

# Transforming Power

Northland Power 2022 Sustainability Report





## Table of Contents

About the Report	2
A Message from Mike Crawley, President and CEO	4
About Northland	6
Sustainability at Northland	9
Our Business	15
Our People	31
Our Planet	41
Our Community	47





# Building a sustainable and carbon-neutral world together

## **Forward-looking information:**

This report contains forward-looking information that is based on certain factors and assumptions and subject to certain risks. All forward-looking information in this report is given pursuant to the “safe harbour” provisions of applicable securities laws. Please refer to “Forward-Looking Information” in the Appendix starting on page 56 of this report.

Unless otherwise indicated herein, the information in this report is provided as at May 9, 2023.

# About the Report

## Reporting Boundaries

This report contains information and data covering January 1 - December 31, 2022, with comparative information for the calendar years 2019-2021. We measure Environment, Social and Governance (ESG) key performance indicators (KPIs) using an operational control approach. We also measure specific KPIs related to health and safety, talent management and community for our project offices and sites. We define operational control as operations where we have full authority to introduce and implement operating policies. This aligns with the Greenhouse Gas Protocol's (GHG Protocol) definition. Site data represents total facility performance, not only our financial share of the operation. The report's information and data account for the direct impacts of all material components of Northland's global activities, except where otherwise noted. All amounts are in Canadian dollars (CAD) unless otherwise specified.

## Frameworks Used

This report covers the period from January 1 to December 31, 2022, in accordance with the Global Reporting Initiative (GRI) Standards. We align with global best practice standards and frameworks, including the GHG Protocol, the Sustainability Accounting Standards Board (SASB) and the recommendations of the Taskforce for Climate-Related Financial Disclosures (TCFD). Our ESG Framework and disclosures align with the United Nations Sustainable Development Goals (UN SDGs) where relevant and appropriate.

As signatories of the United Nations Global Compact (UNGC), we commit to applying its 10 principles in the areas of human rights, labour, environment and anti-corruption in our strategy, culture, and everyday business. We endorse, and have signed on to, Equal by 30.

The full list of applicable KPIs is available here: [Northland 2022 ESG Performance Index](#)

"Sustainability is a journey. Northland is proud of the steps we've taken so far – increasing the proportion of renewable energy in our portfolio and setting our own rigorous reporting standards years ahead of anticipated regulatory requirements. We commit to continuous improvement as the renewable energy sector evolves, and as our business and the market mature.

In 2022, we laid the groundwork to establish emissions reduction targets that we announced in 2023. We are focused on implementing initiatives to deliver on those targets. I'm pleased to share Northland's 2022 Sustainability Report and look forward to continuing this journey towards a more sustainable future."



**Yonni Fushman,**  
Chief Legal Officer (CLO) and Executive Vice-President  
of Sustainability

## Accessibility

This report complies with the *Accessibility for Ontarians with Disabilities Act* (AODA).

## Assurance

Northland received independent third-party limited assurance, conducted by Ernst & Young LLP (EY), over the following material KPIs for 2022:

- Scope 1+2 Greenhouse Gas (GHG) emissions
- Total electricity generated
- GHG emissions intensity

EY provided limited assurance on the allocation of Northland's Green Financing proceeds in line with the Use of Proceeds described in our Green Financing Framework. The assurance statement can be found [here](#). Our Director of Global ESG Strategy and Reporting managed the assurance engagement, with oversight and executive management from our Chief Financial Officer.

## Significant Changes and Restatements

In 2022, we revised the methodology for calculating electricity generation in megawatt hours (MWh) to include paid curtailments in alignment with our financial reporting. We restated our electricity generation figures and our year-over-year carbon intensity metrics for 2021 and 2020 for consistency.

## Awards and Recognitions

Corporate Knights ranked Northland twelfth on its 2022 Best 50 Corporate Citizens in Canada annual ranking, recognizing corporate sustainability performance. We achieved top-quartile scores in Clean Revenue (earned from the generation and transmission of clean energy), Board and Executive Diversity, Employee Health and Safety, incorporating our ESG frameworks and metrics into our executive scorecard, as well as for some of our employee benefits programs.

Northland is an AA leader under MSCI and achieved a B for its climate-related disclosures and performance under CDP.

## Related Disclosures

- [2022 Annual Information Form \("AIF"\)](#)
- [2022 Annual Report](#)
- [2022 ESG Performance Index](#)
- [2023 Investor Day Presentation](#)
- [Northland Power's Green Financing Framework](#)
- [Northland Policies](#)

Northland solar farm located in La Lucha, Mexico.



## A Message from Mike Crawley, President and CEO

Northland's year in 2022 was marked with some incredible tailwinds and headwinds for our business that brought with it opportunities, challenges, and continued growth. This was prevalent across our business as we progressed projects in our global pipeline towards significant milestones, advanced our commitment and involvement in the development of emerging sectors such as storage and green hydrogen, ensured we had the right talent to support our growth, and initiated a realignment of our business to support Northland's continued evolution. These efforts helped to set us up for success and continue global energy transition efforts, balancing the short-term need for energy security and reliability with the longer-term vision for a robust renewable energy sector.

Environmental, social, and governance (ESG) commitments are at the core of our business, reflected in Northland's values, and in everything that we do. As developers, owners, and operators of renewable energy facilities across the globe, we have a responsibility to do what's right, and play a role in **taking a balanced, responsible approach to the global energy transition** and working towards a carbon-neutral future. Our ESG principles are embedded in our strategy, culture, and everyday business and lay the groundwork for forming and fostering strong partnerships at all levels. They help solidify our commitments to implementing and integrating best practices around human rights, sustainable supply chain, environmental stewardship, and climate mitigation across our business.

As discussed in this year's report, **we've established firm targets** outlining Northland's pathway to net zero and an impact reduction strategy that will help us responsibly support global transition efforts in the short, medium, and long terms. We are on track to reduce our Scope 1 & 2 GHG emissions intensity by 65 per cent (from 2019 baseline) by 2030, and to reach a net zero measure over all emissions scopes (Scopes 1, 2 & 3) by 2040.

With energy security and reliability concerns coming into focus amid accelerated global growth and demand, we will harness our 20 GW development pipeline to help meet these concerns. Our near-term efforts focus on optimizing our efficiency and increasing our renewable capacity, allowing us to continue providing energy to global markets. Developing and executing offshore wind facilities is an important part of our medium and long-term growth strategy. Over the next five years, several projects are

expected to become operational and capable of serving regional energy needs while other renewable technologies mature. Our long-term strategy to grow renewable energy capacity and reduce emissions and reliance on fossil fuels remains consistent, with green hydrogen as a key area for potential growth. As we progress with these developments, we remain strategic in the projects we pursue within our 20 GW pipeline to maximize value, and bring a balanced, thoughtful approach to successfully progressing global energy transition efforts.

**We've broadened our commitment to sustainability** with the arrival of Yonni Fushman, our new Chief Legal Officer and Executive Vice President of Sustainability, who brings the experience of a Chief Sustainability Officer who launched and managed a successful sustainability program at another large global organization. This appointment strengthens our shared vision of sustainability for the business.

Last year, despite global volatility, our teams continued to drive performance at the highest levels through strong asset management, strategic investments in existing and new technologies, and forging new partnerships to support our growth.

Our commitment to operational excellence was demonstrated by our ability to deliver high availability levels across our portfolio. This was achieved while our teams in Germany who worked on the Nordsee One offshore wind campaign to successfully replace the main bearing assembly components on 54 turbines. The teams completed the work ahead of schedule, within budget, and without major incidences or significant energy loss.



Our teams worked hard to advance our development pipeline, execute on projects, and add projects in key markets that will allow us to support the global energy transition:

- In Taiwan, Northland entered into a strategic partnership with Gentari for a 49% share in our 60% Hai Long stake, representing a key transaction as part of our partnership model for driving growth. This partnership demonstrates an opportunity for both companies to share the value creation in the development of offshore wind, and will enhance our offshore wind portfolio in Taiwan.
- In Canada, we entered into a shared partnership agreement in battery energy storage with the Oneida Energy Storage Project – the largest of its kind in Canada and amongst the largest in the world – and entered the Alberta power market through the acquisition of a 1.6 GW solar PV and storage portfolio.
- In Scotland, we secured two offshore wind leases, one fixed foundation and one floating foundation with a gross capacity of 2.3 GW that will play a role in the country's move to renewable energy.
- In Colombia, we reached commercial operations on our first solar project in the country, Helios.

Our strong operational performance and ability to successfully progress projects in our pipeline is a direct result of our commitment to work in partnership with governments, local and Indigenous communities, industry peers, project partners, suppliers, and key stakeholders. Global energy transition efforts require strong collaboration, and in 2022, **we continued to develop and strengthen relationships** with new and existing partners, and in local and Indigenous communities. We upheld commitments to meaningfully consult with stakeholders to align our mission and their motivations, looked for opportunities to engage and employ local talent and suppliers, and invested in the communities where we operate, supporting programs that enhance the lives of the individuals and reflect their priorities.

### **We remain steadfast in our commitment to the health and wellbeing of our people and our communities,**

anchored in our core value to take care of ourselves and each other. I'm proud of the steps we've taken to strengthen our health and safety culture, including the recent addition of a world-class HSE leader. Our success depends on our ability to safely and effectively deliver renewable energy and the work that we've done to empower our people globally and regionally with policies, procedures, and tools that they need to proactively ensure a safe work environment for every Northlander.

In 2022, **we realigned our business** to create clearer accountability, empower decision-making, and allow Northland to scale up. As part of this, we recognized a need for new and skilled talent, and added key roles and capabilities across our global company, including in offtake origination, hydrogen, energy storage and risk management. As of January 2023, Northland now operates under a Business Unit (BU) structure organized by our key generating technologies: Offshore Wind, Onshore Renewables, Efficient Natural Gas and Utilities, and Hydrogen/Renewable Fuels.

Looking forward into 2023, I'm excited about the future. Being at the forefront of emerging technologies has always been a part of Northland's DNA, and we are well-positioned to be a significant contributor to industry growth trends. As we shift focus from project origination to execution, we will continue to **drive the energy transition forward**, thinking thoughtfully about what this looks like for our people, our planet, and our communities.

This report and these highlights are just a small subset of all that we've accomplished together in 2022. They represent the cumulative efforts of over 1,000 Northlanders globally who continue to power our communities and businesses forward each day. To each and every one of you – a heartfelt thank you.



**Mike Crawley**  
President and Chief Executive  
Officer

# About Northland

## Our Company

Northland Power is a global power producer. We are dedicated to helping the global energy transition by producing electricity from clean, renewable resources. Founded in 1987, Northland has a long history of developing, building, owning and operating clean and green power infrastructure assets. We own and manage a diversified generation mix, including offshore wind (of which we are a global leader), onshore renewables, and efficient natural gas. We also supply energy through a regulated utility. Northland owns or has an economic interest in 3 GW of gross (net 2.6 GW) operating capacity. We have a strong pipeline of projects in construction and in various stages of development that encompasses over 20 GW of potential capacity. Our head office is in Toronto, Canada, with offices in 12 countries.

## Our Business Strategy

The global energy transition is expected to accelerate over the next decade. Further electrification of the global economy continues to gather momentum, and both the public and private sectors expect to increase decarbonization efforts. This should create significant opportunities for continued growth in renewable power generation and green infrastructure. As a global developer with extensive expertise in renewable projects, we are strategically positioned to compete in this transition, and further grow our portfolio and market share.

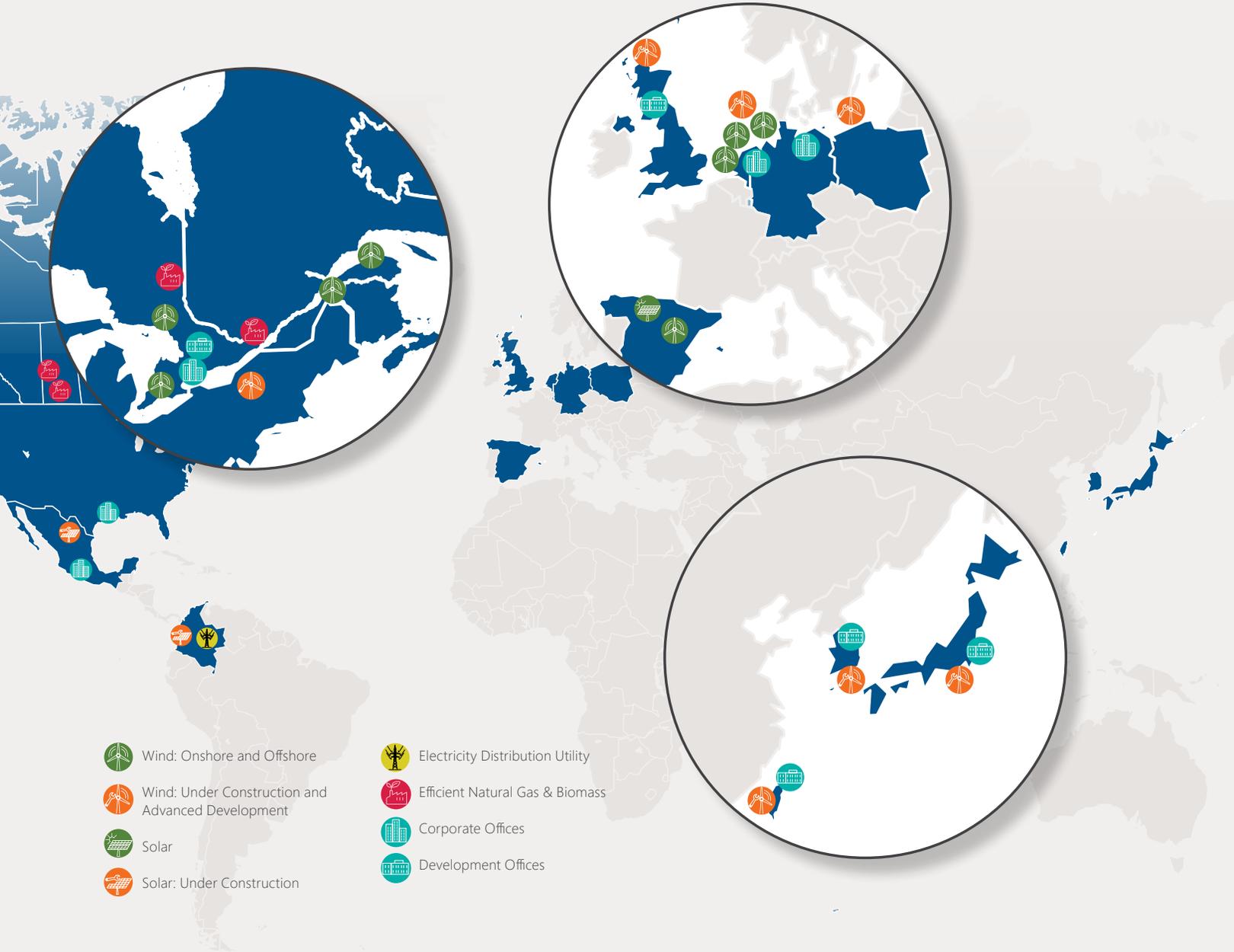
We strive to provide our shareholders with a total return, comprising dividends and share value growth from the management of our energy-related assets, businesses, and investments. Our business strategy focuses on establishing a significant global presence as a sustainable power provider. We deliver on this strategy by developing and operating sustainable projects in key markets supported by long-term offtake agreements with predictable cash flows. Northland optimizes the

performance of our operating facilities to ensure delivery of essential power to our offtake counterparties. We continually reinvest in our assets to ensure maximum efficiency and viability. Through innovation and development, we reduce the cost of renewable power generation. These initiatives drive the comparativeness and economic feasibility of our power generation.

## Significant Events

- On April 7, 2022, Northland completed the sale of our Iroquois Falls and Kingston efficient natural gas facilities in Ontario, resulting in a 24% reduction in gas-fired generation capacity.
- In December 2022, Northland acquired a development portfolio in Alberta. The acquisition adds a solar and battery energy storage pipeline encompassing over 1.6 GW and 1.2 GWh, respectively.
- In December 2022, Northland entered an agreement to acquire a majority interest in the Oneida Energy Storage Project. Oneida is a late-stage, grid-connected, 250 MW/1.0 GWh battery energy storage project in southern Ontario, Canada expected to reach commercial operations in 2025.
- Also in December 2022, Northland signed an agreement with Gentari International Renewables Pte. Ltd. ("Gentari") to sell 49% of our ownership interest in Hai Long, a 1 GW offshore wind project off the coast of Taiwan.
- In January 2023, Northland formally commenced operating under a business unit (BU) structure focused by key generating technology. The BUs are: Offshore Wind, Onshore Renewables, Efficient Natural Gas and Utilities, and Hydrogen/Renewable Fuels.

# Our Global Presence

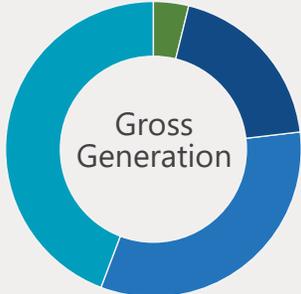


-  Wind: Onshore and Offshore
-  Electricity Distribution Utility
-  Wind: Under Construction and Advanced Development
-  Efficient Natural Gas & Biomass
-  Solar
-  Corporate Offices
-  Solar: Under Construction
-  Development Offices

-  Offshore Wind  
**1,184 MW**
-  Efficient Natural Gas  
**743 MW**
-  Onshore Wind  
**837 MW**
-  Solar  
**262 MW**



-  Offshore Wind  
**4,486 GWh**
-  Efficient Natural Gas  
**3,308 GWh**
-  Onshore Wind  
**1,955 GWh**
-  Solar  
**390 GWh**



# Sustainability at Northland

## Northland's ESG Framework

Northland's ESG framework focuses on the global decarbonization efforts of our renewable energy developments. This includes developing and empowering our people, creating meaningful and collaborative relationships with local and Indigenous communities, and upholding the highest standards of good and responsible governance.

The way we work with other people drives our development approach, aligning their motivation and our mission. We advance energy transition with integrity and deep respect for our internal and external stakeholders. We strive to be trusted partners to, and create shared, long-term value for, the global communities in which we do business.

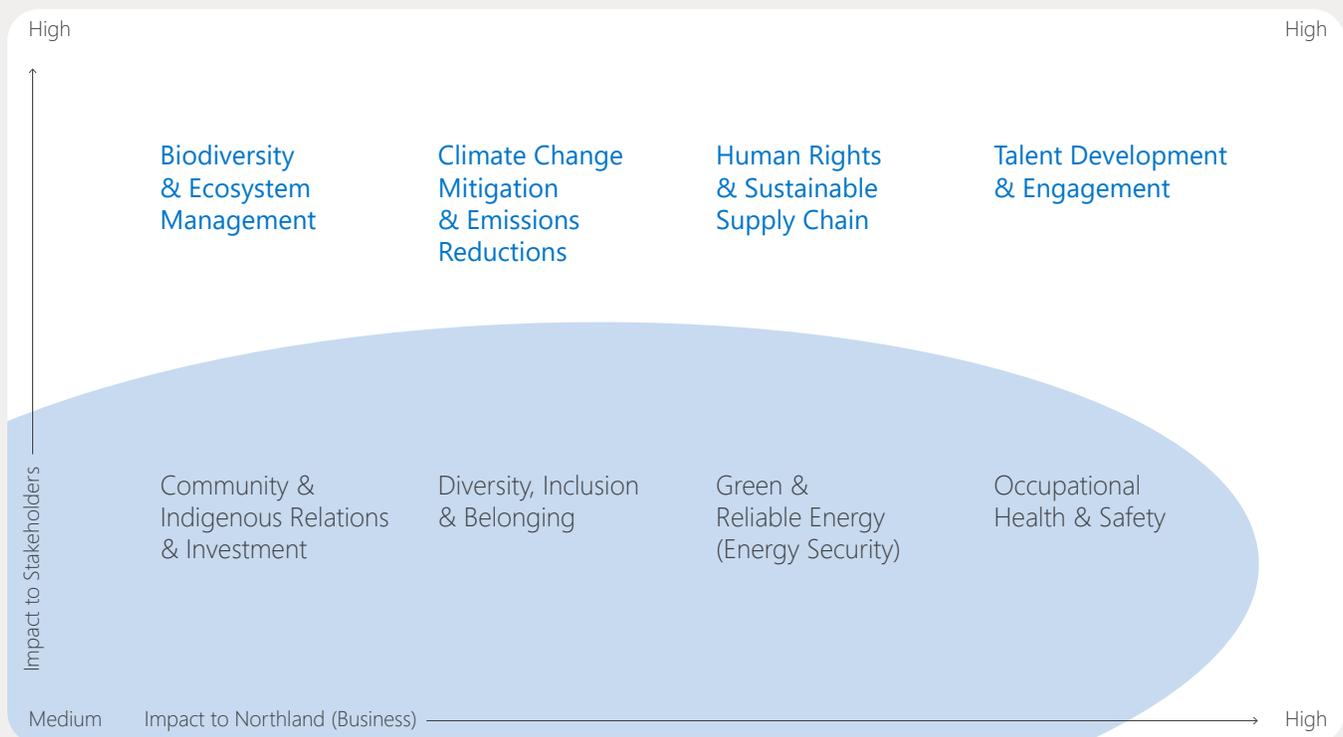
## Materiality

Northland considers how ESG issues impact the long-term sustainability of our business. This includes our ability to access capital, engage employees, build long, trusting relationships with partners, and work with our value chain. Our ability to influence the economy, environment, and people, aligns with our purpose and values.

This report addresses Northland's material ESG issues, which influence our decision making and have the greatest impact on our business and stakeholders. These issues determine where we focus our ESG efforts and reporting. With oversight from the Board, our ESG Steering Committee and the EVP, Sustainability are responsible for our approach to evaluating, managing, and adjusting our strategy for each material topic.

Our 2022 Materiality Assessment included conversations with financial and community partners, a review of industry-specific best practices and guidance, and a review of applicable standards and frameworks. A 2020 employee survey informed the 2022 Materiality Assessment. Our ESG Steering Committee discussed and agreed on the importance of the material issues to our business strategy. Special consideration was given to:

- Impact on our reputation
- Our values
- Increasing shareholder value
- Stakeholder expectations
- Risk management and mitigation



## Priorities

Our ESG efforts have four key focus areas, which include elements of our material issues. In 2022, we implemented policies and processes across each area. We will continue to develop and advance our commitments in 2023.



### Climate change mitigation

Climate change mitigation has always been central to Northland's business strategy. In early 2023, we committed to achieving net zero by 2040. In 2023, we will begin implementing this strategy by focusing on our short-term goals and planning our long-term strategic initiatives.



### Human rights and sustainable supply chain

Having a transparent and sustainable supply chain that respects human rights is imperative to our long-term sustainability strategy. We updated our commitments and policies in 2021 to recognize the complexities of this issue. We strengthened our due diligence practices within our supply chain and when selecting partners, communities where we operate, and our employees. In 2023, we will establish stronger risk identification and due diligence processes.



### Biodiversity and ecosystem management

Northland is committed to strong environmental management. Through project execution, we take a proactive approach to finding solutions that positively impact ecosystems. As we begin constructing and executing several large projects globally, we are focused on minimizing impacts and creating positive change by introducing conservation and alternative practices (i.e. solar grazing<sup>1</sup>) to support operations.



### Long-term business sustainability

Our long-term business sustainability strategy focuses on the long-term sustainability of our physical assets, growing in key markets and retaining our talent.

We consider the long-term footprint of our projects and will continue exploring ways to reduce emissions and waste throughout the project lifecycle.

1. Solar grazing is a practice where grazing livestock such as sheep help control vegetation under solar panels, minimizing impacts to the environment.

# Sustainability at Northland

## ESG Performance Highlights

We're making tangible and meaningful progress toward our priorities. We integrate sustainability into everything we do, and remain wholly committed to making full use of the tools at our disposal to tackle the highly complex challenges of the energy transition.



1,339

employees globally



67%

gross renewable energy generation



12

countries with active development



0

significant environmental incidents



4th

largest offshore wind producer



33%

female Board members



6%

reduction in GHG emissions intensity



50%

female executive officers





**\$3.2M cad**

in community  
investment globally



**\$3.1B cad**

in new green  
financings



**2.6 GW**

net operating  
generating capacity



**0.40**

Total Recordable  
Incident Rate(TRIR)



# Sustainability at Northland

## Our Stakeholders

Northland's stakeholders are individuals who a) have an influential presence or b) are closely affected by our business. The table below lists those parties considered for this assessment.

	Employees and Board of Directors <sup>2</sup>	Communities and Interest Groups <sup>3</sup>	Customers and Government <sup>4</sup>	Shareholders and Capital Markets <sup>5</sup>	Suppliers and Partners <sup>6</sup>
ESG-Related Policies, Codes & Frameworks	●	●	●	●	●
Corporate Reports	●	●	●	●	●
Corporate Meetings & Presentations	●			●	●
Local Engagement, Meetings & Consultations	●	●	●		●
Corporate Updates and Town Halls	●				
Community Investment	●	●	●		●
One-on-one Conversations & Feedback	●	●	●	●	●
Hotlines and Grievance Mechanisms	●	●	●	●	●
Working Groups and Committees	●	●			
Anonymous Surveys	●				
Forums & Conferences		●	●	●	●
Contractual Agreements		●	●		●
Northland Power Website	●	●	●	●	●

2. Current and prospective employees and Northland's Board of Directors

3. Municipalities, non-governmental organizations, associations, indigenous groups, and regulatory authorities in and around communities where we currently operate or are looking to develop

4. Government and corporate off-takers

5. Individuals, investment and pension funds, and the broader investment community, including lenders who hold or are interested in purchasing Northland's equity or debt instruments, and rating companies and third-party reviews

6. The organizations we partner with directly, as well as those within our supply chain and under contract



## Governance

We commit to the highest governance standards and practices. These commitments form the basis of our reputation as trusted and experienced clean energy project developers, owners, and operators. Our strong corporate governance holds us accountable to our shareholders and supports investor confidence.

For details on this year’s corporate governance performance, refer to the [2023 Management Information Circular](#).

### Key ESG elements include:

- Oversight from the Board and related committees on ESG strategy, programs, and disclosure-related matters.
- Updates to our existing ESG-related policies (including our Code of Conduct and Business Ethics and Diversity Policy).
- The introduction of a public Community Investment Policy, a Commitment to Local and Indigenous Communities, and a Supplier and Partner Code of Conduct.
- A commitment to adding diversity at the Board and Executive levels to reflect the communities where we operate.

## Governance Structure

<b>Board of Directors</b>	Northland’s Board of Directors has oversight on ESG-related matters. The Board receives quarterly updates which includes reports on progress against climate-related metrics, risks, and opportunities. The Board also reviews Northland’s annual climate-related disclosures which demonstrate progress towards our stated corporate targets.			
<b>ESG Steering Committee</b>	At the management level the ESG Steering Committee is responsible for all material ESG issues. In 2022 the Committee was co-chaired by the CEO and CFO, and as of 2023 by the CFO and Chief Legal Officer (CLO) and EVP of Sustainability. The Committee sets the Company’s general strategy and overall priorities with respect to ESG matters (including climate-related), and considers, recommends and ensures consistency of appropriate policies, practices, disclosures and managing risks through adequate due diligence.			
<b>ESG Strategy and Reporting Group</b>	The responsibility for the execution and implementation of ESG-related strategies and applicable reporting falls under the ESG Strategy and Reporting group. This group is focused on integrating Northland’s ESG-related strategies throughout the organization and is led by the Director of Global ESG Strategy and Reporting.			
<b>Committees and Working Groups</b>	Northland has multiple working groups and committees which are comprised of individuals of multi-disciplinary departments globally. These committees and groups provide support on developing initiatives, information sharing and overall support of strategy implementation to meet the ESG-related goals.			
<b>Climate Working Group</b>	<b>Joint Health &amp; Safety Committee</b>	<b>Diversity, Inclusion &amp; Belonging Council</b>	<b>Community Investment Committee</b>	<b>Human Rights Working Group (2023)</b>
<ul style="list-style-type: none"> <li>• Energy Market Analysis</li> <li>• Investment Management</li> <li>• Strategy</li> <li>• Project Management</li> </ul>	<ul style="list-style-type: none"> <li>• Health &amp; Safety</li> <li>• Operations</li> <li>• Government Relations</li> <li>• Engineering</li> </ul>	<ul style="list-style-type: none"> <li>• Talent &amp; Fit for Future</li> <li>• Legal</li> <li>• Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Procurement</li> <li>• Communications</li> <li>• Finance</li> </ul>	



We are expanding our capacity to develop, construct, and operate renewable energy assets to support the global energy transition and meet increased clean energy demands. We plan our infrastructure development responsibly, accounting for potential impacts on our people, our communities, and our planet.



# Our Business

## **Material Issues**

- Opportunities and Risks
- Pathway to Emissions Reduction
- Risk Management
- Human Rights and Sustainable Supply Chain

# Opportunities and Risks

## Scenario Analysis

In 2021, we performed qualitative screening and quantitative scenario analyses to identify physical and transitional risks, opportunities, and to assess our business resiliency. The qualitative screening identified specific risks and opportunities. The quantitative analysis assessed the total financial impact of the risks and opportunities under multiple scenarios.

Our goal was to understand how Northland would be affected under a **High-Warming**<sup>7</sup> scenario. This includes the performance of real assets and financial returns. We also wanted to understand the financial impact on our business in a **Below 2°C**<sup>8</sup> scenario. This analysis uses third party climate data to complement existing scenario analysis work being done for our long-term outlook. See our [ESG Performance Index](#) for details on external scenario analysis used.

## High-Warming Scenario

Under a High-Warming scenario, there is little to no further action from governments, business, and society to reduce carbon emissions, leading to severe climate change impacts. This scenario helps us understand how to be more resilient long-term by assessing risks of potential damage to our assets. It also helps us see how changes in weather patterns and increased severity and frequency of storms could impact our assets' operating performance and integrity. Physical impacts were determined using high- and low-warming Intergovernmental Panel on Climate Change (IPCC) pathways, aligned with High-Warming and Below 2°C transition scenarios, respectively.

## Physical risks from chronic weather changes affecting revenue

Changes in weather patterns may cause variability in production results. This risk impacts onshore renewables less, especially within the short term. There remains a risk to offshore operations within the medium and long term. This affects the revenue generated from these assets. While significant changes in mean wind speeds are not expected in the areas where we currently operate,

increased variability is possible. Our current offshore wind facilities have already seen some significant variance in availability year-over-year. In 2021, lower-than-expected winds in the North Sea led to a decrease in generation and revenues. In 2022, these were back to expected ranges.

Over the long term, longer periods of high-heat days could affect the functionality and efficiency at our solar projects and natural gas facilities. This would affect availability and generation. The effects of climate and severe weather events may also change energy demand patterns and market prices in the regions where we operate to the benefit or detriment of our financial results. We hope to mitigate these challenges in the long term through diversification of asset types (onshore and offshore) and of geographic location (e.g., a greater presence in Asia and the east coast of Scotland for offshore wind).

## Physical risks due to acute weather changes affecting tangible assets – operational effectiveness and project timelines

Over the long term, extreme winds and flooding from severe storms could result in downtime, construction delays, production losses and/or damage to 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's operations may rely on assets such as transmission grids, towers and substations owned and operated by third parties. These assets may also be adversely affected by extreme weather events and rising mean temperature, which we have little ability to control.

Similarly, Northland's operating and construction activities could be affected by the impact of extreme weather events on its supply chain. Based on current models used for this scenario, the possible effect on the business is minimal due to the diversification and locations of our current assets and pipeline as well as insurance (although this consideration was not included within the analysis).

<sup>7</sup> Aligns with a high-warming pathway (RCP8.5) where GHG emissions and concentrations in the atmosphere increase unmitigated, leading to an estimated 4.3°C temperature increase by 2100 compared to pre-industrial temperatures.

<sup>8</sup> Aligns with a pathway where actions help limit temperature increases to as close as possible to 1.5°C, and help the planet reach net zero CO<sub>2</sub> emissions, by 2050 compared to pre-industrial temperatures.



## Below 2°C Scenario

Under a Below 2°C scenario, sufficient action is taken by all players to achieve a low-carbon transition and reach Net Zero globally by 2050. This scenario helps us understand how Northland can capitalize on energy generation opportunities, while also considering risks. It helps us assess how a low-carbon transition could impact the demand for, and price of, our generated electricity, and the electricity distributed through our regulated utility. The scenario also explores how regional carbon pricing, based on both High-Warming and Below 2°C transition scenarios, could impact our operating costs.

### Market opportunities with an impact on revenue

Northland's recent and expected short-term growth correlates to the increased demand for accessible and affordable green energy in new and existing markets. As governments and companies look to meet their Paris-aligned emissions targets, powering grids with green energy unlocks greater revenue from new and existing markets.

### Reputational opportunities with an impact on financing – debt and equity capital

Institutional investors and global capital market participants are increasing capital allocation to climate-resilient and sustainable energy companies. We expect to benefit from this trend. Financial products, such as green bonds and other green financings, present additional financing opportunities for us in the future. This will be particularly true over the short and medium term but will continue into the long term as well. Northland is included in 478 ESG funds to date and received over CAD 3 billion in green financings in 2022.

### Reputational opportunity with an impact on human capital – talent attraction and retention

Northland expects to continue attracting and retaining top talent. Our demonstrated climate resilience, focused growth and innovation in renewable energy, global presence, and track record help in this regard. Northland expects these advantages to support greater social capital opportunities, including new business and community partnerships. Our reputation will also help support our primary business of renewable energy development. In 2022 Northland hired 293 new employees.

### Market risk related to attracting specialized skills

Given the industry's growth and the relative newness of some green energy-generating technologies, finding and hiring properly trained workers can be a risk in the short and medium term. Due to its global scope, Northland has access to a wider talent pool when looking to fill critical roles. We have expanded our mobility policy to ensure we can bring the right people to where they are needed most. See [Our People](#) for more details.

### Policy and regulatory risks' impact on operational costs

We expect to see more changes in policies and regulatory requirements around carbon over the next few years. Carbon price increases could have an impact on operational costs. These include increased costs for materials and fuel, and increased carbon taxes. To the extent these changes impact Northland, the impacts would mostly be in relation to our natural gas assets, however currently most of these costs are absorbed by the offtakers. Our sites that rely on fuel generators, non-electrical vehicles, and non-renewable electricity are affected to a lesser extent. Under a stricter policy scenario, project development may also experience some risk through increased indirect cost of goods and services.

# Pathway to Emissions Reduction

Building a sustainable, carbon-neutral future involves balancing the short-term need to meet increasing clean energy demand with the long-term need to deliver accessible and affordable renewable energy for future generations. We commit to the global energy transition by continuing to increase our facilities' efficiency while reducing our reliance on fossil fuels.

Northland was one of 50+ global companies and industry leaders to endorse the Corporate Knights Action Declaration on Climate Policy Engagement (Action Declaration) ahead of COP27 in Egypt. The Action Declaration outlines how industry leaders will engage with policymakers, and work with industry and trade associations to help reduce emissions and decarbonize the economy.

Northland sees tremendous opportunity as we continue developing green energy infrastructure. We are also aware of the risks that exist in the short, medium, and long term due to regulatory changes, shifts in weather, and impacts within our value chain.

## Our three key climate targets:

1. Net Zero over Scope 1, 2 and 3 by 2040
2. 6 GW increase in gross renewable energy capacity by 2030 (from 2019 baseline)
3. 65% reduction in carbon intensity (Scope 1+2/MWh generated) by 2030 (from 2019 baseline)

The scenarios used in this analysis are hypothetical. The potential risks, opportunities, impacts and considerations, and outcomes discussed in this report are inherently uncertain and should be read in conjunction with the information in [Appendix B: Forward-Looking Information](#).

## Our approach to making real, sustainable impacts is phased over the short, medium, and long term.

### Short Term – Present-2025

Optimize efficiency and increase onshore renewable capacity,

- Enhance onshore renewable (wind and solar) capacity.
- Use purchased renewable energy and credits to optimize electricity use at offices and facilities.
- Expand into energy storage.

### Medium Term – 2025-2030

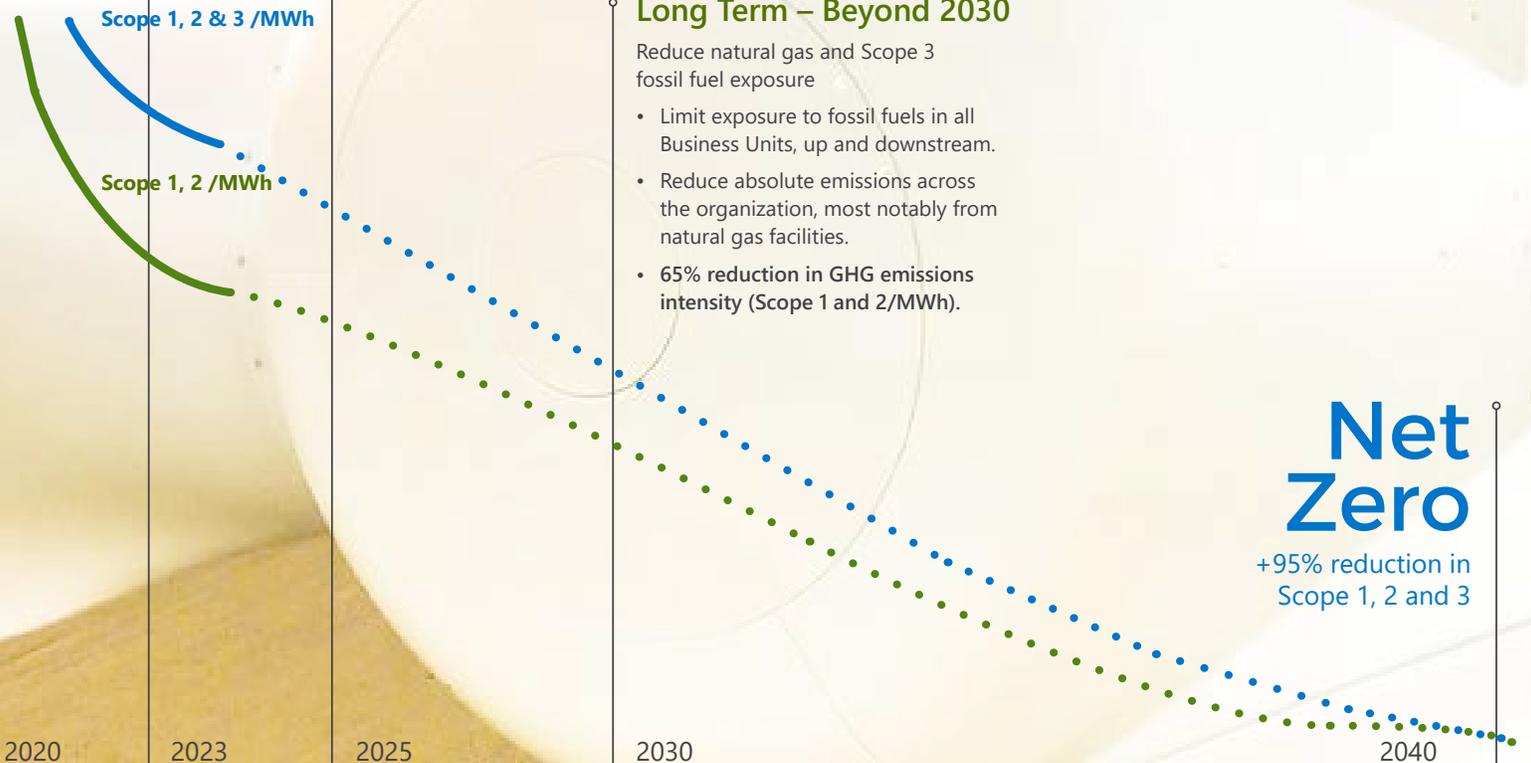
Execute offshore wind projects, reduce direct fossil fuel exposure through operations

- Leverage growth in offshore wind portfolio.
- Continue to ensure asset efficiencies to meet demand.
- Assess viability of electric or alternative fuel vehicles and vessels.

### Long Term – Beyond 2030

Reduce natural gas and Scope 3 fossil fuel exposure

- Limit exposure to fossil fuels in all Business Units, up and downstream.
- Reduce absolute emissions across the organization, most notably from natural gas facilities.
- 65% reduction in GHG emissions intensity (Scope 1 and 2/MWh).



# Net Zero

+95% reduction in Scope 1, 2 and 3

2020

2023

2025

2030

2040

# Pathway to Emissions Reduction

## Short Term – Present-2025

In the short term, Northland does not expect to see a significant difference between the two climate scenarios considered. We see a continued opportunity in increased demand for green and affordable energy.

During this time, increases to our renewable capacity will come from our onshore renewables projects. These projects include solar, onshore wind and battery storage. To reduce exposure and operational costs, we are also focused on reducing emissions at our offices and looking at efficiencies with both onshore vehicles and business travel.

We are working to ensure strong availability and minimal down time for our current assets, especially during high periods of productivity. This allows us to mitigate risks due to potential changes in weather patterns on an annual basis.

### Onshore Renewables

#### Solar and Wind

Our goal is to strengthen and diversify our onshore renewables portfolio. Our primary targets include solar PV, energy storage, and onshore wind projects across Europe, North America, and Latin America. This technology allows for quicker turnaround times from development to operations, leading to an increase in our renewable generating capacity and cash-flows over the next three-to-five years.

Northland's onshore portfolio continues to grow in targeted markets within North America, South America and Europe. At the close of 2022, we had 0.35 GW gross capacity under construction and 1.8 GW gross capacity under late-stage development.

### Energy Storage

Energy storage is an emerging growth area for Northland. This new technology shifts energy from off-peak hours and supplies it back to the grid during on-peak hours to support energy reliability. This ability to ramp-up capacity far exceeds that of nuclear, hydroelectricity or natural gas.

We plan to use storage to build grid resilience, and to increase energy stability and security. This strategy allows for the development of more renewable projects that can integrate into the grid and support governments' environmentally sustainable ambitions.

### Optimizing our Assets

We prioritize maintaining and optimizing our assets to maximize performance and outputs. In the short term, how our assets run affects their availability to generate energy. While short-term gains are important, our assets must also be viable past their planned lifecycle. We conduct regular maintenance and shutdowns to reach the full potential of our assets while ensuring they are built to last.

Our Gemini Offshore Wind Park was the first single-purpose offshore wind project to achieve ISO55001 certification. The facility has maintained its certification annually, integrating an ISO55001-certified Quality Management System and ISO45001 Health and Safety certification into an Integrated Management System (IM). Our regulated utility Empresa de Energía Boyacá S.A. E.S.P's (EBSA) asset management system is certified in compliance with ISO55001. For more details on our asset management process, see our [2021 Sustainability Report](#).



## Featured Story Highlights

### First Wind Turbines Installed at New York Onshore Wind Farms

In July 2022, Northland celebrated the installation of the first wind turbines at our Bluestone Wind Farm. The Bluestone Wind Farm is a 112 MW onshore wind project located in Broome County, New York. Bluestone will connect to the existing New York State Electric and Gas Corporation transmission lines, delivering enough renewable energy to the New York State grid to power more than 54,000 homes. Bluestone will be our first onshore wind project to be energized in the United States. Read more about our Bluestone Wind Farm [here](#).

### Canada's Largest Battery Storage Project Moves Forward

In early 2023, Northland closed our first strategic investment in storage with our participation in the Oneida Energy Storage Project in southern Ontario. The project is a milestone for the province's burgeoning energy storage sector. Once completed in 2025, Oneida will deliver critical capacity and improved efficiency to Ontario's energy grid and will boost the province's clean energy storage from 225 MW today to 475 MW. It is expected that Oneida will help Ontario reduce GHG emissions by 4.1 million tonnes, or the equivalent of taking 40,000 cars off the road every year.

The project is being developed in partnership with NRStor Inc. (NRStor), the Six Nations of the Grand River Development Corporation (SNGRDC), and Aecon. Read more about Oneida [here](#).

### Proactive Asset Management at Nordsee One

Our Nordsee One offshore wind farm in Germany is located approximately 40 km north of the island of Juist. It consists of one offshore substation platform and 54 wind turbines installed in water depths between 26-29 m. The wind farm began commercial operation in December 2017.

In January 2021, our teams identified a serial defect on the main bearing in several wind turbines. This meant repairing a major component in the entire fleet of turbines, without risking interruptions to the electricity grid.

Our experts exchanged the rotor shaft assembly of 10 turbine generators in 2021, and another 44 by the fall of 2022. We managed to replace these critical components on all turbines while maintaining the facility's ability to operate at 95 per cent capacity. The campaign was completed on budget and ahead of schedule. Most importantly, there were no major incidents or instances of energy loss. Read more about Nordsee One [here](#).

First wind turbines being installed for Bluestone Wind Farm

# Pathway to Emissions Reduction

## Medium Term - 2025-2030

We see an opportunity in the industry due to an increased demand for renewable energy capacity coupled with larger-scale projects gradually coming online. Pending government and industry progress, we may begin to see varying risks and opportunities. These risks include those that apply to the short term, as well as additional risks and opportunities as outlined below.

In the medium term, Northland expects that significant increases to our renewable capacity will come from our offshore wind projects. We will also continue meeting the capacity needs of the communities where we operate by being a dispatchable provider of energy from efficient natural gas and continuing to build out our onshore renewable generation and storage capacity.

We can reduce our operating facilities' fuel consumption by re-imagining how we power offshore wind operation and maintenance vessels. We are exploring ways to reduce our Scope 3 exposures to capital goods to meet our targets and mitigate potential operational expenditure risks.

We expect to see, and will continue to monitor, global regulatory developments as part of our resilience strategy. We will also manage any financial and business risks associated with our activities.

We take preventative measures to anticipate the risks associated with greater physical changes caused by climate change. We optimize the physical resilience and site design of our offshore wind projects based on local climate data, including outlying trends. Operations teams monitor weather and expected generation on a regular basis. Northland mitigates these risks through its development and maintenance processes, and with the purchase of insurance<sup>9</sup> and/or the inclusion of provisions under applicable construction agreements with contractors. For more information about insurance, please refer to the Risk Factors in the AIF.

## Offshore Wind

Developing and executing offshore wind facilities is an important part of our growth strategy. These facilities hold vast potential and are free of the constraints found on land.

We are investing today in our offshore pipeline, which will come online over the medium term. These projects are capital intensive, come with significant development risks and take years to bring online, but can deliver significant increases to our renewable energy generation capacity. During the medium term, several projects are expected to become operational and capable of serving regional electricity needs.

Our offshore wind strategy focuses on developing strategic financial partnerships globally to enable the development of larger-scale projects. This means finding the right partners to bring into existing projects and new opportunities.

In this rapidly growing industry, we will stay committed to our ESG principles while we originate, secure, fund, and build sustainable offshore wind projects. We are committed to working with suppliers that share our principles, are fit for purpose, and are focused on ESG performance.

At the close of 2022, we had 1.2 GW of operating assets and 2.2 GW gross capacity in late-stage development, including our Baltic Power project in Poland and the Hai Long project in Taiwan.

<sup>9</sup> Insurance policies may not provide coverage for certain events, or coverage may be insufficient to compensate for all losses suffered by a project. Such insurance may not continue to be available at all or at economically feasible cost. As such these potential risks are included in planning and construction design as well to help mitigate the impact.



## Featured Story Highlights

### New Partnership Blossoms in Taiwan

Northland is developing one of the world's largest offshore wind farms off the coast of Taiwan. The Hai Long project will carry a total installed capacity of over 1 GW. In December 2022, we formed a strategic partnership with Gentari Renewables Pte Ltd to bring them on as a 29.4 per cent partner in the Hai Long project. Northland will lead Hai Long's construction and operation.

This partnership is a prime example of how we intend to grow and mitigate risk by partnering with organizations that share our mission of building a carbon-neutral future. Together, we will help expand the Taiwanese offshore wind market and advance the country's broader decarbonization efforts.

### The Role of Efficient Natural Gas in the Global Energy Transition

As renewable capacity gets established in the coming years, efficient natural gas will play an important role in meeting growing energy demands. This lower-emitting and affordable type of energy production remains a crucial part of the short- and medium-term energy transition. Northland sees efficient natural gas as a crucial part of a diversified and reliable energy mix over the next 10 years. This allows us to continue providing affordable, cleaner and accessible energy to the markets we serve.

We understand that carbon reduction is not linear. We commit to reducing our intensity by offsetting higher-emitting natural gas generation with an increase in renewable generation. We continue to seek ways to reduce run times and retrofit facilities where possible to produce energy more efficiently.

In the long term, we will continue to strive for solutions to reduce our emissions from fossil fuels and natural gas to meet our net zero commitments.

# Pathway to Emissions Reduction

## Long Term - 2030-2040

Over the long term, the High-Warming and Below 2°C scenarios begin to see real differences in risks and opportunities. Under a Below 2°C scenario in line with our business strategy, we continue to see opportunities that outweigh any increased risk of higher costs. We also continue to see some risk related to our natural gas exposure. We commit to reducing these emissions, especially over the long term.

Under a High-Warming scenario, our physical assets may experience greater impacts related to operational efficiency due to more warming days, as well as extreme weather events. These are not expected to have a significant impact on revenues.

Our long-term strategy to grow renewable energy capacity and reduce emissions and reliance on fossil fuels remains consistent. One key area of potential growth is around renewable fuels, including green hydrogen.

## Green Hydrogen

The European Union (EU) has strengthened its promotion of low-carbon and renewable hydrogen as resources to support decarbonization and reduce dependence on imported fossil fuels. In 2022, 20 key policy actions were implemented in five areas, including creating a hydrogen market and infrastructure, international cooperation, and investment support.

ENERGY STORAGE

CAUTION  
9' 6.5" HIGH  
8' 6" WIDE  
CONTAINER



**H<sub>2</sub>**  
**HYDROGEN**

### **At the Forefront of Canada's Emerging Green Hydrogen Industry**

Northland sees green hydrogen as an important opportunity for Canada. The country has world-class renewable resources in remote and low-populated areas. Being able to harness this renewable energy to create transportable "green" molecules will help support energy demand without supply.

This is especially true on the east coast of Canada. There is great potential for onshore and offshore wind facilities to supply regional energy needs, and to drive a new green hydrogen industry. By converting green hydrogen into green ammonia, Canada's east coast could provide energy security across the Atlantic.

Northland is currently exploring the feasibility of Canadian green hydrogen export opportunities. Green hydrogen export could boost economies and create jobs in Atlantic Canada, support European countries facing energy crises, and advance our decarbonization goals.

# Risk Management

Northland's Enterprise Risk Management (ERM) framework is designed to implement structured processes and tools to identify, mitigate, and monitor key enterprise risks and support our strategic objectives and long-term sustainability goals. The ERM program is under the responsibility of the CEO, CFO, and CLO, with accountability to the Board.

The program includes the following key elements:

- 1) Integration of ERM with strategic planning
- 2) Risk identification and assessment of new risk events
- 3) Development of risk mitigation responses and action plans
- 4) Monitoring risk and controls changes, and reporting on the process' results

Northland assesses key enterprise risks based on three criteria: (i) impact, (ii) likelihood and (iii) the effectiveness of existing management controls.

As part of our ERM program, we evaluate our key enterprise risks and mitigating controls on a quarterly basis. Risk owners and senior leaders across the company are accountable in this process.

As we advance our strategic priorities and expand into new markets, we account for risks and opportunities associated with project delivery and organizational governance and growth. We consider how we manage key issues, such as occupational health and safety, our supply chain, human rights, community engagement, and environmental impacts, and respond accordingly through local and corporate-wide governance, programs and initiatives.

## Climate-related Risk Management

Managing climate-related risks is an important part of our decision-making process throughout the project life cycle. Risk management is integrated within our business processes and across the project life cycle.

We identify and assess climate-related risks throughout the project life cycle. These risks are brought to the ESG Steering Committee and, where relevant, to the CEO Risk Committee. We integrate the identification, assessment, response planning, reporting, and monitoring of these risks into our business activities. Ownership of key risks is delegated to the functional leads across the organization. Identified risks are escalated to the Executive Team and Board of Directors. They are monitored to ensure appropriate responses.

We mitigate risks by assessing their magnitude against the feasibility of projects under consideration and the actions required to minimize the likelihood of these risks. We also mitigate them by transferring risk through appropriate insurance (subject to the limitations described in the Risk Factors section of the AIF). Our assets under development are built to meet industry design standards that consider physical risks, such as the increased frequency and severity of storms. We minimize risks by procuring solar PV modules or wind turbines that are specifically designed for the environment they will operate in over the short, medium, or long term. We reduce risks to the performance of our assets through our operational expertise, continuous monitoring, and maintenance.

When assessing the significance of any risk, it's important to consider our ability to manage and mitigate the effects on project costs, cash flows and returns, as well as reputation. We use enterprise-level criteria to determine the materiality and priority status of each risk. These criteria assess the potential effects on our company-wide objectives, including financial performance, strategy, and operations.

## Data and Cybersecurity

As operators of critical electricity infrastructure, Northland views data and cybersecurity as an essential part of our risk management and good business practices. We continuously monitor and assess threats, risks, and vulnerabilities. We mitigate risks through prevention, detection, and response controls in line with global best practices. We also ensure our employees are regularly trained in cybersecurity to encourage the security mindset. For more details on Northland's Data and Cybersecurity policies and processes please see our [2021 Sustainability Report](#) (page 40) as well as our [AIF](#) (page 37).

## Emergency Preparedness

Each of our facilities maintains an emergency response plan. They regularly complete drills and exercises to test the plan and strengthen our emergency preparedness. We have site-specific processes in place to identify and respond quickly and effectively to risks in times of crisis.

Our emergency response plans include:

- Emergency and crisis communication and escalation processes
- Specific strategies for spills, fires, working near open bodies of water, working at heights, pandemic preparedness, cybersecurity incident response and operational emergency procedures, among others that are relevant to the asset type and location

## Accountability, Ethics and Transparency

Northland is committed to the highest standards of business ethics and corporate governance. We commit to excellence in transparency, integrity, and accountability to shareholders. Our global [Code of Business Conduct and Ethics](#) (the Code) is founded on our values, outlining the ethical, legal and compliance expectations for all of Northland's employees, officers, directors, consultants, and representatives. The Code includes guidelines for upholding human rights, health and safety, respect in the workplace, confidentiality of information, social responsibility, regulatory compliance, and ethical and honest conduct. The Code was updated and affirmed by our Board in 2022.

All employees sign Northland's Code during the onboarding process and are informed of changes and updates on an annual basis. The Code also refers to related policies, including our [Anti-Bribery Anti Corruption policy](#). These are reviewed annually, and all employees must undergo mandatory training around them.



A member of EBSA's customer service team

# Human Rights and Sustainable Supply Chain

## Committing to Upholding Human Rights

We commit to upholding human rights in accordance with the United Nations (UN) Guiding Principles on Business and Human Rights, the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.

In 2022, there were no incidents of violence involving the rights of Indigenous people, no incidents of child or forced labour, or any other human rights violations.

### Our policies

Our human rights policies can be found within our Code of Conduct and Business Ethics, and in our Supplier and Partner Code of Conduct. These policies apply to internal activities and conduct, our work with partners in communities where we conduct business, and to activities within our value chain, including, but not limited to, prohibiting the use of child and/or forced labour.

Our policies maintain that all employees and contractors have the right to equal employment opportunities, freedom of association, dignity, privacy, and the right to safe and fair work without fear of discrimination or violence based on ethnic background, culture, religion, sexual identity or orientation, race, gender, ability or other factors.

### Due diligence

As we grow and expand into new regions, the risk of human rights issues increases. We are committed to mitigating these risks for our people, our communities and within our business. Our Commitment to Local Communities and Indigenous People is centered on building strong relationships, including engaging in meaningful consultation with these communities early, often and throughout the life of our projects. This helps us develop a comprehensive understanding of local and Indigenous community perspectives.

We acknowledge the risks within our value chain. We conduct thorough and proper due diligence in parallel with our agreements, and through our contractual language. We conduct reviews at each stage of the project life cycle, from initial market analysis to supplier due diligence and monitoring. We work with our partners and suppliers to promote greater transparency and minimize the risk of violation of our codes of conduct.

### Remediation

Northland commits to remediation for any incidents that occur within our operations, the communities where we operate, or through our value chain. We have local grievance mechanisms at every project, from construction through operations. We also have a [Whistleblower Policy](#), which applies to all employees, officers, directors, contractors and suppliers of Northland and its affiliates, as well as members of the community. Northland will investigate all allegations and protect those reporting in good faith from retaliation. Supporting and protecting those who report wrongdoing encourages all employees to observe the highest standards of business and personal ethics in accordance with our principal business and practices.

### Training

To support further awareness and accountability for our commitment, in 2022, we launched our first mandatory training on Modern Slavery and Human Rights. This training focuses on providing Northland employees with an overview of modern slavery, its global prevalence, and how to combat it through proper business practices. The training includes an overview on supplier due diligence, highlighting the importance of early detection of human rights risks within the supply chain. In 2023, Northland will look to translate this training into multiple languages and find new opportunities to engage employees to raise awareness of human rights issues.



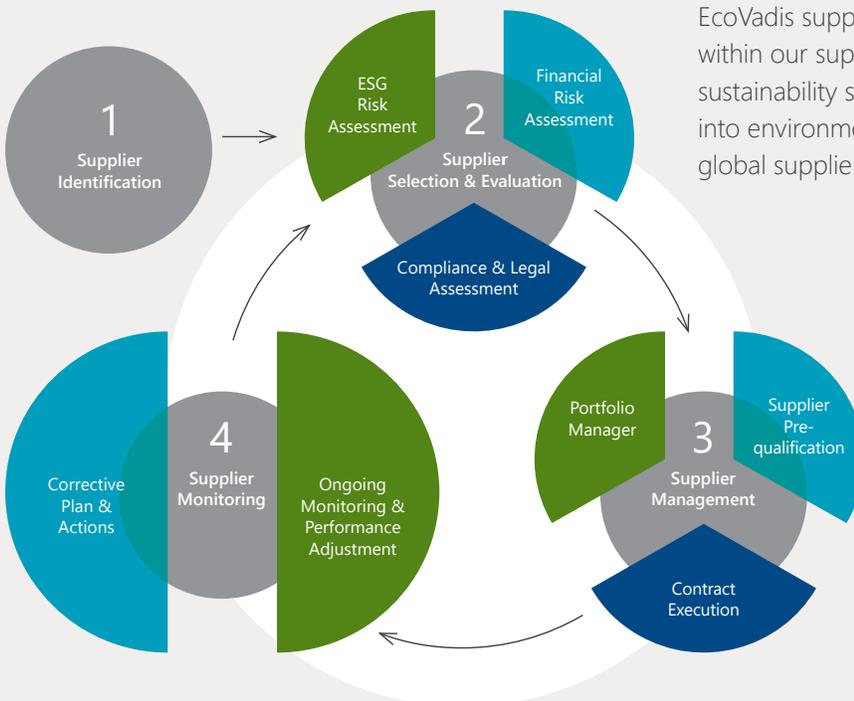
## Building a Sustainable Supply Chain

Each year, we work with over 2,000 suppliers and vendors around the world. It is imperative that we clearly articulate our ESG values and what we stand for as a company to this entire supplier ecosystem.

While our construction efforts are mostly supported by our largest suppliers, we also have long-term contracts for operations, maintenance and corporate services across our value chain. In line with our [Supplier and Partner Code of Conduct](#), we commit to working with our suppliers to ensure long-term sustainability and the upholding of our values and commitments to our planet and people. This includes, where possible, the growth of local industry and supporting local supply chains.

Our Supplier and Partner Code of Conduct is both a business agreement and social contract to help guide our partner and supplier relationships. It helps mitigate risks and lays the foundation for honest and transparent relationships built on accountability and shared responsibility.

### Supplier on-boarding best practice: 360° view on suppliers and partners



“We seek to create partnerships with our suppliers, not only contractual arrangements. We share in our commitments with them, and collectively push for change, working seamlessly to have greater impact. We’re not willing to compromise on our core values, and we won’t pursue work with a supplier that requires us to do so.”



**Martijn de Heer,**  
Global Head of Supply Chain and Procurement

### A tool to ensure suppliers meet our ESG expectations

Northland has partnered with EcoVadis, a well-respected provider of business sustainability ratings, intelligence, and collaborative performance improvement tools for global supply chains. This partnership has become an intrinsic part of how we onboard our suppliers.

EcoVadis supports better due diligence and transparency within our supply chain. It provides an actionable sustainability scorecard that arms us with detailed insight into environmental, social and ethical risks within our global suppliers.



While our work powers communities around the globe, Northland is powered by our people. We prioritize building a strong, diverse, and differentiated global workforce to support project development, innovation and execution of our 20 GW renewable energy pipeline. We value great talent and invest in our people accordingly.



# Our People

## **Material Issues**

- Attracting Top Talent
- Engaging and Developing our People
- Prioritizing Occupational Health & Safety
- Committing to Diversity, Inclusion & Belonging (DIB)

# Attracting Top Talent

## Building our Talent Pipeline

In 2022, we revamped our talent acquisition strategy on the back of a strong employee value proposition (EVP). Our EVP articulates the opportunity at Northland to do something special in the renewables industry. We bring our EVP to life in two ways. Our hiring managers and Talent Acquisition Partners tell a consistent, compelling story about working at Northland, customized based on our target talent segments. And we showcase our current employees through our updated Careers Page and social sites. In 2022, we launched our Employee Referral Program to incentivize our people to refer talented, high-performing, and diverse candidates to join Northland. Through our attraction efforts, we added 293 team members to our business in 2022.

## Driving a Collaborative Culture

Our values are the foundation of our culture. They represent what we stand for, inform who we hire, and guide how we evaluate, develop, engage and empower our people globally. Northland's leaders have a crucial role in employee engagement. They are ambassadors for our culture, and we work to ensure they have the skillsets and competencies to fill that role. Our executives have undergone leadership assessments, including psychometric testing, to identify strengths and gaps in their ability to build a dynamic global culture that is felt and fostered through all teams.

"We have undergone a positive culture shift focused on accomplishing our goals together through a common vision that promotes a high level of trust, transparency, and team building. We foster culture-building opportunities throughout the organization. And we commit to continued learning through insights, quarterly in-person workshops, and open communication between leaders and their respective teams."



Rachel Stephensen,  
Chief People Officer



## Placing Employee Engagement at the Heart of Everything We Do

Engagement is about two-way communication. In 2021, we introduced our first global engagement survey to help us understand how our people feel about topics ranging from culture, to collaboration, to decision making. In 2022, we launched our second annual survey and achieved a global engagement score of 72. After hearing from 82 per cent of all Northlanders, we determined the biggest opportunities to increase engagement were:

1. **Career development:** Focus on supporting employee development efforts so people can grow their career at Northland.
2. **Global connectivity & collaboration:** Focus on enhancing information flows, understanding of business goals (outside of own functional area) and connecting with other teams.

Listening to and embracing our peoples' feedback and acting on the above focus areas were key to our success in 2022. Our continuous listening strategy includes our annual engagement survey and other pulse surveys. It has allowed us to know whether the actions we take each year have made an impact on our peoples' experience at Northland.



## Global Clean Up Day

As part of Global Clean Up Day during the week leading up to and/or directly following September 17 (many sites celebrated on September 14th in conjunction with Northland's 35th anniversary), Northland coordinated regional clean ups at parks and green spaces near our offices, facilities, and project sites globally. More than 300 employees across 10 sites and three continents, volunteered their time to support our local communities. This number represents a quarter of our total global employee base.

Together, we were able to collect and divert over two tonnes of waste from the natural environment.

**Clockwise from top left:** Employees at Northland's Toronto office participating in a cleanup at a local park. Employees at Northland's Hamburg office participating in a local cleanup. Employees at Northland's regulated utility, EBSA, cleaning up their local communities.

# Engaging and Developing our People

## Powering up Careers at Northland

Our Global Engagement Survey results identified career development as a focus area and engagement driver. Powered by this feedback, we celebrated Career Month in September by sharing information and tips on how our people can develop their career at Northland. Career Month included the launch of LinkedIn Learning, new internal mobility guidelines, ideas on how our people can shape their career, and highlighted some of the amazing careers from across Northland.



### LinkedIn Learning Initiative

In 2022, we launched LinkedIn Learning to all Northland employees. This provided Northlanders globally with access to over 15,000 courses on business, leadership, and technology topics, with recommended courses mapped to Northland's core and leadership competencies, values and Diversity, Inclusion and Belonging (DIB) principles.

## Enhancing our People's Skills, Knowledge, and Competency

Supporting the development of our people through required and voluntary training is an important part of our talent development program. Most training is supported at a site or function level. Our people are encouraged to take courses and join conferences to develop their skills and knowledge. Corporate-led training in 2022 included health and safety training for new employees and specific employee groups, mandatory anti-bribery, anti-corruption, and human rights training, as well as mandatory DIB training for people managers. We also offer tuition reimbursements for education costs that enhance organizational effectiveness and productivity.

## Creating a High-performance Culture

Our performance management process allows for employees and their managers to establish goals, share continuous feedback on performance throughout the year, and recognize and reward our people for their contributions to Northland.

In 2022, we revamped our five-point performance scale to include an assessment of what was achieved (accomplishment of goals and the impact of these contributions on business results) and how the work was accomplished (observable behaviours that are tied to our core competencies). All permanent employees and those on long-term fixed contracts who started prior to October 1, 2022, took part in the 2022 performance process.

For more details, see our competency framework and values in our [2021 Sustainability Report](#) or visit [the Careers](#) page on our website.

## My Career Journey at Northland

We asked Northlanders to share their career journey with us. Here are some of the highlights



“Northland has helped my education, significantly supported me in my personal and professional development, and helped me gain new skills. I’ve overcome many challenges and have been able to grow thanks to good feedback and colleagues who were able to answer my questions and give me guidance.”

**Joschka Klauke,**  
O&M Package Manager – Hamburg, Germany



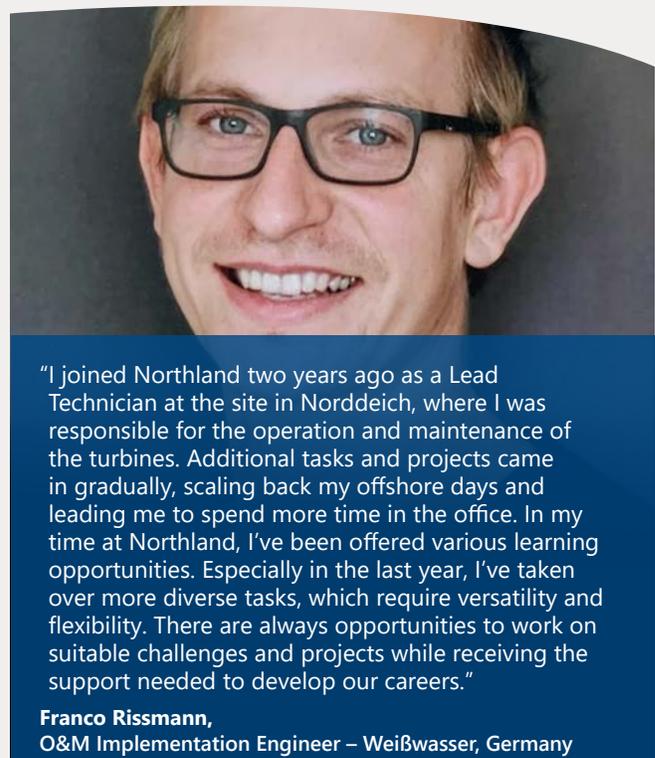
“I joined Northland in 2021 as the director of government relations for the Hai Long Project. I joined at a critical time for the project, allowing me to get involved right after onboarding. Under my supervisor’s leadership, I have had the opportunity to work closely with the Canadian Trade Office in Taipei to organize the reception for government officials from Canada and to communicate with central and local stakeholders. Seeing my work contribute to Northland’s growing presence in Taiwan is very rewarding and inspires my professional development. I consider myself lucky to work with a team with diverse backgrounds and a shared passion for improving the planet.”

**Gina Wu,**  
GR/PR Director, Hai Long Project – Taipei, Taiwan



“I’m lucky to have worked across three functional areas of the business: Operations, Development and now Finance. I’ve grown a lot in my years at Northland and have found my time here to be rewarding professionally and personally. I value how Northland is a non-hierarchical organization. I know a lot of organizations say that, but here I’ve always felt that collaboration and open dialogue across all levels of seniority are welcomed and encouraged. It’s unique for an organization of Northland’s size to be able to foster that kind of environment.”

**Lara Ballantyne,**  
Senior Manager, Financial Partnerships – Toronto, Canada



“I joined Northland two years ago as a Lead Technician at the site in Norddeich, where I was responsible for the operation and maintenance of the turbines. Additional tasks and projects came in gradually, scaling back my offshore days and leading me to spend more time in the office. In my time at Northland, I’ve been offered various learning opportunities. Especially in the last year, I’ve taken over more diverse tasks, which require versatility and flexibility. There are always opportunities to work on suitable challenges and projects while receiving the support needed to develop our careers.”

**Franco Rissmann,**  
O&M Implementation Engineer – Weißwasser, Germany

# Prioritizing Occupational Health and Safety

Health and safety are our top priorities at Northland. We maintain the highest standards – in line with our Global Health and Safety Policy (H&S Policy) and Core Principles – and continuously improve our processes, ensuring they are integrated and applied globally.

Our corporate goals and global H&S Policy drive our occupational health and safety practices at the project and site level, allowing us to identify and manage issues through our policies, procedures, and tools. Health and Safety department heads visit our sites regularly to ensure direct communication with employees and contractors. Each site, regardless of stage of project lifecycle, has a structured safety management system that identifies hazards and manages risks in line with best practices.

“At Northland, we are committed to advancing a safety culture globally that embeds the mental and physical well-being of our employees in daily work activities.”



Ana Reyes,  
Director of Global Health  
& Safety

## Leadership Safety Walks

Leadership safety walks are a key method by which we enhance our emergency preparedness. They reflect our effort to not only impart a culture of safety, but also to live one. Executives visit Northland facilities equipped with specific information so that they can ask the right questions.

These are not checkbox exercises – instead, they are tools to help measure Northland’s safety culture and capture diverse employee perceptions. Key learnings are then brought back to the leadership table to be scrutinized, keeping safety top of mind at Northland.

## Global Health & Safety Risk Management Process

- Assessment
- Planning
- Implementation
- Monitoring and Reporting
- Incident Review
  - Engage third parties for independent review to ensure limited bias throughout established processes

## Incident Management

Northland monitors and reports on all incidents, whether minor or significant. We do this in compliance with local laws and regulations and in alignment with our policies and procedures. Northland also conducts regular safety observations, monitoring and evaluation - of both lagging and leading indicators - for continuous learning and improvement.

## Contractor Health and Safety

Northland requires all contractors and partners to comply with company-led, jurisdictional, and site-specific occupational health and safety acts, regulations, codes, protocols, and policies to uphold industry and Northland safe-work practices and standards. Northland adheres to internationally recognized occupational health and safety standards, including the International Standards Organization (ISO).

Additionally, each of our locations maintains its own emergency response plan, including risk assessment processes in place to help employees identify hazards in the workplace and on project sites. Employees regularly complete drills and exercises to reinforce our emergency preparedness.



## Core Health and Safety Principles

<p><b>1. Systems</b></p> <p>Our Safety Management System (SMS), in place at every site, helps us monitor, measure, evaluate and report on health and safety performance targets in all countries. It is regularly reviewed and improved based on emerging information, cementing clear safety requirements and compliance standards for all project and facility types.</p>	<p><b>2. People</b></p> <p>Northland’s full-time safety leader is dedicated to building culture and awareness around this vital issue. This role is complemented by internationally certified safety leaders in all business units. All operational sites and corporate offices have Health and Safety representation, or formal Joint Health and Safety Committees where required consisting of management and worker representatives who meet regularly to identify issues, recommend solutions, follow up on actions items, and ensure regular inspections of working environments. We are also committed to cross-operational discussions to help share best practices and engage employees on health and safety topics.</p>
<p><b>3. Preparedness</b></p> <p>A global Risk Management Program ensures we identify, assess and report on all risks consistently across Northland. Each facility maintains its own emergency response plan and teams complete regular safety exercises. Meanwhile, health and safety training programs are tailored to all employees, offices and sites on such workplace topics as heat stress, chemical safety, materials handling, and behavior-based safety. Northland commits to further enhancements to training programs and management systems to ensure employees and systems are up to date.</p>	<p><b>4. Leadership</b></p> <p>Health and Safety is embedded in Northland’s governance and is a priority agenda item at every quarterly Board meeting. Our Executive team consistently analyzes safety performance, risks and planned activities, and receives quarterly updates from all regional offices and facilities. Beyond the responsibility and accountability taken by Senior Management, our Board also provides oversight, confirms health and safety policy and reviews performance for all regions.</p>

### Learning and Continuous Improvement

In 2022, despite a reduction in our total recordable incident rate and an increase in number of observations and safety walks, we had a life-changing event, the first of its kind in over 25 years at Northland. While the incident was non-fatal, it did prompt a thorough review of the incident, with both internal resources as well as an external, independent review to help understand the root causes for such an event. Northland’s leadership has reinforced our commitment to effective health and safety management and to the responsibility held by leadership and each employee.



# Committing to Diversity, Inclusion and Belonging (DIB)

It takes ongoing commitment and effort to create an inclusive environment where everyone is empowered to do their best work, differences are welcome, practices are equitable, and a sense of belonging is widespread.

Our commitment to fostering an inclusive and equitable environment is entrenched in our values and part of everything we do at Northland.

## What Does DIB Mean to Us?

**Diversity:** The seen and unseen characteristics that make people unique. This includes age, gender, identity, ethnicity, disability, sexual orientation, education, and national origin.

**Inclusion:** The behaviours and cultural norms that make people feel welcome at Northland.

**Belonging:** The individual sense of acceptance.

## Moving Forward Together

Our commitment to DIB spans functions and geographies at Northland. Everyone shares a role in maintaining our fair, inclusive culture. Our executives own our DIB strategy. It is led by a DIB Executive Champion, which is a rotating position that allows for different members of our executive leadership team to spearhead DIB initiatives. The DIB Executive Champion works closely with our Global DIB Lead and local DIB Champions to align our initiatives globally.

“For me, diversity, inclusion and belonging are all about empathy. Having empathy for other people’s experiences and how that shapes their views and opinions. An empathetic leader tries to create an environment that is safe for individuals to be their authentic selves and share their views and opinions. This diversity of thought can lead to better decisions.”



**Michelle Chislett,**  
Executive Vice President,  
Onshore Renewables and  
DIB Executive Champion

## Promoting Balance and Well-Being

Northland is committed to the well-being of our employees, while recognizing the struggles of well-being, mental health, and work-life balance over the last several years. In 2022, we rolled out a new Global Wellness Program that reimburses employees up to \$300 (or the equivalent in local currency) annually for expenses that support physical and mental well-being, such as fitness activities and meditation programs.

Since 2021, Northland has encouraged all teams to collaborate on flexible work arrangements in support of hybrid workstyles. We also provided new resources for people to improve their personal well-being – and to support others. These included a training exercise to learn how to help someone who is struggling, and webinars on mental health, empathy, and inclusion in the workplace.

## Advancing our DIB Commitments

Northland's executive team is committed to advancing the following six objectives:

Commitment	Initiatives
Creating a trusting environment where our people feel secure and confident enough to engage in constructive dialogue	In 2022, we piloted DIB Learning Socials. DIB Learning Socials are peer-to-peer forums where Northlanders can connect informally to share lived experiences and discuss topics that matter to them, judgement-free space. Our piloted Learning Social on Inclusive Language involved watching a TED Talk by Fahad Saeed which explored intersectionality. Participants then met to discuss and reflect on how communicating about our intersecting identities brings us closer together.
Acknowledging that advantages and barriers exist	In 2022, we signed a gender equality pledge through Equal by 30, committing to achieving equal pay, equal leadership, and equal opportunities in the energy sector by 2030. We have achieved equal gender representation on our executive team, with almost half (44%) of our executives identifying as women.  Northland has partnered with Catalyst, a non-profit devoted to building inclusive workplaces. Northlanders can access Catalyst's online hub of resources on topics such as unconscious bias, microaggressions, inclusive leadership and bystander intervention. In 2022, senior leaders attended a special inclusivity workshop to set the DIB tone from the top.
Promoting inclusivity through cultural competence	As part of our DIB learning journey, over 80 per cent of our managers completed a DIB course in 2022. This course allowed our people managers (those with direct reports) to gain a better understanding of why DIB is important and learn strategies to hire and retain diverse talent.  We also hosted self-led and group learning opportunities that included workshops and shared resources. The goal was to build awareness around DIB, and ensure our people have the training and guidance to put that awareness into action. In 2022, we celebrated or marked a wide range of diversity-focused events, highlighted by a 2SLGBTQ+ advocacy workshop during Pride Month and a presentation by a First Nations elder on National Day for Truth and Reconciliation.  To recognize and celebrate our diverse cultures, we launched a multicultural calendar, which includes important cultural and religious events across the globe.
Establishing processes to measure the ongoing efficacy of our DIB initiatives	Our annual global engagement survey includes questions that measure employee sentiment on important issues including authenticity ("I feel comfortable being myself at work"), a sense of belonging, and inclusion ("Leaders at Northland value different perspectives").
Recognizing our people for the work they do and values they hold	In 2022, Northland began performing a global compensation calibration against markets where we operate. The goal was to ensure fair and equitable compensation based on skills and roles, and to adjust salaries to ensure they meet or exceed market standard. This is an example of how we ensure equitable practices in our talent processes.
Sharing our DIB plans with our Board	In 2022, we amended our Diversity Policy to further refine our targets, and committed to adding at least one board member who identifies as a member of one or more of the following groups by the end of 2024: Indigenous peoples, persons with disabilities, persons belonging to visible minorities, and/or 2SLGBTQ+ members.



At Northland, we are committed to a sustainable future for our planet. We take a systematic approach to achieving our decarbonization and stewardship goals. We engage in proactive environmental and climate management through broad awareness, coordinated design and effective controls. Our approach is grounded in our Global Environmental Policy.



# Our Planet

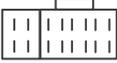
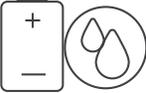
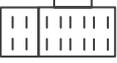
## Material Issues

- Reducing Emissions
- Preserving Biodiversity and Ecosystems

# Reducing Emissions

In 2022, Northland continued its focus on developing renewable energy projects and operating our facilities as efficiently as possible. Our teams monitor each facility and office to quantify all sources of GHG emissions.

## GHG Emissions Breakdown by Scope and Source

Upstream Supply Chain Emissions (Scope 3)	Direct Emissions (Scope 1)	Indirect Emissions (Scope 2)	Upstream Third-Party Services Emissions (Scope 3)
 <p>Goods and services 47,809 tCO<sub>2</sub>e</p>	<p><b>Generation</b></p>  <p>Renewable energy 2,041 tCO<sub>2</sub>e</p>	 <p>Operations 10,073 tCO<sub>2</sub>e</p>	 <p>Waste 189 tCO<sub>2</sub>e</p>
 <p>Capital goods 10,465 tCO<sub>2</sub>e</p>	 <p>Efficient natural gas 1,266,802 tCO<sub>2</sub>e</p>	 <p>Offices<sup>2</sup> 294 tCO<sub>2</sub>e</p>	 <p>Business travel 1,488 tCO<sub>2</sub>e</p>
 <p>Fuel and energy 259,109 tCO<sub>2</sub>e</p>	<p><b>Operations</b></p>  <p>Vehicles at all locations 16,901 tCO<sub>2</sub>e</p>	 <p>Line losses 17,121 tCO<sub>2</sub>e</p>	 <p>Employee commuting 312 tCO<sub>2</sub>e</p>
	 <p>Utility operations 10 tCO<sub>2</sub>e</p>	 <p>Heating for offices 121 tCO<sub>2</sub>e</p>	



	Total Scope 1 Emissions (tCO <sub>2</sub> e)	Total Scope 2 Emissions (tCO <sub>2</sub> e)
Thermal & Utilities	1,267,183	22,233
Onshore Renewables	2,053	2,096
Offshore Wind	15,752	2,866
Offices	47	415

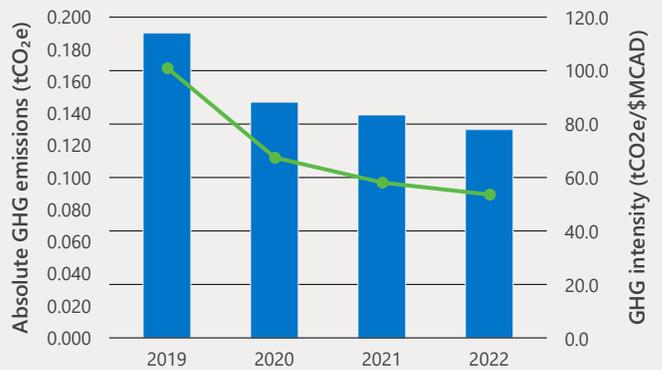
Total Scope 3 Emissions (tCO <sub>2</sub> e) 319,373			
Upstream Fuel and Energy Activities	259,109	Waste in Operations	189
Purchased Goods and Services	47,809	Business Travel	1,488
Capital Goods	10,465	Employee Commuting	312

**GHG Emissions Inventory and Intensity by Generation**



- Total Scope 3 GHG emissions
- Total Scope 2 GHG emissions
- Total Scope 1 GHG emissions
- GHG emissions (Scope 1 & 2 emissions) intensity by generation
- GHG emissions (Scope 1, 2 & 3) intensity by generation

**GHG Emissions Intensity by Generation and Revenue**



- GHG emissions (Scope 1 & 2 emissions) intensity by generation
- GHG emissions (Scope 1 & 2) intensity by revenue

# Reducing Emissions

## Scope 1 Efforts

Our direct Scope 1 GHG emissions are primarily from stationary combustion from natural gas-fired power generation. However, we also have emissions from mobile equipment, vehicles and vessels at all of our sites, as well as fugitive emissions. In keeping with our emissions reduction strategy, in 2022, our emissions reduction efforts were focused on operational optimization and efficiency and decreasing baseload production from natural gas, while continuing to grow our renewable energy capacity. As a result, we are seeing a downward trend in our carbon intensity from the 2019 baseline.

Kirkland Lake	Onshore Renewables Portfolio, Spain
<p>We achieved significant CO<sub>2</sub> reduction by transitioning to just 10 per cent operational capacity from baseload status. This change was the result of three years of discussions with the community and our operating team. The new agreement allows the site to continue supporting the energy grid with accessible energy where and when needed, while significantly reducing run times and emissions.</p>	<p>Northland advanced our carbon intensity reduction by acquiring a fleet of high-quality renewable assets in Spain. These assets contributed 980 GWh energy generation in 2022. The assets supply near-term cash flow to support offshore wind development. They will serve as a platform for future growth in onshore renewables in Europe.</p>

One of Northland’s solar PV assets from its Spanish onshore portfolio.



## Scope 2 Efforts

Our indirect Scope 2 GHG emissions are from the electricity and heating we purchase at our offices and facilities and from line losses through the distribution of energy. We purchase certified green power directly from suppliers and Renewable Energy Credits (RECs), where available, to reduce the effects of these emissions. We look for efficiencies, choose upgrades that reduce our office footprint, and choose more eco-friendly office spaces.

Renewable energy purchased during 2022	Eco-friendly office space
<p>We purchased 207 MWh of renewable energy across our offices in Germany and Spain, and at our offshore wind facilities in Germany. In Ontario, Canada we purchased 1,273 MWh of RECs from onshore wind to reduce the impact from our Kingston location and our global head office in Toronto.</p>	<p>We commit to making sustainable choices to support our future growth. An example of this is the lease of green office space for our new Spain corporate office in Madrid. This space includes rooftop solar installations that provide renewable energy directly to the building.</p>

## Scope 3 Efforts

Our indirect Scope 3 GHG emissions relate to upstream activities associated with the development and operation of our projects and facilities. We measure and report on these emissions to better understand how to begin reducing our larger indirect footprint. Our Scope 3 emissions remained relatively consistent, though we did see an increase in fuel consumption due to higher natural gas production and global travel returning from pandemic lows. Conversely, we saw lower emission numbers from construction, as we only had a few onshore construction projects underway during the year (some of which was accounted for in 2021).

Gold standard offsets for travel	Green commuting in Saskatchewan
<p>In 2022, we purchased 1,488 tCO<sub>2</sub>e worth of Gold Standard-certified offsets from Less Emissions to compensate for our global travel-related emissions. These offsets support projects around the world that verifiably reduce GHG emissions at the source and positively impact social networks and local economies. Details on the Gold Standard-certified international projects can be found <a href="#">here</a>.</p>	<p>In 2022, our North Battleford and Spy Hill efficient natural gas generating sites in Saskatchewan, Canada installed several electric vehicle charging stations to encourage employees to switch to electric vehicles. Both sites have installed level 2-type EV chargers, with the North Battleford site able to charge up to four vehicles at any given time. This service is offered at no cost to employees to help minimize the impact of commuting.</p>

# Preserving Biodiversity and Ecosystems

Northland is committed to protecting and supporting biodiversity and effectively managing shared resources in our areas of operation. We minimize the effects of our activities through proactive project planning and continuous monitoring. We use a precautionary approach to develop action plans in response to identified risks.

There are environmental risks, opportunities, dependencies, and impacts due to the nature of our business. This is particularly true during construction activities and throughout operations.

**Risk and impact management:** We design our facilities to avoid disturbing environmentally sensitive and/or emblematic species and their habitats. We carefully plan our construction activities to minimize adverse environmental impacts and disruptions to life on land

or underwater. We actively revive and restore natural environments by replanting forested areas and grasslands, among other activities. Our environmental management plans monitor and mitigate potential and actual effects throughout the project life cycle.

**Opportunities:** Effective management of natural resources and the environment we operate in presents many opportunities. Northland uses natural processes in the environments we work in to support effective rehabilitation, maintenance, and water usage. This section covers examples of these processes.



## Colombia

### Preventing Impacts to Microclimates and Habitats in Colombia

EBSA develops transmission and distribution projects with a focus on preventing impacts to plants, animals, and habitats through engineering design. Unavoidable impacts are addressed through enhanced mitigation, remediation, and/or compensation programs. These programs build on minimum regulatory requirements through species identification and planting schedules that are customized to meet the needs of microclimates and unique ecosystems for the long-term success of local biodiversity.



## Canada

### Revitalizing Greenspace in Thorold

At our Thorold Generating Station, we revitalized unused land next to the power plant into a green space for the surrounding community to use. The space features a mix of trees, shrubs, grasses, and wildflowers native to the area. These plants provide habitats to local wildlife, particularly birds, butterflies, and insects. A rain garden is in the works to collect rainwater runoff, which will be filtered by vegetation and percolate into the soil to recharge groundwater aquifers.

### Beekeeping in Ontario

At our Belleville South and North Burgess solar sites, we use vacant space to maintain apiaries. Introduced in 2020, the apiaries produced an inaugural harvest of over 40 kg of honey. We also have a program in place at these sites to plant, maintain and monitor local wildflowers that ensure a three-season food supply for bees and other pollinators.

## Spain

### Recycling Rainwater in Spain

In Spain, we reduce the water footprint of six of our wind park substations through rainwater collection systems. At our Lebrija concentrated solar plant, some of the water withdrawn for operations is stored for reuse. A rainwater collecting system also supplies water for cooling purposes.

### Solar Grazing<sup>11</sup> with Sheep

At our Castejada, Rambla, Valdecaballeros and Zarza solar parks in Spain, Northland works with local sheep farmers to let their flocks graze the grassy areas within fields of solar panels, clearing vegetation that could interfere with operations. This arrangement avoids the use of machinery or harmful pesticides, while regenerating the soil. It benefits local farmers by offering shade, shelter, food, and water for the sheep.



<sup>11</sup> Solar grazing is a practice where grazing livestock such as sheep help control vegetation under solar panels, minimizing impacts to the environment.

## The Netherlands

### Restoring Oyster Beds in the Netherlands

Gemini Wind Park, in partnership with The Rich North Sea, is restoring what was once one of the largest oyster reefs in the region. The project will rebuild an oyster reef the size of eight football fields, located 85 km from the north coast of the Netherlands. Oyster beds play an important role in underwater ecosystems. Researchers from both organizations are working together to understand the complexity of oyster bed development and recovery, including the ways wind parks provide suitable conditions for oysters and other shellfish to thrive.



## Germany

### Reforestation in Germany

In December, a team of Northland employees travelled to Hamburg Hills and planted nearly 1,000 beech trees. Northland donated the trees to the German Forest Protection Association. This initiative is part of a campaign to counteract the wide-spread decline of forests in Germany and restore their ecological, cultural, and economic services. The variety of species planted will support a mixed forest of local and adaptable trees that provide the greatest possible diversity to local plants and animals.

## Protecting Bats in Ontario

We know that despite the climate mitigation potential, wind turbines can sometimes be fatal to birds and bats. This is particularly true if they are erected in feeding grounds or migratory pathways, as is the case with our Grand Bend facility in Ontario, Canada. It was our responsibility to act on this key local biodiversity issue.

We sought out an innovative new technology. We investigated the use of an early-stage acoustic bat deterrent system, which emits high-frequency sound to keep bats away from the turbine's blades. We held a three-year trial and analyzed the results.

During the trial period, the technology reduced bat mortalities by approximately 50 per cent. It significantly reduced raptor mortalities too, likely due to fewer prey near the turbines. After three years, the program was more successful than expected. We plan to install this technology at all turbine sites.





Northland is committed to building and maintaining strong relationships with our local and Indigenous communities. We recognize the importance of establishing and maintaining relationships in the communities where we do business. We prioritize creating positive impact throughout our projects' lifecycles.



# Our Community

## **Material Issues**

Partnering with Local and Indigenous Communities  
Investing in our communities

# Partnering with Local and Indigenous Communities

We commit to working with integrity and deep respect for local communities and Indigenous people on every project globally. We will form and foster strong, mutually beneficial relationships that reflect local knowledge and establish respect, trust, and support between all parties. See our [Commitment to Local and Indigenous Communities](#) policy for more information.

A key to our success on each project is earning what is described as social license to develop and operate. Partnering with communities enables us to develop, construct and operate our projects while sharing a common purpose with those who live and work in the regions where we operate. Our teams are committed to understanding the evolving needs of the communities, and to delivering positive outcomes for both projects and host communities. To achieve this, we work to align with various local rightsholders and stakeholders as well as key decision makers on the economic, social and environmental benefits of our projects for communities.

## Community Consultation

Northland actively seeks to anticipate, understand and manage any potential effects our projects may have. Our process is to identify key rightsholders and stakeholders, create channels for engagement, and continuously consult with them. This means engaging early and often – from project conception, through to construction and operation. We engage municipalities, local communities, Indigenous communities, conservationists, community groups, NGOs and more.

## Understanding Impacts

As part of our strategic planning process, Northland is committed to identifying and addressing ecological and community impacts from the beginning to the end of the project life cycle. We implement social impact assessments, management plans, and community engagement as well as consultation programs during early project development at all sites. This results in ongoing engagement and consultation with key stakeholders and rightsholders to regularly address their opinions, sensitivities and any potential or actual impacts on their communities.

## Developing Communities

Northland is dedicated to creating economic prosperity in the communities where we work. Some highlights of this include:

- 43 local hires at our La Lucha project
- 78 local jobs created at our Helios project

As a trusted partner, we look to create economic opportunities in the communities where we do business and make investments to enhance the lives of local residents.

Our priority focus is hiring from within the community, including the hiring of a local social liaison. We use local suppliers wherever feasible. We consider it best practice to provide job training for local employees and local businesses to work on our projects, and support learning opportunities for those looking for jobs in renewable energy. Finally, we allocate funds to community initiatives and activities during construction project phases to support revitalizing and restoring community infrastructure that drives local economies.

To help guide these efforts, and to identify challenges, Northland produces social impact assessments that target any direct and indirect areas of influence in our project scope. These studies are conducted on all new projects globally.



## Staying Connected

At the outset of each project, Northland's Community and Indigenous Relations team work with Northland's development staff to build robust avenues to connect with local rightsholders and stakeholders. This multi-layered communication framework includes government and Indigenous and community relations. It encourages dialogue at the local and regional levels, with dedicated project teams at the corporate level.

Public consultation is a central component of our project development, construction and operations. We execute a fully integrated consultation strategy as projects progress. We host local open houses and town halls to inform community rightsholders and stakeholders about our projects, to help us understand prevailing sentiments and questions, and to make sure we mitigate and address any concerns as they are raised. Many of our projects also have dedicated websites, emails, and telephone hotlines to ensure lines of communication are always open. All new projects undergo a complete Social Impact Assessment during the development phase. This assessment is used to develop the relevant social and community relations plan and initiatives as well as predict and help to mitigate community and social aspects of the project.

## Collaborative Indigenous Partnerships

Our teams respect Indigenous communities, and their traditional lands, heritage, culture, language, and values. To honour this, we believe in finding ways to create meaningful Indigenous community involvement in our projects.

In step with our "early and often" consultation approach, we engage local Indigenous community leadership, including Chiefs and councils, as well as local elders, in any proposed project as it is conceived. We recognize that meaningful involvement and economic reconciliation provides uncommitted funds that Indigenous communities can invest in programs and other developments that are important for them. (For more information, see our [2021 Sustainability Report](#))

In 2022, one of our focus areas was heightened training and relationship building between operating members of our teams and their local Indigenous partners.

## Earning a New Trusted Relationship in Scotland

In 2022, Northland was awarded offshore wind projects near the Isle of Lewis in northwestern Scotland. This followed a multi-year engagement with stakeholders from local communities and governments – conversations that continue to this day. Our Scotwind bid was successful in part due to our commitment to working closely with communities and listening to their needs.

We took our local community partners' leads on developing a supply chain and collected diverse perspectives before announcing any decisions. We hired an experienced resident to serve in our social liaison role, and quickly established connections to various impacted communities. Our teams also consulted elementary school students to help name our two offshore wind projects – Spiorad na Mara (Gaelic) and Havbredey (Norse). See [link](#) for more details.



# Investing in Communities

We aim to contribute to the long-term economic prosperity of our local partner communities. We provide support through donations, sponsorships, and community investments at any stage in a project, from development through to operations. To ensure our initiatives are implemented across the business, we engage and encourage our employees to act as responsible business partners and seek volunteer opportunities to remain active participants in community efforts.

While this engagement had long been a grassroots-level approach, it is now coordinated through a new policy to reflect our broader social and environmental commitments. In December 2021, we released the company's first [Community Investment Policy](#), designed to support the communities and regions where we are active and to create positive impacts for the planet and its people. This policy is supported by our Community Investment Committee, and supports integration of the policy globally. The members of the committee bring a wide range of experience, backgrounds, departments diverse perspectives and guide decisions around global initiatives. In 2022, Northland invested over \$3 million to support our communities.

## Northland Introduces Community Investment Committee

“Northland’s community investment committee unites representatives from our global offices to ensure our investments align with our values and the priorities of our partner communities.”



**Tim Richardson,**  
Committee Co-Chair



The policy's three pillars support communities and our ESG goals:

### Decarbonization and proactive environmental protection

Through our focus on clean technology and education, we committed to slowing the effects of climate change and conserving and supporting life on land and in the water.

more than

**\$440,000**

#### Northland Sponsors SevenGen Conference

Northland was a gold sponsor for SevenGen 2022. The conference brought together young Indigenous people to empower the next generation of energy and environmental leaders.

#### Offshore Wind for Kids

In 2021, we supported Offshore Wind for Kids by leading a group of youth through an exercise of building mini turbine models, showcasing how this is done, how they work and sharing knowledge about the industry and technology.

### Health and well-being

We supported mental health initiatives around the globe to promote health and well-being of our people and our communities.

more than

**\$100,000**

#### Mental Health Month Donations

As part of our commitment to raise awareness on the importance of mental health, we were proud to partner with CAMH Engage. CAMH Engage is an advocacy group that promotes mental health education and engages in fundraising for the Canadian Association for Mental Health (CAMH).

### Sustainable communities

We provided appropriate support to our local communities, Indigenous communities, and the regions where we work. This includes supporting employment, cultural and heritage preservations.

more than

**\$2.4 million**

#### Upgrading and Donating Buildings to Community Non-Profit in Colombia

In 2022, EBSA donated renovated facilities in its jurisdiction to Fundación Hogar Pequitas, which supports vulnerable older adults. The buildings house 10 residents and six visiting older adults, and include living spaces and a clinic area as well as an expansive garden where community members grow food.

#### Long-term Care Facility

In 2022, Northland contributed to the Wiikwemkoong Long-Term Care Home on Manitoulin Island. This facility provides important services to the local communities, as well as services to our partner Indigenous communities.

## Appendix A: ESG Performance

Creating impact and delivering on our commitments.

Material Topic	Targets/Commitments	SDG Alignment	Progress
<b>Climate Change Mitigation &amp; Emissions Reduction</b>	<p>65% reduction of GHG emissions intensity (Scope1+2 tCO<sub>2</sub>e/MWh) by 2030 from 2019 baseline.</p> <p>Net Zero across scope 1, 2 and 3 by 2040.</p>	<p><b>13</b> Taking urgent action to combat climate change and its impact through the reduction of carbon emissions.</p>	<ul style="list-style-type: none"> <li>• <b>6%</b> reduction in GHG Emissions Intensity (tCO<sub>2</sub>e/MWh) from 2021 ↓</li> <li>• <b>32%</b> Reduction in GHG Emissions Intensity (tCO<sub>2</sub>e/MWh) since 2019 ↓</li> <li>• <b>+2.7M</b> tonnes of avoided emissions ↑</li> </ul>
<b>Green &amp; Reliable Energy (Energy Security)</b>	<p>6 GW of additional renewable capacity by 2030.</p>	<p><b>7</b> Ensuring access to affordable, reliable, sustainable and modern energy for all by growing a portfolio of renewable energy assets.</p> <p><b>9</b> Develop quality, reliable, sustainable and resilient infrastructure to support economic development and human well-being, with a focus on affordable and equitable access for all.</p>	<ul style="list-style-type: none"> <li>• <b>+1.75M</b> Households provided with clean energy<sup>2</sup></li> <li>• <b>67%</b> of gross renewable energy generation ↑</li> <li>• <b>2.3</b> GW Renewable Generating Capacity ↑</li> <li>• <b>531,234</b> Customers served through EBSA ↑</li> </ul>
<b>Human Rights &amp; Sustainable Supply Chain</b>	<p>Signatory of the UN Global Compact.</p> <p>Commitment to aligning with the UN Guiding Principles on Business and Human Rights for our business and within our value chain.</p>	<p><b>8</b> Promoting inclusive and decent work in our business and across the value chain.</p> <p><b>12</b> Encourage our suppliers and partners to adopt sustainable practices.</p> <p><b>16</b> Upholding human rights and ensuring there is no child abuse or forced labour within our business or value chain and upholding the right to work without discrimination, harassment or violence.</p>	<ul style="list-style-type: none"> <li>• Policy commitments to upholding human rights within operations and value chain.</li> <li>• Due diligence over human rights and other material ESG issues within partnerships and value chain.</li> </ul>
<b>Talent Development &amp; Engagement</b>	<p>Attract and retain top talent.</p> <p>Engage, empower and develop our people.</p>	<p><b>8</b> Promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work.</p>	<ul style="list-style-type: none"> <li>• <b>72/100</b> Overall employee engagement score ↓</li> <li>• Maintained <b>82%</b> participation score</li> </ul>



Material Topic	Targets/Commitments	SDG Alignment	Progress
<b>Biodiversity &amp; Ecosystem Management</b>	<p>Commitment to conservation of the ecosystems where we construct and operate our facilities.</p> <p>Proactive management of natural resources and a commitment to reduce waste.</p>	<p><b>12</b> Supporting the sustainable management and use of natural resources including water and land. As well as waste management.</p> <p><b>14</b> Proactively protecting and conserving and, where necessary, restoring terrestrial, marine and coastal ecosystems throughout the construction and operations of our projects.</p> <p><b>15</b></p>	<ul style="list-style-type: none"> <li>• <b>0</b> significant environmental incidents</li> <li>• Ongoing biodiversity efforts and programs at almost all sites</li> <li>• <b>99% of water withdrawn returned to its source</b></li> </ul>
<b>Diversity, Inclusion &amp; Belonging</b>	<p>30% female representation on Executive and Board of Directors.</p> <p>1 beyond gender diversity Board member by 2024.</p> <p>Pledged support Equal by 30 (in progress)</p>	<p><b>5</b> Achieving gender equality and empowering all women within our business.</p>	<ul style="list-style-type: none"> <li>• <b>33%</b> female Board members ↓</li> <li>• <b>50%</b> female executives ↑</li> <li>• <b>36%</b> female new hires ↑</li> <li>• <b>26%</b> of females in workforce ↑</li> <li>• <b>Authenticity</b> glint score<sup>1</sup> <b>76</b> ↓</li> <li>• <b>Belonging</b> glint score<sup>1</sup> <b>64</b> ↓</li> <li>• <b>Inclusion</b> score<sup>1</sup> <b>66</b></li> <li>• <b>0%</b> beyond gender Board members</li> </ul>
<b>Community &amp; Indigenous Relations &amp; Investment</b>	<p>Commitment to supporting meaningful partnerships with local and Indigenous communities.</p> <p>Supporting programs that reflect the priorities of our local and Indigenous communities.</p>	<p><b>8</b> Promoting sustained, inclusive and sustainable economic growth.</p> <p><b>11</b> Making cities and human settlements inclusive, safe, resilient and sustainable through our community investment and commitment to local and indigenous communities.</p>	<ul style="list-style-type: none"> <li>• <b>CAD 3.2M in community investment globally</b></li> <li>• Commitment to Local and Indigenous Communities policy focused on consultation, assessment and collaboration with communities.</li> </ul>
<b>Occupational Health &amp; Safety</b>	<p>Reduction of TRIR by 10% year-over-year (internal target).</p> <p>0 life-changing incidents.</p>	<p><b>8</b> Promoting decent work free from hazards and supporting the health and well-being of our employees, contractors and the communities where we operate.</p>	<ul style="list-style-type: none"> <li>• <b>0.40</b> total recordable injury rate (TRIR) ↓</li> <li>• <b>1</b> life-changing incident (non-fatal) ↑</li> </ul>

## Appendix B: Forward-Looking Information

This Sustainability Report contains statements that constitute “forward-looking information” within the meaning of applicable securities laws (“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. Northland’s actual results could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, the events anticipated by the forward-looking statements may or may not transpire or occur. Forward-looking statements include statements that are not historical facts and are predictive in nature, or depend upon or refer to future events or conditions. 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” are often intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Specific forward-looking statements in this Sustainability Report include, but are not limited to, statements relating to: Northland’s business strategies, plans, prospects, opportunities and its sustainability, climate change and ESG plans, initiatives and strategies; the expectation that certain projects will become operational; Northland’s sustainability and ESG opportunities and expectations and risks related thereto; the future availability of capital dedicated to climate-resilient and sustainable energy companies; the ability to attract and retain top talent; changes in policies and regulators’ requirement related to carbon; plans with respect to energy storage; initiatives relating to the reduction of GHG and carbon emissions; commitments to invest in new technologies; emerging growth areas; expectations of efficiency; offshore wind projects; risk mitigation strategies; and Northland’s objectives with respect to diversity, inclusion and belonging.

The forward-looking statements in this Sustainability Report are based on certain material factors or assumptions that were applied in developing the forward-looking statements, including, but not limited to, management’s current plans and its perception of historical trends; current conditions and expected future developments; the presence of a favourable regulatory environment; the commercial viability of emerging technologies relating to decarbonization; the availability of financing on commercially reasonable terms; the absence of significant operational, financial or supply chain disruptions or liability due to natural disasters, diseases or other force majeure events; the absence of a severe and prolonged downturn in general economic, credit, social and market conditions; the ability to obtain necessary approvals, satisfy any closing conditions, or obtain adequate financing regarding contemplated construction, acquisitions, dispositions, investments or financings; the continuation of observed

weather patterns and trends; the absence of a change in applicable laws, political conditions or public policies and directions by governments; as well as other factors, estimates and assumptions 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 that could cause actual results to differ materially from historical results or results anticipated in the forward-looking statements. Factors that could cause actual results to differ materially from current expectations include, but are not limited to: availability of willing project partners; increases to the cost of carbon and operations; risk associated with sales contracts; Northland’s reliance on the performance of its offshore wind facilities at Gemini, Nordsee One and Deutsche Bucht; counterparty risk; contractual operating performance; variability of sales from generating facilities powered by intermittent renewable resources; offshore wind concentration; natural gas and power market risks; operational risks; recovery of utility operating costs; Northland’s ability to resolve issues/delays with the relevant regulatory and/or government authorities; permitting; construction risks; project development risks; acquisition risks; financing risks; disposition and joint-venture risks; competition risks; interest rate and refinancing risks; liquidity risks; inflation risks; impacts of regional or global conflicts; credit rating risk; currency fluctuation risk; natural events; environmental risks; health and worker safety risks; market compliance risk; government regulations and policy risks; utility rate regulation risks; international activities; reliance on information technology; labour relations; reputational risk; insurance risk; risks related to co-ownership; bribery and corruption risk; and legal contingencies. Some of these and other factors are discussed under the heading “Risk Factors” in Northland’s most recent AIF dated February 23, 2023, and under the heading “Financial Risks and Uncertainties” in Northland’s most recent annual management’s discussion and analysis dated February 23, 2023, each of which has been filed on SEDAR ([www.sedar.com](http://www.sedar.com)) and Northland’s website ([www.northlandpower.com](http://www.northlandpower.com)).

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 Sustainability Report are based on assumptions that were considered reasonable as at [DATE]. 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 because of new information, future events or results, or otherwise.





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