NORTHLAND POWER

Intelligent Energy. Greener Planet.

2021

ESG Performance Index

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Supporting Reports and Information

- 2021 Annual Report: for Northland's financial performance
- 2021 Annual Information Form: for information on Northland's business and key risks
- 2022 Management Information Circular: for information on Northland's Governance initiatives, Executive Team and Board of Directors
- Northlandpower.com: for all of the above, including general corporate information, current developments and related policies

About This Index

Reporting Boundaries

Northland Power Inc.'s ("Northland" or the "Company") Environmental, Social and Governance (**ESG**) Performance Index contains information and data covering the 2021 calendar year, with comparative information for both the 2020 and 2019 calendar years. All ESG key performance indicators (**KPIs**) are measured using an operational control approach. Where this is not the case, either due to the nature of the KPI or lack of information, the boundaries used are included. Exclusions and estimations or other assumptions used in measuring performance of a KPI are included within the methodology and definitions section.

Frameworks Used

This index has been prepared in accordance with the Global Reporting Initiative (**GRI**) Standards and in alignment with the Sustainability Accounting Standards Board (**SASB**) recommendations, and the Taskforce for Climate-Related Financial Disclosures (**TCFD**). Throughout this index we have marked relevant sections with the appropriate framework disclosure reference. Additionally, all disclosure framework elements used are referenced in the GRI, SASB and TCFD indexes.

Assurance

Northland received independent third-party limited assurance, conducted by our financial auditors, Ernst & Young LLP (EY), over a number of material KPIs for 2021, including:

- Scope 1 & 2 Greenhouse Gas (GHG) emissions
- Total electricity generated
- GHG emissions intensity
- Total recordable incident rate
- Total hours worked

EY provided limited assurance on the allocation of Northland's Green Financing proceeds in accordance with the Use of Proceeds described in Northland's Green Financing Framework. The assurance statement can be found here. The external assurance engagement is managed by the Director of Global ESG Strategy and Reporting and under the ultimately accountability of the Chief Financial Officer (**CFO**).

☑ KPIs assured to a limited level by EY are denoted with this symbol.

Accessibility

This report is compliant with the Accessibility for Ontarians with Disabilities Act (AODA).

Restatements

In 2021 we revised the methodology for calculating biogenic emissions. We have restated the 2020 value to ensure consistency with the base year. In cases where we have added new KPIs, we have provided information from 2020 that was not previously disclosed. In cases where information is new or restated, it has been noted as such.

Evaluation and Management Approach

The approaches taken to manage, evaluate, and adjust the approach to each material topic are the responsibility of the ESG Steering Committee, the Director of Global ESG Strategy and Reporting, and with oversight from the Board of Directors (**the Board**).

Material Topics

Northland conducted a materiality assessment in 2021 as noted in our 2021 Sustainability Report The following chart is a list of material topics included in this Index. We have included topics that are important to our stakeholders and to our business.

ESG Focus Areas for 2021-2022

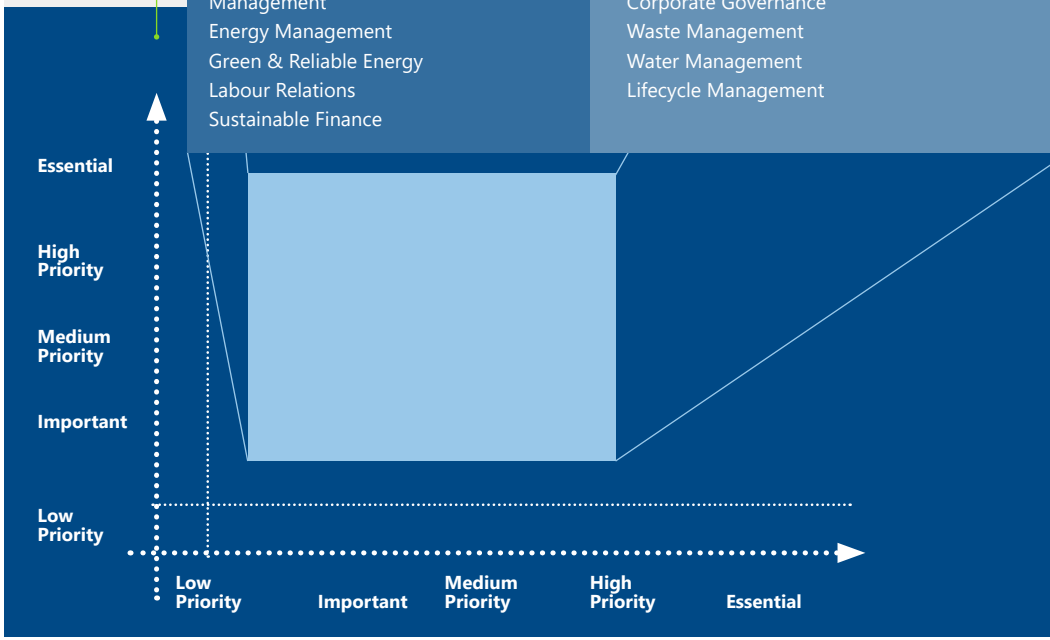
- Biodiversity
- Community & Indigenous Relations
- Climate Risk Management & Resiliency
- Data & Cybersecurity
- Diversity, Inclusion & Belonging (DIB)
- Emissions & Carbon Reduction
- Environmental Management
- Occupational Health & Safety
- Sustainable Supply Chain Management
- Transparency & Business Ethics
- Talent Engagement & Development

ESG Focus Areas for 2022

- Community Investment & Impact
- Emergency Preparedness & Management
- Energy Management
- Green & Reliable Energy
- Labour Relations
- Sustainable Finance

Areas of Continued Disclosure for 2021

- Access and Affordability
- Corporate Governance
- Waste Management
- Water Management
- Lifecycle Management



Our Commitment to Sustainability & Transparency

Letter from CFO

At Northland, we are deeply committed to advancing our sustainability objectives and building on the momentum we achieved following the formal launch of our global ESG Framework in 2020. Since then, we have taken additional actions to enhance the transparency of our ESG programs and initiatives. Our key stakeholders in the financial and investment community are increasingly looking for enhanced disclosures that demonstrate accountability towards improving our ESG key performance indicators. We believe the work we have done over the past two years addresses the increased demands by these and other stakeholders. We also recognize the importance of transparency, accuracy and quality of data in our disclosures so that our partners, lenders, investors and other stakeholders can feel confident in the information we disclose. To this end, we have enlisted our auditor to provide assurance over a number of our environmental and social indicators included within this report, in addition to our green financing disclosures.

We are proud to see that our enhanced disclosure efforts have been reflected through improved performance across numerous external rating agencies, such as Sustainalytics, MSCI, S&P Global CSA and the CDP. In addition to this, we have recently received numerous accolades, including reaching #11 in Corporate Knights' Best 50 Corporate Citizens, being named amongst Corporate Knights' Clean200, and being recognized as 2021 Clean50 award winners. We are very proud of our accomplishments as a global company dedicated to developing renewable energy projects in our target markets around the world, and continue to deliver best-in-class reporting based on ESG and business best practices.

Climate-Related Disclosures

As part of our enhanced disclosure objectives, we have included considerations of climate-related issues as an integrated component of our strategy and management practices, helping us to mitigate risks and identify opportunities. Our Sustainability Report is aligned with TCFD recommendations. Disclosures of climate-related risks and opportunities have been a part of our annual public reporting for a number of years; however, this year's Sustainability Report enhances our disclosures by providing greater detail on our governance structure, risk management practices as well as metrics related to risks and opportunities. We also expanded our GHG reporting to include Scope 3 emissions. This allows us to better capture and report on the total climate impacts of our activities, including from our supply/value chain. This will also enable us to formulate a roadmap to outline our steps to mitigate our carbon footprint while contributing to overall global decarbonization efforts.

In 2021, we started mapping out the risks and opportunities associated with the relevant climate-related scenarios to help understand the resiliency and sustainability of our strategy over the long-term.

Green Financings

In February 2021, we launched our Green Financing Framework and set out to secure green corporate and project financings to support the development of our renewable energy projects. The focus of our green financing initiatives is to support climate change mitigation efforts by developing and investing in renewable energy infrastructure assets that increase green energy production. I am happy to report that we succeeded on this front through new financings in the U.S. and Colombia and refinancings in Canada related to our renewable projects. In New York State, our 112 megawatt (**MW**) Ball Hill and 108 MW Bluestone onshore wind projects secured green construction financing comprised of a US $381 million (M) dollar non-recourse loan, a tax equity bridge loan and letters of credit, with a consortium of lenders. In Colombia, our 16 MW Helios solar project secured construction financing amounting to approximately $11M CAD, being one of the first renewable projects in the country to achieve a green loan.

In addition to these project financings, Northland introduced a Sustainability Linked Loan (**SLL**) overlay on our $1 CAD billion-dollar corporate credit facility. The SLL is based on achieving defined targets around both increasing our renewable generating capacity and reducing GHG emissions intensity and is expected to provide Northland with cost savings when the targets are met.

Delivering Value

At Northland, we have a 34-year track record of developing, owning and operating clean and green energy projects. We built a strong global position and team that is focused on offshore wind. We believe that we can continue to generate long-term shareholder value while supporting the global need for more renewable energy. As our company continues to grow and evolve, so does the way we report our activities to all of our stakeholders. Our financial stakeholders are increasingly relying on our disclosures to support the investment in, and/or financing of, Northland and/or our projects, which will be critical to our success. Current and prospective offtakers, including governments and commercial/industrial clients are also focusing more on ESG best practices and disclosures to ensure there is alignment and transparency. We continue to enhance our global connectivity across our organization to engage in uniform best practices with respect to ESG in order to create value, mitigate risks and accurately and holistically report on our business and social practices. We believe our efforts will continue to create and support the value of our business and our projects.

Thank you for your interest in our ESG Performance Index and for your continued support for our business.

Sincerely,

Pauline Alimchandani
Chief Financial Officer

Section 1.

Business Overview and ESG Performance

1.1 Business Overview and Performance

As of December 31, 2021, Northland owned or had a net economic interest in 2,817 MW of power-producing facilities with a total gross operating capacity of approximately 3,240 MW. In addition, we have a regulated utility serving over 500,000 residential, commercial and industrial customers. Northland has another 366 MW of gross capacity in construction and a development pipeline of approximately 14 GW. Northland's facilities produce electricity from clean energy sources for sale primarily under long-term PPAs or other revenue arrangements with creditworthy counterparties. Northland's utility is a distributor and retailer of electricity compensated under a regulated framework. These operating assets provide stable cash flow and are primarily located in Canada, Germany, the Netherlands, Spain and Colombia. Northland's significant assets under construction and development are located in Mexico, Taiwan, Poland, Germany, Colombia and the United States. Refer to the 2021 AIF for additional information on Northland's key operating facilities as of December 31, 2021 and refer to Section 9 of the MD&A for additional information on key development projects.

Our increase in operating capacity in 2021 was due to the acquisition of an operation portfolio consisting of 559 MW of gross capacity encompassing onshore wind and solar assets in Spain on August 11, 2021. In 2021, Northland also began construction on a 16 MW solar project in Colombia and two onshore wind projects in the United States totalling 220 MW, all of which are expected to reach commercial operations in 2022. Table 1 shows the capacity of Northland's portfolio of assets, revenues and adjusted EBITDA. It includes our most significant technologies under construction and under development.

Table 1: Gross energy capacity and electricity distributed

	2021	2020	% Change	2019
Revenues[1] (Thousand $ CAD)	$2,104,917	$2,072,650	2%	$1,671,331
Adjusted EBITDA (Thousand $ CAD)	$1,137,004	$1,170,097	-3%	$984,736
Operational capacity (MW)	**3,240**	**2,681**	**21%**	
Offshore wind (MW)	1,184	1,184	-	
Natural gas (MW)[2]	973	973	-	973
Onshore wind (MW)	837	394	112%	394
Solar (MW)	246	130	89%	130
Gross capacity under construction (MW)	**366**	**130**	**181%**	**Not Reported**
Onshore wind (MW)	220	-	-	
Solar (MW)	146	130	12%	
Gross capacity in development (MW)[3] (Includes capitalized and identified growth projects)	**8,147**	**N/A[4]**	**-**	**N/A**
Solar (MW)	130	N/A	-	
Onshore wind (MW)	100	N/A	-	
Offshore wind (MW)	7,917	N/A	-	
Electricity delivered by Regulated Utility (MWh)	769,020	760,099	1%	
Customers served by Regulated Utility	516,638	503,009	3%	

1. Revenue includes sales and finance lease income
2. Natural gas includes biomass capacity, which although used at Northland's Kirkland Lake facility for the first half of 2021 is no longer in operation
3. The list of projects under development exclude the Company's larger pipeline of earlier stage development opportunities
4. In 2021 we introduced disclosure of our pipeline as capitalized and identified growth, this was not previously disclosed under these terms and therefore no comparison year data is provided

1.2 ESG Performance Highlights

Delivering on our Commitments

E

6 GW
Additional gross renewable capacity in operation by 2030

65% Reduction
GHG emissions intensity by generation (tC02e/MWh) by 2030)

Environmental stewardship and managing shared resources

S

Zero
Life-changing incidents

Engagement diversity and inclusion of our workforce across the globe

Engaging & creating partner-ships with local and Indigenous communities

G

30%
Female representation on Board of Directors/Executive Office

Continuing emphasis on good Corporate Govern-ance, Transparency and Business Ethics

Performance to Date

21%
increase in renewable operational capacity in 2021

26%
reduction in GHG emissions intensity (Scope 1 & 2/ MWh)

>1.75 M
Households provided with clean energy

99%
Water returned to source

0.44
Total recordable injuries per 200,000 hours worked and 0 life changing incidents

75/100
Overall engagement score

79 hrs
Training per employee / year

$2 M
In community investment globally

Female representation

44% Board of Directors

43% Executive Office

TCFD
Reporting in alignment with Task Force on Climate - related Financial Dislosures (TCFD) Recommendations in 2022

$ 1.4 B
In Green Financings and Sustainability Linked Loans

Improved ratings from: Sustainalytics, CDP, MSCI and S&P Global

Awards BEST 50 CORPORATE CITIZENS · CLEAN200 · Clean50

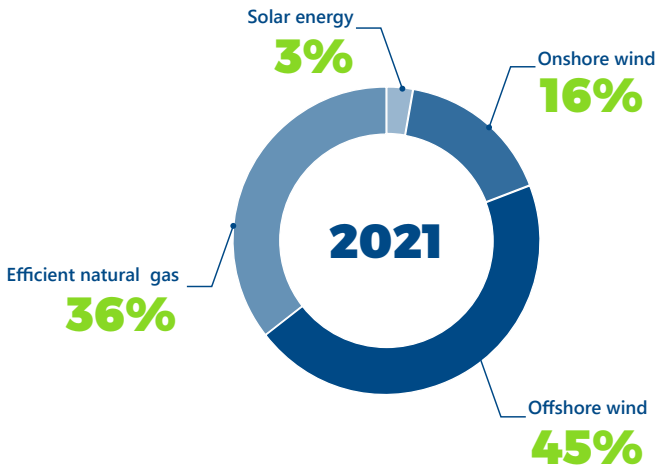
Section 2.
Energy and Climate

2.1 Power Production and Energy Consumption

Northland's business is rooted in the generation of energy through offshore wind, onshore wind, solar power and efficient natural gas. The operation of these facilities directly affects the total energy produced and sold, as well as the consumption of energy through non-renewable and renewable sources. We do not include our regulated utility in the calculation of our consumption. These are included as part of the overall consumption related to our emissions metrics.

In 2021, Northland produced over 8.5 GW of electricity from its offshore wind, onshore wind, solar and efficient natural gas facilities. Our production of electricity from efficient natural gas decreased due to a new Power Purchase Agreement (**PPA**) at our Kirkland Lake natural gas generation facility from baseload to dispatchable[1]. As part of our new PPA at Kirkland Lake the biomass facility was closed as of July 2021. This decreased in biomass fuel generation significantly. The changes to our natural gas facilities help Northland maintain stable revenues to support continued renewable growth, while also minimizing emissions.

Electricity Generation



1. Baseload energy generation contract is where the contract stipulated that a facility should run at full capacity continuously to support the base of grid energy. A dispatchable contract allows a facility to run as required to meet the needs of the grid

Table 2. Total electricity generated, percentage by major energy source, percentage in regulated

	2021	2020	% Change	2019
Total electricity generated[1] (GWh)	8,567 ☑	9,172	-7%	9,060
• Percentage of electricity generation from renewable sources	64%	62%	3%	58%
• Percentage of total electricity generated in regulated markets	33%	33%	-	Not reported

1. Total electricity generated also represents total electricity sold and does not include curtailments (paid or unpaid)

Table 3. Total energy consumption by source

	2021	2020	% Change
Total Energy Consumption (GJ)	24,109,748	28,879,653	-17%
• Total Fuel Consumption (Non-renewable) in GJ	23,131,426	26,869,034	-14%
• Total Fuel Consumption (Renewable) in GJ[1]	803,363	1,869,633	-57%
• **Electricity Consumption in GJ**	174,959	140,987	24%
• **% of electricity consumed from renewable source**	4%	0%	N/A

1. The reduction in renewable fuel here is due to the closure of Northland's biomass facility in July of 2021

Methodology and Definitions

Northland electricity generation and consumption are calculated in line with **GRI 302-1** and **SASB IF-EU-000.D**. Electricity generated is based on electricity sold and is reported based on invoices from off-takers. The totals do not include paid or unpaid curtailments. Generation is also calculated using the operational control boundary in accordance with the GHG protocol. Currently all operating facilities across all asset classes are included at 100 per cent of their generation.

Northland only operates in two regulated markets in Canada: Quebec and Saskatchewan. None of the European markets where we operate are considered regulated. Percentages of electricity generated are from our two natural gas facilities in Saskatchewan and our onshore wind facilities in Quebec. Despite changes in overall generation, the percentage remains consistent from 2020 to 2021.

Fossil fuel consumption is reported based on invoices when available, otherwise fuel tank measurements or estimates are based on kilometers driven for some vehicles. Natural gas used for heating at European offices is estimated based on consumption records at our Toronto Head Office due to unavailable invoice data at those locations (assumed no heating at other offices). Biomass used at Kirkland Lake is waste wood from local lumber yards, which is considered renewable fuel. Consumption is based on direct measurement (belt scale). Biomass was discontinued as of July 2021. Electricity consumption is largely based on invoices, but estimates are required at Taipei City, Houston, Mexico City and Bogota offices due to unavailable invoice data. In these cases, estimations are calculated based on square footage occupied.

2.2 Emissions

To measure our performance against our commitment to supporting the decarbonization shift, Northland measures its global footprint from Scope 1, Scope 2 and material Scope 3 emissions. Northland calculates its emissions based on input from all of its operational sites, offices and through its spending within its value chain. Northland is committed to reducing our GHG emissions intensity[2] from our generation activities by 65 per cent by 2030 through the growth of its renewable portfolio as well as operational efficiencies. This is in line with the organization's objectives and ESG framework.

Emission from operations

Consumption data is provided by the facilities, offices and projects and is used to calculate Scope 1 and 2 emissions by Northland's Environment and ESG teams. Scope 1 and Scope 2 GHG emissions have received limited assurance by our third party independent assurance provider, EY in 2021 and GHD in 2020. The Scope 1 and Scope 2 GHG emissions have been calculated and disclosed using the guidance contained within the GHG Protocol Corporate Accounting and Reporting Standard and using an operational control boundary. It has been noted where estimations have been used in the absence of accessible data. In 2021, Northland's highest sources of emissions were from our natural gas-fired energy generating facilities. Total Scope 1 GHG emission reductions were due to a change in contracted usage of our Kirkland Lake facility from baseload to a dispatch contract. This is in keeping with our reduction strategy. Additionally, Northland added 559 MW of gross capacity from onshore renewable assets through the acquisition of the portfolio of onshore renewable assets in Spain on August 11, 2021. This further supported the reduction in GHG emissions and carbon intensities as a factor of total generation.

The increase in Scope 2 emissions was due to updates made to the methodology used to calculate line loss emissions from our regulated utility in Colombia as well as an increase in electricity distributed in 2021. In 2021, we updated our market-based calculation methodologies by finding more appropriate residual electricity emissions factors for a larger number of regions. Northland does not deliver any power directly to retail customers, but instead provides power through the wholesale markets via various third-party utilities.

Table 4: GHG emissions by scope

	2021	2020[1][2]	% Change	2019
Scope 1 (direct) GHG emissions (tCO_2e)	**1,183,719** ☑	**1,369,083**	**-13%[3]**	**1,686,511**
• Biogenic emissions (CO_2)	73,162	142,454[4]	-55%	
• Emissions-limiting regulations	98.40%	98.61%	0%	
• Emissions-reporting regulations	97.30%	Not reported	N/A	
• Associated with generation (tCO_2e)	1,182,552	1,328,680	-14%	
Scope 2 (indirect) GHG emissions	**28,302** ☑	**19,208**	**47%**	**Not reported**
• Location-based (tCO_2e)	28,302	19,208	47%	
• Market-based (tCO_2e)	28,944	19,208	51%	
Avoided carbon emissions (tCO_2e)	**2,149,584**	**1,319,001**	**63%**	

1. 2020 Scope 1 and Scope 2 numbers were assured by GHD, please find verification statement here
2. Northland considers 2020 as the base year for our GHG emissions inventories, but uses 2019 for the baseline calculations of our performance against our stated GHG emissions intensity reduction
3. Reduction in 185,364 tC02e of Scope 1 emissions was due to a change in contracted usage of our Kirkland Lake Facility as well as planned outages and operational maintenances. In 2021 Northland, in keeping with its reduction strategy, moved from a base load contact to a capacity contract to support only when needed the Ontario energy grid from its Kirkland Lake facility
4. In 2020 we used the emission factors associated with wet volume (50% moisture) to calculate emissions on the dry volume, however, in 2021, we used the emission factors associated with dry volume (0% moisture) to calculate emissions on the dry volume. We have also restated to the 2020 value based on this more accurate methodology.

Methodology and Definitions

Northland's GHG emissions are calculated in line with **GRI 305-1-3** and **SASB IF-EU-110 a.1.3** as well as the recommendations from TCFD and the GHG protocol. Northland uses the operational control boundary for its GHG emissions calculations which include Northland's operating facilities and offices globally. Our reporting base year is 2020, chosen as such due to the establishment of a consistent methodology for reporting GHG emissions for Scope 1 and Scope 2. However, for reporting on our performance over our stated public GHG emissions intensity reduction target, we use 2019 for which Scope 1 emissions have been verified under the regulatory requirements for Ontario and Canada. Under Northland's methodology the base year data will be restated only when there has been a change in methodology (e.g., calculation of biogenic emissions) or a material change in operating assets through acquisition or divestiture. Material in context refers to assets which have a 10% or larger impact on total emissions (Scope 1 & 2).

GHG emissions by tonnes (t) and tonnes of CO2 equivalent (t CO2e) are as follows: 1,164,480 t CO2 carbon dioxide (CO2), 303 t methane (CH4) or 8,479 t CO2e, 33 t nitrous oxide (N2O) or 8,779 t CO2e, and 0.08 t sulfur hexafluoride (SF6) or 1,981 t CO2e. Scope 1 emissions are calculated using fuel combustion emission factors and AR5-100 year GWP values, except for CO2 emissions from natural gas-fired facilities, which are calculated by mass balance (as required by Canada's carbon tax program). Emission factors are sourced from Canada's carbon tax program (when available) otherwise emission factors from the U.S. EPA or GHG Protocol are used. Biogenic emissions are calculated using dry volume emission factors on the dry volume of the waste wood used as biomass for energy generation.

Scope 2 emissions (from electricity consumption) are location-based and are calculated using emission factors from Carbon Footprint or when not available, from the grid operators (for Colombia and Taiwan). Northland also calculates market-based Scope 2 emissions to capture the energy used in generated in the markets where we operate. In 2021, much of the market-based emissions for offices in Germany and Canada's head office were offset through the purchase of Renewable Energy Credits or the equivalent. The Toronto office and the Kingston facility retired 2,581 MW of Renewable Energy Credits from our Grand Bend onshore wind facility. Residual grid emissions factors were used to calculate market-based emissions for all locations except for locations where these factors are not available (Mexico, Japan, S. Korea and Taiwan), in which case national grid emissions factors were used to calculate market-based emissions. Calculations based on residual grid emissions factors and RECs or equivalent instruments account for the difference in emissions between location-based and market-based methodologies.

2. See definition of GHG emissions intensity in the carbon intensity section. In this instance GHG emissions intensity refers to Scope 1 & 2 emissions (tCO_2e) divided by total generation (MWh)

2.2 Emissions (continued)

Carbon Intensity

In 2021 we furthered of our GHG emissions intensity (Scope 1 & 2) by electricity generated by 7% from 2020 and 26% from 2019 base line[3], showing significant progress towards achieving 65 per cent reduction in GHG emissions intensity by energy generation by 2030 from 2019 baseline.

Table 5: Carbon intensity

	2021	2020	% Change	2019
GHG emissions intensity by generation (Scope 1+2 GHG emissions in tCO_2e/MWh)	0.141 ☑	0.151	-7%	0.190
Carbon intensity from energy generation (Scope 1 GHG emissions tCO_2e from generation activities[1]/MWh generated)	0.146	0.165	-11%	Not reported
Carbon intensity by revenue (Scope 1+2 GHG emissions in tCO_2e/$CAD million in revenue)	57.1	67	-14%	Not reported

1. Includes biogenic emissions in keeping with science-based guidance

Methodology and Definitions

This metric aligns with **GRI 305-4 GHG** emissions intensity. In order to align our metrics with science-based guidelines, Northland calculated Carbon Intensity from generated sites by total generation and included its biogenic emissions from biomass energy generation (which includes its operations offshore wind, onshore wind, solar and natural gas assets). This updated calculation is included in the **Carbon intensity table** along with carbon intensity by revenue and carbon intensity (Scope 1 & Scope 2) from energy generation. In all cases, Northland experienced reductions in intensity levels in part due to the change in agreement at our Kirkland Lake Facility, as well as greater renewable generation as a percentage of the total energy mix.

Other Air Emissions

In 2021, Northland realized a significant decrease in PM10, NOx and VOC emissions primarily due to the closure of our only remaining biomass facility in July of 2021, as well as the switching of the Kirkland Lake facility from baseload to dispatchable operations. The reason for the increase in SOx was due to the inclusion of mobile emissions, which tend to be higher in sulfur from the diesel and gasoline and therefore affect the SOx more than any of the other emissions.

Table 6: Other emissions

	2021	2020	2019
VOC emissions (t)	201	228	211
NOx emissions (t)	1,663	2,182	2,021
NOx emissions (%) in or near areas of dense population	5%	4%	Not reported
SOx emissions (t)	98	16	8.7
SOx emissions (%) in or near areas of dense population	2%	9%	Not reported
PM10 emissions (t)	56	100	104
PM10 emissions (%) in or near areas of dense population	7%	4%	Not reported
Lead (Pb) emissions (t)	0.02	0.05	Not reported
Pb emissions (%) in or near areas of dense population	6%	3%	Not reported
Total mercury (Hg) emissions (t)	0.007	0.008	Not reported
Hg emissions (%) in or near areas of dense population	17%	15%	Not reported

Methodology and Definitions

This table follows **SASB IF-EU120a.1** and **GRI 305-7** for Non-GHG air emissions disclosure. All emissions are calculated using the operation control boundary. All sources of emissions for Northland's operations are included in these calculations, including mobile fuel consumption of diesel and gasoline. Most of the stationary emission factors used are taken from the US EPA (AP-42) while the mobile emission factors originated from European Monitoring and Evaluation Program (EMEP)/European Environment Agency (EEA) 2016 Guidebook.

3. 2019 is used as the baseline for our stated target, however, our reporting base year, in keeping with the GRI 305-1 & 2, is 2020 which was our first year calculating Scope 2 emissions. Scope 2 emissions were not calculated in 2019, however these would have been significantly smaller than in 2020 as EBSA's line losses account for 40% of Scope 2 emissions

2.3 Emissions From Value Chain

Scope 3 Emissions

In 2021, Northland undertook the process of calculating material Scope 3 emissions from 2020 and 2021 to better understand the impact of our value chain. The majority of the emissions in this category come from purchased goods and services for our operations (natural gas and electricity purchased through our regulated utility) and at our corporate offices. The calculation also included capital goods purchased to support our construction activities at our La Lucha solar project in Mexico in 2020 and our Helios solar project in Colombia in 2021. Due to the project-based nature of Northland's work, we expect to see a non-linear pathway for the Scope 3 emissions associated with capital goods, especially as more of our renewable projects enter construction over the next 10 years.

Table 7: Scope 3 emissions

	2021	2020	%Change
Scope 3 (other indirect) GHG emissions (tCO_2e)	**309,014**	**386,798**	**-20%**
• Purchased Good & Services	47,597	39,629	20%
• Capital Goods	9,933	27,169	-63%
• Upstream Fuel & Energy Activities	251,076	317,540	-21%
• Waste Generated in Operations	107	1,670	-94%
• Business Travel	265	284[1]	-4%
• Employee Commuting	37	506	-93%

1. Our 2020 Sustainability report reported 156 tCO_2e for business travel. Based on our updated methodology we have restated this number and purchased additional offsets to compensate for the difference

Methodology and Definitions

Northland's Scope 3 disclosures are in line with GRI 305-3 and the recommendations of the TCFD as well as the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Scope 3 Guidance"). The categories Northland selected include material Scope 3 categories for its 2021 reporting year. The purchased goods and services and capital goods categories are used to quantify emissions for the extraction, production, and transportation of goods and services acquired by Northland in the reporting year. For all goods and services, with the exception of the construction of new generating assets, emissions were estimated through the spend-based approach, using the US Environmentally-Extended Input-Output (USEEIO) models.

Estimated emissions for the construction of new generating assets were calculated by multiplying the expected generation of the new assets by published upstream emissions factors for the specific generating asset. This was then multiplied by the percentage of total expected construction spend which occurred in the reporting year. In 2020, the construction emissions include our solar site in Mexico. For 2021, the construction emissions include the onshore wind sites in New York State and the solar site in Colombia. Upstream fuel and energy-related activities include upstream emissions of fossil fuels used by Northland, as well as upstream electricity generation emissions for electricity consumed at Northland facilities and offices. Transmissions and distribution losses associated with electricity consumed is also included in this category, as well as upstream generation of electricity sold to end users, specifically for EBSA. Emissions for upstream fuels were calculated using fuel consumption data from purchase records and published upstream emission factors for fuel production. Country-specific fuel emissions data was used where available. Emissions for upstream electricity consumption was calculated using electricity consumption data from facilities and offices and country-specific grid emission factors and/or mixes, where available.

Emissions for waste generation in Northland's operations were calculated using actual waste data when available or estimated waste generation rates based on employee headcounts. Employee commuting emissions were calculated based on average commuting data for major cities using national census data, where available, and was not based on employee-specific surveys. Business travel emissions were estimated using spend data for business travel categories using the USEEIO models.

2.4 Climate-Related Management

Northland's corporate strategy focuses on identifying and executing on decarbonization opportunities that aligns with our vision and objectives to build clean, reliable and accessible energy for communities across the globe. Understanding these climate-related opportunities and managing risks is integrated within our governance structure (see chart below and its strategic and risk management process).

In alignment with the TCFD, the following section looks at the processes and identified climate-related risks and opportunities, and their impact on Northland over the short, medium and long-term. Performance of ESG metrics is provided within this section and throughout the ESG Performance Index. For a complete view on all TCFD related reporting, see Appendix C.

Strategy

Northland recognizes the risks and opportunities associated with climate change (both from the transition to a lower-carbon economy and from weather impacts). Climate-related risks and opportunities are assessed throughout the project lifecycle. Monitoring of markets, political and regulatory environments is conducted regularly as part of the assessment program when sourcing appropriate opportunities.

Northland prioritizes risks and opportunities as part of its decision-making process and incorporates them into its planning assumptions, investment decisions, project development and operational processes.

In 2021, Northland began the process of reviewing long-term, third party-informed climate scenarios to further understand climate-related risks and opportunities under high-warming[4] and high-policy[5] scenarios associated with a world that sees a global temperature increase of less than 2°C in 2050. Beginning in 2022, Northland is looking to further integrate these scenarios into its risk identification and management processes.

The tables below outline the identified risks, impacts and opportunities for Northland and demonstrates our resilience, risk management process and metrics on how we measure performance.

Risk Management

Identification and assessment of climate-related risks are done throughout the project life cycle as part of the Enterprise Risk Management (ERM) process. Northland's risk identification, assessment, response planning, reporting, and monitoring are integrated into routine business activities, with ownership of key risks delegated to the functional leads throughout the organization. Any identified risks are escalated to the Executive Team and Board of Directors, which are monitored to ensure appropriate responses.

Northland assesses each potential project for relevant market, reputational, policy and regulatory (carbon price, indirect carbon prices' impact on materials and incentives related to renewable growth, as well as requirements around emissions), and technological risks around feasibility, costs, and returns. Additionally, assessment on relevant physical risks associated with the location are also considered (e.g. typhoon zones). These same assessments are carried through to project design and construction and are monitored along with adherence to regulatory requirements through to operation. The significance of identified risks relates to the ability of Northland to manage and mitigate the impacts on project costs, cash flows and returns, as well as reputation.

Climate-related risks are managed through mitigation (e.g. using the appropriate type of solar module or wind turbine to meet the environment in which it will operate over the short-, medium-, and long-term). Risks are transferred through the use of appropriate insurance, or are mitigated through assessing the magnitude of the risks in relation to the feasibility of the projects under consideration and the necessary actions needed to minimize the likelihood of the risk.

Priority and materiality of all risks is determined using a single enterprise-wide set of risk criteria. These are used to assess the potential impact of the risks on the overall objectives of the corporation, including financial performance, strategy and operations.

Target setting and reporting

- Global ESG Strategy & Reporting
- Investor Relations
- Investment Management
- Corporate Finance

Climate-related risk and opportunity management areas

- Market Analysis
- Procurement
- Operations
- Construction Engineering
- Corporate Finance
- Risk Government Relations
- Investor Relations
- Environment
- Regional Development Offices
- Investment Management
- Project Management

4. The high-warming scenario reviewed leveraged data from the Intergovernmental Panel on Climate Change (IPCC) representative concentration pathway 8.5 (RCP8.5)
5. The high policy scenario reviewed was informed by data from the International Energy Agency (IEA), and the Network for Greening the Financial System (NGFS)

Climate Related Opportunities

Category[1]	Climate Impact	Impact on Northland	Resilience & Metrics
Financing: debt and equity capital (Short-, medium- & long-term)	**Opportunity** Positive reputational and financial impact through demonstrated resilience, products and services and market opportunities related to decarbonization	**Access to capital** Northland expects to benefit from direct business partnerships as well as the trend of increasing capital allocation by institutional investors and global capital market participants to climate-resilient and sustainable energy companies. Northland's current shareholder base includes large institutional investors and "ESG funds" that have determined that Northland meets their investment criteria, based on our focus on renewable power development and generation. Financial products, such as green bonds and other green financings, present additional financing opportunities for Northland in the future.	Northland's current growth strategy over the short-, medium-, and long-term is aligned with developing climate friendly energy infrastructure in markets where demand is growing, and supply is required. Target(s): • Gross renewable energy capacity to targeted reach 6.5 GW by 2027 and over 10 GW by 2030 • Reduce GHG emissions intensity from generation by 65% by 2030 (from 2019) Metric(s) used: • GHG emissions intensity reduction tCO_2e/MWh • % Revenue from renewable energy and related infrastructure (e.g., Offshore Wind) • Total gross GW of renewable energy capacity
Intangible Assets (Short-, medium- & long-term)		**Growth on human and social capital** Northland expects that its demonstrated climate resilience, focused growth and innovation in renewable energy, coupled with its global presence and historical track record will continue to help attract and retain top talent seeking to align themselves with organizations demonstrating their values. Northland expects that these reputational advantages will support greater social capital opportunities including new business and community partnerships, and help support its primary business of renewable power development.	Northland's renewable energy focus, coupled with its strong performance on all aspects of ESG will help provide reputational and competitive advantages to attract and retain employees and empower them to support the organization's success. Identified risks related to attracting the specialized skills and experience required, particularly in new markets and for new technologies. Northland understands these risks and is building global programs to better attract and retain the necessary talent to help achieve its growth. Metric(s) used: • Voluntary employee turnover rate (%) • Employee engagement score (/100)
Revenue (Short-, medium- & long-term)	**Opportunity** Increased demand for accessible and affordable green energy in new markets (public and private industrial and commercial entities). The need for more renewable energy sources and new technologies (products & services) to meet governmental and corporate carbon targets and consumer preferences	**Growth of renewable energy** Increased demand for green energy by government and corporate offtakers will allow for greater revenue potential over the long term. This will ultimately provide Northland with the opportunity to enhance its operating and financial performance and build business resilience as it develops, owns and operates sustainable assets across the globe. Northland's strategy around growing its renewable portfolio centers on balancing opportunities in key target markets while evaluating changing regulatory and geopolitical landscapes.	Northland already has a pipeline of capitalized and secured projects over the medium-term and has set targets to add to this significantly in order to capitalize on the revenue opportunities. Northland is continuously looking at new opportunities to develop offshore wind and onshore renewables, as well as to invest in new technologies to support renewable energy (e.g. storage, green hydrogen, etc.) Target: **6 GW of additional gross renewable capacity in operation by 2030** Metric(s) used: • % Revenue from renewable energy and related infrastructure (e.g., storage) • Total gross GW of renewable energy capacity

1. Short-term is defined as the next three years, medium-term as the next four to nine years and long-term as more than 10 years

Climate Related Risks

Category	Climate Impact	Impact on Northland	Resilience & Metrics
Expenditures: OpEx (Medium-& long-term)	**Risk** Changes in policy and legal / regulatory requirements which would increase the price of carbon	**Impact on operation costs** Changes in policies and regulatory requirements around carbon are expected to increase over the next few years. These changes could have an impact on operational costs such as increased costs for materials, fuel and in increased carbon taxes. Northland is most vulnerable to these impacts through its natural gas assets (although currently these costs are mostly absorbed by the offtakers) and to a lesser extent its other sites where these rely on fuel generators, non-electrical vehicles, and non-renewable electricity. Northland is also at some risk of impact through indirect increases of goods and services under a stricter policy scenario.	Northland continually monitors global regulatory developments and acts to manage the related financial and business risks associated with its activities. Northland discloses its GHG and other air emissions and year over year performance in its Sustainability Report and ESG Performance Index. Climate change-related compliance requirements did not have a significant financial or operational impact on Northland's earnings or capital expenditures in 2021. Under a long-term 'policy scenario' this risk remained low on as % of revenue based on future exposure to a $400/tCO$_2$e by 2050) in consideration of Northland's visible pipeline. Metric(s) used: Operational expenditures related regulatory expenses ($CAD/year) (e.g., carbon tax paid)[1]
Tangible Assets (Long-term)	**Risk** Increased severity and frequency of storms, rising mean temperatures and changes in precipitation and rising sea levels	**Risk to operational effectiveness and project timelines** Longer periods of high heat days could have an impact on the functionality and efficiency of equipment but could also delay construction or maintenance. 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 Northland has 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.	Northland is exposed to weather risk and subsurface risk during the construction and operation of its offshore wind facilities. In the short- and medium-term, careful consideration in design, effective monitoring of cooling systems, equipment selections (e.g., typhoons resistant turbines), maintenance schedules and location of assets are integrated into Northland's development and maintenance processes and help to mitigate these risks. Additionally, Northland currently mitigates these risks through the purchase of insurance and/or the inclusion of provisions under applicable construction agreements with contractors. Metric(s) used: • Number of disruptions, delays (in days) due to weather-related impacts[2] • Revenue loss or capex related to disruptions[3]
Revenue (Short-, medium- & long-term)	**Risk** Extreme variability in weather and wind patterns due to chronic physical impacts of climate change	**Increased variability of results** Extreme weather may impact variability in results for offshore wind production. This risk is exacerbated in some regions by concentration of assets (e.g., the North Sea, East Asia). This could impact revenues associated with these assets.	Our operations and project development teams carefully and regularly monitor the relevant areas to assess expected wind performance and budget and plan accordingly. However, long-term regionally specific weather data is still limited. Metric(s) used: Description of any significant diversion from P50 (above or below) when applicable (descriptive)[4]

1. Northland has agreements with its offtakers in Ontario and Saskatchewan to reimburse or assume the costs of the almost all carbon related taxes from its natural gas facilities . Natural gas electricity generation still plays an important role within the energy mix of both provinces and as such the costs are assumed by the utilities. However, we do reconcile these costs and monitor for changes that may impact or increase the costs to Northland
2. In 2021 there were no disruption or delays due to weather related impacts
3. In 2021 there were no revenue losses or capital expenditures related to disruptions caused by weather or natural events
4. As documented in Northland's quarterly reporting, in Q1, Q2 and Q3 of 2021 there were lower than predicted winds in the North Sea impacting our three offshore wind facilities

Section 3.
Environmental Management

3.1 Environmental Management and Compliance

Northland has a strong commitment to environmental compliance with all applicable laws, obtaining and maintaining permits at all our of construction and operating locations across the globe. Details of these permits and related reports can be found on project websites at www.northlandpower.com.

Managing the impacts on our operations is an important part of our business processes. Our strategic planning for project development and operations incorporates the identification and assessment of risks, using a precautionary approach to develop action plans in response to any identified risks. Legal and regulatory frameworks surrounding the electricity sector are comprehensive and impacts to the environment are generally well known. As such, there are few instances of lack of certainty about threats of serious or irreversible damage. We take early action to reduce any environmental impacts, proactively communicating with stakeholders during the early stages of project development about uncertainties and potential risks. This is in line with our environmental policy.

Each year, Northland issues an updated Environmental Policy. We manage environmental compliance at corporate and local levels and place a high value on good environmental performance. Consultants and advisors are leveraged in each of our regions to maintain awareness of applicable legislation (including amendments) and environmental practices. Northland employees in our facilities prepare an Obligations Table that summarizes our commitments to monitoring and reporting environmental requirements. These tables ensure timely monitoring and reporting.

Table 8: Instance of non-compliance or significant fines or sanctions

Non-compliance with environmental laws and regulations	In 2021, no incidents of non-compliance with environmental laws and regulations occurred during the reporting period.
Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations	In 2021, there were no incidents of non-compliance with environmental laws and/or regulations that resulted in significant fines and or non-monetary sanctions.

Methodology and Definitions

The information reported in this section aligns with **GRI 102-11** and **GRI 103-2**, as well as **GRI 307-1** on compliance with international laws and regulations and significant fines and sanctions for non-compliance. The metrics under this section include all of Northland operations (including EBSA) under our control. This also includes projects under construction where Northland has operational control. In 2021, these included the onshore wind projects in New York state (Bluestone and Ball Hill), the solar project in Mexico (La Lucha) as well as the solar project in Colombia (Helios).

In this section, non-compliance is defined as an event that does not meet the requirements of either the permits (environmental or otherwise) held by Northland at the site, or with any applicable environmental laws and/or regulations. Significant fines are considered to be fines or penalties resulting from violations that occurred during the reporting year that are greater than the equivalent of $10,000 USD in the reporting currency (CAD).

3.2 Biodiversity

Northland does not own, lease, or manage sites in, or adjacent to, protected areas and areas of high biodiversity value (outside protected areas). Northland uses the International Union for Conservation of Nature (**IUCN**) Red List of Threatened Species and national conservation lists to provide a fulsome list of species within the regions where we operate. This disclosure helps to identify where an organizations' activities could pose a threat to endangered plant and animal species and consequently, initiate steps to avoid harm.

A description of Northland's activities to preserve and restore habitats can be found in our 2021 Sustainability Report. Northland adheres to all environmental permitting requirements for the management of plants and animals and their habitats in our areas of operation.

There were no project delays in 2021 due to ecological impacts at our solar PV project construction sites (La Lucha and Helios) or any other sites or operating facilities.

Table 9 lists the number of species by class and IUCN Red List category for locations where we operate (offshore and onshore wind parks, solar parks, natural gas plants, and our regulated utility) during 2021. All species with habitats within our locations of operations are listed, including species that are not included in our environmental permitting, which are not directly impacted by Northland's operations.

Table 9. Number of species with habitats in areas of Northland operations during 2021

	Total	Canada	The North Sea (Germany, The Netherlands)	Spain	Colombia
Critically Endangered, CR	**2 Mammal** **3 Amphibian** **4 Reptile** **5 Bird** **8 Fish**	1 Reptile 1 Fish	1 Bird 7 Fish	1 Mammal 3 Reptile 2 Bird	1 Mammal 3 Amphibian 2 Bird
Endangered, EN	**9 Mammal** **10 Amphibian** **5 Reptile** **7 Bird** **4 Fish**	2 Mammal 1 Reptile 1 Fish	2 Mammal 3 Fish	3 Mammal 3 Reptile 3 Bird	2 Mammal 10 Amphibian 1 Reptile 4 Bird
Vulnerable, VU	**23 Mammal** **11 Amphibian** **2 Reptile** **37 Bird** **12 Fish**	3 Mammal 7 Bird 2 Fish	2 Mammal 4 Bird 10 Fish	5 Mammal 3 Amphibian 1 Reptile 13 Bird	13 Mammal 8 Amphibian 1 Reptile 13 Bird

Methodology and Definitions

The information reported in this section aligns with **GRI 304 1-2,4** for biodiversity and **SASB RR-ST-160a.1** for ecological impacts of solar project development. These metrics cover all operations (including EBSA) over which Northland has operational control, and solar projects under construction over which Northland currently has operational control. Additionally, the sphere of influence is the radius of, or around, the property where an ecosystem may still be affected. Northland does not take into consideration where operations are connected to distribution and transmission lines (except for our regulated utility).

Northland used the IUCN Red List as it serves as an authority on the sensitivity of habitats of flora and fauna and the relative importance of these habitats in an organization's areas of operation. The IUCN uses criteria on a geographic range, population size and populations decline or increase in addition to extinction probability analysis to determine the threatened categories of species. Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) species are considered threatened with global extinction. Species of fish are included for operations within or adjacent to significant bodies of water. Northland used the Red List search tool to identify species with habitats in areas where we operate (areas are a minimum of 2000 km2). The following locations were assessed: In Canada, Ontario, Quebec, and Saskatchewan; in Colombia, the department of Boyacá; in Spain, central and southern regions; in Germany and the Netherlands, The North Sea. For more information about the nature and criteria of the categories reported by Northland see the IUCN Red List Categories and Criteria on the IUCN website.

3.3 Water Management

Northland's water management objectives are to efficiently use water in its processes and minimize the quantity withdrawn from the environment; to minimize any impacts on the water sources supplying water and the receiving water bodies; wan to recycle/reuse water as much as possible. Northland's main water use is in the operation of its natural gas assets. These facilities are located in jurisdictions where permitting requirements are extensive and prescriptive.

Northland works with local regulators, ensuring there is adequate water supply for the generating stations and other users.

In 2021, there were **no incidents** of non-compliance associated with water quantity and/or quality permits, standards, and regulations.

Water-Related Risks and Risk Management

Nearly all of Northland's water withdrawal is used for cooling purposes at its natural gas facilities. The total withdrawal is affected by production levels, as well as the ambient and water temperatures. All of our water withdrawal used for process water or system cooling is surface water or is supplied via the municipal supply. Minimal amounts of groundwater are removed for domestic or sanitation purposes, generally at renewable energy facilities without municipal water supply. Water supply risk is mitigated by being located on large rivers or lakes where flow is ensured. Operating and maintenance practices ensure pumping systems are reliable and redundancy is built-in via installed back-ups. Where the water piping integrity is a concern, soft starting of the pumps reduces the risk of water hammer shock.

Interactions with Water as a Shared Resource

Natural gas power generating stations have two main water requirements:

A. process water used to make-up for losses and blowdown in the steam cycle,

B. water used for cooling.

A key design feature of any natural gas generating station is the steam-condensing system and whether it is water cooled or air cooled. If water is the prime cooling medium, extensive assessments are undertaken to understand historical flows/water availability and adequacy. The regulatory process requires that our own water requirements and the requirements of others within the same usage area considered.

Management of Water Discharge-Related Impacts

Discharge criteria are established by the provincial regulator, based on their published standards and also with consideration for local receiving water conditions. If the regulator believes a particular discharge constituent may be a concern, then a discharge study (assimilative capacity study) will be conducted to model how the discharge will impact the receiving water body. The physical dimensions (depth, width, flow velocity) of the receiving water body will often be considered as part of the assessment, with the objective of ensuring the discharged effluent will not have a negative impact on habitat or aquatic life.

Table 10. Water withdrawn and discharged

	2021	2020	% Change	2019
Total water withdrawal (ML)	82,559.07	82,506.45	0.06%	83,549.28
• Water withdrawal by source: surface water (ML)	82,510.16	82,457.11	0.06%	83,498.91
• Water withdrawal by source: third-party water (ML)	48.92	49.34	- 0.85%	50.37
• Percent (%) withdrawn in regions with high or extremely high baseline water stress	Northland does not operate natural gas facilities in areas with high or extremely high baseline water stress.			
Total water discharge (ML)	**81,753.45**	**81,461.67**	**0.36%**	**81,872.41**
• Water discharge by destination: surface water (ML)	81,713.40	81,418.14	0.36%	81,828.99
• Water discharge by destination: third-party water (ML)	40.06	43.53	-7.97%	43.42
Percent (%) consumed in regions with high or extremely high baseline water stress	Northland does not operate natural gas facilities in areas with high or extremely high baseline water stress.			
Percent (%) returned[1]	**99%**	**99%**	**0%**	**98%**

1. Percent returned is calculated as the total water discharged (back to source) divided by the total water withdrawn.

Methodology and Definitions

The information reported in this section aligns with **GRI 303 1-5** and **SASB IF-EU-140a.1-3** for water risk management, withdrawal and consumption. Water withdrawal and discharge are measured for Northland's natural gas facilities only. Water use is different from across different facilities, and calculations used to measure water use and the proportion of water withdrawn and discharged varies significantly. Northland's North Battleford facility uses air cooling for steam condensing and only uses third-party water for process water. This limits water withdrawal as less is needed; however, more water is consumed through conversion to steam through this process, meaning less water is discharged. Our Spy Hill facility operates in simple cycle mode, with no steam or steam turbine to cool, meaning no water is withdrawn for that site. In 2021, our Kingston and Iroquois Falls sites, which, like our Thorold and Kirkland Lake sites, use water from the waterways to cool and then release, did not consume much water as they were operating on dispatchable-only contracts. Kirkland Lake also transitioned to a dispatchable contract in 2021, reducing its water taking requirements. Therefore 96 per cent of the water withdrawal occurs at our Thorold natural gas site, which uses water from the canal for cooling and then monitors the water to ensure the temperature is safe to return back to the water way. In all cases, water is carefully monitored and returned at equal or better-quality levels than it was withdrawn. Some water loss occurs due to evaporative cooling systems of the Saskatchewan sites.

3.4 Effluents and Waste Management

Northland adheres to all local requirements when dealing with hazardous and non-hazardous waste. Where possible, we recycle or reuse waste to minimize the amount sent to landfills. All waste is disposed of off-site. Waste streams are tracked at the operating facilities and at regional and corporate offices, where possible. We are currently developing our internal waste management reporting strategy, including mapping processes to improve accuracy in measuring and tracking non-hazardous waste and recycled waste. All hazardous waste and recycled waste, and most non-hazardous waste, is disposed of by waste management contractors. Northland's strategy will include obtaining accurate waste disposal method data from waste recipients, taking into consideration whether waste hauling companies are delivering waste to authorized disposal facilities or sites.

In 2021, there were no significant spills at any of our sites or facilities including operations and solar project construction sites. There were minor reportable spills at our New York Wind construction sites and European offshore wind farms, however, these had no lasting impact to the site or surrounding area and no remediation action was required. All spills are managed in accordance with our environmental permitting and legal requirements of jurisdictions where we do business. Our approach is to respond to spills promptly and in accordance with local requirements. All spills are communicated directly to site managers who are responsible for implementing safety or management procedures, including proper disposal and remediation, and alerting of local authorities as required.

The increase in hazardous waste generated for 2021 is due, in part, to the acquisition of our portfolio of operating onshore assets in Spain. Additionally, as part of a government led initiative, EBSA tested and replaced a significant number of transformers with a risk of PCB contamination. The increase in hazardous waste includes 100 mt in non-PCB contaminated transformers as well as 800 kgs in PCB contaminated transformers.

Table 11. Waste generated

	2021	2020	% Change
Total waste generated (mt)	**20,881**	**No reported**	**-**
• Waste generated: hazardous (mt)	253	120	87%
• Waste generated: non-hazardous (mt)	20,251	Not reported	-
• Waste generated: recyclable (mt)	377	Not reported	-

Methodology and Definitions

The information reported in this section aligns with **GRI 306-3 (GRI 306: Waste 2020)** and **GRI 306-3 (GRI 306: Effluents & Waste 2016)**, covering all operations (including EBSA) over which Northland has operational control, as well as **SASB RR-ST-150a2**, covering Northland's solar project construction sites.

Northland reports on waste generated in its own activities by waste type. Non-hazardous wastewater is excluded from calculations for non-hazardous waste. Waste management data is collected from facility managers and site supervisors based on invoices and/or manifests received from third-party contractors. In some cases, data may not be recorded in Northland's inventory for some types of waste managed by contracted companies from major maintenance outages. Hazardous waste is defined by applicable regulations in the reporting jurisdiction. In some cases, amounts reported for non-hazardous waste are estimated based on waste disposal bin size, estimated waste volume and contractor pick-up frequencies. Waste is reported as recycled when the contracted waste management company has an applicable waste recycling program in place to process such waste. All units for measuring waste amounts are converted to kilograms using available information on density factors and subsequently converted to metric tonnes for reporting.

Significant and reportable spills are those included in Northland's financial statements, for example due to resulting liabilities, within the reporting year, or where releases to the environment exceed applicable environmental permitting requirements.

Section 4.
People

Core GRI 102-41; GRI 102-8; GRI 401-1

4.1 Talent Management

Under the leadership of Rachel Stephenson, Chief People Officer, Northland invested in enhancing the Chief People Office and People Services. The group established a Talent and Fit for Future team focused on building programs and processes across the talent lifecycle, including recruitment, onboarding, performance, learning and development, and engagement.

In 2021, Northland continued to grow our global workforce with the acquisition of operating onshore renewable assets in Spain, as well as additions to Northland's development and corporate teams to support global growth. The reduction in percentage of employees covered by collective bargaining agreements is due to the change in contract at our Kirkland Lake natural gas facility in July 2021, where biomass-related production ceased.

In 2021, we are tracking of internal transfers and development. This year, we had an internal rate of movement of five per cent with at least 54 individuals hired internally or making a transfer.

Table 12: Employees

	2021	2020	%Change	2019
Total number of employees	**1,186**	**1,104**	**7%**	**425**
• Full time	1,176	1,093	8%	415
• Part time[1]	10	11	-9%	10
• Percentage of total employees covered by collective bargaining agreements	47%	56%	-16%	8%
Full time employees by region				
• Canada	277	272	2%	254
• Colombia	558	573	-3%	N/A
• Germany	150	124	21%	118
• The Netherlands	22	12	83%	12
• Mexico	20	34	-41%	15
• Taiwan	69	N/A	N/A	N/A
• Spain	19	N/A	N/A	N/A
• Other[2]	61	78	N/A	16
Number of new employee hires	**171**	**190**		**138**
• Male	67%	53%[4]	N/A	79%
• Female	33%	24%[4]	N/A	21%
Total number of employee turnover	**104**	**62**		**43**
• Employee turnover rate	9%	6%	50%	10%
• Voluntary employee turnover rate[3]	6%	-	-	8%

1. Part time employees work in Canada (2), Germany (3) and the Netherlands (5) in 2021
2. For 2021 Other includes: United Kingdom (18), United States (15), Japan (13), South Korea (12) and Poland (3). In 2020 and 2019 other includes Japan, Poland, South Korea, Spain, Taiwan, United Kingdom and USA
3. Voluntary turnover rate for 2020 does not include EBSA as the information was not available. The Voluntary Turnover for all other sites is 5.9%
4. Out of the 190 new hires in 2020, 44 or 23% were undeclared

Methodology and Definitions

The information in this section aligns with **GRI 102-8, 41** and **GRI 401-1**. Our employee numbers are calculated on full- and part-time employees as at December 31, 2021. The numbers do not include contracted employees. Gender is based on information provided by employees during the onboarding process. In 2020 Taiwan was covered under the "other" category and therefore does not have a percentage change associated.

4.2 Talent Development & Engagement

Engagement

In the summer of 2021, Northland launched our first global engagement survey through Glint. This annual survey is the backbone of our engagement strategy. In total, 82 per cent of our people across the globe responded to the survey and the company achieved an overall engagement score of 75, keeping in line with the Glint global benchmark (see table 13).

Training

Supporting the development of our people through access to, and support for, required and voluntary training is an important part of our talent development program. Most training is supported at a site or function level, although corporate training is provided for Health and Safety, as well as for Cybersecurity. Additionally, Northland employees are encouraged to take courses and join conferences to further their skills and knowledge.

In 2021 we undertook a more thorough review of training related spend and reporting. The significant difference in spend and hours is accounted for based in this change in methodology as well as the inclusion of new sites (Spain and EBSA) as well as all of our offices and development projects.

Performance

In 2021, we globalized our performance process by ensuring our people across the globe followed the same evaluation calendar (our subsidiaries EBSA and Gemini are not included in this process as they have their own systems in place). We also enhanced our 2021 performance process by hosting calibration sessions at the end of the performance cycle so managers could discuss performance ratings for their team with other managers in their functional area. These sessions helped identify and correct potential rating biases or errors and ensured performance evaluations were fair, accurate, and supported by evidence of achievement. Performance is based on a five-point system to help compare performance across levels and functional areas based on the achievement of pre-determined goals. In 2021, 98 per cent of Northland employees and 95 per cent of EBSA employees participated in the performance management process[6].

Compensation and Remuneration

Northland seeks to ensure equitable compensation for all of its employees regardless of gender, age or background. Compensation is based on skills, experience, and merit, and is evaluated against market standards. When necessary, we make pay adjustments in order to maintain equitable compensation. Given the nature of our business, there may be different levels of experience and skills required to fulfill a role, and these are compensated accordingly. As Northland grows, we are committed to greater understanding how we are actively managing equitable compensation and disclosing the results.

Benefits

Life and health care insurance

Northland provides a combination of private and public life and health care insurance coverage globally, and annually reviews coverage to ensure market competitiveness. Coverage varies regionally in keeping with markets.

Short-term disability

Northland administers short-term disability cases internally and provides a combination of private and public insurance coverage globally. This is also reviewed annually to ensure market competitiveness.

Table 13: Talent engagement and development survey results

Category	Questions	2021 Global Score
Overall Engagement	**How happy are you working at Northland?**	**75**

Table 14: Employee courses and training by hours and investment

	2021	2020	%Change	2019
Investment in training and education ($CAD thousands)	2,064	636	224%	610
• Total hours of training hours	93,903	37,241	152%	Not reported
• Hours of training per employee per year	79	34	132%	Not reported

Methodology and Definitions

The information in this section aligns with **GRI 401-2** and **404-1-3**. The aggregate spending reported is based on invoices from individual trainings and courses taken by employees supported by Northland, as well as fees paid to services providers for specialized Northland group training. The calculation for hours per employee uses the total employee headcount and includes all sites, corporate offices as well as development offices.

Where detailed hourly breakdowns were not provided, we estimated total hours based on a $100 CAD per hour estimation based on corporate and operational averages and descriptions.

Parental leave

Northland also provides parental leave in accordance with local entitlements, plus additional top-up for a pre-defined period during leave. In 2021, 33 employees took parental leave. Of that group, nine or 27 per cent were female and 24 or 73 per cent were male. Of those that took leave, 30 (or 90 per cent) returned within the reporting year.

Retirement provision

Northland provides matched contributions towards retirement saving programs for employees who elect to have payroll deductions.

Stock ownership

Northland primarily provides equity programs to Executive Officers only; the exception is that the Board of Directors has discretion to provide project development incentives in the form of cash or shares.

6. Northland employees hired after October 31 2021 were not included in performance review activity for the 2021 cycle.

4.3 Diversity

Northland is committed to fostering an inclusive environment, where everyone is empowered to do their best work, all differences are welcome, practices are equitable, and everyone experiences a sense of belonging. Northland has been able to exceed its targets for gender diversity at its **Board (44 per cent female) and Executive (43 per cent female)** levels (see corporate governance section). Greater gender representation across all employee levels remains a challenge for Northland and the broader renewables industry.

Diversity, Inclusion and Belonging

As part of the 2021 global engagement survey, we included items to measure our peoples' perception of diversity, inclusion and belonging at Northland. The survey included themes around inclusive leadership, belonging, empowerment, career and work-life balance. Our engagement survey saw favourable results for base year, with survey items such as 'I feel comfortable being myself at work' receiving a global score of 78. We will continue assessing inclusion and belonging based on patterns in employee experiences through our engagement survey, as well as focus groups. These questions are also aimed to help us in establishing processes to measure the ongoing efficacy of our diversity, inclusion and belonging initiatives by continuing to implement qualitative measures designed to capture our people's experiences, as well as establishing a numeric baseline to track improvement on inclusion and engagement over time..

Table 15: Percentage of employees per employee category by sex and age

	Gender[1]		Age			
	Male	Female	< 31	31-40	41-50	>50
All employees	**77%**	**23%**	**16%**	**39%**	**23%**	**22%**
• Senior Management	71%	29%	0%	18%	24%	59%
• Directors	82%	18%	0%	26%	42%	32%
• Managers	70%	30%	8%	37%	33%	22%
• Individual contributors	77%	23%	21%	29%	20%	30%

1. Gender here is determined for use within labour and insurance records, these are not self identified, in the future Northland will be working to advance self-identification on gender identity among other self-identification criteria

Methodology and Definitions

These metrics are calculated in line with **GRI 405-1.b**. Senior management is defined as executive officers, executive vice-presidents and vice-president employees. Directors include directors and senior directors across the organization.

Table 16: Glint Engagement Survey: Diversity, Inclusion and Belonging Scores

Topic	Questions	2021 Global Score[1]
Authenticity	I feel comfortable being myself at work.	78
Belonging	I feel a sense of belonging at Northland.	69
Culture	Northland has a great culture.	66
Inclusion	Leaders at Northland value different perspectives.	66

1. Survey score did not include participation from EBSA nor Gemini employees

Section 5.
Occupational Health & Safety

5.1 Health & Safety Performance

Northland's approach to health and safety is outlined in our 2021 Sustainability Report as and our Global Health and Safety Policy.

Recording and Reporting Accident Statistics

We track all our controlled sites, which includes offices, operating facilities and projects. They report all incidents and statistics, and the Management Team receives monthly reports on our global health and safety performance. Information gathered from incident investigations is used to identify and share lessons, discover trends and improve standards, systems and practices.

The health and safety metrics are meant to define which work-related events are tracked in order to report work-related incidents and promote a culture of safety. It is understood that these definitions may not match the reporting definitions used by the regulators in particular regions. It is recognized that in some cases, an office, facility or project may need to keep two sets of numbers: one for local regulations and one to meet corporate reporting standards. The objective is to collect health and safety statistics using common metrics for all locations so that the numbers can be readily trended, tracked and compared.

There were no life-changing or high-consequence injuries last year. Common types of injuries include bruises, cuts, and bone fractures arising from driving, contact with equipment, and slips, trips and falls. We remain focused on increasing awareness and mitigation of the risks associated with these activities. We set a corporate target of 10 per cent reduction in our Total Recordable Incident Rate (**TRIR**) for 2021 and achieved a 42% reduction across all our regions. Over the past three years, we have started and completed the construction of offshore wind projects and onshore renewables assets, and have undergone growth through acquisitions, meaning year-over-year comparisons should be viewed with caution. In addition, in 2021 there were changes in methodologies used to measure total hours worked, including greater inclusion of contractors hours worked. The TRIR and total hours worked have received limited assurance by EY in 2021 and GHD in 2020.

Training

Our training program needs are identified and delivered to support adequate levels of competency. We integrate new employees and contractors into our programs during their relevant onboarding and orientation. Training programs are periodically reviewed to ensure they remain relevant and appropriate to the nature and extent of the risks. In 2021, we observed a significant increase of our total hours in health and safety training, we put in place improved tracking and corporate reporting processes, and we returned to our regular training schedule after altering it in 2020 to protect our employees and other stakeholders.

Table 17: Health and Safety performance

Health and Safety	2021	2020[1]	% Change	2019
Total hours worked (all sites)[2]	**4,062,211** ☑	**3,439,945**	**18%**	**922,584**
Total recordable work-related injuries (all sites)	**9**	**13**	**-31%**	**0**
• Own employees	3	Not reported		
• Contractor's employees	6	Not reported		
Number Lost-time injuries (LTI)	**6**	**7**	**-14%**	**0**
• Own employees	2	Not reported		
• Contractors' employees	4	Not reported		
Total Recordable Incident Rate (TRIR)	**0.44** ☑	**0.76**	**-42%**	**Not reported**
Lost-Time Injury Frequency Rate (LTIFR)	**0.30**	**0.41**	**-27%**	**0**
Number of Fatalities resulting from a work-related injury	**0**	**0**	**0%**	**0**
• Own employees	0	0	0%	0
• Contractors' employees	0	0	0%	0
Number of high-consequence (life changing) work-related injuries - excludes fatalities	**0**	**0**	**0%**	**0**
• Own employees	0	0	0%	
• Contractors' employees	0	Not reported		
Health and Safety-related training (hours)	**38,044**	**13,608**	**180%**	**Not reported**

1. 2020 numbers were verified by GHD, see assurance statement
2. Northland receives monthly reports with total hours for both contractor and employees hours worked, as such these numbers are reported in aggregate. We are looking to ensure disaggregated data beginning in 2022

Methodology and Definitions

These metrics are calculated in line with **GRI 403-5, GRI 403-9, SASB IF-EU-320a.1** and **SASB RR-WT-320a.1**. Employee information includes all employees and contractors working in any offices, or on any project under the operational control of Northland or one of its subsidiaries. Contractor information (injuries and total hours worked) is currently available for all sites, operations and offices with the exception of EBSA, where contractor's hours worked is not currently available. This information will be included for the 2022 disclosure.

Total hours worked is calculated based on the number of FTEs per month and on standard industry working hours per week. All rates are calculated using 200,000 hours worked. Recordable injuries are work-related injuries or ill health that result in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness; or significant injury or ill health diagnosed by a physician or other licensed healthcare professional. Life-changing or high-consequence incidents refer to a work-related injury from which the worker cannot, or is not expected to, recover fully to pre-injury health status within six months. Lost-time injuries are captured when an individual is unable to return to their next scheduled day or shift, total numbers of days are not accounted for in this disclosure, only occurrence.

In all cases, only work-related incidents arising out of, or in the course of work, and only work-related injuries or illnesses arising from exposure to hazards at work are included in this report.

Training hours include employees and contractors. The hours are calculated based on the number of participants per session and the duration of that training session. Training hours include any topic related to specific work-related hazards, hazardous activities and hazardous situations, including hours attending any health and safety related conference. Technical training and non-health and safety related training are not included in this report.

Note that in 2021 there were changes in methodologies used to measure total hours worked, including greater inclusion of contractor hours worked. Our 2020 numbers do not include the full extent of these contractor hours (contractor injuries for all sites with the exception of EBSA were included in 2020) and therefore we see a significant increase in total hours worked between 2020 and 2021. Also, while total incidents did go down, the % change between the two years for both TRIR and LTIFR is likely higher due to the previous methodology. Since this 2020 number was assured by GHD and used to measure performance internally and externally, we have not restated it in this year's report with the updated methodology.

Section 6.
Community

6.1 Community Landscape

Northland's Community and Indigenous Relations Policy and commitments, and our focus on developing strong relationships with community stakeholders is fundamental to how we do business. This includes consulting early and often with community stakeholders, conducting appropriate social impact assessments, investing to support the sustainability of communities and ensuring ongoing collaboration (see policy).

We consult local and Indigenous communities throughout the life of each project and have liaison staff who work directly with communities to maintain strong and positive relationships. The purpose of Northland's management approach for local communities is to understand the communities and foster a productive and mutually beneficial working relationship. We have commitments to these communities and clearly defined responsibilities. At each project, we typically have a social team that consists of Community and Indigenous Relations staff from corporate head office, the local liaison person and project management. We maintain grievance, and comment and complaint mechanisms at our projects.

Northland implements environmental and/or social impact assessments as required at the start of the life of each project. Community engagement and/or development programs are implemented during the early stages of project development at all project sites, resulting in ongoing community engagement across Northland's global operations.. Results of environmental and social impact assessments are available upon request.

Table 18: Community impacts in areas of operations

	2021	2020
Operations with significant actual and potential negative impacts on local communities	None	None
Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of:	100% of Northland's operations have implemented community programs and/or environmental or social impact assessments.	

Methodology and Definitions

The information in this section aligns with **GRI 103-2** and **GRI 413 1-2**. These metrics cover all operations (including EBSA) over which Northland has operational control, with a focus on engagement with local communities to understand their needs and expectations, as well as assessments and planning needed to understand actual and potential impacts to Northland's area of influence. Elements reported are those that have been consistently applied across the organization. Local communities are defined as persons or groups of persons living and/or working in any areas that are economically, socially, or environmentally impacted (positively or negatively) by an organization's operations. Operations with significant impacts on local communities are those that have a higher-than-average potential of negative impacts on the social, economic or environmental well-being of local communities.

6.2 Economic Impact and Community Investment

Northland creates and distributes significant economic value to our stakeholders and in the communities where we operate. The direct value we deliver comes in the form of salaries and wages, payments for goods and services, through investment in local communities and dividends to our shareholders. Northland also provides indirect economic benefits through payments in taxes to governments as well as through our supply chain activities.

In 2021, Northland supported communities where we work, including our development and construction projects, our operating facilities and our offices through donations, sponsorships, community agreement programs and where possible, volunteering.

Northland formalized its Community Investment initiatives into a public policy in 2021. The policy outlines the types of investments that qualify and the pillars we support. The majority of Northland's Community Investment activities are tied to our operations and are in most cases provided through community contribution agreements. Northland supported over 300 organizations with over $670M (CAD) to support decarbonization and proactive environmental protection, health and well-being and sustainable communities across the globe.

Table 19: Economic value generated and distributed

Economic Value ($CAD thousands)			
Economic value generated	**2021**	**2020**	**2019**
Revenues	$2,104,917	$2,072,650	$1,671,331
Economic value distributed			
Operating costs	$686,730	$646,153	$346,454
Employee wages and benefits	$117,362	$114,407[1]	$73,875
Payments to capital providers	$562,763	$683,614	$619,854
Payments to governments	$84,410	$90,282	$49,236
Community investments	$2,735	$1,116	$964
Total economic value distributed	**$1,454,000**	**$1,535,572**	**$1,090,383**
Net economic value retained	**$650,917**	**$537,078**	**$580,948**

1. We have restated the numbers for employee wages and benefits from 2020 to include information relevant to EBSA All totals have also been updated to reflect this change

Table 20: Community investment

Community Investment Categories	**% of Total Community Investment**
Donations and Sponsorships	25%
Community Contribution agreements	75%

Methodology and Definitions

This section's information on economic value generated and distributed aligns with **GRI 201-1**. In keeping with the standard, net economic values retained is the value retained from the economic values generated less the total economic value distributed. The metrics under this section are aligned with Northland's consolidated financial statements:

- Revenues include sales and finance lease income.
- Operating costs include cost of sales, plant operating costs and general and administrative costs.
- Payments to capital providers include payments for interest and dividends to common shareholders, preferred shareholder and non-controlling interest partners, disclosed on a cash basis.
- Payments to governments is limited to current-year tax expenses recognized on an accrual basis.
- Employee wages and benefits included payroll costs, including, but not limited to, employer-paid benefit premiums, employer-matched savings contributions and allowances.

Community Investments was calculated separately and includes any donations, sponsorship or community contribution agreement spending done to support local communities at our operations and construction Sites or to support causes where Northland does business. These also include employee matching programs to support our employees' philanthropic activities. All community investment is done in line with Northland's Community Investment Policy. Donations are the provision of monetary and/or in-kind gifts to support registered charitable organizations and/or organizations that serve the community. Sponsorship activities include the support for non-profit and charitable activities and events either through monetary or in-kind support. Community Contributions Agreements are committed community investments agreed upon through formal agreement; these may be during initial development and construction or throughout the life of the operation.

6.2 Economic Impact and Community Investment (continued)

Infrastructure Development

In addition to direct and indirect financial impacts detailed above, our activities continue to drive economic value beyond our operations, through our development and construction activities through infrastructure investments. Northland invests significantly in the development of sustainable infrastructure, which is core to our business strategy. The development of our projects contributes to local and regional economies and supports the local supply chain. This includes, secondary job creation, improving conditions for economic activity, supporting the use of local products and services and investing in programs that support the economic prosperity and well-being of the local communities. In 2021 these investments included our identified and capitalized development projects, including Hai Long in Taiwan, Baltic Power in Poland as well as projects in Japan, South Korea, Colombia, the United States and Canada. Additionally, there was significant capital expenditure to support our construction projects in New York State and Colombia and further expansionary spending for EBSA.

Table 21: Infrastructure investments and services supports

Development prospecting expenses ($CAD Thousands)	**2021**
Total	**$57,208**
North America	$14,768
Latin America	$2,897
Europe	$15,778
United Kingdom	$1,549
Asia	$22,215
Construction and Capital expenditures	
Total	**$541,476**
North America	$317,758
Latin America	$67,439
Europe	$108,302
Asia	$48,557

Methodology and Definitions

The information reported in this section aligns with **GRI 203-1**. Growth Expenditures include project related expenses incurred pre-financial close (Pre-FC) and prior to capitalization of costs of our development activities and projects in each region as well as development overhead expenses related to specific projects including the use of consultants, IT and payroll for employees working on these projects or for our regional development offices. In this case North America includes activities in the United States and Canada, Latin America includes our activities in Colombia, Europe includes activities in Germany and Poland among others, and United Kingdom includes development expenses related to our offshore wind project in Scotland. Asia includes our activities in Japan and Korea.

Capital expenditures include all construction-in-progress property, plant and equipment costs as well as cost associated with capitalized expenses for our joint venture development project, Baltic Power. In this case, Asia includes our Hail Long project in Taiwan, North America include construction related to existing operations in Canada and our United States, Onshore Renewable projects in New York state, Europe includes as mentioned capitalized development expenditures on Baltic Power in Poland as well as capitalized expenditures on our offshore wind development in Germany. Latin America includes expenditures in Mexico on our La Lucha project as well as on our solar projects and expansionary expenses for our regulated utility in Colombia.

6.3 Electricity Distributed

Northland's regulated utility, Empresa de Energía de Boyacá (**EBSA**), operating in Boyacá, Colombia delivered over 769,000 MWh of electricity to over 500,000 people within the region in 2021.

Energy Mix

The energy distributed by EBSA is primarily (80%) from hydropower plants or other renewable energy sources .

Boyacá is not a renewable portfolio standards market; however, according to Resolution MME 4-0590 2019, issued by the Government of Colombia, all utilities within the country should have as a target to purchase 10 per cent of its energy from renewable sources (wind and solar in particular). To comply with this, EBSA has participated in energy auctions and has secured enough renewable energy to meet this target. The supply of electricity from renewable energy, which includes Northland's Helios project, among others, will begin in January 2022.

Table 22: Customers served, and electricity delivered

	2021	2020
Total customers served[1]	**516,638**	**503,009**
• Number of residential customers	469,459	457,198
• Number of commercial customers	39,017	37,795
• Number of industrial customers	3,044	2,915
Total electricity delivered (MWh)	**769,020**	**760,099**
• Residential customers (MWh)	423,576	419,687
• Commercial customers (MWh)	148,669	131,105
• Industrial customers (MWh)	74,945	68,335
• Wholesale customers (MWh)	9,230	28,794
• All other customers (public sector [government], public lighting and non-regulated customers) (MWh)	112,600	112,178
Length of transmission and distribution lines (km)	**34,815**	**34,305**
Total wholesale electricity purchased (MWh)	**907,100**	**875,800**

1. Total includes public sector (government), public lighting and non-regulated customers not listed above

Methodology and Definitions

The information reported in this section aligns with **SASB IF-EU-000.A, B, C and E** activity metrics for Electric Utilities & Power Generators and is focused on Northland's regulated utility, EBSA, as a provider of reliable energy to its community. EBSA has two key business segments covering distribution and commercialization, operating as a distribution company to transfer electricity for its commercialization business, and on behalf of other commercialization businesses owned by other companies. The number of customers served for each category corresponds to the number of meters billed for each category. The length of transmission and distribution lines is calculated on a circuit kilometer basis.

Energy Distribution

As a distributor of essential services, tracking the accessibility and affordability of the electricity delivered is of utmost importance. 10.39 per cent of EBSA's customers are within the vulnerable customers category. EBSA's definition of "Vulnerable Customers" corresponds to users located in areas classified by the Ministry of Mines and Energy as "Special Areas", which are considered by EBSA to be less developed rural areas.

During 2021, the energy market continued to be affected by COVID-19. In 2020, the Colombian government implemented regulations to support those impacted by the pandemic, including:

1. A rate freeze from May to December 2020 and, starting in January 2021, a controlled increase of electricity rates that fluctuated between 1% and 2% for EBSA customers.
2. Government financing of unpaid bills for residential end-users categorized within income levels 1 to 4[7].

Repayments of residential end-user electricity bills proceeded throughout 2021 as expected. However, EBSA's portfolio has been impacted due to the long amortisation period of 24 and 36 months defined by the regulatory framework.

Table 23: Energy affordability and grid resiliency within the service territory

	2021	2020
Average Rates[1]		
• Average retail electric rate for residential customers per kWh (CAD)	0.20	0.19
• Average retail electric rate for commercial customers per kWh (CAD)	0.18	0.17
• Average retail electric rate for industrial customers per kWh (CAD)	0.18	0.17
Typical monthly electricity bill for residential customers		
• Typical monthly electric bill for residential customers for the first 500 kWh of electricity delivered per month (CAD)	19.41	19.68
• Typical monthly electric bill for residential customers for the first 1,000 kWh of electricity delivered per month (CAD)	20.41	20.56
Number of residential customer electric disconnections for non-payment	57,525	26,238
Percentage of residential customers reconnected within 30 days of disconnection	100%	100%
Number of incidents of non-compliance with physical standards or regulations	0	0
Number of incidents of non-compliance with cybersecurity standards or regulations	0	0
System Average Interruption Duration Index (SAIDI) (minutes)	5.84	6.19
System Average Interruption Frequency Index (SAIFI)	7.42	7.75
Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	0.79	0.83

1. Rates reported are an average of rates by voltage level for each customer type

Methodology and Definitions

The information reported in this section aligns with **SASB IF-EU-240a.1-4** for Electric Utilities & Power Generators and is focused on Northland's regulated utility, EBSA, addressing energy affordability and grid resiliency. Average electricity rates are tracked and calculated by voltage level and asset ownership. Electricity rates for 2020 and 2021 reflect measures implemented by the Government of Colombia to help manage economic impacts of COVID-19. EBSA's reliability indicators are calculated by EBSA operations department in accordance with applicable national measurements and standards.

7. In Colombia there is a regulatory instrument that guides tariff setting for public utilities (residential). Residential customers/dwellings in a city or town are categorized by socio-economic status and electricity rates are determined in part by these categories. Income levels 5 and 6 are higher income categories

Section 7.
Corporate Governance

7.1 Responsible Corporate Governance

Northland is committed to the highest standards in its governance practices and is motivated to be a top clean and green developer, constructor, owner and operator of sustainable infrastructure assets. We are constantly evolving our practices with respect to the formulation and implementation of policies, standards and practices regarding health, safety, environment, and social-related risks. Northland believes that strong corporate governance is the foundation for effective oversight, accountability to shareholders and investor confidence. Northland's Governance and Nominating Committee continually analyzes Northland's governance, environmental and social policies to ensure alignment with the highest standards.

For details on this year's corporate governance performance, as well as all other governance matters, please refer to the 2021 Management Information circular.

Key elements related to ESG include:

1. greater oversight from the board and related committees on ESG strategy, programs, and disclosure related matters,
2. updated policies with emphasis on ESG related matters; including an updated Code of Conduct and Business Ethics and Diversity Policy, as well as the introduction of a public Community Investment Policy, a Commitment to Local and Indigenous Communities and a Supplier and Partner Code of Conduct.

Relevant Board-approved policies include:

Code of Conduct and Business Ethics and Supplier and Partner Code of Conduct

Our updated *Code of Conduct and Business Ethics* and *Supplier and Partner Code of Conduct* speaks to our values and our commitment to a safe place to work. These policies detail our commitment to uphold the UN Guiding Principles on Business and Human Rights, including the prohibition of child labour, compulsory labour and violence, or discrimination of any kind. In addition to these policies, Northland reviews each project and conducts regular market analysis to determine human rights-related risk. Northland prohibits child and compulsory labour for our operations and suppliers. In keeping with our policies, there were no incidents of discrimination, no incidents of violations involving the rights of Indigenous peoples and no incidents of human rights violations. Through the review of the Code of Conduct and Business Ethics, employees are also provided with training on our policies and procedures regarding human rights.

Anti-Corruption and Anti-Bribery Policy

Northland's Anti-Corruption and Anti-Bribery policy continues to serve to support all of our transactions, projects and operations. In 2021, there were no incidents of corruption. Northland continues to make the policy available to all employees who must review and sign-off on it regularly.

In keeping with our ethical and anti-corruption principles and policies, Northland had no incidents or legal actions taken against us for anti-competitive behavior, antitrust or monopoly practices in 2021.

Supplier and Partner Code of Conduct

2022 Code of Ethics and Conduct

7.2 ESG Governance Structure

For a full overview of Northland's Board of Directors, Committees and Oversight, as well as matters pertaining to individual Board members, compensations and management, please refer to Northland's 2021 Management Information Circular.

ESG Governance

Board of Directors

Northland's Board of Directors has oversight over ESG-related matters which include all material ESG issues and climate-related issues that impact the organization. Additionally, through quarterly updates, the Board is provided with reports on progress against ESG and climate-related metrics, risks, and opportunities. The Board reviews the annual sustainability and climate-related disclosures which demonstrate progress towards Northland's stated targets.

Although ESG related matters are primarily under the oversight of the Governance and Nominating Committee (**GNC**), the Audit Committee (**AC**) and the Human Resources and Compensation Committee (**HRCC**) have oversight over specific elements. The AC oversees organizational risk and all reporting which includes any related ESG risks and reporting. The HRCC oversees matters relates to Talent and Health and Safety.

ESG Steering Committee

Responsibility for ESG and climate-related issues at the management level fall under the ESG Steering Committee, which is co-chaired by the CEO and CFO and includes nine core members and 14 subject matter experts across multiple functions within Northland. Core members represent key functions across the organization including Investor Relations, Government Relations, Community and Indigenous Relations, Human Resources, Procurement, Finance, Treasury, Communications and Legal. The ESG Steering committee, through updates coordinated by the Director, Global ESG Strategy and Reporting, provides regular updates to the Board on Northland's ESG activities.

The Committee's mandate is to set the general strategy and overall priorities with respect to ESG matters (including climate-related), and to consider, recommend and ensure consistency of appropriate policies, practices and disclosures. It also oversees ESG-related communications to all stakeholders and monitors trends and stakeholder concerns relating to ESG matters. The Committee works collaboratively with our regional offices and Health, Safety and Environment (HSE) leaders, and other functional leaders across the organization and each level of the project life cycle to develop strategies and action plans to integrate the ESG framework, effectively report on our performance and work towards achieving and exceeding our goals.

ESG disclosure and strategy

- Communications
- Investor Relations
- Government and Public Affairs
- Community and Indigenous Affairs
- Legal

ESG performance, programs and strategy

- Human Resources
- Health & Safety
- Environment
- Community and Indigenous Affairs
- Operations (Facilities and offices)
- Finance
- Development (RDO's & Projects)
- Procurement

7.3 Board and Executive Diversity

Northland conducted its inaugural self-identification campaign and anonymous survey for its Board and Executive members. Six executives out of seven and 9 out of 10 Board members participated in the survey. We did not include age for our Board of Directors as this is publicly available through our 2021 Management Information Circular. For our executives, 17% are between 31- 40, 33% between 41-50, 33% >50 and 17% prefer not to answer.

Methodology and Definitions

These metrics are calculated in line with **GRI 102-22 and GRI 405-1.a**. A voluntary and anonymous survey was sent to the Board of Directors and to the Executives. The definitions for the terms used were included. All question related to how the individuals perceived themselves. For the purposes of this survey, indigenous identity refers to within the Canadian context, First Nations (North American Indian), Metis or Inuk (Inuit). For Ethnic minority we used the definitions of ethnic groups and ethnic minorities provided by the International Labour Organization (ILO) and the definitions of visible minority from the Canadian Employment Equity Act. The definition of Disability was taken from the Accessible Canada Act.

Table 24: Results of Board and Executive members self-identification

Category	2021	
	Board of Director[1]	Executives[2]
Gender Identity		
Gender fluid	-	
Man	56%	50%
Non-binary	-	
Trans man	-	
Trans woman	-	
Two-spirit	-	
Woman	44%	50%
I don't identify with the options provided	-	
I prefer not to answer	-	
Sexual Orientation		
Asexual	-	
Bisexual	-	
Gay	-	
Heterosexual	100%	100%
Lesbian	-	
Pansexual	-	
Queer	-	
Two-Spirit	-	
I don't identify with the options provided	-	
I prefer not to answer	-	
Indigenous Identity		
Yes	-	
No	100%	100%
I prefer not to answer	-	
Ethnic or Visible Minorities		
Yes	-	17%
No	100%	83%
I prefer not to answer	-	
Disability		
Yes	-	
No	100%	100%
I prefer not to answer	-	

1. The percentages below represent the responses of 9 out of 10 of our Board of Directors
2. The percentages below represent the responses of 6 out of 7 Executives. We have publicly disclosed that our % of women is actually 46% versus 50% for 2021

7.4 Memberships and Associations

As a global company, Northland works together with local governments, communities, and associations where available to connect with peers, service providers and off-takers to support the growth of renewable energy globally. Northland is also committed to being a good corporate citizen and has committed to supporting global initiatives, commitments, and principles.

Northland has committed to:

- UN Guiding Principles on Business and Human Rights
- Equal by 30

Northland is a member of the following associations:

- Association of Power producers of Ontario (APPRO)
- Canadian Renewable Energy Association
- Energy Storage Canada
- Ontario Energy Association (OEA)
- Marine Renewables Canada
- Canadian Council for Aboriginal Business
- Ontario Water Power Association
- Asociacion Colombiana de Distribuidores de Energia Electrica (ASOCODIS)/(Colombian Association of Electric Power Distributors)
- ANDESCO Asociacion Nacional de Empresas de Servicios Públicos y Comunicaciones/(National Association of Public Services and Communications Companies)
- COCIERComité Colombiano de la CIER (Comision de Integracion Energetica Regional)
- Colombian Committee of the CIER (Regional Energy Integration Commission)
- CAC Comité Asesor de Comercialización Marketing Advisory Committee”
- CAMACOL Cámara Colombiana de la Construcción (Colombian Chamber of Construction)
- CNO Consejo Nacional de Operación del sector eléctrico (National Council of Electricity Sector Operation)
- Corporación Red Local Pacto Global en Colombia (Local Network Corporation Global Compact in Colombia)
- Wind Europe ASBL
- Federal Association of Wind Farm Operators Offshore eV (BWO)
- Offshore Wind Foundation
- Japan Wind Power Association
- Korea Wind Energy Industry Association
- Jeonnam Wind Energy Industry Association
- Energy Transition Forum
- Canadian Chamber of Commerce in Korea (CanCham Korea)
- Asociación de Comercializadores de Energía
- Canadian Chamber of Commerce
- Polish Wind Energy Association
- Scottish Renewables
- Taiwan Offshore Wind Industry Association
- SEMI Offshore Wind Committee
- European Chamber of Commerce Low Carbon Initiative (LCI)
- RenewableUK
- Alliance for Clean Energy New York, Inc.
- G+ Offshore Wind Association
- International Marine Contractors Association (IMCA)

Section 8.
Sustainable and Green Financings

Table 25. Allocation of Green Financing Proceeds

Project	Amount Raised in 2021	Currency	Type of Funding	Allocated Proceeds in 2021[1] ☑	Use of Proceeds	Jurisdiction	Impact Metrics
Ball Hill Wind (BHW) and Bluestone Wind (BSW)	$186 M	USD	Construction loan	BSW ($66M) + BHW ($36 M)	Capital expenditure associated with the development and construction of onshore wind projects in New York State	New York State, USA	219.30 MW (107.5 BHW + 111.8 BSW) of gross onshore wind capacity
Helios	$35 B	COP	Construction loan	$24 B	Capital expenditure associated with the development and construction of a solar PV project in Colombia	Meta, Colombia	16 MW of gross solar PV capacity
Solar III[2]	$122 M	CAD	Term loan	$93 M	Refinancing solar projects in Ontario (Northland Power's Glendale, North Burgess and Burks Falls West Projects)	Ontario, Canada	30 MW of gross solar PV capacity
				$17 M	Development expenditures associated with the advancement of Hai Long in 2020.	Taiwan	1044 MW of gross offshore wind capacity
				$12 M	Capital expenditures associated with the development of the Hai Long project in 2020.	Taiwan	1044 MW of gross offshore wind capacity
Solar IV[2]	$163 M[3]	CAD	Term loan	$153 M	Refinancing in solar projects in Ontario (Northland Power's Abitibi, Empire, Long Lake, and Martin's Meadows projects)	Ontario, Canada	40 MW of gross solar PV capacity
				$4 M	Capital expenditures associated with the development of the Hai Long Project in 2020.	Taiwan	1044 MW of gross offshore wind capacity
				$2 M	Development expenditures associated with the advancement of Baltic Power offshore wind project in 2021.	Poland	1200 MW of gross offshore wind capacity

1. Allocated proceeds include associated financing fees as these are considered part of project costs.
2. The refinancing of term loans for Solar III and IV resulted in incremental borrowing ($29 M CAD Solar III and $10 M CAD Solar IV) which has been distributed to Northland and used to fund eligible green projects as listed here
3. The remaining portion of this loan ($4 M) was distributed to our financial partners Kisis Aki to help repay a loan to Northland Power to fund Kisis' equity investment in the projects

Green Financings

In 2021, Northland published its inaugural Green Financing Framework (the "Framework") and received a second-party opinion from Sustainalytics. Our Green Financings, in accordance with this Framework, align with Green Bond Principles (2021)[8], the Green Loan Principles (2020)[9] and the EU taxonomy.

The focus of alignment with the EU taxonomy is in the aim of making a substantial contribution towards climate mitigation efforts through the development, construction and operations of solar PV, onshore wind and offshore wind projects. In 2021, our Green Financings supported all three programs to support climate mitigation efforts on a global scale. Additionally, and in keeping with the criteria set out in the EU taxonomy, Northland is committed to Do No Significant Harm in any of the other EU taxonomy categories. Finally, Northland is committed through its Code of Conduct and Business Ethics and its Supplier and Partner Code of Conduct to adhering to the UN Guiding Principles of Business and Human Rights, including the International Labour Organization's (**ILO**) Declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions, and the International Bill of Human Rights.

Each new project is reviewed through Northland's Investment Committee. Where proposed projects meet the minimum threshold for eligibility for Green Financings (i.e. are an offshore wind, onshore wind and/or solar Project), the ESG Steering Committee, chaired by the CFO and CEO of Northland Power, review it against the Green Financing eligibility criteria. All eligible projects must meet the criteria set forth in the Framework.

In 2021, Northland had four eligible Green Financings outlined in the tables above. EY has provided limited assurance on the allocation of Green Financing proceeds in accordance with the Use of Proceeds described in the Framework (see assurance statement).

Sustainability Linked Loan

In addition to these project financings, Northland also introduced a Sustainability Linked Loan (**SLL**) overlay on our $1 billion corporate credit facility. The SLL is based on achieving defined targets around both increasing our renewable generating capacity and reducing GHG emissions intensity. It is expected to provide Northland with cost savings when the targets are met.

8. The Green Bond Principles are administered by the International Capital Markets Association (ICMA), "The Green Bond Principles (GBP) 2021", published on June 10, 2021. https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/
9. The Green Loan Principles are administered by the Loan Syndications and Trading Association, published in May 2020 and available at: https://www.lsta.org/content/green-loan-principles/

Appendices

Appendix A – GRI index

Reference Indices	Indicator	Reference(s)
Core GRI 102-1	Name of Organization	Northland Power Inc.
Core GRI 102-2	Activities, brands, products, and services	2021 Annual Report, page 15; 2021 ESG Performance Index, page 6
Core GRI 102-3	Location of headquarters	Toronto, Canada
Core GRI 102-4	Location of operations	2021 ESG Performance Index, page 6; 2021 Sustainability Report, pages 8-9
Core GRI 102-5	Ownership and legal form	2021 Annual Information Form, page 2
Core GRI 102-6	Markets served	2021 ESG Performance Index, page 6; 2021 Sustainability Report, pages 8-9
Core GRI 102-7	Scale of the organization	2021 Annual Report, pages 15, 19, 60-61; 2021 Annual Information Form, pages 13, 22
Core GRI 102-8	Information on employees and other workers	2021 ESG Performance Index, page 22
Core GRI 102-9	Supply chain	2021 ESG Performance Index, page 35; 2021 Sustainability Report, pages 14,30
Core GRI 102-10	Significant changes to the organization and its supply chain	2021 Sustainability Report, pages 8-9, 30
Core GRI 102-11	Precautionary principle or approach	2021 ESG Performance Index, page 17
Core GRI 102-12	External initiatives	2021 ESG Performance Index, page 38
Core GRI 102-13	Membership of associations	2021 ESG Performance Index, page 38
Core GRI 102-14	Statement from senior decision-maker	2021 Sustainability Report, page 7
GRI 102-15	Key impacts, risks, and opportunities	2021 Annual Report, pages 46-50 and throughout the report; 2021 Annual Information Form, pages 25-37 and throughout the report
Core GRI 102-16	Values, principles, standards, and norms of behavior	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19 and throughout the report
GRI 102-17	Mechanisms for advice and concerns about ethics	2021 Sustainability Report, page 19
Core GRI 102-18	Governance structure	2021 ESG Performance Index, pages 35-36; 2022 Management Information Circular
GRI 102-20	Executive-level responsibility for economic, environmental, and social topics	2021 ESG Performance Index, pages 35-36; 2021 Sustainability Report, pages 5,42
GRI 102-21	Consulting stakeholders on economic, environmental, and social topics	2021 ESG Performance Index, page 29,36; 2021 Sustainability Report, pages 5,26-29
GRI 102-22	Composition of the highest governance body and its committees	List of Executive Team, Board of Directors, 2021 Annual Information Form, page 38; 2021 ESG Performance Index, page 37, 2022 Management Information Circular
GRI 102-23	Chair of the highest governance body	John Brace, Chair and Director 2021 Annual Information Form, page 38; 2022 Management Information Circular page 5
GRI 102-24	Nominating and selecting the highest governance body	2022 Management Information Circular, pages 10-11
GRI 102-25	Conflicts of interest	Northland 's Code of Conduct and Business Ethics, 2022 Management Information Circular, page 27
GRI 102-26	Role of highest governance body in setting purpose, values, and strategy	2021 ESG performance Index, page 36; 2022 Management Information Circular
GRI 102-27	Collective knowledge of highest governance body	2022 Management Information Circular, pages 12-24
GRI 102-28	Evaluating the highest governance body's performance	2022 Management Information Circular, page 31
GRI 102-30	Effectiveness of risk management processes	2021 ESG Performance Index, pages 13, 35; 2021 Sustainability Report, pages 40-42
GRI 102-32	Highest governance body's role in sustainability reporting	2021 ESG Performance Index, pages 3,36
Core GRI 102-40	List of stakeholder groups	2021 Sustainability Report, page 5
Core GRI 102-41	Collective bargaining agreements	2021 ESG Performance Index, page 22
Core GRI 102-42	Identifying and selecting stakeholders	2021 Sustainability Report, page 5

Appendix A – GRI index

Reference Indices	Indicator	Reference(s)
Core GRI 102-43	Approach to stakeholder engagement	2021 Sustainability Report, page 5
Core GRI 102-44	Key topics and concerns raised	2021 Sustainability Report, page 5
Core GRI 102-45	Entities included in the consolidated financial statements	2021 Annual Report
Core GRI 102-46	Defining report content and topic boundaries	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-47	List of material topics	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 5 and throughout the report
Core GRI 102-48	Restatements of information	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-49	Changes in reporting	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-50	Reporting period	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-51	Date of most recent report	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-52	Reporting cycle	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-53	Contact point for questions regarding the report	2021 Sustainability Report, page 50
Core GRI 102-54	Claims of reporting in accordance with the GRI Standards	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
Core GRI 102-55	GRI content index	2021 ESG Performance Index, page 42
Core GRI 102-56	External assurance	2021 ESG Performance Index, page 3; 2021 Sustainability Report, page 4
GRI 103-1	Explanation of the material topic and its boundary	2021 ESG Performance Index, page 3 & throughout; 2021 Sustainability Report, pages 4-5
GRI 103-2	The management approach and its components	2021 ESG Performance Index, throughout; 2021 Sustainability Report, throughout for each material topic
GRI 103-3	Evaluation of the management approach	2021 ESG Performance Index, page 3
GRI 201-1	Direct economic value generated and distributed	2021 ESG Performance Index, page 30; 2021 Sustainability Report, pages 22-23
GRI 201-2	Financial implications and other risks and opportunities due to climate change	2021 ESG Performance Index, page 13-15; Sustainability Report, pages 40-42
GRI 203-1	Infrastructure investments and services supported	2021 ESG Performance Index, page 31; 2021 Sustainability Report, pages 22-23
GRI 205-2	Communication and training about anti-corruption policies and procedures	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 205-3	Confirmed incidents of corruption and actions taken	2021 ESG Performance Index, page 35
GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2021 ESG Performance Index, page 35
GRI 302-1	Energy consumption within the organization	2021 ESG Performance Index, page 9
GRI 303-1	Interactions with water as a shared resource	2021 ESG Performance Index, page 19
GRI 303-2	Management of water discharge-related impacts	2021 ESG Performance Index, page 19
GRI 303-3	Water withdrawal	2021 ESG Performance Index, page 19
GRI 303-4	Water discharge	2021 ESG Performance Index, page 19
GRI 304-5	Water consumption	2021 ESG Performance Index, page 19
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	2021 ESG Performance Index, page 18
GRI 304-2	Significant impacts of activities, products, and services on biodiversity	2021 Sustainability Report, pages 17-18
GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	2021 ESG Performance Index, page 18
GRI 305-1	Direct (Scope 1) GHG emissions	2021 ESG Performance Index, page 10
GRI 305-2	Energy indirect (Scope 2) GHG emissions	2021 ESG Performance Index, page 10

Appendix A – GRI index

Reference Indices	Indicator	Reference(s)
GRI 305-3	Other indirect (Scope 3) GHG emissions	2021 ESG Performance Index, page 12
GRI 305-4	GHG emissions intensity	2021 ESG Performance Index, page 11
GRI 305-5	Reduction of GHG emissions	2021 ESG Performance Index, pages 10-11; 2021 Sustainability Report, pages 14,15, 47-49
GRI 305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	2021 ESG Performance Index, page 11
GRI 306-3	Significant spills	2021 ESG Performance Index, page 20
GRI 306-3 (2020)	Waste generated	2021 ESG Performance Index, page 20
GRI 307-1	Non-compliance with environmental laws and regulations	2021 ESG Performance Index, page 17
GRI 401-1	New employee hires and employee turnover	2021 ESG Performance Index, page 22
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	2021 ESG Performance Index, page 23
GRI 401-3	Parental leave	2021 ESG Performance Index, page 24
GRI 403-1	Occupational health and safety management system	2021 Sustainability Report, pages 35-36
GRI 403-2	Hazard Identification, risk assessment, and incident investigation	2021 Sustainability Report, page 37
GRI 403-3	Occupational health services	2021 Sustainability Report, pages 35-36
GRI 403-4	Worker participation, consultation, and communication on occupational health and safety	2021 Sustainability Report, pages 35-36
GRI 403-5	Worker training on occupational health and safety	2021 ESG Performance Index, pages 26-27; 2021 Sustainability Report, pages 35,36
GRI 403 - 6	Promotion of worker health	2021 Sustainability Report, pages 35,36
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2021 Sustainability Report, pages 35,36
GRI 403-9	Work-related injuries	2021 ESG Performance Index, pages 26-27
GRI 403-10	Work-related ill health	2021 ESG Performance Index, pages 26-27
GRI 404-1	Average hours of training per year per employee	2021 ESG Performance Index, page 23
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	2021 ESG Performance Index, page 23
GRI 404-3	Percentage of employees receiving regular performance and career development reviews	2021 ESG Performance Index, page 23
GRI 405-1	Diversity of governance bodies and employees	2021 ESG Performance Index, pages 24, 37
GRI 406-1	Incidents of discrimination and corrective actions taken	2021 ESG Performance Index, page 35
GRI 408-1	Operations and suppliers at significant risk for incidents of child labor	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 411-1	Incidents of violations involving rights of indigenous peoples	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 412-1	Operations that have been subject to human rights reviews or impact assessments	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 412-2	Employee training on human rights policies or procedures	2021 ESG Performance Index, page 35; 2021 Sustainability Report, page 19
GRI 413-1	Operations with local community engagement, impact assessments, and development programs	2021 ESG Performance Index, page 29; 2021 Sustainability Report, pages 26-29
GRI 413-2	Operations with significant actual and potential negative impacts on local communities	ESG Performance Index, page 29

Appendix B – SASB Index

Reference Indices	Indicator	Reference(s)
F-EU-110a.1	1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	2021 ESG Performance Index, pages 10-11
IF-EU-110a.3	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	2021 ESG Performance Index, page 10; 2021 Sustainability Report, pages 14,15
F-EU-110a.4	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	2021 ESG Performance Index, page 32
IF-EU-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	2021 ESG Performance Index, page 11
IF-EU-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	2021 ESG Performance Index, page 19
IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	2021 ESG Performance Index, page 19
IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	2021 ESG Performance Index, page 19
IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	2021 ESG Performance Index, page 33
IF-EU-240a.2	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	2021 ESG Performance Index, page 33
IF-EU-240a.3	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	2021 ESG Performance Index, page 33
IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	2021 ESG Performance Index, page 33
IF-EU-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate	2021 ESG Performance Index, page 27
IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	2021 ESG Performance Index, page 33
IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	2021 ESG Performance Index, page 33
IF-EU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served	2021 ESG Performance Index, pages 6,32
IF-EU-000.B	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	2021 ESG Performance Index, pages 6,32
IF-EU-000.C	Length of transmission and distribution lines	2021 ESG Performance Index, page 32; 2021 Sustainability Report, page 48
IF-EU-000.D	Total electricity generated, percentage by major energy source, percentage in regulated markets	2021 ESG Performance Index, page 9
IF-EU-000.E	Total wholesale electricity purchased	2021 ESG Performance Index, page 32
RR-ST-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	2021 ESG Performance Index, page 20
RR-ST-160a.1	Number and duration of project delays related to ecological impacts	2021 ESG Performance Index, page 18
RR-ST-160a.2	Description of efforts in solar energy system project development to address community and ecological impacts	2021 Sustainability Report, pages 16-18,26,28
RR-WT-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	2021 ESG Performance Index, pages 26-27
RR-WT-410a.3	Description of efforts to address ecological and community impacts of wind energy production through turbine design	2021 Sustainability Report, page 18

Appendix C – TCFD Reporting Index

Section	Disclosure recommendation	Reference(s)
Governance	a. Describe the boards' oversight of climate-related risks and opportunities b. Describe management's role in assessing and managing climate related risks and opportunities	2021 ESG Performance Index, pages 13, 36; 2021 Sustainability report pages 40-41; 2022 Management Information Circular, pages 23,25, 31
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b. Describe the impact of climate related risks and opportunities on the organization's business, strategy and financial planning	2021 Annual Information Form (AIF) pages 30-31; 2021 Annual Report, page 47; 2021 ESG Performance Index pages 13-15; 2021 Sustainability Report page 40-41
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios.	*Northland conducted long-term scenario analysis, including a below 2oC scenario. Reporting on the outcomes of this process to be included in 2022 disclosures.*
Risk Management	a. Describe the organization's processes for identifying and assessing climates-related risks. b. Describe the organization's processes for managing climate-related risks.	2021 ESG Performance Index, pages 13-15; 2021 Sustainability Report page 40-41
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organizations overall risk management	2021 Annual Information Form (AIF) page 30-31; 2021 Annual report, page 47; 2021 ESG Performance Index, pages 10-15; 2021 Sustainability Report page 40-41
Metrics & Targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. b. Disclose Scope 1, Scope 2 and Scope 3 GHG emissions and the related risks.	2021 ESG Performance Index, pages 10-12, 14-15; 2021 Sustainability Report page 14-15
Northland's climate-related disclosure in line with the TCFD recommendations can be found though our corporate disclosure. This table maps the detailed disclosures to reports		

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