net)¹	1,754 MW	534 MW

Well Defined and Executable Strategy



Continue to Enhance Growth and Shareholder Value

- Growth: Strategically positioned in key markets with strong demand and investment fundamentals
- Capital Structure: Continue to optimize capital structure to keep cost of capital as low as possible
- Dividend Policy: Balance growth needs with investor preferences through a prudent dividend policy
- Management Alignment: Long tenured management team, enhanced with new additions to grow the business platform internationally

World Class Offshore Wind Projects









Project Capital Costs: Over €5 Billion



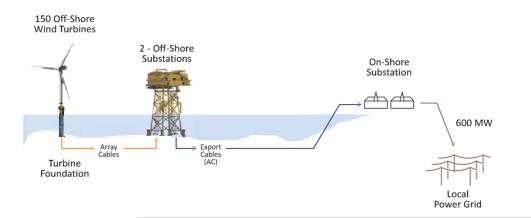
With Gemini construction completed in April 2017, Management is focused on completing Nordsee One, construction of Deutsche Bucht and developing pipeline of new projects

Gemini – Project Overview





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	Offshore Wind Project
Location	North Sea, Netherlands
Capacity	600 MW (2 sites x 300 MW)
Capital Cost	€2.8 billion
Northland interest	60% (360 MW)
Power contract	Fixed price; 15-year contract with the Dutch government
Operations & maintenance	Siemens (15-year contract) – guarantees high operating availability
Partners	Siemens (20%), Van Oord (10%), HVC (10%)
COD	Completed in April 2017

Gemini – Operations Highlights



Gemini has produced over \$500 million* of operating revenues so far

Excellent, proven wind resource

- High capacity factor with average wind speeds of approximately 10 m/s.
- Annual net production is estimated to be approximately 2.6 GWh

Revenue Contact includes Mechanism that Stabilizes Annual Cash Flows

- Revenue contract is a contract-for-differences that tops up market-based revenues to ~€169/MWh
- The full subsidy is received based on the production of 80% of forecasted generation
- Market price is subject to a floor of €44/MWh

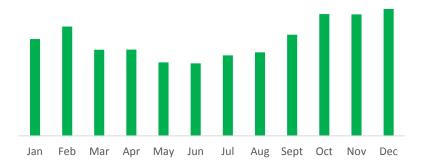
Long-term Operations & Maintenance contracts

- 15-year O&M contracts for turbines and balance of plant maintenance (underwater, land substation etc.)
- Guarantees 95% availability

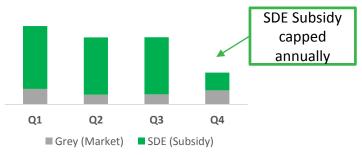
Key Interest Rate and FX
Risk Hedged

- Project debt repaid over tenor of power contract with fully hedged interest rate
- Euro FX exposure is largely hedged over power contract period (average rate of \$1.67/EUR)

Gemini Monthly Wind Generation Profile



Gemini Quarterly Revenue Profile

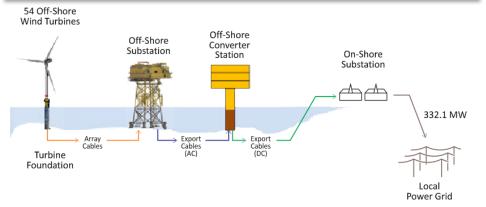


Nordsee One – Project Overview





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	Offshore Wind Project			
Location	North Sea, Germany			
Capacity	332 MW			
Capital Cost	€1.2 billion			
Northland interest	85% (282 MW)			
Power contract	A fixed price Feed-in-tariff subsidy for 10 years.			
Operations & maintenance	Senvion (10 years) – guarantees high operating availability			
Partners	RWE Innogy (15%)			
COD	End of 2017			
Additional facts	 Pre-completion revenues started in March 2017 Over €20M of pre-completion revenues generated so far 			

Deutsche Bucht – Project Overview



Highlights

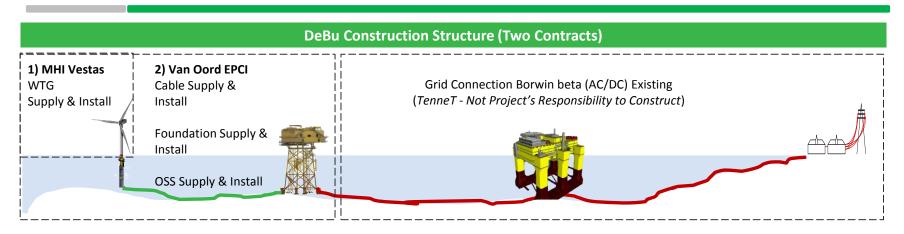
- Northland continues to expand its leading European Offshore Wind platform
- Capital deployment with returns consistent with Northland's investment criteria
- Opportunity to take advantage of learnings from Gemini and Nordsee One while leveraging common infrastructure to generate operating synergies

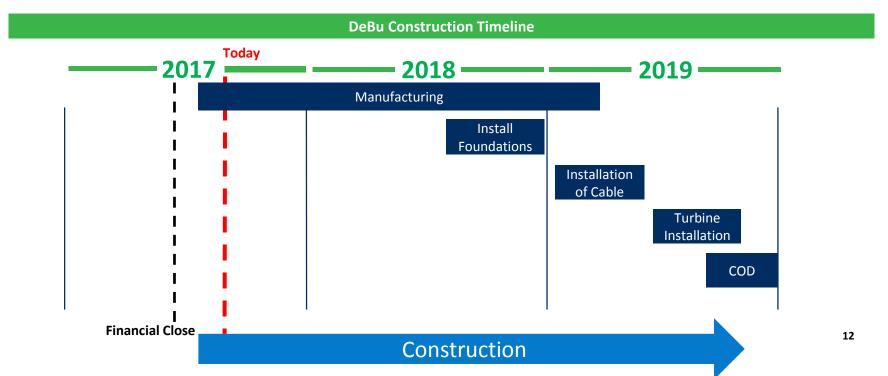
Financial Close Achieved in August 2017 and Construction has recently commenced

	Offshore Wind Project
Location	North Sea, Germany
Capacity	252 MW
Capital Cost	€1.3 billion
Northland interest	100% (252 MW)
Power contract	13-year fixed feed-in tariff subsidy under the German Renewable Energy Act
Operations & maintenance	MHI Vestas Offshore Wind (~13 years) – guarantees high operating availability
COD	End of 2019
Additional Facts	 Opportunity for two additional demonstration turbines utilizing suction bucket foundations. Final investment decision for these two turbines is subject to achieving certain development milestones. If built, they will contribute an additional 17 MW of capacity, and the total project cost will increase to approximately €1.4 billion.

Deutsche Bucht – Construction Timeline







Construction Track Record – Ahead of Schedule & Under Budget



Project	Technology	MW (gross)	COD	Ahead of Schedule	Under Budget
Iroquois Falls	Gas	120	1997	✓	✓
Mont Miller	Onshore Wind	54	2005	✓	✓
Jardin d'Éole	Onshore Wind	133	2009	✓	✓
Thorold	Gas	265	2010	✓	✓
Mont Louis	Onshore Wind	101	2011	✓	✓
Spy Hill	Gas	86	2011	✓	✓
North Battleford	Gas	260	2013	✓	✓
Northland Solar	Solar	90	2013 – 15	✓	✓
McLean's Mountain	Onshore Wind	60	2014	✓	✓
Cochrane Solar	Solar	40	2015	✓	x 1
Grand Bend	Onshore Wind	100	2016	✓	✓
Gemini	Offshore Wind	600	2017	✓	✓
Nordsee One ²	Offshore Wind	332	2017E	✓	✓
Total		2,241 MW			

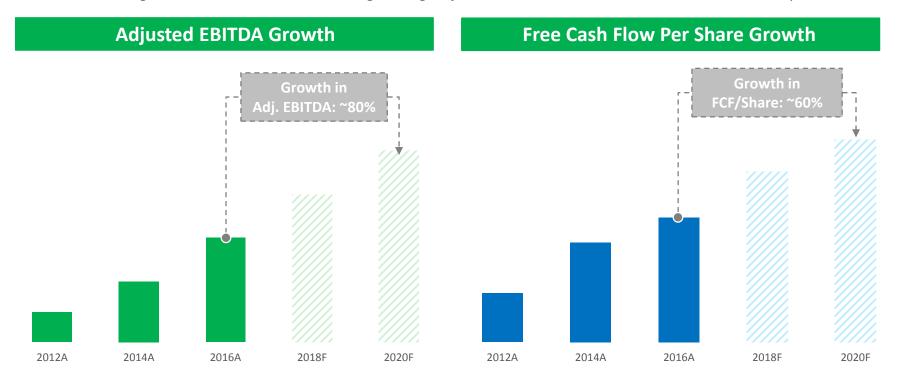
¹ Cochrane Solar was over budget due to the failure, and subsequent commencement of restructuring proceedings, of the contractor.

² Currently on time and on budget as of September 1, 2017.

Continued Grow in Financial Results



The following chart illustrates Northland's growing Adjusted EBITDA and Free Cash Flow Per Share profile

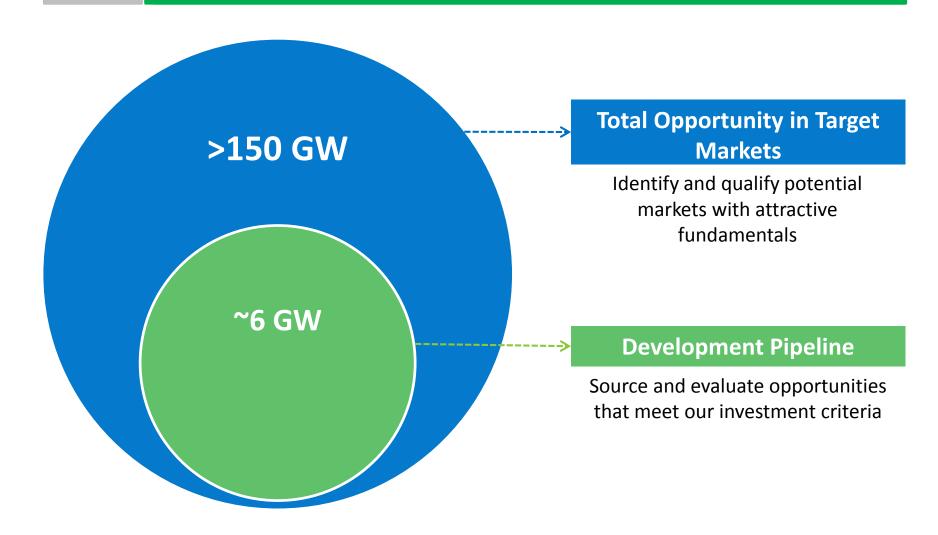


Significant and visible growth forecasted into the future from projects operating and under construction

Note: The above chart is illustrative of managements objectives. They are based upon Northland's operating facilities continuing to perform in a manner consistent with operations in 2016, with additions to Adjusted EBITDA and Free Cash Flow from projects under construction and other adjustments resulting from power contract renewals 14 primarily in Ontario all as described in our MD&A and 2016 AIF. The illustrations do not constitute a financial forecast, projection or guidance and are based upon assumptions that are subject to change.

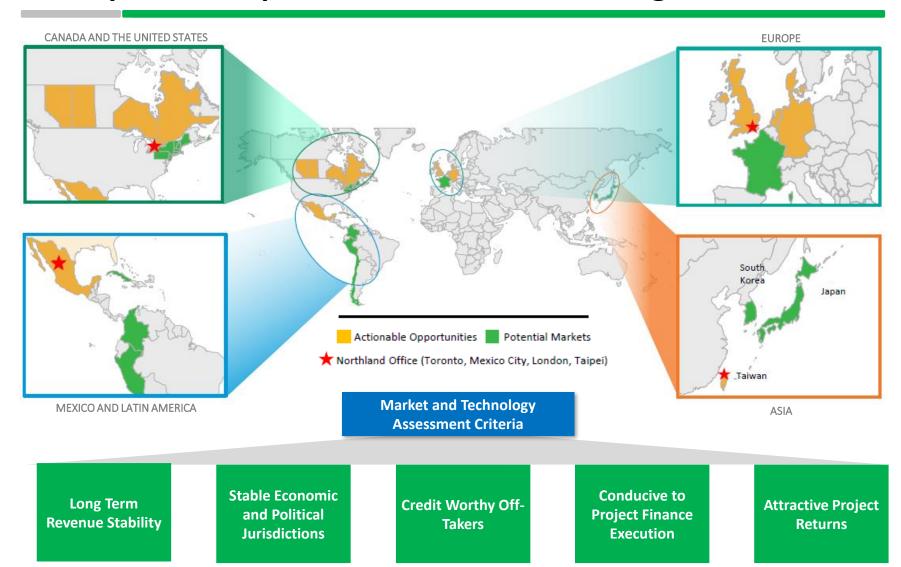
Significant Development Opportunities





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Multiple Development Markets & Technologies

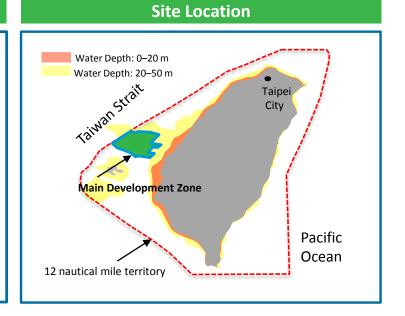


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New Target Markets: Taiwan Overview

Current Market Themes

- FIT Program currently in place to support renewable policy targets
 - FIT program designed to kick-start sector with 20-year offshore FIT contracts
- 2 Government policy aimed at phasing out nuclear generation
 - Government committed to phasing out nuclear by 2025, representing an opportunity for offshore wind as an alternative
 - 4 GW offshore wind target by 2030 expected to be increased and accelerated
- 3 Strong geographic fundamentals for offshore wind
 - Taiwan Straight benefits from being one of the best wind resources in the world, sufficient to support 6–10 GW
 - · Scarcity in land space to site onshore wind solar projects



Development Strategy

- Established a meaningful presence in Taiwan
- Northland and its partners are currently in advanced site development
- Continue all required regulatory/permit related work in order to secure approvals and secure FIT Tariff
- Seek opportunities for further projects

New Target Markets: Mexico Overview



Current Market Themes

- Large, long-term demand for new generation created load growth and asset retirements
 - 57 GW of new capacity required by 2030, of which 20 GW needed over the next 5 years
 - New capacity needs driven by ~4% annual demand growth and 16 GW of planned capacity retirement by 2030
- 2 14 GW of wind and solar from government auctions through 2030
 - Local RPS target of 35% renewable generation by 2030 represents ~14 GW of new wind and solar capacity
 - Contracting opportunities through competitive auctions, bilateral agreement with government utilities or industrial/commercial off-takers

Regions With Actionable Opportunities



Development Strategy

- Established a meaningful presence in Mexico
- Securing sites with advantageous locations, from interconnection and/or resource standpoint
- Advance greenfield development portfolio to prepare for bid submissions in upcoming tenders

Effective & Flexible Liquidity Management



Well-developed liquidity management program and several Corporate tools to support growth:

- Proactive monitoring and forecasting of cash and credit requirements
- Prudent liquidity reserves that are improving with distributions from Gemini and Nordsee One
- Corporate liquidity tools include:
 - Cash on Hand
 - Corporate Credit: \$900M across its aggregate corporate facilities, with a supportive bank group
 - Revolver \$450M
 - Term Loan \$250M
 - Corporate Letter of Credit Facility \$100M
 - EDC-backed Letter of Credit Facility (unsecured) \$100M (NEW)
 - Capital Markets: Continued access to debt and equity markets (common, preferred, convertible debentures, etc.)
 - Dividend Re-Investment Plan

Our Story Remains Consistent



- We are delivering on our commitments of stability and superior returns over the long term
- We are excited about the future and continuing to add value for our shareholders

Management's ownership of more than 35% ensures alignment with shareholder interests





Appendix

Reporting of Non-IFRS Financial Measures



This investor presentation includes references to Northland's adjusted EBITDA and free cash flow, measures not prescribed by International Financial Reporting Standards (IFRS). Adjusted EBITDA and free cash flow, as presented, may not be comparable to other similarly-titled measures presented by other publicly-traded companies, as these measures do not have a standardized meaning under IFRS. These measures should not be considered in isolation or as alternatives to net income, cash flow from operating activities or other measures of financial performance calculated in accordance with IFRS. These measures are also not necessarily indicative of operating income or cash flows from operating activities as determined under IFRS. Rather, these measures are provided to complement IFRS measures in the analysis of Northland's results of operations, and are used by management to evaluate the performance of the company for internal assessment purposes. Management believes that adjusted EBITDA and free cash flow are widely-accepted financial indicators used by investors to assess the performance of a company. These measures provide investors with additional information to assist them in understanding these critical components of the company's financial performance, including its ability to generate cash through its current operations. These measures have been applied consistently for all periods presented in this document.

Adjusted EBITDA

Adjusted EBITDA provides investors with an indication of Northland's capacity to generate income from operations and investments before taking into account management's financing decisions and the costs of consuming tangible and intangible capital assets, which vary according to asset type and management's estimate of their useful lives.

Adjusted EBITDA is calculated as income (loss) before income taxes adjusted for depreciation of property, plant and equipment, amortization of contracts and other intangible assets, net finance costs, Gemini subordinated debt earned by Northland, fair value losses (gains) on derivative contracts, unrealized foreign exchange losses (gains), elimination of non-controlling interests and finance lease and equity accounting.

Free cash flow

Free cash flow is calculated as cash flow provided by operating activities adjusted for net change in non-cash working capital balances, capital expenditures, interest paid, scheduled principal repayments on term loans, funds set aside for scheduled principal repayments and for asset purchases, restricted cash (funding) for major maintenance, write-off of deferred development costs, consolidation of managed facilities, income from equity accounted investments, proceeds from sale of assets, and preferred share dividends. This measure, along with cash flow provided by operating activities, is considered to be a key indicator for investors to understand Northland's ability to generate cash flow from its current operations.

Readers should refer to our MD&As accompanying our financial statements for an explanation of adjusted EBITDA and free cash flow, and for a reconciliation of Northland's reported adjusted EBITDA to its consolidated income (loss) before taxes and a reconciliation of Northland's free cash flow to its cash provided by operating activities. These are filed from time to time on our company's website www.northlandpower.ca.

Executive Team





John Brace *Chief Executive Officer*

Industry Experience: 30 years Northland Experience: 28 years



Paul BradleyChief Financial Officer

Industry Experience: 25 years Northland Experience: 6 years



Mike Crawley
Executive Vice President
Development

Industry Experience: 14 years Northland Experience: 2 year



Michael Shadbolt Vice President and General Counsel

Industry Experience: 25 years Northland Experience: 6 year

2017 New Additions



Morten Melin

Executive Vice President, Construction

Over 15 years in the Power and Energy Industry; Formerly VP Construction for DONG Energy Wind Power



Troy Patton

Chief Operations Officer

Over 20 years in the Power and Energy Industry;
Formerly held positions at Northern Power Systems, Vestas and
General Electric

Operating Facilities



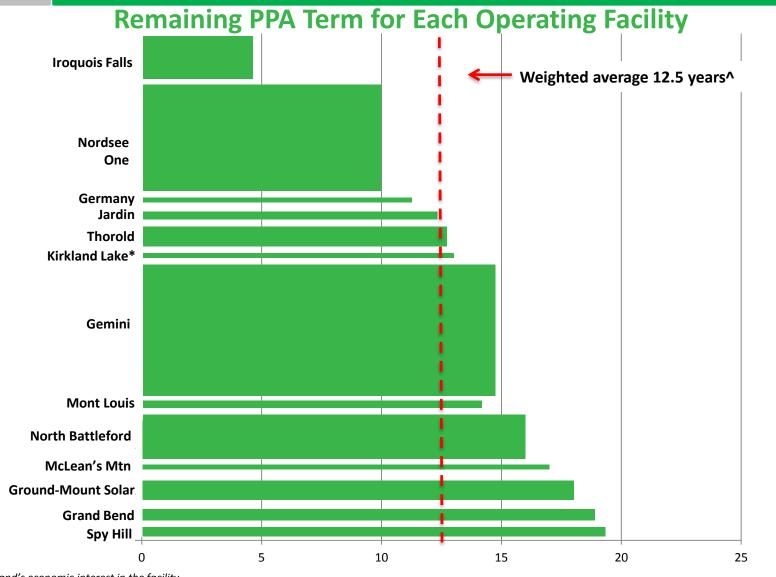
Project	Location	Gross Capacity	Northland Ownership	Technology	PPA Term
Thorold	ON, CA	265 MW	100%	Natural gas cogeneration	2030
Iroquois Falls	ON, CA	120 MW	100%	Natural gas cogeneration	2021
Spy Hill	SK, CA	86 MW	100%	Natural gas peaking plant	2036
Kirkland Lake	ON, CA	132 MW	68%*	Biomass and natural gas combined cycle and peaking	2030
Mont Louis	QC, CA	100 MW	100%	Onshore Wind	2031
Jardin d'Éole	QC, CA	134 MW	100%	Onshore Wind	2029
Other	Various	24 MW	100%	Onshore Wind/Roof-top Solar	Various
North Battleford	SK, CA	260 MW	100%	Natural gas combined cycle	2033
Ground-Mount Solar	ON, CA	130 MW	100% (90 MW) 62.5% (40 MW)	Solar	2033-2035
McLean's Mountain	ON, CA	60 MW	50%	Onshore Wind	2034
Grand Bend	ON, CA	100 MW	50%	Onshore Wind	2036
Gemini	Netherlands	600 MW	60%	Offshore Wind	2032

^{*} Northland has an effective 77% residual economic interest

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Producing and Maintaining Stable Cash Flows



^{*}Represents Northland's economic interest in the facility

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European Offshore Wind Facilities Details

	Gemini	Nordsee One	Deutsche Bucht (DeBu
Capacity	600 MW	332 MW	252 MW (+17 MW Demonstrators*)
Distance to Shore	85km	40km	95km
Wind Turbines	150 x Siemens 4 MW	54 Senvion x 6.15 MW	33 x MHI Vestas 8MW
Turbine Foundation	Monopile	Monopile	Monopile*
Water Depth	28m to 36m	26m to 29m	39m to 41m
Total Project Costs	€2.8 Billion	€1.2 Billion	€1.3 Billion*
Revenue Contract Type	Contract for Differences (CFD) (FiT-Type)	Feed in tariff	Feed in tariff
Revenue Contract Term	15 years	~10 years	~13 years
Revenue Contract Price	~€169/MWh [No escalation]	€194/MWh for 8 years, €154/MWh for 1.5 years [No escalation]	€184/MWh for 8 years, €149/MWh for 4.7 years [No escalation]
Grid Connection Responsibility	Gemini responsible for connection to shore	Tennet responsible for connection to shore	Tennet responsible for connection to shore
NPI Ownership	60%	85%	100%

^{*} As previously announced, DeBu is investigating the development of two additional demonstration turbines utilizing suction bucket foundations. The final investment decision for these two turbines is subject to achieving certain development milestones. If built, they will contribute an additional 17 MW of capacity, and bring the total project cost to approximately €1.4 billion.

Financial Summary



FINANCIAL SUMMARY	
Recent Share Price (TSX: NPI)	\$23.64
Shares (Common + Class A)	174 millior
Institutional Ownership	~29%
Management Ownership	~35%
Annual Dividend	\$1.08
Annual Dividend Yield	4.6%
Total Debt, Net of Cash	\$5,731 millior
Convertible Debentures (NPI.DB.B, NPI.DB.C)	\$228 millior
Preferred Shares (NPI.PR.A, NPI.PR.B, NPI.PR.C)	\$261 millior
Market Capitalization (Common + Class A)	\$4,103 millior
Enterprise Value	\$10,582 millior
Credit Rating (S&P)	BBB Stable Outlook

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