

Northland Power Investor Day | Toronto September 19, 2018



TSX: NPI



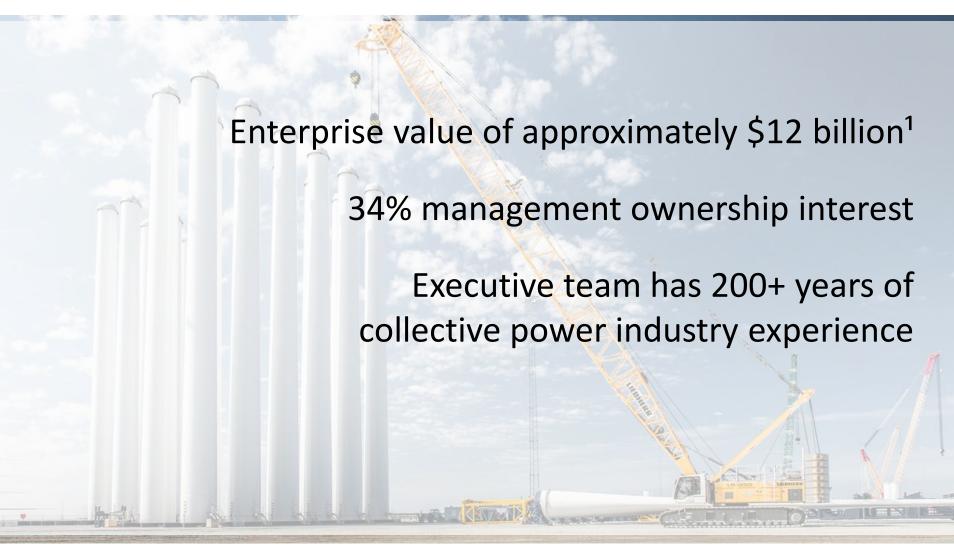
Welcome

James Temerty



Northland Overview

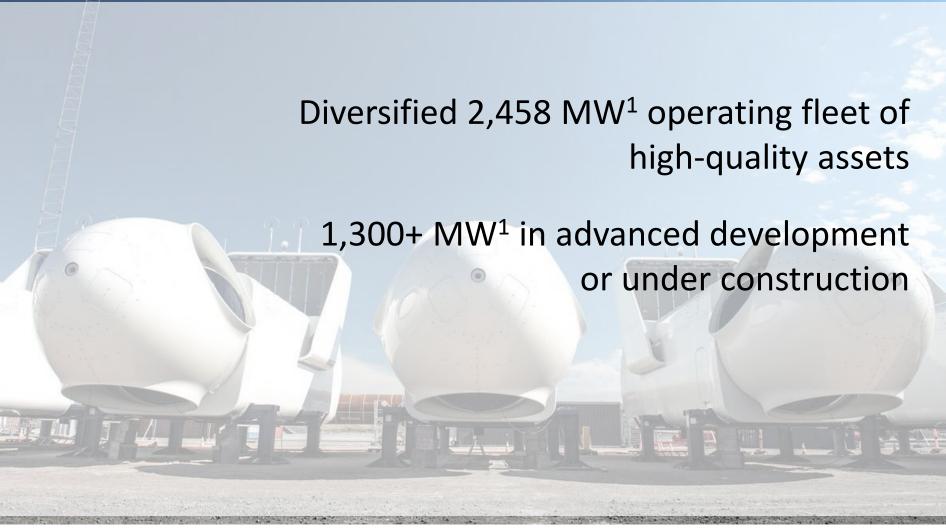




1. As at September 11, 2018

Northland Overview





^{1.} Gross capacity



Mike Crawley, Chief Executive Officer

- Founder & CEO of AIM PowerGen
- President of GDF Suez Canada
- Former Board member of Ontario and BC Power Producers Association and Canadian Solar Industries Association
- **EVP Development at Northland Power** 2015 to 2018
- 16-years industry experience





Agenda

Strategic Overview – Mike Crawley

Construction – Morten Melin

Operations – Troy Patton

Finance – Paul Bradley

Wrap Up – Mike Crawley

Our Vision



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

Our Strategy



- Develop and acquire high-quality projects with long-term revenue contracts
- Focus on renewable and sustainable energy sources
- Seek technologies / jurisdictions as an "early mover"
- Deliver projects on time, on budget
- Inspire and equip our people to achieve excellence

Our promise to investors





We remain focused on providing stability and growth to investors by:

- Targeting a higher Total Shareholder Return relative to our peers
- Ensuring stability through operational excellence
- Achieving growth through a diversified, global development and acquisition strategy

Investor feedback





Met more than 30 investors in multiple cities in 2018. Topics commonly raised:

- Near-term growth objectives and visible development pipeline
- Impact of competition
- Northland's scale to compete
- Impact of government policy change
- Founder's holdings
- Dividend policy
- Northland debt levels



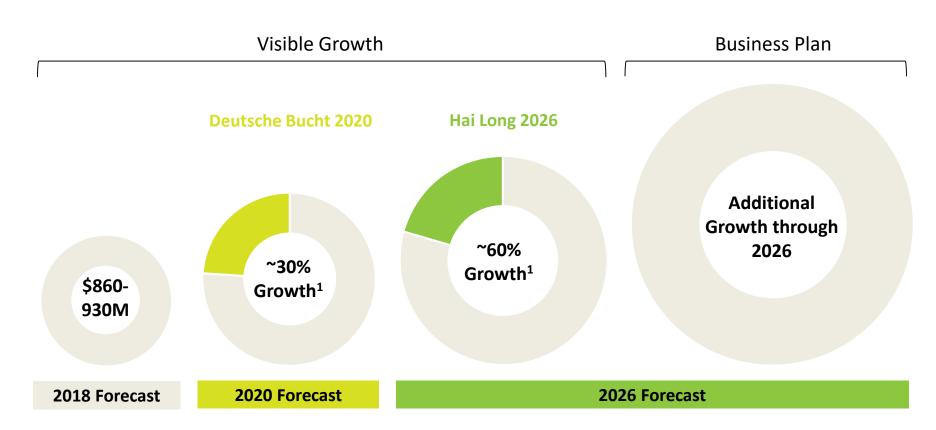


Date	Significant Events
Apr 2016	Grand Bend (100 MW) achieves commercial operation
Jul 2016	Northland announces Strategic Review
Apr 2017	Gemini (600 MW) in the Netherlands achieves commercial operation
Aug 2017	Northland concludes Strategic Review
Aug 2017	Northland acquires Deutsche Bucht (252 MW)
Dec 2017	Nordsee One (332 MW) in Germany achieves commercial operation
Apr 2018	Hai Long 2a awarded 300 MW of capacity under FIT
Jun 2018	Hai Long 2b & 3 awarded 744 MW of capacity under auction
Aug 2018	CEO transition from John Brace to Mike Crawley





Business Plan provides for significant Adjusted EBITDA growth

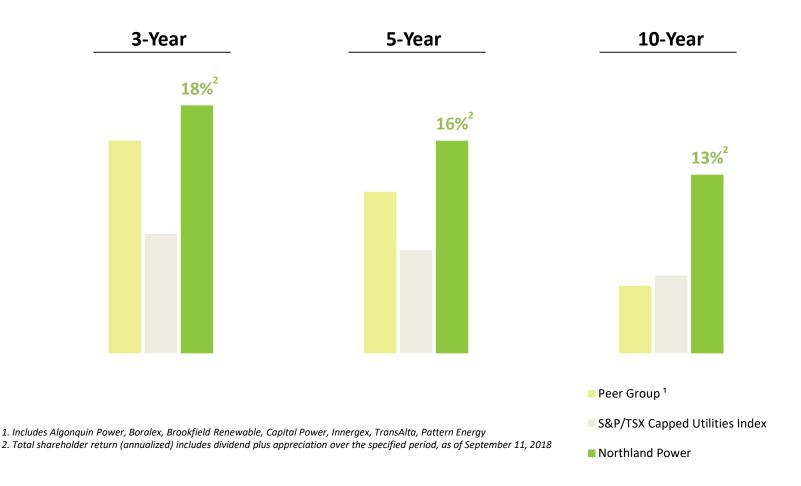


^{1.} The growth % is based on 2018E Adjusted EBITDA

The above graphic/chart is an illustration of management's business plan. They are based upon Northland's operating facilities continuing to perform in a manner consistent with operations in 2017, with additions to Adjusted EBITDA from projects in development, construction, and management business plan, and other adjustments resulting from power contract renewals as described in our MD&A and 2017 AIF. The illustrations do not constitute a financial forecast, projection or guidance and are based upon assumptions that are subject to change.



Northland continues to deliver superior returns to shareholders



Our track record speaks for itself



September 11, 2018 Northland has added 1,032 MW¹ of 1,113% Total Return 2,458 MW Capacity¹ operating capacity and delivered a 14% TSR² since 2014 Investor Day July 16, 2009 Merger of NPI and Income Trust 1987 April 15, 1997 Founding Income Fund IPO Renewables (MW) Clean Gas and Biomass (MW) 1. Gross MW (Excluding Deutsche Bucht and Hai Long) 2. Total shareholder return (annualized) include capital appreciation and dividend reinvestment as of September 11, 2018 Northland Returns (%)

Where will we go from here?



- How is the power industry changing?
- Where are the opportunities?
- How is Northland positioning itself?

Industry Overview



Opportunities:

- Global shift towards renewable power
- Offshore wind expansion to new markets
- Large volume of power and infrastructure assets to be constructed globally

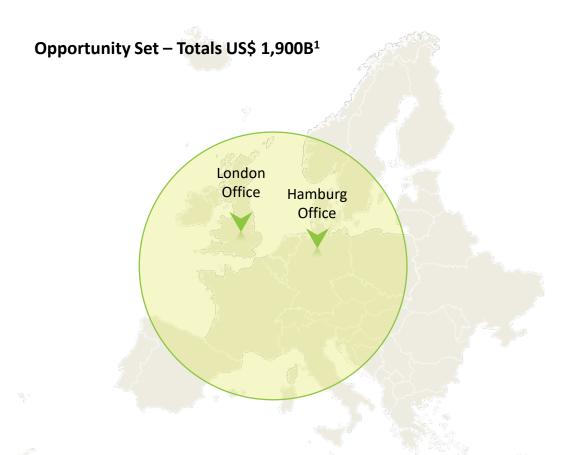
Challenges:

- Significant volume of capital chasing late stage projects
- Long-term PPAs less prevalent
- Global growth creates new exposures



Northland's opportunity in Europe





Technology

- Offshore wind
- Onshore renewables

Rationale

- New emerging offshore wind markets
- Leverage existing offshore wind platform
- Decarbonization of electricity grid

1. Source: Bloomberg New Energy Finance (2018-2050 Projections), June 2018

Northland's opportunity in Asia





Technology

- Offshore wind
- Onshore renewables
- Natural gas

Rationale

- Offshore wind opportunities due to land constraints
- Denuclearization of electricity grid
- Decarbonization of electricity grid

Northland's opportunity in Canada & US





Technology

- Onshore renewables
- Bulk storage
- Offshore wind

Rationale

- Phase out of coal generation
- Storage to optimize existing and new renewables
- Canadian tax pools

1. Source: Bloomberg New Energy Finance (2018-2050 Projections), June 2018

Northland's opportunity in Latin America



Opportunity Set – Totals US\$ 500+ B¹



Technology

- Onshore renewables
- Natural gas
- Transmission
- Hydro

Rationale

- Power market liberalization
- Economic growth and development
- Significant investment in infrastructure

How we will sustain long-term, global growth



Operational excellence of existing fleet

Advance current projects

- Complete Deutsche Bucht on time and on budget
- Complete development and construction of Hai Long projects

Execute business plan

- Decentralize development to increase project pipeline
- Higher-value early stage development
- Expand gas and electricity marketing services
- Internalize expertise
- Explore infrastructure and non-power opportunities





Morten Melin, EVP – Construction

- Experience: 25+ offshore wind farms in addition to other renewable projects
- VP, Project and Technology at Vestas Offshore
- VP, EPC & Construction Management at Ørsted
- Served on the Board of Directors at A2SEA and Inwind / Current **Board of Director at ZITON**
- 20-years industry experience



Deutsche Bucht – continued offshore growth





2018 Progress:

- No lost time injuries
- First foundation installed on September 3, 2018
- Four foundations installed¹
- 17 MW demonstrator project achieved Financial Close in August 2018
- Project on track for commercial operations by end-2019

1. As at September 11, 2018

Deutsche Bucht – project advancing on time, on budget





Illustrative timeline of Deutsche Bucht construction

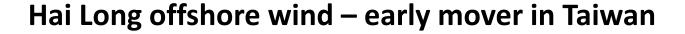


Continued focus on enhancing our proficiency and leadership in offshore wind construction



Learnings:

- Optimize risk sharing
- Utilize economies of scale in scheduling and procurements
- Retaining in-house construction expertise
- Design optimization
- Mono buckets pilot







Illustrative timeline of Hai Long development and construction



Troy Patton, Chief Operations Officer

US Navy Nuclear program

Engineering Management, GE Power Systems

Senior VP of Engineering and Products at Vestas Wind Systems

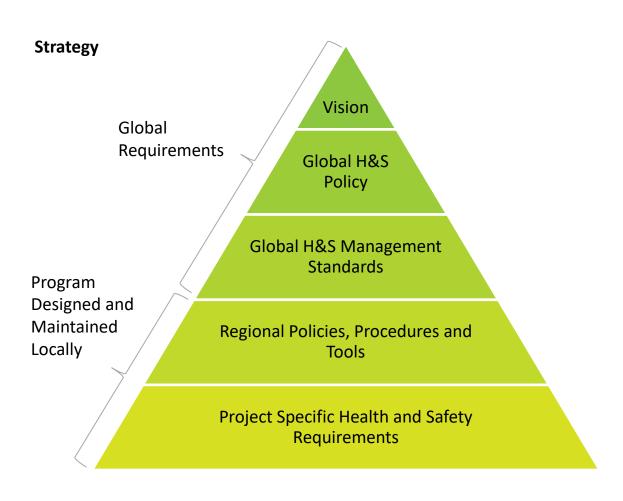
CEO of Northern Power Systems

24-years industry experience





Strong commitment to employee health & safety is key to top performance

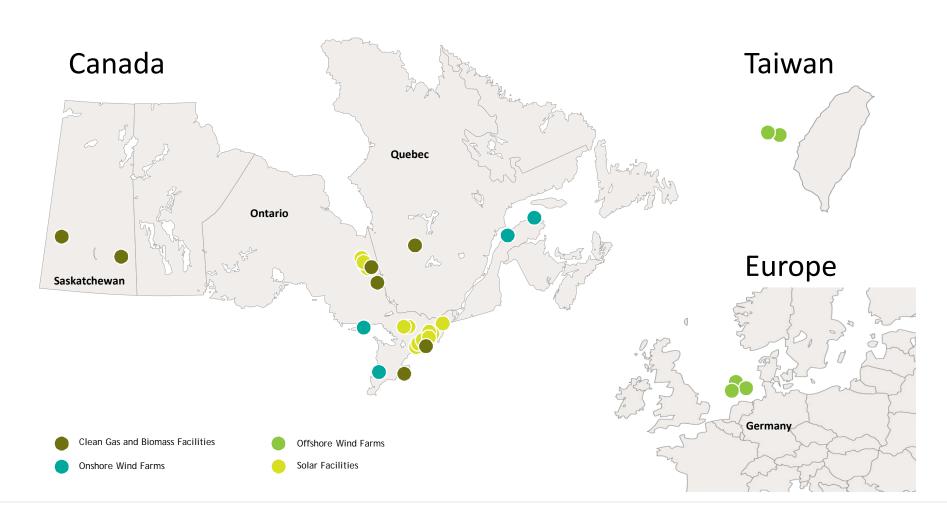


Track Record

We have a strong track record, including zero critical injuries in 2017 and 2018 YTD





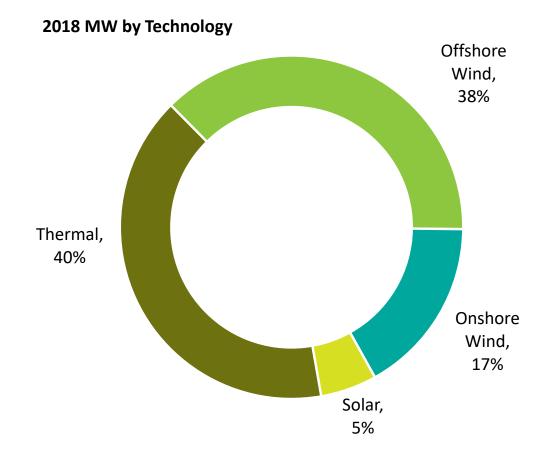


Diversity by technology



Key Highlights

- Portfolio consists of 2.4+ GW of capacity
- 98% of revenue from long-term contracts
- \$1B of net project EBITDA (before corporate expenses) expected in 2018





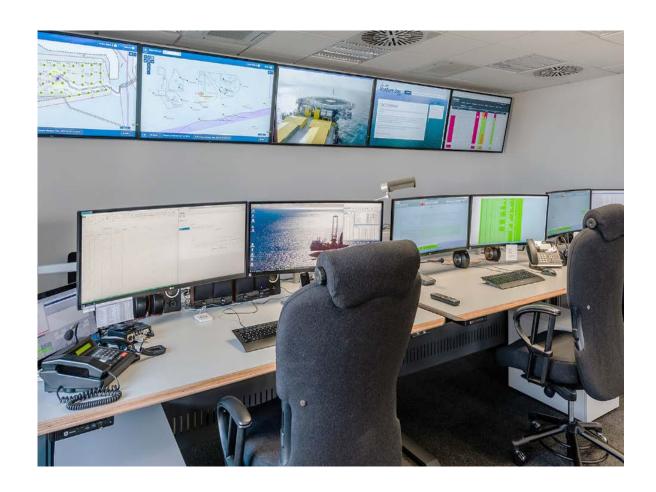
Continuous improvement leads to operational excellence

Operations Philosophy

- Strategic core operations performed in-house
- Contract non-core operations
- Manage long-term risk using service agreements

Engaged Stakeholders

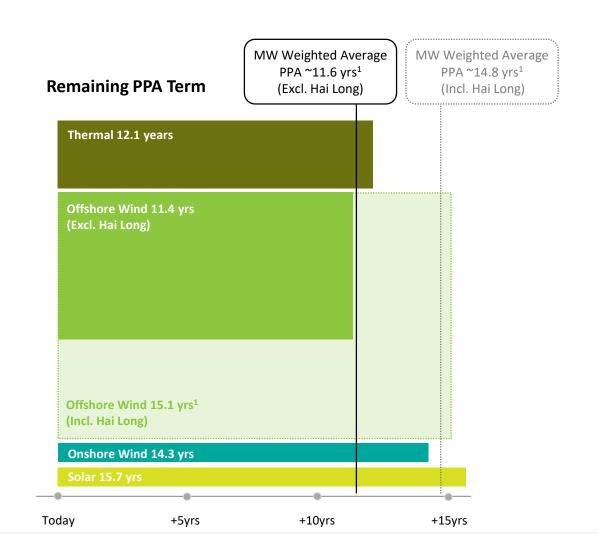
- Encourage community involvement
- Minimize environmental and compliance concerns





Financial stability achieved through long-term contracts

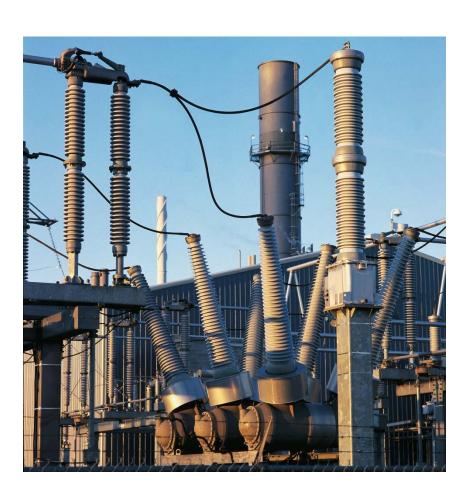
- Stable long-term cash flows from contracted revenues
- MW weighted average PPA life ~11.6 years¹
- Hai Long projects will add 626 MW (net) and 20-year PPA life when operational
- Re-contracting opportunities for expiring PPAs (Iroquois Falls)
- Robust European power market mechanisms



^{1.} The weighted average PPA life is weighted by net MW capacity. The thickness of each bar represents each technology's respective overall contribution to forecasted Adjusted EBITDA



Enhancing the profitability of our existing assets through energy marketing



Objectives and Benefits:

- Retain margin currently captured by 3rd parties
- Gain expertise to support future growth
- Establish platform to originate PPAs
- Manage merchant markets
- Securing post-PPA revenue

Global operational excellence: getting smarter



In-house Expertise

 Leverage knowledge to support development and construction

Improvements Through Use of Big Data

- Analytical tools optimize production
- Best practices improve maintenance scheduling
- Implement snow removal at solar facilities



Portfolio optimization opportunities





Optimizing Power Purchase Agreements

 Enhanced Dispatch Contract for Iroquois Falls, explore similar options for Ontario assets

Securing New Revenue Streams

New offtake opportunities for post PPA assets

Energy Marketing

Greater margins by bringing in-house gas and electricity services

Divestments

- Divesting opportunistically
- Focus on optimizing performance of larger assets

Utilizing Technology

- Leverage "big data" to optimize performance
- Smarter maintenance practices



 Appointed Chief Financial Officer at Northland in 2011

Managing Director and Head of Power
 & Utilities at Macquarie

Vice President at Ontario Power Authority

 Executive Director of Power & Utilities at CIBC

28-years industry experience





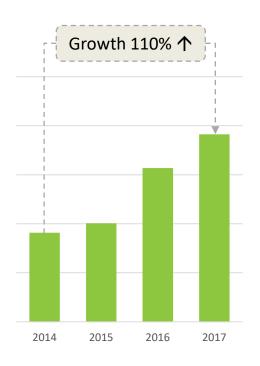
Our goal is to create long-term value for shareholders

- Strong financial growth and global diversification
- Long-term sustainable cash flows
- Prudent balance sheet management
- Proactive risk management

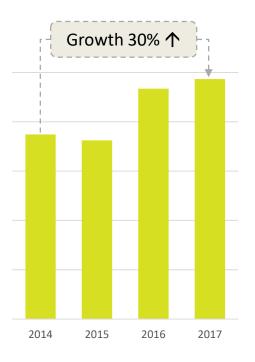




Adjusted EBITDA Growth



Free Cash Flow per Share Growth





Shareholder value is underpinned by strong financial management

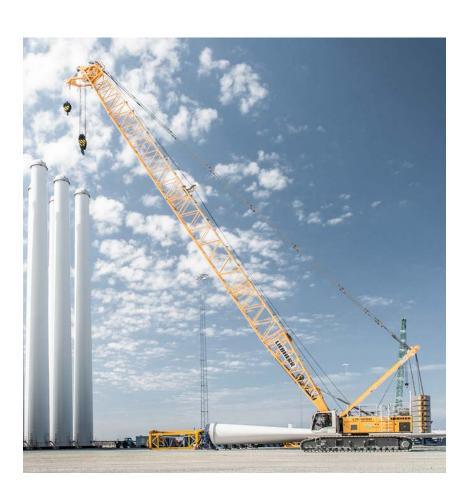
Snapshot 2018

Dividend Policy	 Increased monthly dividend to \$0.10/sh (equivalent to \$1.20/sh annually) Policy reviewed periodically Gross payout ratio expected to be well below 100% in 2018
Financial Guidance	 Adjusted EBITDA \$860M-\$930M Free Cash Flow per Share \$1.70-2.00/sh
Market Cap / Enterprise Value ¹	Approximately \$4B / \$12B
Corporate Credit Rating	BBB Stable Standard and Poor's Rating
Liquidity	 Expansion of corporate credit facility to \$1.25B Upsized preliminary base shelf prospectus to \$1B
Risk Management	Enterprise Risk Management program to manage increased risk exposure

1. As at September 11, 2018

Strong access to capital to fund our growth strategy





Generated Cash Flows

- Increasing annual operating cash flows
- Dividend Reinvestment Program
- Approximately \$1B in deductible tax attributes

Corporate Credit Facility

- Increased corporate credit facility
- Further support development and M&A opportunities

External Capital

- Seasoned access to equity and debt markets
- Project financing
- Increased preliminary base-shelf prospectus
- Third party capital

Prudent use of leverage



- Northland remains investment grade (S&P BBB Stable)
- Strong S&P FFO¹-to-Debt, well above minimum threshold
- Healthy corporate debt level relative to IPP industry
- Primarily use non-recourse project debt

Corporate Debt

\$0.4B utilized

Corporate Credit Facility

\$0.2B issued

Convertible Debentures

Project Debt

\$6.9B drawn

Non-Recourse Debt



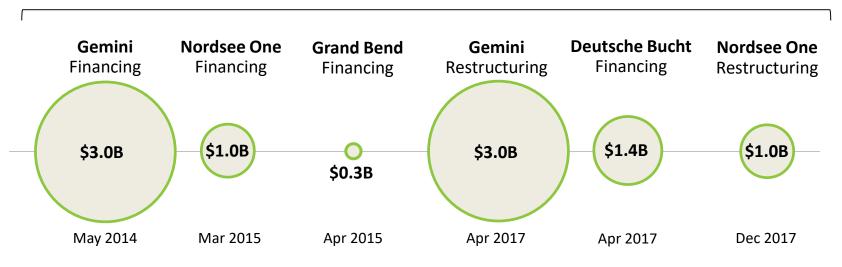
1. Funds From Operations

Project finance is a cornerstone of our capital plan



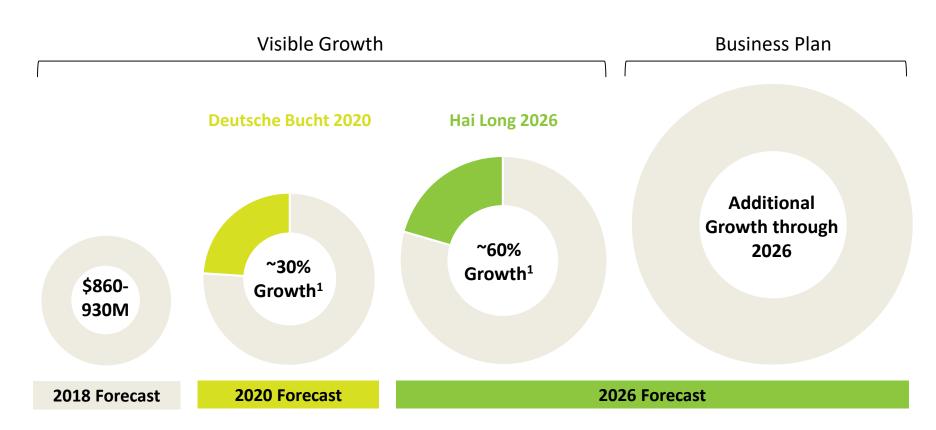
- Ideal fit with Northland's risk management mindset
- Attractive leverage and low cost
- Strong long term relationships with leading lenders
- No cross-collateralization of project debt

Approx. \$10 billion of successful project financings / restructurings since 2014





Business Plan provides for significant Adjusted EBITDA growth



^{1.} The growth % is based on 2018E Adjusted EBITDA

The above graphic/chart is an illustration of management's business plan. They are based upon Northland's operating facilities continuing to perform in a manner consistent with operations in 2017, with additions to Adjusted EBITDA from projects in development, construction, and management business plan, and other adjustments resulting from power contract renewals as described in our MD&A and 2017 AIF. The illustrations do not constitute a financial forecast, projection or guidance and are based upon assumptions that are subject to change.

We remain disciplined and well-positioned



- Robust financial results and continued growth through 2026
- Strong access to capital to fund growth
- Continued prudent use of balance sheet
- Proactive risk management throughout the organization



Wrap Up Mike Crawley

We provide sector leading total shareholder return



- Stability and global growth
- Prudent financial and risk management
- Diverse business plan to facilitate growth
- Strong access to capital
- Deliver projects on time and on budget

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. 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. Forward-looking statements are predictive in nature, depend upon or refer to future events or conditions, or include words such as "expects", "anticipates", "plans", "predicts", "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, free cash flow, dividend payments and dividend payout ratios; the construction, completion, attainment of commercial operations, cost and output of development projects; litigation claims; plans for raising capital; and the future operations, business, financial condition, financial results, priorities, ongoing objectives, strategies and outlook of Northland 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.

Forward-looking statements are subject to numerous risks and uncertainties, which include, but are not limited to, contract, contract counterparties, operating performance, variability of renewable resources and climate change, offshore wind concentration risk, market power prices, fuel supply, transportation and price, operations and maintenance, permitting, construction, development prospects and advanced stage development projects, financing, interest rates, refinancing, liquidity, credit rating, currency fluctuations, variability of cash flows and potential impact on dividends, taxes, natural events, environmental, health and safety, government regulations and policy, international activities, relationship with stakeholders, reliance on information technology, reliance on third parties, labour relations, insurance, co-ownership, bribery and corruption, legal contingencies, and the other factors described in Northland's 2017 Annual Report and 2017 Annual Information Form, which are both filed electronically at www.sedar.com and Northland's website www.northlandpower.com. 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.

Investor relations contacts



