

Northland Power Investor Presentation

September 2021



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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", "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, adjusted 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.

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All figures are presented in Canadian dollars unless otherwise indicated. Unless otherwise indicated, the statistical and financial data in this presentation is presented as of June 30, 2021.

Northland Overview

Resilient Operations and a Global Platform

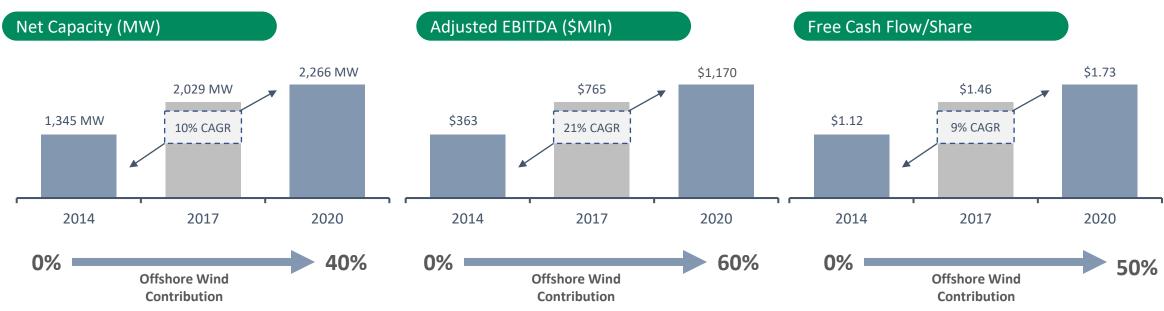


- Northland Power is a leading global power producer dedicated to helping the clean energy transition
- Over 30 years of success developing, constructing and operating power projects across a range of technologies
- Well-diversified portfolio of high-quality power infrastructure assets: over 3 GW of operating capacity
- **Approximately 95% of revenues** under long-term contracts with highly creditworthy government counterparties
- Significant development opportunities across multiple markets and technologies: 4-5 GW of identified development projects
- Significant depth of management experience across a number of disciplines including renewables, project finance, construction and development, Human resources, and risk management
- Strong environmental and health & safety record



Evolution of Northland

Offshore Wind has Accelerated Our Growth

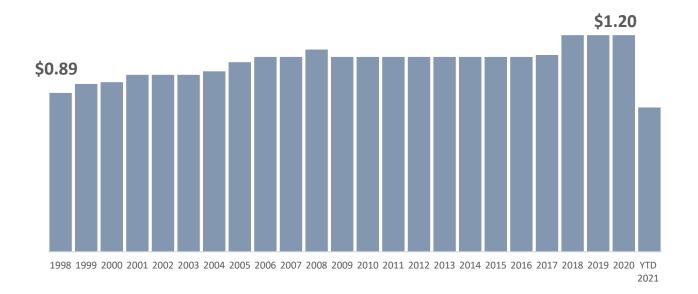




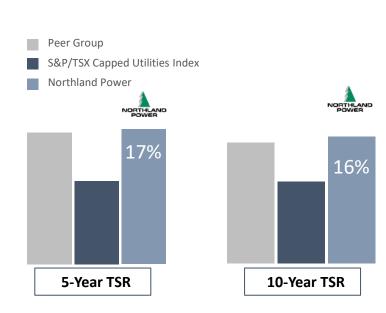
Shareholder Returns

Track Record of Strong Returns to Shareholders

Annual Dividends (Distributions) per share



Total Shareholder Returns



- Canadian IPP Peer Group includes Algonquin Power, Boralex, Brookfield Renewable, Capital Power, Innergex, and TransAlta.
- 2. As at August 31, 2021.



Global Competitive Position

Northland is on the Ground in Key Markets



Global Competitive Position

The Talent to Win



REGIONAL DEVELOPMENT OFFICES

Toronto Houston

Mexico City Bogota

London Amsterdam

Seoul Tokyo



OFFSHORE WIND

Offshore wind engineering and construction management

Hamburg

Taipei



ONSHORE RENEWABLES

Onshore wind, solar and construction management

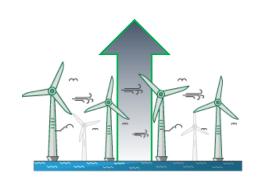
Toronto



Accelerating Growth

Northland's Capital Allocation is Focused on Renewable Growth

Northland has the following major business segments



Offshore Wind Increase Exposure



Onshore Renewables
Increase Exposure



UtilitiesIncrease Exposure



Efficient Natural Gas
Reduce Exposure



New Technologies
Establish Position

Our Renewables segments are growing in line with our capital allocation strategy, and we intend to establish initial positions in new technologies such as energy storage and renewable green fuels



Accelerating Growth

Balancing Long-term Growth with Near-term Cash Flow

2021 - 2025

2026 - 2030



- Development of onshore renewable projects with shorter incubation periods
- M&A to augment immediate cash flow



- Offshore wind drives significant growth in capacity and cash flow
- New initiatives to drive additional growth



Evolution of Northland

Doubling the Company (again) by ~2030

Significant offshore wind platform of operating and development projects position Northland as a global leader in offshore wind development

4-5 GW

Identified Development Projects¹

\$15-20+ Billion

Potential capital investment over next 5 years, anchored by Offshore Wind development (\$10-14 billion net Northland ownership interest)



More projects being initiated and through M&A



Sustainability

Our Commitment to Sustainable Growth

Aligning our values with the United Nations Sustainability Development Goals





De-carbonization and footprint minimization

Our Community



A positive and contributing community partner

Our People



A safe, healthy, inspired and empowered workforce

Our Company



Responsible and transparent governance and sustainable value creation



















Sustainability

Our Commitment to Develop a Carbon Free World







S



highest standards of Health & Safety



G





Continuing emphasis on Corporate Governance best practices



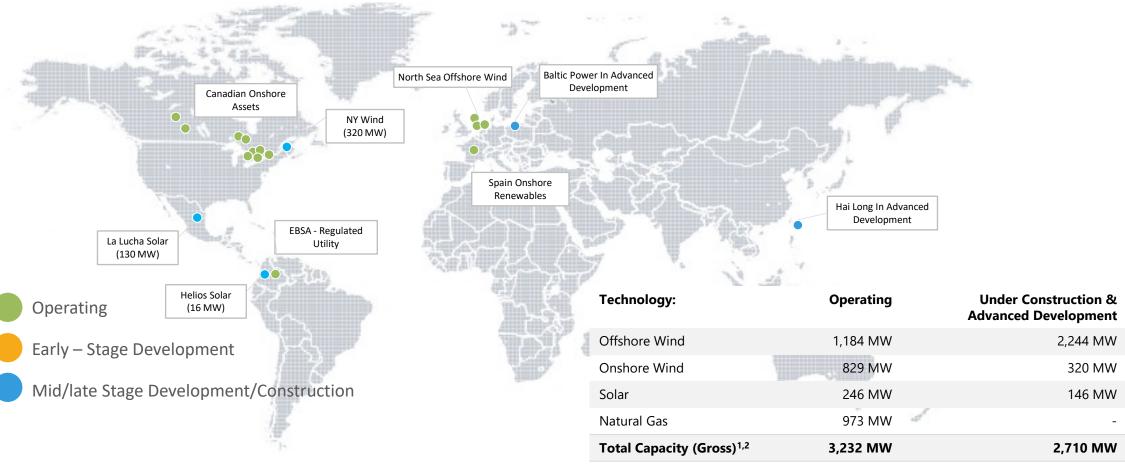


Portfolio Overview

Northland Power

Diversified Asset Portfolio

Significant Operating and Development Portfolio



^{1.} As at August 11, 2021. Includes Spain Portfolio acquisition



^{2.} Includes Hai Long, La Lucha, NY Wind and Baltic Power

Northland Operating Assets

Project	Technology	Location	Gross Capacity	Ownership	Expiry PPA Term	Construction (On-time/on-budget)
	·				•	
Gemini	Offshore Wind	Netherlands	600 MW	60%	2032	✓
Nordsee One	Offshore Wind	Germany	332 MW	85%	2027	✓
Deutsche Bucht	Offshore Wind	Netherlands	252 MW	100%	2031	✓ (Base Plant)
Mont Louis	Onshore Wind	QC, CA	100 MW	100%	2031	✓
Jardin d'Éole	Onshore Wind	QC, CA	134 MW	100%	2029	✓
McLean's Mountain	Onshore Wind	ON, CA	60 MW	50%	2034	✓
Grand Bend	Onshore Wind	ON, CA	100 MW	50%	2036	✓
Ground-Mount Solar	Solar	ON, CA	130 MW	100% (90 MW) 62.5% (40 MW)	2033-2035	√ ×
Thorold	Efficient Natural Gas	ON, CA	265 MW	100%	2030	✓
Iroquois Falls	Efficient Natural Gas	ON, CA	120 MW	100%	2021	✓
Spy Hill	Efficient Natural Gas	SK, CA	86 MW	100%	2036	✓
North Battleford	Efficient Natural Gas	SK, CA	260 MW	100%	2033	✓
Kirkland Lake	Efficient Natural Gas	ON, CA	132 MW	68%¹	2030	✓
EBSA	Regulated Distribution Utility	Colombia	n/a	99.2%	Perpetual	n/a
Spain Portfolio ²	Onshore Wind/Solar/Concentrated Solar Power	Spain	560 MW	98%	2031	n/a

^{1.} Northland has an effective 77% residual economic interest

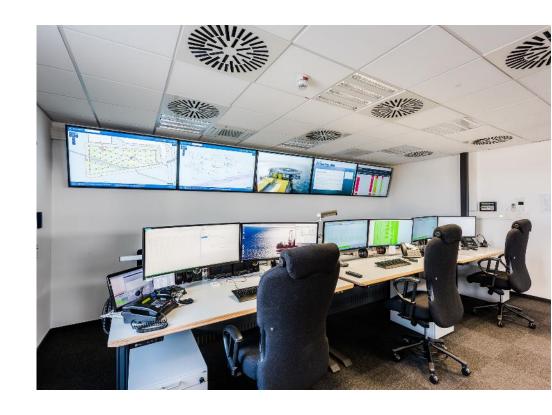


^{2.} Closed August 11, 2021

Operations

Wide Breadth of Generation and Utility Experience

- Offshore Wind, Onshore Wind, Solar, Gas Turbine, Electricity Transmission, Distribution and Marketing Activities In-House
- Industry-leading Generation availability factors and Utility reliability rates across the fleet in 2020 despite COVID-19
- Perform all balance of plant operations (substations, transmission) at most of our facilities
- Operators and Technicians fully certified in plant operations and leveraging shared best practices to ensure cost efficiency and economies of scale by technology
- Operating teams provide Due Diligence services to Development Teams to ensure lessons learned and best practices in assessing new opportunities



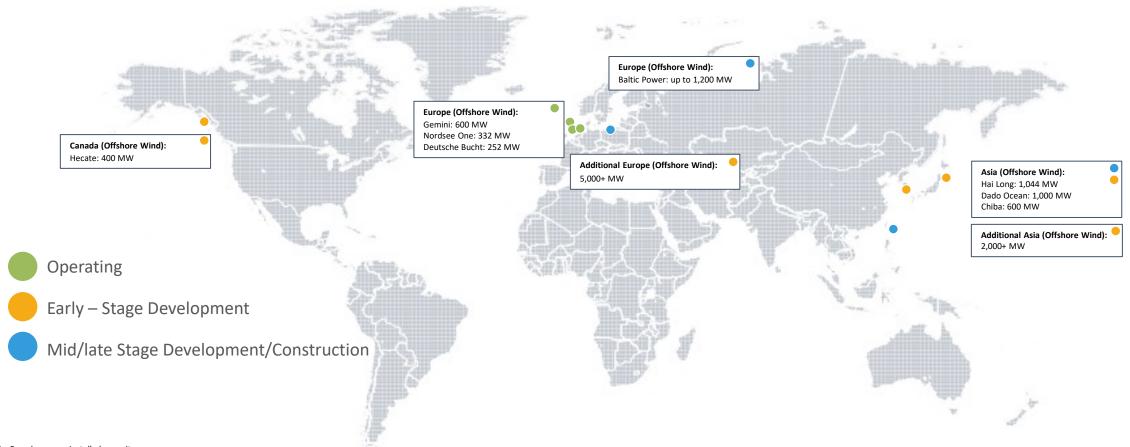




Growth Strategy

Offshore Wind Platform to Anchor Northland's Growth

Significant offshore wind platform of operating and development projects position Northland as a global leader in offshore wind development



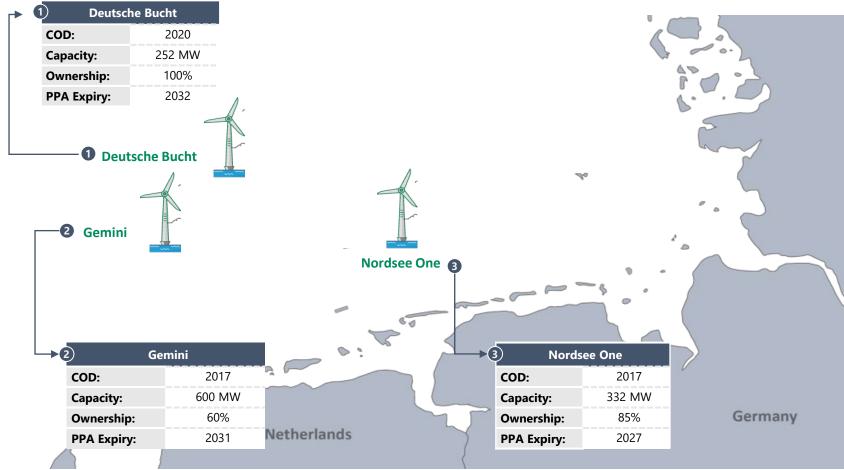


Europe

Established Offshore Wind Platform in North Sea



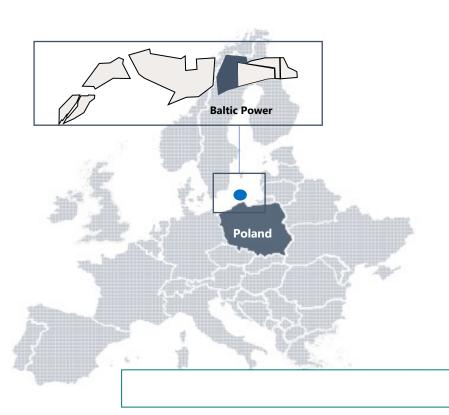
Offshore wind in-operation





Poland

Expanded Portfolio with Baltic Power Offshore Wind Project



- Acquired 49% interest in mid-stage offshore wind development project with potential for up to 1.2 GW of capacity
- Continuation of Northland's strategy of leveraging its top ten sector position globally to expand offshore wind portfolio
- Project will benefit from long-term, 25-year CfD revenue contract
- Market entry with strategic partner PKN Orlen, Poland's largest company; synergy between Orlen's significant local presence and Northland's offshore wind expertise

Timeline For Baltic Power Development

2021



2023



2023



2026

Secured CfD

Achieve Financial Close

Expect to start Construction

Expected Commercial Operations



Asia

Growth leading from the anchor project across the region



Offshore wind in-development

Taiwan

Hai Long 1, 044 MW

Japan

Chiba 600 MW

South Korea

Dado Ocean Up to 1,000 MW

Asia Growth

Additional projects 2,000+ MW

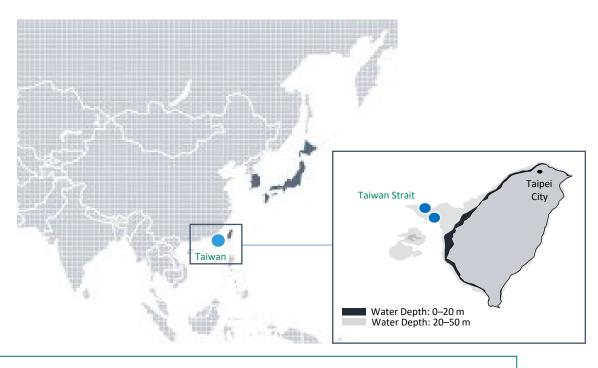




Taiwan Offshore Wind

Hai Long

Key Project Highlights			
Status:	Advanced Development		
Location:	 40-50 km off the west coast of Taiwan, in Taiwan Straits, located in Changhua County Water depth between 35 and 50 meters 10 m/s average wind speed 		
Capacity:	1,044 MW (gross)		
Contract:	Signed 20-year PPA under FIT (300 MW); pursuing PP for remaining (744 MW) with Taipower with possibility for corporate PPA		
Technology:	Offshore wind		
Ownership:	Northland Power: 60%		



Timeline For Hai Long Development

2021



2022



2023



2025-2026

Expect to start Construction



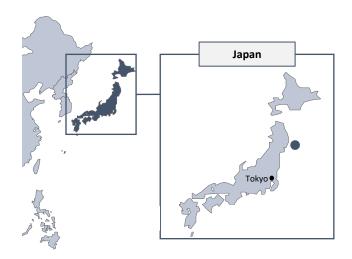


Japan and South Korea

Developing local partnerships to facilitate opportunities for future offshore wind

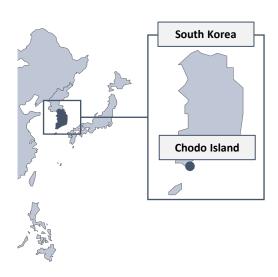
Japan

- Announced entry into Japanese market with joint venture in November 2019
- Established Chiba offshore Wind Inc. to develop early stages offshore wind opportunities
- Early-stage development projects with potential for 600 MW of offshore wind



South Korea

- Acquired Dado Offshore Wind Corp. in February 2020
- Multiple early-stage development opportunities near Chodo Island
- Early-stage development projects with potential for 1,000 MW of offshore wind



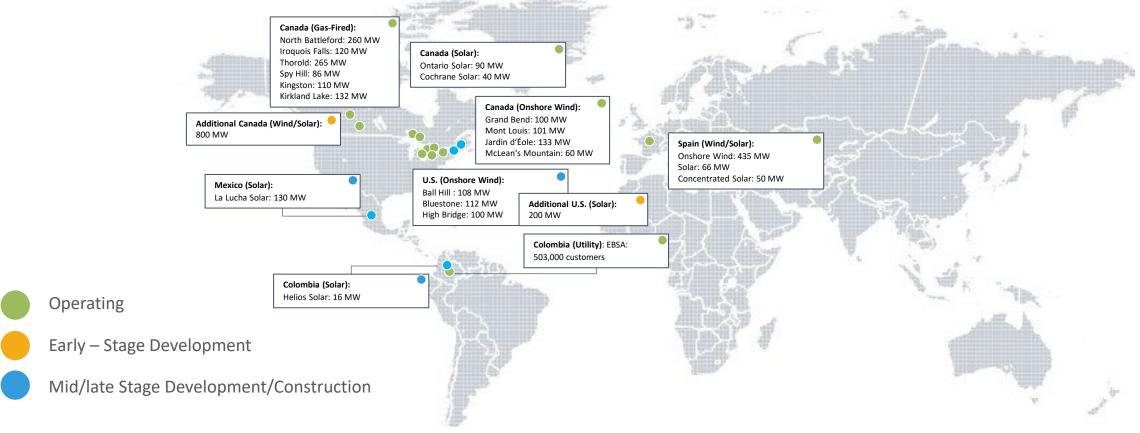


Northland Power **Onshore Renewables**

Growth Strategy

Onshore Renewables to Support Near-term Growth

Targeted Approach to Developing Onshore Renewables



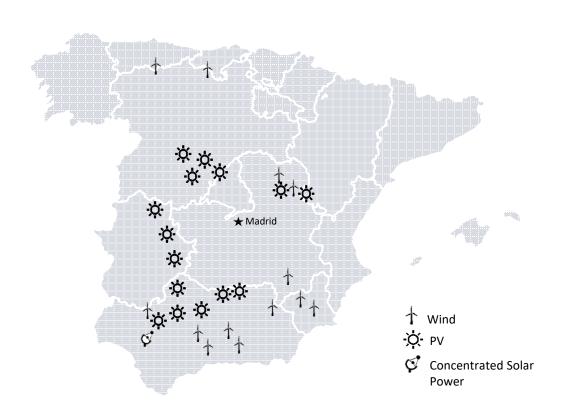


Spain

A Leading Onshore Renewables Portfolio

- Acquired a portfolio of 551 MW (net) of onshore renewables with a regulated tariff
 - ~80% of the portfolio consists of onshore wind assets, with the balance comprising solar PV and Concentrated Solar Power (CSP)
- Positions Northland as top 10 owner of operating onshore renewables in Spain and provides better access to growth opportunities locally and elsewhere in Europe
- Assets are supported with a regulated tariff with more than 13 years remaining of regulatory life
- Immediate cash flow contribution to further support offshore development strategy/initiatives
- Portfolio benefits from a diversified mix of equipment suppliers and OEM providers, mitigating exposure to any single manufacturer or service provider

	Onshore Wind	Solar PV	Concentrated Solar Power
Net Capacity	435 MW	66 MW	50 MW
Project(s)	14	18	1
Average Asset Age	11 Years	10 Years	10 Years
Fully Regulated	Yes	Yes	Yes



Operating portfolio supplies over 270,000 of households with energy



Mexico La Lucha Solar

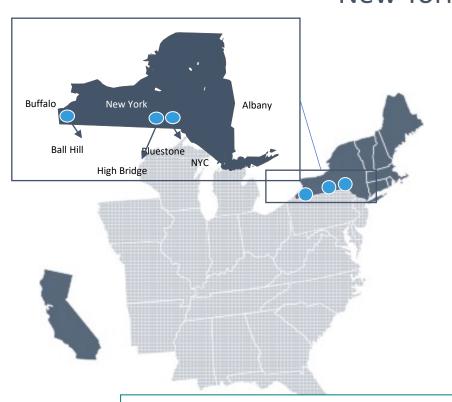
- Solar project located in State of Durango, Mexico; ~78 km from the city of Torreon
- 130 MW solar project with 100% Northland ownership
- First step in Mexico strategy that will focus on commercial and industrial market with a diversified generation portfolio
- EPC contract with Grupo Ortiz who will provide first two years of O&M services
- Will target to secure commercial offtake contracts for the project's output after commercial operations





United States

New York Onshore Wind Project Overview



- Acquired three New York onshore wind development projects in 2020. Projects expand Northland's North American portfolio by providing investment opportunities into the US renewables market
- Well positioned from a competitive standpoint relative to the state's wind development pipeline
- USD cash flows from stable and high demand market
- 320 MW potential capacity (Bluestone, High Bridge and Ball Hill)
- Secured 20-year indexed REC contract (CfD all-in PPA) with with the New York State Energy Research and Development Authority
- Achieved financial close on Ball Hill and Bluestone in Q2 2021 and actively developing Highbridge

Timeline For NY Wind Development

2020

2021



2021



2022/23

Acquired Projects

Secured 20 year IRec Offtake **Expect to start Construction**

Expected Commercial Operations



Colombia

Helios Solar Project Overview



- 16 MW Solar project in Colombia
- First development project in Colombia to capitalize on EBSA's grandfathered rights, allowing it to expand into the energy generation market in Colombia
- Aim is to service the power needs of non-regulated municipal, commercial and industrial (C&I) customers
- Secured 12-year Power Purchase Agreement with EBSA
- Achieved financial close in Q2 2021

Timeline For Helios Solar Development

2020



2021



2021



2022

Acquired Projects

Financial Close Start of Construction

Expected Commercial Operations



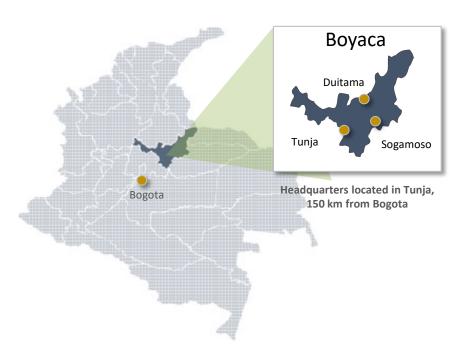


Utilities

Northland Power

Latin America

EBSA Utility



Key Operating Metrics

34,035 km Distribution Lines 105 Substations		COP 1,670 Bn RAB (C\$ 622M)	1.7 TWh Energy Distributed	
	603,000 lated Clients	573 Full Time Employees	915 MVA 220kV/115kV	

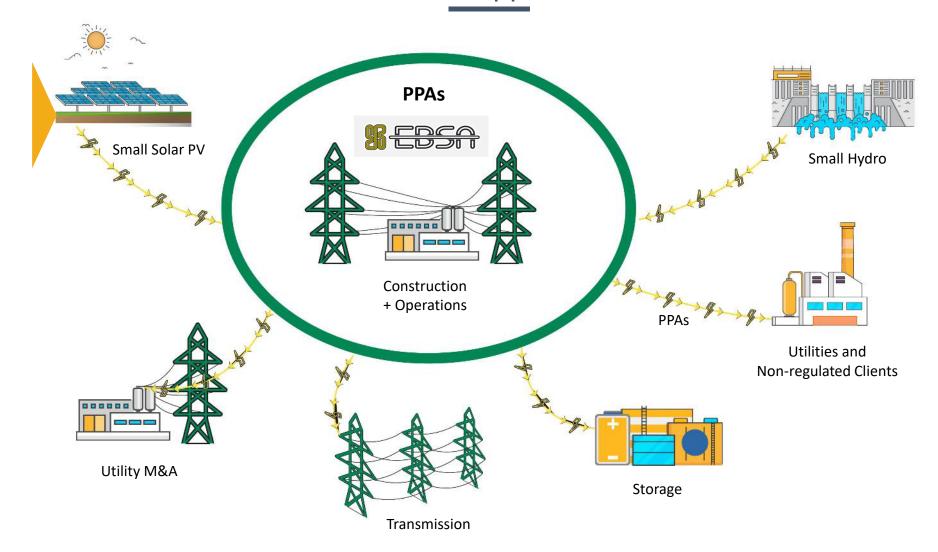
- EBSA provided strategic value to existing asset portfolio
 - Sole distributor to a population of over 1.3 million; proven management team with local expertise
 - Operates under regulatory framework with an average approved WACC of approximately 11.5%
 - RAB is expected to grow at a rate in excess of inflation
 - Other key regulatory features including RAB inflation indexation, a five-year planning cycle and limited to no demand risk
 - Provided a measure of stability and predictability to Free Cash Flow
 - Reduced concentration risk as well as exposure to re-contracting and merchant power price risk
- Provided Northland with a platform to drive future opportunities in Colombia and Latin America
 - EBSA is one of a few energy companies in Colombia with favourable grandfathered rights allowing for vertical integration across all segments of the electricity market

Distribution	Regulated revenue subject to revenue cap and five-year tariff review process – No volume risk		
Commercialization Power retailer for 100% of regulated clients in Boyacá and 44% market share of commercialization segment			
Transmission	Operator of 790km of national and regional transmission lines and 18 substations; fixed annual revenue for 25 years		



Latin America

Additional Growth Opportunities







Financial Overview

Northland Power

2021 Financial Guidance

Adjusted EBITDA and Free Cash Flow

Adjusted EBITDA

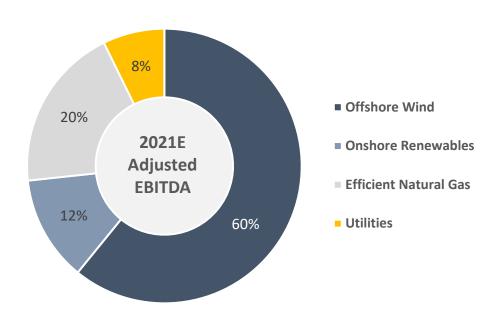
\$1.1 to \$1.2 Billion

Free Cash Flow (incl. growth expenditures)

\$1.30 to \$1.50 Per Share

Adjusted Free Cash Flow (excl. growth expenditures)

\$1.60 to \$1.70 Per Share



New for 2021, Northland plans to report on Adjusted Free Cash Flow before all growth-related expenditures



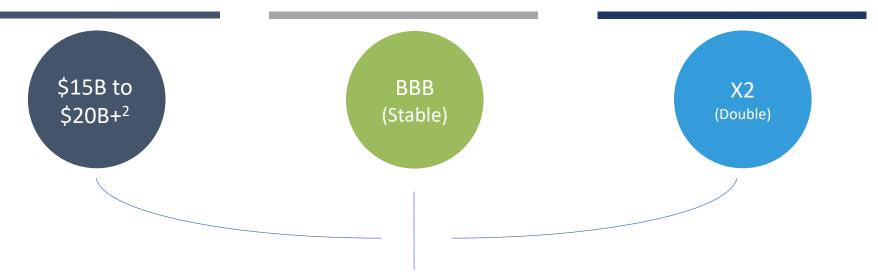
Financial Overview

Funding Plan to Support Growth and Maintain Discipline

Identified Development Projects Gross Capital Investment Plan Next 5 Years¹

Green and maintain investment grade balance sheet to support growth

Significant growth in adj. EBITDA expected on completion of **Identified Development projects**



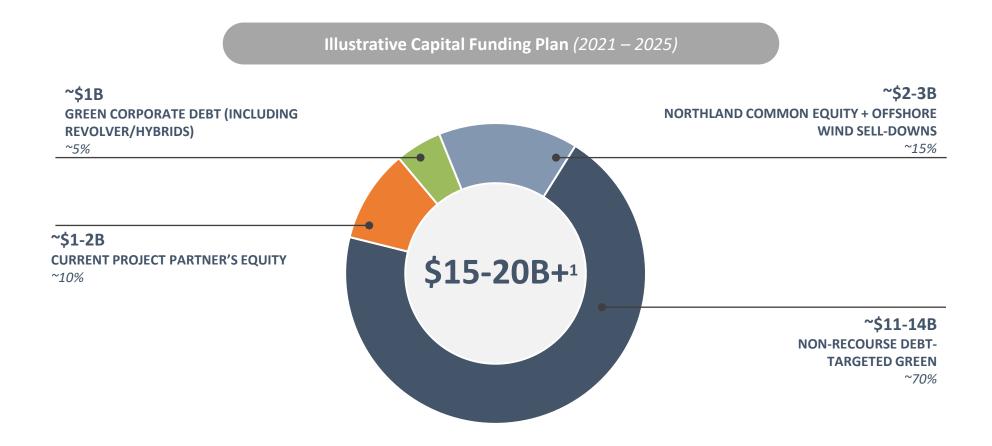
Maintaining flexibility, adding corporate funding tools to diversify sources of capital, preserving low cost of capital and investment grade balance sheet are key to the successful growth execution of Northland



^{1.} Represents the total gross capital costs of the 4-5 GW visible development projects

Strong Balance Sheet will Support Growth

Illustrative Capital Funding Plan of Identified Development Project Over Next Five Years





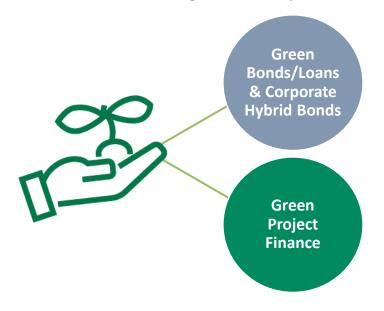
Green Financing Framework

Adding Financial Optionality to Portfolio

Green Financing Framework allows Northland to diversify and optimize additional sources of capital to fund growth plan

- Northland has advanced several capital markets initiatives to diversify and optimize our sources of capital
- Green the balance sheet
- Increase our available liquidity
- Capitalize on strong investor demand
- Our Green Financing Framework allows Northland to issue green bonds and corporate hybrids at any point in the future
- Key benefits:
 - Lower cost than traditional unsecured senior debt
 - Enhanced ESG positioning
 - Access to European debt capital markets
 - Strong Euro base allows to better match tenor and currency
 - Very strong demand/subscription levels for green products
 - Favourable treatment by lenders and S&P for corporate hybrids

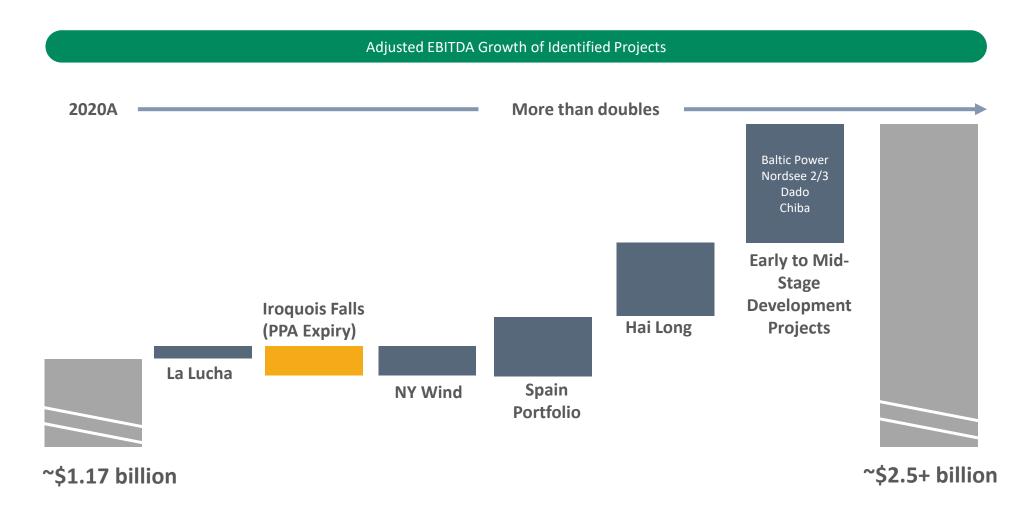
Allows the issuance of green debt instruments that benefit from lower margins and a new pool of investors





Adjusted EBITDA Growth Outlook

Identified Projects Alone Expected to Double Adjusted EBITDA





Evolution of Northland

Key Priorities Over the Next five Years



Leverage Strong Position in Offshore Wind Press strong position in offshore wind by sourcing and

Press strong position in offshore wind by sourcing and advancing large scale projects as the sector grows and new markets open up

Near-term Growth

02

03

Secure near-term growth through onshore renewables and Transmission and Distribution assets in select markets

Positioned for New Wave of Global De-carbonization

Targeting further growth from storage and renewable fuels





Appendix

Northland Power

Market Summary

Key Metrics¹

Recent Share Price (TSX: NPI)	\$41.74
Shares (Common)	225 million
Annual Dividend	\$1.20
2021 EBITDA Guidance	\$1.1 – \$1.2 Billion
2021 FCF/sh Guidance	\$1.30 - \$1.50
2021 Adjusted FCF/sh Guidance	\$1.60 - \$1.70
Total Debt, Net of Cash ²	\$6.7 billion
Preferred Shares (NPI.PR.A, NPI.PR.B, NPI.PR.C)	\$239 million
Market Capitalization (Common)	\$9.4 billion
Enterprise Value	\$15.0 billion
Credit Rating (S&P) ³	BBB Stable

Market data as at August 31, 2021 unless stated otherwise.
 As at June 30, 2021 and includes assumed debt from Spain transaction .



^{3.} Reaffirmed in March 2021

European Offshore Wind

Facility Details

	Gemini	Nordsee One	Deutsche Bucht
Capacity	600 MW	332 MW	252 MW
Distance to Shore	85km	40km	95km
Wind Turbines	150 x Siemens 4 MW	54 Senvion x 6.15 MW	31 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	€1.5 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%



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.



Northland Power

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