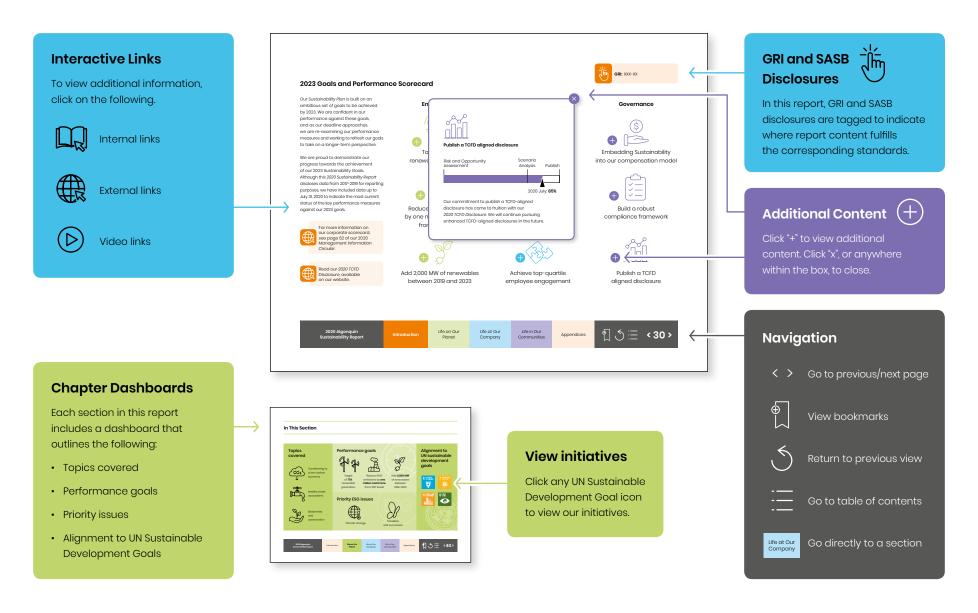
# Sustainability Report 2020







# **How to Use this Report**



# **Table of Contents**



Leadership Messages4
Letter from Ken Moore, Chair of the Board4
Letter from Arun Banskota,
President & Chief Executive Officer 5



COVID-19 Response 1



About this Report11	t this Report	11
---------------------	---------------	----



About Us	13
Who we are	.13
Where we are	.15
Algonquin by the numbers	.15
Performance highlights	.16
How we create value	. 17
Our values and purpose	.18
Awards and recognition	.19



Our Sustainability Approach	. 20
Our journey of sustainability	2
Our commitment to the UN SDGs	. 22
Stakeholder engagement	. 26
Our 7 priority ESG issues	. 29
2023 Goals and Performance	. 30



Governance	.31
Sustainability governance	33
Enterprise risk management	34
Compliance and ethics	36
Improving our	
compliance framework	36



Life on Our Planet37
Transitioning to a low-carbon economy and addressing climate change
De-carbonizing
our energy portfolio40
Healthy water ecosystems47
Biodiversity and conservation50





Life in Our Communities	.63
Safe and resilient communities	.6
Leading customer service	.68
Community investment	.69



Appendices73
Forward-Looking Statements and Forward-Looking Information
Appendix I: Operational metricsiii
Appendix II: SASB indexxx
Appendix III: GRI content index xxviii
Appendix IV: Algonquin's priority issues and relevant GRI indicators xlv
Appendix V: KPMG Verification Statement

## Forward-Looking Statements and Forward-Looking Information

This report contains forward-looking statements which are based on certain factors, assumptions, and expectations and are subject to certain risks that would cause actual performance and results to differ materially. For more information on forward-looking statements, please refer to "Forward-Looking Statements and Forward-Looking Information" in the Appendix on p. i.

- \* Unless otherwise indicated herein, the information in this report is provided as at December 31, 2019.
- \* All dollar references in this report are to US dollars unless otherwise indicated.

## Letter from Ken Moore, Chair of the Board



2020 has brought with it some of the most challenging times we have faced in recent generations.

The COVID-19 pandemic has tested the agility and ability of organizations to adapt to new challenges and paradigms and go about their businesses in new and uncharted ways.

These times have highlighted the importance of good governance, risk management, and emergency preparedness, as effective execution on each of these processes has been required in order to enable us to continue to provide the socially essential services that we deliver to our customers and communities every day.

Our ability to successfully navigate the challenges of the COVID-19 pandemic has rested on the shoulders of each and every one of our employees. As we continue on our journey of sustainability, we are reminded that Algonquin and Liberty employees are passionate about being a part of the solution of building a more resilient economy, society, and planet. Our unique culture, built upon an unwavering commitment to our purpose of sustaining energy and water for life, is demonstrated every day, as we make positive impacts for our customers and in the communities we serve.

On behalf of the entire Board of Directors, I want to thank all of our employees for their efforts and dedication during these challenging times. They are the reason that we have been able to continue to provide essential services during the pandemic – safely and reliably. As such, this 2020 Sustainability Report is dedicated to our employees in recognition of the great things they have accomplished and continue to do to enable us to achieve our 2023 Sustainability Goals.

One of our key business priorities has been ensuring that we have in place a strong leadership team to continue to build and grow our business.

We recently completed the successful transition of our leadership from Ian Robertson, one of our founders, to Arun Banskota, Under Ian's leadership. Algonquin and Liberty grew into an organization with a record of strong execution of its growth strategy, supported by a capable, innovative and experienced management team. Arun brings extensive experience within the renewable energy and technology sectors. We are confident that his skill set and strategic vision will continue the momentum built by lan and our company's founders. We welcome Arun to the organization and look forward to supporting him as he leads Algonquin and Liberty on the journey to build a better world and a brighter common future.

Sincerely

Ken Moore

Chair of the Board of Directors

## Letter from Arun Banskota, President & Chief Executive Officer



It requires bold vision, an optimistic attitude, and creative thinking to seek and capture opportunities that others don't see.

Our corporate purpose is sustaining energy and water for life, and it is demonstrated in everything we do as a business, and as an employee team. We understand that sustainability cannot exist as an isolated pillar in our organization, and we pride ourselves in the holistic approach we take towards advancing our purpose. Therefore, our sustainability plans and initiatives are embedded into our broader corporate strategy and woven throughout every aspect of our operations.

As a new employee in 2020, I was gratified to immediately experience how sustainability is prioritized and deeply integrated across our business. Coming from a background built upon my passion for renewable energy technologies and solutions, I couldn't imagine a more natural organizational fit for me. An incredible foundation has already been laid, and I am honoured to be given the opportunity to carry on Algonquin's legacy. Most importantly, I am proud to



**SASB:** EU-110a.3 **GRI:** 102-14, 102-15, 102-21, 102-21, 102-21, 102-21, 102-21

102-29, 102-43, 102-46, 102-47, 102-49, 102-50, 102-52, 102-54, 102-56

be part of an amazing culture backed by a world-leading workforce truly focused on making a positive impact and driving results that benefit us all.

The recognition our company has received over the last year is a testament to our drive to fulfill our sustainability commitments and reach our goals. Our efforts to transparently address the global issue of gender inequality have been recognized through our inclusion in the 2020 Bloomberg Gender Equality Index. Additionally, we were thrilled to be recognized in the Top 10 of Corporate Knights Global 100 Most Sustainable Corporations in the World ranking a placement we take great pride in, as we represent the only Canadian company ranked in the top 10 and the highest-ranking North American utility company in the overall ranking.



#### Leading the transition to a low-carbon energy future

We recognize that we have a role to play in leading the energy transition towards greener solutions for our customers and communities.

We view ourselves as an enabler for decarbonization, with many opportunities to displace carbon-intensive energy sources – particularly in terms of power generation, transportation, and home heating – but also by way of carbon off-setting and grid displacement for our commercial customers and partner organizations.

I am proud to state that, since its establishment, Algonquin has never added to the total of global emissions by developing thermal assets on a green field basis. We are a highgrowth company, but we also consider ourselves to be strong stewards of energy and water assets. In our ongoing acquisitions of regulated utilities and other generation facilities, we recognize that sometimes, operational thermal assets are a part of the package. However, we are committed to managing and reducing the harmful environmental impacts associated with our acquired assets and operations.

During our 32-year history, we have developed approximately 1,300 MW of renewable generation facilities and displaced nearly 130,000 tonnes of CO<sub>2</sub>e per year. And, based on our current portfolio, we have invested approximately \$2.6 billion in building sustainable and renewable energy generation assets.

Of the **1,798 MW** of cogeneration and natural gas thermal assets acquired to date, we have closed or sold **410 MW**, thereby reducing our GHG emissions by approximately **1 million tonnes** of carbon dioxide equivalents (CO<sub>2</sub>e) every year and meeting our 2023 emissions reduction goal – well ahead of schedule.



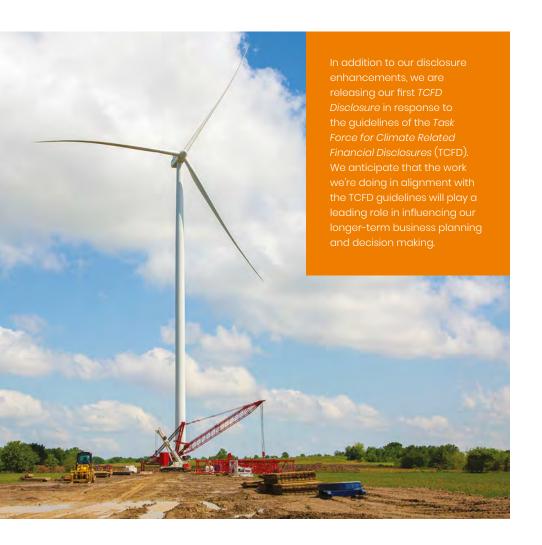
#### Partnering for growth and change

The ESG factors most relevant to our business influence our growth strategy in the same way that they inform and guide our corporate strategy.

As our business remains focused on our strategic pillars of growth, operational excellence, and sustainability leadership, we leverage ESG insights to inform our strategic planning process as well as our decision-making in regards to acquisitions, mergers, divestments, partnerships, and generation asset site selection.

We are very excited to announce a four-year framework agreement to co-develop over 500 MW of renewable power projects with oil and gas industry leader Chevron – a partnership that is expected to expand our renewables footprint and greatly contribute to both companies' sustainability goals. The generating capacity outlined in the agreement is equivalent to the energy used to power 400,000 U.S. households for a year. And we think that's an impressive partnership that will generate results both companies will be proud of. This report also details several other projects and initiatives, both in North America and internationally, that demonstrate our value as a partner in the transition to a low-carbon energy economy.





#### Enhancing our sustainability disclosures

Our inaugural sustainability report, released in 2019, brought to light the environmental, social and governance (ESG) plans and initiatives that were already in place across our organization. We wanted to ensure that our stakeholders understood that we've been at this well before we released our first report, and that sustainability has been at the heart of our corporate strategy for a long time. As we move forward on our reporting journey, we look forward to sharing how these existing plans have grown alongside fresh initiatives.

Despite having focused on our ESG impacts since our establishment, we wanted to solidify our approach to sustainability and implement it in a strategic and formalized manner. As such, we developed a comprehensive Sustainability Plan, anchored in globally recognized sustainability frameworks and industry best practices. Our 2020 Sustainability Report covers data from our 2017 base year through December 31, 2019, and is built upon our Sustainability Plan and showcases detailed disclosures based on our priority ESG issues.

Enhancements in this report include:

- The addition of new emissions information, including Scope 3 and SF<sub>6</sub> emissions;
- Third-party verification of our 2019 emissions inventory;
- · Adherence to the GRI: Core Option;
- A more robust SASB table, complete with data for our three utility modalities (Electricity, Water, and Gas); and
- Voluntary reporting of additional data that we believe our stakeholders will find relevant, found in our Operational Metrics table

#### Measuring performance

Formal integration of our sustainability commitments and a strong focus on our ESG priority issues has resulted in the implementation and enhancement of ESG-focused key performance indicators and goals throughout our business units and corporate services. This continuous alignment across the enterprise has given way to the following achievements:

- Consistent economic progress
   Unsurprisingly, as a result of COVID-19
   we have seen reduced demand for
   our services. This has inevitably made
   2020 a challenging year. Despite the
   obstacles presented by the COVID-19
   pandemic, I am pleased to say that
   our business continues to have a
   solid footing. Our five-year plan to
   invest \$9.2 billion into our regulated
   utilities and new renewable energy
   projects remains on track.
- Renewable energy growth
   Our 2020 pipeline has almost 1600
   MW of wind and solar facilities under

construction; the largest number in our company's history. We expect the vast majority of these projects to reach commercial operation in the coming months, adding both to our renewable energy portfolio and progress towards our sustainability goals.

- Safety culture recognized
   Safety underpins everything we do –
   a fact that was supported by a recent
   award from the National Safety
   Council in the U.S. Midwest, where our
   employee teams worked 2,000,000
   employee hours without injury.
- nearing top-quartile

  One of our 2023 Sustainability Goals is to achieve top-quartile employee engagement. Despite COVID-19, our 2020 employee survey results increased 5% from our 2019 score, bringing us within reach of the North American top-quartile ranking.

Employee engagement

This is great progress, and we're committed to translating our employees' feedback into meaningful actions that make Algonquin and Liberty an even better place to work.

• 2023 Sustainability Goals

We understand the importance of demonstrating transparency in our reporting, especially as it relates to providing our stakeholders with insight on our performance against our ESG objectives. A scorecard to track progress towards our 2023 goals is included in this report. We calculate and review this scorecard on a monthly basis to ensure that we are meeting or exceeding our forecasted activities.

While we continue to drive forward and deliver on our impressive achievements, we will remain focused on our priority ESG issues while always seeking opportunities to improve our processes and meet the evolving needs of our customers.

With renewed vision and corporate purpose, I am invigorated by the opportunities to truly inspire people to do the right thing, positively impact our communities, habitats and the planet at large, and provide new and exciting opportunities for our investors. As we continue on our journey of sustainability, we look forward to involving ourselves more deeply as change makers with industry and government while embracing our position among global leaders striving to deliver results – now and for the future.

Sincerely,

Aun Buskota

Arun Banskota

President & Chief Executive Officer

"A sustainability mindset is embedded across our company. Employee teams demonstrate their commitment to reaching our goals through regional programs such as the zero-waste program happening in our Goodyear, Arizona office."

## **COVID-19 Response**



Our 2020 Sustainability Report was developed in a time during which we faced unique challenges due to the COVID-19 pandemic. While the pandemic did not greatly impact the reporting period covered in this document, we feel we would be remiss to publish this report without discussing our response to COVID-19 with our stakeholders. The impacts of COVID-19 on our performance measures will be discussed in our 2021 Sustainability Report. Ongoing COVID-19 updates can be found online.

At Algonquin and Liberty, ensuring the health and safety of our employees, customers, and the public is our first priority. The proactive measures we have put in place to respond to the COVID-19 pandemic are driven by that priority, and as a result we are operating at a heightened level of emergency response preparedness.

Our emergency and business continuity plans enable us to manage unfolding developments related to COVID-19, and we are staying closely connected to recommendations from public health authorities and medical experts. We have carefully prepared plans to ensure the continued safe and reliable delivery of the energy and water services our customers and communities depend on, as well as the continued safe operation of our facilities across North America.

To lessen the financial hardship and stress that the COVID-19 pandemic may have on our customers, we temporarily suspended service disconnections for customers and waived late fees, as well as bolstered our online and telephone customer service options. Being community focused is part of who we are, and we want to show our full support in getting everyone through this situation as smoothly as possible.

In April 2020, we announced a \$500,000 donation towards helping our local communities in response to the COVID-19 health crisis. These funds are being used to address the specific needs of the many communities where we live and work, including supporting our local partners across the business, providing local community grants, and supporting our customers who are in the most

serious need. In true Algonquin / Liberty spirit, all of our employees were given a voice to influence where we would direct donation funds within our local communities, so that we could be sure to give where the need was strongest.

We have also committed to helping our local frontline heroes by donating personal protective equipment (PPE) to help ensure that they receive the protection they need as they continue to provide critical assistance in the communities we serve.

Our leaders and teams across the business are highly involved in planning to ensure we take every possible precaution for the protection of our employees, customers, and communities. We are taking steps to help prevent further spread of the virus, including:

- Increasing cleaning and sanitizing activities across our offices;
- Placing strict limitations on business travel;
- Cancelling and postponing large group meetings;
- Enacting work-at-home plans across the organization that started in mid-March;
- Equipping our employees to work safely, whether at home or in the field; and



SASB: EU-240a.4, WU-240a.4, GU-240a.4 GRI: 203-1, 403-2, 416

 Ensuring our employees have the information and support they need for their own and their families' wellbeing.

Our company's core purpose is sustaining energy and water for life; we know that the services we provide directly affect, and are essential to, our customers' quality of life and wellbeing.

From homes to hospitals, elder-care facilities to elementary schools, our customers depend on our ability to continue to provide safe and reliable energy and water services. It's a responsibility we take very seriously, and we are doing all we can to minimize stress and provide our customers with some peace of mind in knowing we are committed to providing safe, reliable energy and water, so they can concentrate on what matters most – keeping their loved ones safe and healthy.

# **About this Report**

The voluntary reporting landscape is evolving rapidly. We operate in a climate where stakeholders not only want, but expect organizations to act ethically and transparently. We aim to support those expectations by actively engaging with our key stakeholders in an enhanced ESG dialogue and working to achieve further transparency as we address risks and create opportunities for progress.

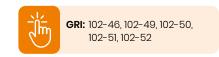
We recognize that transparent and objective reporting is essential in demonstrating our commitment to sustainability to our stakeholders. The alignment of our ESG goals with our corporate strategy ensures consistency between what we say and how we act.



#### **Reporting period**

Our 2020 Sustainability Report
expands on the disclosures provided
in our inaugural 2019 report, which
introduced our commitment to
sustaining energy and water for life.
Our 2020 report communicates our
strategies, initiatives, and goals related
to the three foundational elements of
sustainability:

- the environment in which we live and work;
- the social matters important to our core strategy and our key stakeholders; and
- the **governance** framework under which we operate.











# Base Year and Recalculation Policy

Our growth strategy has the effect of changing our asset profile from time to time due to acquisitions, divestments, mergers, and other operating changes. These modifications can alter our emissions profile significantly (for example, the purchase of Empire District Electric's coal-fired power plant as part of a utility acquisition we made in 2017 significantly increased our total emissions), which makes meaningful comparisons to historical emission levels difficult.

Base-year emissions data may need to be recalculated to reflect future changes to our current business structure. Therefore, we have developed a Base Year and Recalculation Policy to serve as a guideline that defines the circumstances and thresholds that trigger a base-year and historic-

year recalculation. The policy outlines the methodology for carrying out recalculations to maintain a fair year-over-year comparison.

To maintain consistency over time, we have determined our base year as 2017 for establishing an initial emissions reduction target.



# Reporting frameworks

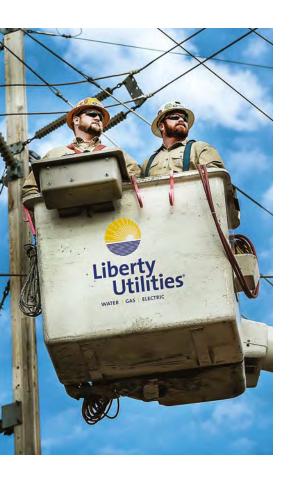
Our sustainability planning process included consideration of several ESG reporting methodologies and tools to effectively organize and communicate our plans and measures.

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. Our *GRI index* can be found in the appendix of this report and online. This sustainability report should be read in conjunction with the *GRI index*.

This report aligns to the Sustainability Accounting Standards Board (SASB) framework; a SASB index can be found in the appendix of this report and online. We have also aligned our reporting to the United Nations (UN) Sustainable Development Goals (SDGs).

Furthermore, this year marks the publication of our first Task Force on Climate-related Financial Disclosures (TCFD) Report

#### **About Us**





Algonquin Power & Utilities Corp. (Algonquin) is a growing renewable energy and utility company with \$11 billion of assets across North America and internationally. We acquire and operate green and clean energy assets including hydroelectric, wind, and solar power facilities, as well as sustainable utility distribution businesses (water, electricity and natural gas) through our operating subsidiary, Liberty. We are committed to providing safe, reliable, and costeffective

rate-regulated natural gas, water, and electricity generation, transmission, and distribution utility services to over 800,000 customer connections in the United States and Canada.



**GRI:** 102-1, 102-2, 102-4, 102-6, 102-7

Algonquin has become a global leader in renewable energy through our portfolio of long-term contracted wind, solar, and hydroelectric generating facilities representing over 3,100 MW of total generation capacity and more than 1,600 MW of incremental renewable energy capacity under construction. Since our inception in 1988, our operations have grown to include more than 130 electrical generation, transmission, and distribution facilities in Canada, the United States, and internationally. We are supported by more than 2,600 skilled and motivated employees, each of whom plays a vital role in our success. With our robust, diversified, and growing presence in communities across North America and internationally, we are continually demonstrating our "Think Global, Act Local" business model.



#### **Power Generation**

Liberty owns a direct or indirect equity interest in more than 35 clean energy facilities including

- wind
- solar
- hydroelectric
- therma

#### **Regulated Services**

Liberty provides rate-regulated water, electricity, and gas utility services to communities across the United States and Canada.

Serving over 804,000 customers in twelve states, Liberty is unique among its peers for its commitment to the community, conservation, and customer service. Liberty upholds the highest standards of service in meeting the day-to-day needs of its customers and offers employee programs that recognize superior customer support and contribution to the community.



# Water distribution and wastewater treatment

- Water distribution and wastewater operations in 5 states (Arizona, Arkansas, California, Illinois, Missouri, and Texas)
- Approximately 168,000 customer connections



#### **Electricity distribution**

- Electricity distribution operations in 6 states (Arkansas, California, Kansas, Missouri, New Hampshire, and Oklahoma)
- Approximately 267,000 customer connections



# Natural gas distribution

- Natural gas distribution operations in 6 states (Georgia, Illinois, lowa, Massachusetts, Missouri, New Hampshire, and New York,) and 1 province (New Brunswick)
- Approximately 369,000 connections

<14>



#### Performance highlights





#### Operations reach

24 states and provinces in North America

#### Indirect interests in energy and water assets in

9 countries



Employees (women: men)

1:2.1

Board (women: men)

1:2



Solar, wind, and hydroelectric generation in North America

4,568 GWh



owned and operated wind turbines





customers

Our ESG reporting is based on assets under operational control. Therefore, information reflecting Algonquin's pro rata interest in Atlantica Yield is not included in this report

#### **Summary of operations**

Data supplied as of December 31, 2019

Regulated Services	Customers (000s)	Gross revenues (\$US millions)
Electric utilities	267	\$784.4
Natural gas utilities	369	\$402.6
Water and wastewater utilities	168	\$130.5
Total	804	\$1,317.5

Power Generation <sup>1</sup>	Facilities	Capacity	Gross revenues
	(#)	(MW)	(\$US millions)
Generating capacity	36	1,506	\$246.60

Electricity ge (MW) <sup>2</sup>	neration capacity	Liberty Power	Liberty Utilities	Total
Renewable er	nergy			
	Wind	1,101	0	1,101
	Solar	170	60	230
	Hydroelectric	109	16	125
	Total	1,380	76	1,456
Thermal				
	Natural gas	126	1,370	1,496
	Coal <sup>3</sup>	0	213	213
	Total	126	1,583	1,709
	Grand total	1,506	1,659	3,164

- 1. Excludes \$11 million of Renewable Energy Credits revenue
- 2. Electricity generation capacity relates to the gross nameplate generating capacity of the power facilities owned and managed by Algonquin
- 3. Coal capacity total represents the Asbury facility, and does not include minority, non-controlling equity interests in latan and Plum Point



#### How we create value



#### **Build for the future**

Everything we do is directed to making a lasting difference. From powering our customers' stoves, filling up their baths, to generating clean energy for regions and communities, we provide critical services that are needed by everyone, day in and day out. We are committed to providing everyone access to affordable, reliable, sustainable, and modern energy and water services today, so we can enjoy a clean future tomorrow.

#### We act for our environment

North America is actively transitioning into a sustainable, low-carbon economy and we are at the forefront of that transition. Our strategy stems from the United Nations Sustainable Development Goals and we are taking tangible action to reduce the environmental impacts of our daily operations and the services we deliver.

#### Inspire our communities

We exist for the people we serve – our customers, our employees, and our shareholders. Many of us live in the communities we serve. We work with our customers, local partners, regulators, and interested parties in our communities to combat climate change. We have clear environmental, social, and governance goals to build the foundation for a sustainable and prosperous future.





#### Our values and purpose

We are committed to sustaining energy and water for life. As we work towards fulfilling this purpose, we strive to be a top-quartile global utility and independent power provider, known for exceptional performance in terms of safety, customer experience, employee engagement, diversity, equity, inclusion, environmental and social responsibility, and financial results.

#### Our sustainability commitment

- We are committed to building and operating our business such that we make a positive and durable contribution to sustaining energy and water for life.
- We support the global goal of limiting planetary temperature rise to less than 2 degrees
   Celsius this century to reduce the impact of climate change.
- We strive to deploy emerging technologies and business models in the delivery of clean efficient and reliable energy at a fair price to facilitate the transition to low carbon emission communities.
- We are committed to providing safe and reliable drinking water and wastewater services while maintaining healthy water eco-systems by employing best practices in efficiency, conservation, re-use, and recycling of water.
- We believe diversity and inclusion results in a more just society, resilient communities, and a high-performing workforce.
- We seek open dialogue and collaboration with the communities in which we operate.

- We encourage good health and wellness for our employees and foster a positive safety culture that promotes ownership, accountability, and care.
- We view our suppliers, vendors, and contractors as integral partners and seek their alignment with our values and principles.
- We view good governance practices as an essential element in the pursuit of positive and balanced outcomes for our business, our workforce, our shareholders, and
  our communities.

#### Awards and recognition







Ranked #10 in Corporate Knights' Global 100 Most Sustainable Companies – 2020





Inclusion in S&P TSX Composite ESG Index





Ranked among Top 10 in the Corporate Knights Best 50 Corporate Citizens in Canada for the last 2 years





AWEA 2020 Safety and Health Recognition Award – 2020





MSCI Rating increased to AA in 2019





Recognized in the Bloomberg Gender Equality Index - 2020





Carbon Disclosure Project Legacy Responder



<19>

# **Our Sustainability Approach**

With more than 30 years of experience developing and operating renewable and clean energy facilities, Algonquin was centered on a sustainable business model long before the green economy became the market focus that it is today.

Sustainability is, and always has been, an integral part of the way we conduct our business. It's not just something we do; it's embedded in who we are. Sustainability, to us, means meeting the needs of the present without compromising the ability of future generations to meet their own needs. It means leaving the planet in as good or in a better state for our children than the state we found it in – ensuring a healthy world for generations to come.

Plentiful sources of clean water and sustainably produced energy are essential for a healthy and happy life. They are the foundation of strong communities and a sustainable future. Bringing this clean water and energy to people in a sustainable fashion is a major responsibility. It takes drive and courage to do the right thing every day. It requires a bold vision, an optimistic attitude, and creative thinking to seek and capture opportunities that others don't see. Everything we do will make a positive difference – today and tomorrow.

But maintaining our commitment to sustainability and fulfilling our purpose goes beyond doing the right thing. It is an essential element to our longevity and success, and it enables us to create meaningful value for our loyal customers, talented employees, and committed investors. As we continue our journey of sustaining energy and water for life, we

are committed to building a common future with our partners. We welcome new opportunities that enable us to work alongside other companies to offset and reduce our collective environmental footprints. We are proud of the progress we have made in integrating sustainability into our business decisions, and are confident that our future holds exponential growth and new green investment opportunities.

We have committed to measuring our sustainability efforts, performing well against them, and communicating our results to our stakeholders. Reporting on relevant environmental, social, and governance information is our way of demonstrating how we drive positive change.



**GRI:** 102-46



"We are committed to sharing the responsibility of creating a healthier common future for us all. This commitment is embedded in everything we do. It drives our purpose: sustaining energy and water for life."

**Jeff Norman**Chief Development Officer

<20>



#### Our journey of sustainability

Our journey began by formalizing our commitment to sustainability through the establishment of our Office of Sustainability. Our Chief Governance Officer was delegated with the responsibility of leading our Sustainability Team in developing and executing our Sustainability Plan. We look forward to expanding our Sustainability Team in an effort to bring engaged, talented minds together to continuously improve our strategic planning and reporting practices.

Supported by a team of senior executives, the development of our sustainability program was undertaken by a cross-functional working group including individuals who represent the corporate strategy, enterprise risk management, human resources, environmental, health & safety, communications, project development, customer experience functions within our organization, and compliance. This group's mandate is to ensure that the environmental, social, and governance opportunities and risks identified as relevant to our business are considered and addressed as core components of the strategy and business processes of the organization, and to implement practices and programs that support the achievement of our mission and fulfillment of our purpose.

Our Sustainability Plan is based on a framework aligned with our priority ESG issues and the commitments set out in our Sustainability Policy. We have defined specific strategic objectives

relating to our ESG issues and the enterprise initiatives that will help us to achieve those objectives. While we have established our 2023 Sustainability Goals, we will continue to refine and develop appropriate key performance indicators to measure our progress towards these goals and a more sustainable future.

In 2019, we made a conscious decision to showcase our sustainability efforts through our inaugural sustainability report. We also hosted our first Sustainability Day, which was executed by our recently-formed Office of Sustainability. We deeply appreciate the ongoing interest and support given to our sustainability efforts by our stakeholders, and we look forward to continuing on our journey with this year's 2020 Sustainability Report.

#### Our commitment to the UN SDGs

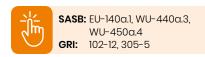
The United Nations
Sustainable Development
Goals (UN SDG) are a set of
17 goals that serve as a call to
action for all countries – and,
increasingly, businesses – in
a global partnership to tackle
issues such as poverty, health
and education, reduced
inequalities, economic growth,
and environmental protection.

While we recognize that each of the 17 SDGs is equally important and essential in building a healthier world, we believe that the best way for us to make a meaningful contribution is by focusing on a select number of SDGs that align to areas in which we feel our business could make the greatest positive impact.

We have identified six SDGs that are most relevant to our business and to our sustainability commitments. The selected SDGs act as the foundation for our sustainability strategy and selection of our priority ESG issues. In this report, we have expanded on our existing understanding of the UN SDGs, and have aligned to specific SDG targets in order to undertake a more structured and strategic approach to advancing the UN's 2030 Agenda for Sustainable Development.







SDG	Our commitments	Our initiatives	Our alignment with SDG targets
13 CLIMATE ACTION	Support the global goal of limiting planetary temperature rise of less than 2 degrees Celsius this century and reduce the impact of climate change by deploying emerging technologies and business models to decarbonize our energy portfolio.	<ul> <li>Reducing the carbon content of the products we deliver to our customers</li> <li>Growing our renewables portfolio</li> <li>Reducing the internal carbon intensity of our operations</li> <li>Working with our customers to help them meet their sustainability goals</li> </ul>	<ul> <li>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</li> <li>13.2 Integrate climate change measures into national policies, strategies, and planning</li> <li>13.3 Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning</li> </ul>
6 CLEAN WATER AND SANITATION	Provide safe and reliable drinking water and wastewater services while maintaining healthy water ecosystems by employing best practices in efficiency, conservation, re-use, and recycling of water.	<ul> <li>Encouraging efficient use and re-use of water resources</li> <li>Deploying new technologies that reduce the demand for freshwater resources and the carbon intensity of providing those resources</li> <li>Upgrading infrastructure to provide safe and reliable drinking water</li> </ul>	<ul> <li>6.1 By 2030, achieve universal and equitable to access to safe and affordable drinking water for all</li> <li>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally</li> <li>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</li> <li>6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes</li> </ul>
11 SUSTAINABLE CITIES AND COMMUNITIES	Create and support resilient communities through dialogue and collaboration, and seek partnerships with local suppliers, vendors, and contractors who align with our values and principles.	<ul> <li>Fostering constructive and supportive relationships with the communities we serve</li> <li>Striving to provide a top-quartile customer service experience</li> <li>Actively engaging with supply chain partners to operationalize our Sustainability Plan</li> </ul>	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



SDG	Our commitments	Our initiatives	Our alignment with SDG targets
7 AFFORDABLE AND CLEAN ENERGY	Deliver cost-effective and reliable utility services	<ul> <li>Incorporating low-cost renewable energy into our supply mix</li> <li>Investing in infrastructure to reduce operating costs</li> <li>Operating our business efficiently</li> </ul>	<ul> <li>7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services</li> <li>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</li> <li>7.3 By 2030, double the global rate of improvement in energy efficiency</li> <li>7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency, and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology</li> </ul>
5 GENDER EQUALITY	Champion equality to build a more just society	Creating and fostering employee resource groups to encourage positive diversity and inclusion outcomes  Committing to gender balance on boards and in senior leadership  Removing unconscious bias from our processes and systems	<ul> <li>5.1 End all forms of discrimination against all women and girls everywhere</li> <li>5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life</li> <li>5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels</li> </ul>
8 DECENT WORK AND ECONOMIC GROWTH	Educate, develop, and empower a high-performing workforce through good health and wellness, and a positive safety culture.	<ul> <li>Attracting and developing world-class talent</li> <li>Driving top-quartile employee engagement</li> <li>Achieving our Safety Excellence safety culture</li> </ul>	<ul> <li>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</li> <li>8.8 Promote labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment</li> </ul>



SDG Our commitments Our initiatives Our alignment with SDG targets

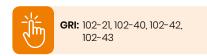


Practice good governance as an essential element of our pursuit of positive and balanced outcomes for our business, workforce, shareholders, and communities.

- Engaging Board and senior executives in sustainability
- Developing a positive compliance culture
- Adopting TCFD recommendations into our business
- **8.4** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

#### Stakeholder engagement

Stakeholder dialogue not only guides our reporting process and informs our report content selection, but is an essential element of our core business practices. Our key stakeholder groups include our customers, employees, investors, communities, and government and regulatory bodies. An overview of these stakeholder groups, our engagement methods, and priority concerns can be found below.



Stakeholder group	How we engage	Frequency of engagement	Key concerns raised	How we address those concerns
Customers	<ul> <li>Annual J.D. Power Customer Satisfaction Survey</li> <li>Call centers</li> <li>Community education programs</li> <li>Conservation and outreach programs</li> <li>Regular email communications</li> <li>Focus groups</li> <li>Local customer walk-in centers</li> <li>Local media outlets</li> <li>Participation in and sponsorship of local events, teams, and charitable foundations</li> <li>Social media</li> </ul>	Annual and ongoing	<ul> <li>Customer service improvements</li> <li>Rates and pricing</li> <li>Digital billing and payments</li> <li>Communications (i.e., outage alerts)</li> <li>Increased community involvement</li> <li>Low-income household needs</li> </ul>	<ul> <li>Customer First program</li> <li>eCustomer project: new MyAccount customer experience improvement</li> <li>Updated Outage Management system</li> <li>Continuous communications through email, social media, and bill inserts on local community engagement</li> <li>Customer Savings Program (expected savings of approximately \$300 million over 30 years)</li> </ul>
Employees	<ul> <li>Annual Employee Engagement Survey</li> <li>Annual executive visits</li> <li>Employee Ethics Reporting Line</li> <li>Individual development planning</li> <li>Lean In Circles program and business resource groups for LGBTQIA employees</li> <li>Ombudsperson service</li> <li>Quarterly town halls</li> <li>Training</li> <li>Union relations and consultations</li> </ul>	Annual and ongoing	<ul> <li>More frequent internal communications</li> <li>More learning and development opportunities</li> <li>Career development and guidance</li> </ul>	<ul> <li>Annual employee business strategy communications (Liberty Journal)</li> <li>Individual Development Plan</li> <li>Achievement Fund</li> <li>Annual performance and career development discussions</li> <li>Succession planning</li> <li>Regular health &amp; safety training modules</li> </ul>

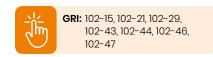


Stakeholder group	How we engage	Frequency of engagement	Key concerns raised	How we address those concerns
Communities	<ul> <li>Charitable activities</li> <li>Community consultation meetings</li> <li>Community events</li> <li>Community partnerships and sponsorships</li> <li>Community partnership survey</li> <li>Education and outreach programs</li> <li>Educational institutions</li> <li>Landowner dinners and information sessions</li> <li>Liberty Days (employee volunteer events)</li> <li>Local Chambers of Commerce</li> <li>Local media outlets</li> <li>Military events and organizations</li> <li>Rotary Clubs</li> </ul>	Annual and ongoing	<ul> <li>Increased community inclusion in early development efforts</li> <li>Increased support for local organizations and direct community benefits</li> </ul>	<ul> <li>Increased consultation and external engagement efforts when first entering a new community</li> <li>Early engagement with community organizations and agricultural programs to share the benefit of contribution (4-H, county fairs, Lions Club, local food banks, etc.)</li> <li>Collaboration with local officials to identify opportunities to benefit communities</li> </ul>
Investors and analysts	<ul> <li>Annual Investor Day events in both Toronto and New York City</li> <li>Quarterly earnings calls</li> <li>Ongoing direct investor engagement</li> <li>Sustainability Day event</li> <li>Third-party interviews with an external ESG consultant</li> <li>Institutional investor interviews through third-party ESG consultants</li> </ul>	Annual and ongoing	<ul> <li>Business complexity</li> <li>Coal exposure</li> <li>Management succession</li> <li>Growth opportunities</li> <li>Equity/funding needs</li> <li>Asset acquisitions</li> </ul>	<ul> <li>Simplification of Algonquin's business story</li> <li>Green projects and Asbury plant closure</li> <li>Increased exposure to and engagement with executive management team</li> <li>Presentation of updated 5-year growth plan at Annual Investor Day</li> </ul>



Stakeholder	How we	Frequency of engagement	Key concerns	How we address
group	engage		raised	those concerns
Government and regulatory agencies	<ul> <li>Building local relationships</li> <li>Participation in industry associations and advisory groups</li> <li>Proactive self-reporting</li> <li>Regular outreach</li> <li>Regular site visits and management briefings</li> </ul>	Annual and ongoing	<ul> <li>Climate action</li> <li>Affordable energy</li> <li>Greater stakeholder involvement in project development and planning</li> <li>Safety</li> <li>Enabling the deployment of renewable energy</li> </ul>	<ul> <li>Building and maintaining long-lasting and meaningful relationships with a wide variety of stakeholders</li> <li>Communicating stakeholder concerns with internal decision-makers on a regular basis</li> <li>Early engagement with stakeholders prior to finalization of policies and initiatives</li> <li>Demonstrating the alignment of company priorities with those of stakeholders when appropriate</li> </ul>





# Our 7 priority ESG issues

In 2019, we engaged external consultants in conducting a materiality assessment to identify issues that are most likely to have a significant impact on our operations and performance.

The process consisted of interviewing our management and operations teams to gain an internal perspective of key priorities, as well as interviewing our largest shareholders to gain an external perspective of key priorities. Outputs of these interviews were assessed against peers, industry and sustainability frameworks, and rating agency reports, as well as against insights from our various engagement activities with customers and employees, described in our stakeholder engagement section. This work resulted in the identification of seven priority ESG issues.



- 1. Transition to a low-carbon economy, and the succession of talent to a leadership team and workforce with the necessary skills to navigate to the new economy
- 2. Reliability and safety of assets (including cyber security risk management)

#### 2023 Goals and Performance Scorecard

Our Sustainability Plan is built on an ambitious set of goals to be achieved by 2023. We are confident in our performance against these goals, and as our deadline approaches, we are re-examining our performance measures and working to refresh our goals to take on a longer-term perspective.

We are proud to demonstrate our progress towards the achievement of our 2023 Sustainability Goals.

Although this 2020 Sustainability Report discloses data from 2017-2019 for reporting purposes, we have included data up to July 31, 2020 to indicate the most current status of the key performance measures against our 2023 goals.

#### **Environment**



Target of 75% renewable generation



Reduce GHG emissions by one million metric tons from 2017 levels



Add 2,000 MW of renewables between 2019 and 2023

#### Social



Exceed 30% women in leadership roles



Achieve top-quartile customer service



Achieve top-quartile employee engagement

#### Governance



Embedding Sustainability into our compensation model



Build a robust compliance framework



Publish a TCFD aligned disclosure

## Governance

# **Topics covered**



Sustainability governance



Our values and purpose



Enterprise risk management



Compliance and ethics

# Performance goals



Embed sustainability into our compensation model



Build a robust compliance framework



Publish TCFD-aligned disclosure starting in 2020 Alignment to UN sustainable development goals

# **Priority ESG issues**



Culture

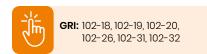


Transition and succession



Reliability and safety of assets







"Our approach to sustainability governance is built on a strong foundation of strategic oversight, accountability, and crossfunctional collaboration. This ensures that our sustainability programs and initiatives are aligned and integrated into our business strategy in a meaninaful way."

George Trisic
Chief Governance Officer
and Corporate Secretary

#### Sustainability governance

We believe that intentionally embedding sustainability into how our business is governed will help us deliver the three elements of our success:

- loyal and satisfied customers who value our brand; served by
- an engaged, talented and safe workforce; funded by
- patient and successful investors.

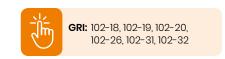
The Corporate Governance
Committee of our Board of Directors
is responsible for overseeing the
ongoing development and progress
of Algonquin's Sustainability Plan and
initiatives, as well as periodic reporting
to the Board in regards to progress
and performance. The Corporate
Governance Committee receives
quarterly updates from
senior management relating to
the development and execution
of our Sustainability Plan and key
sustainability initiatives.

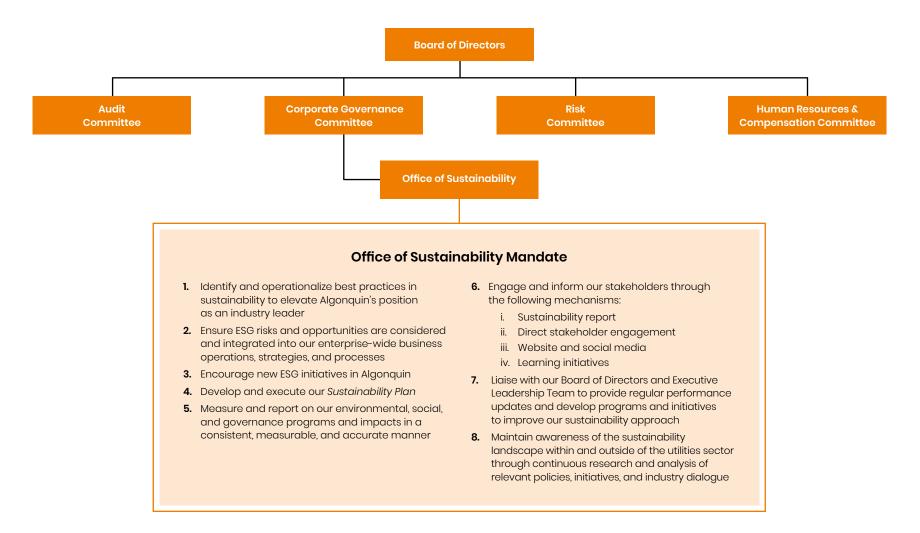
To ensure that we are able to continuously enhance our sustainability commitments and work towards achieving our 2023 goals, we established an Office of Sustainability. In 2020, we expanded the Office of Sustainability to further advance and streamline our Sustainability Plan and processes.

Our Office of Sustainability addresses the execution of our Sustainability Plan and monitors our performance on a regular basis through the following communications vehicles:

- Weekly team meetings within the Office of Sustainability
- Ongoing responses to rating agency and capital market information requests
- Quarterly reporting to the Corporate Governance Committee
- Analysis of stakeholder feedback and development of recommendations for improvement
- Monthly reporting to our executive leadership team
- Employee training on key ESG concepts and commitments
- Ongoing stakeholder dialogue
- Annual sustainability reporting
- Ongoing communication updates via external and internal digital channels
- Onaoina investor enaggement events

(32>











## Enterprise risk management

Undertaking a robust, proactive approach to risk management is integral to enabling ongoing growth and business success.

Our approach to enterprise risk management is rooted in strong Board oversight. Our Enterprise Risk Management Policy and related strategy are embedded throughout all areas of our business. To support the identification of existing and emerging risks and opportunities, we use a common framework and language when discussing risk, potential likelihood and impacts, and actions and controls for risk mitigation.

Our risk management activities span our day-to-day operations, strategy development, and due diligence for new acquisitions and assets.



"Because sustainability has always been a fundamenta element of our corporate strategy, the majority of business risks we've been historically managing have been, and continue to be, sustainability-related."

Mary Ellen Paravalos
Chief Compliance
and Rick Officer

<34>



# Governance practices for the long-term

Establishing effective governance processes and systems is crucial in order to successfully develop and maintain a leading sustainability program that centers on proper data collection, measurement of our progress, and accountability for long-term performance.

Our governance practices focus on providing guidance on corporate sustainability priorities, equipping our businesses with the tools and performance measures necessary to mitigate ESG risks, and supporting the achievement of our sustainability objectives.



#### Climate risk management

In 2019, we committed to looking more closely at the impacts of climate change on our business through alignment with the recommendations of the Task Force for Climate Related Financial Disclosures (TCFD). A key component of the TCFD recommendations includes a call for companies to conduct climate-related scenario analysis to identify, assess, and manage relevant climate-related risks and opportunities and their impact on financial planning and business strategy. The outcomes of these scenario analyses will be featured in our 2020 TCFD disclosure.



#### **Effective ESG oversight**

Board engagement in overseeing matters related to sustainability is embedded in our Corporate Governance Committee mandate, while our Board Risk Committee mandate includes management of ESG risks,

We have formalized leadership engagement in sustainability by assigning responsibility for sustainability plan development to our senior executives. These actions ensure that sustainability matters are represented in executive and strategic decisions, and that progress against our established sustainability priorities is regularly communicated at the board level. through the Corporate Governance Committee. We incorporate sustainability-related risks in our enterprise risk management framework, and these risks will be re-assessed with the completion of our TCFD activities.



# Alignment with management compensation

Sustainability performance is an essential component of our leadership compensation practices. Our Corporate Scorecard, which impacts annual shortterm incentive fund (STIP) payments for all full-time employees, including the Algonquin CEO and executive team, has included sustainabilityrelated performance metrics for several years. ESG-related metrics within the scorecard include customer satisfaction, compliance performance, safety results, employee engagement, system reliability, and growth in renewable energy capacity. As we continue to establish new enterprisewide sustainability goals related to the renewable generation mix, carbon intensity, community engagement, our workforce, and other vital factors, the Human Resources and Compensation Committee of our Board will continue to assess the sustainability metrics to be included in future scorecards.



# **GRI:** 102-17, 102-33

#### Compliance and ethics

A positive compliance culture leads to a workplace where every employee feels that they can bring their best self to work, feel valued, and effectively do their job. Our policies are put in place to ensure that everyone has the information they need to be able to effectively abide by consistent and fair rules and practices. Sometimes, navigating these policies can be challenging. For that reason, we established a program of services and informational resources to help answer any questions our employees may have, and, more importantly, to address potential problems before they become significant challenges.

We implement regular training programs across the enterprise to ensure that all employees are well informed on relevant company policies. *Code of Business Conduct and Ethics* training, along with training on other key compliance areas such as energy regulations, cyber security, and information protection, is completed by employees on an annual basis.

In 2019, we rolled out our refreshed "We're Here to Help" campaign to highlight the resources available for our employees to address concerns before they become more serious issues. Employees have continuous access to support services through the Compliance Office, Employee Support Line, and our Ethics Reporting Line.



**99%** employee completion of the annual *Code of Business Conduct and Ethics* training in 2019

# Improving our compliance framework

In 2019, building upon our compliance framework, we appointed key individuals to our Compliance and Risk Office charged with advancing our compliance framework, including the VP of Regulatory Compliance, and the Director of Compliance Strategy and Performance.

To date, we have also established a Policies Administration framework and launched a Policies Page on our intranet for employees to have ready access to company policies. In order to further educate and engage our workforce, we have established mandatory annual Code of Business Conduct and Ethics and energy regulations training, along with other key educational initiatives. Our Compliance and Ethics Committee is led by senior executives and provides holistic oversight of any allegations and concerns raised via our Ethics Reporting Line, and meets regularly to review enterprise performance and identify areas for improvements to our work culture and develop solutions.

Our Compliance and Ethics program includes the following employee resources:



Email: We have a dedicated compliance team account that employees can email to ask compliance policy-related questions.



Civility Policy: This policy outlines our expectations for treating all employees with respect and dignity, and for enabling them to be their authentic selves without fear of reprisal.



Ombudsperson: Our Employee
Support Line provides independent
third-party advice that complements
the support that leaders and
our Human Resources team
typically provide if employees
are experiencing difficulties
within the workplace.

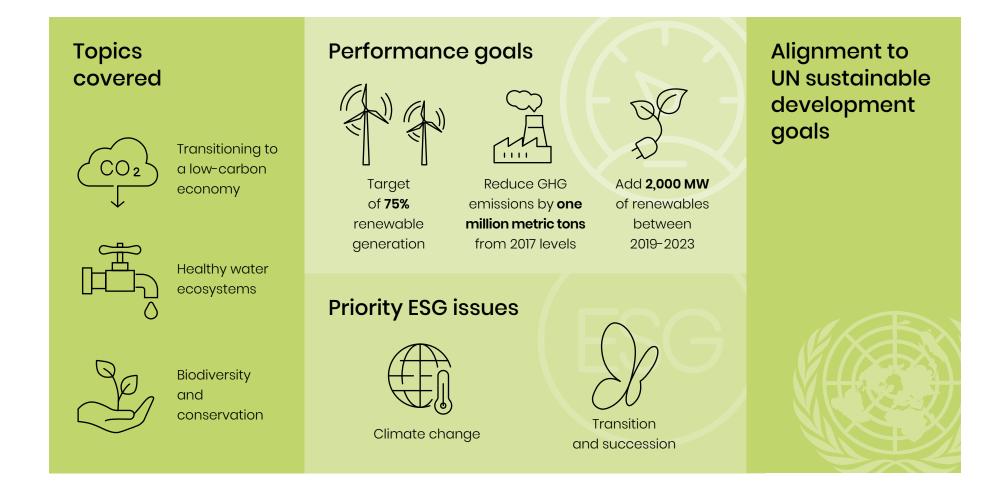


Ethics Reporting Line: Our employees can use this reporting line to anonymously report suspected breaches of our Code of Business

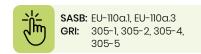
**<36>** 



# **In This Section**







# Transitioning to a low-carbon economy and addressing climate change

We are committed to the global goal set forth by UN SDG 13 (Climate Action) to reduce planetary temperature rise within this century. We aim to minimize climate change impacts through the deployment of emerging technologies and business models to decarbonize our energy portfolio.

Our efforts to reduce our reliance on fossil-based energy sources by pursuing sustainable alternatives is centered on reducing the carbon content of the services we deliver to our customers, growing our renewables portfolio, and decreasing the internal carbon intensity of our operations. We are continuously developing initiatives and partnerships that help drive positive impacts in the face of climate change.

### Our emissions profile

### Total GHG emissions kt CO<sub>2</sub>e

2017	3,220	
2018	2,881	
2019	2,793	

#### Fossil fuel GHG emissions

kt CO2e

2	-		
2017	3,084		
2018	2,743		
2019	2,649		

# Percentage of total GHG emissions covered under reporting regulations

2017	99.19%	
2018	99.96%	
2019	99.74%	

#### **GHG** emission intensity



From 2017-2019:

- Algonquin reduced GHG emissions from fossil fuel based electricity generation by 14.1%
- Algonquin reduced gross GHG emissions by 13.3%





# De-carbonizing our energy portfolio

As the development of renewable energy resources becomes an increasingly important factor of our common future, Algonquin remains well-positioned for continuous growth through our "Greening the Fleet" initiative. This commitment to championing change by investing in renewable energy in place of fossil fuel based resources is our path to reaching our goal of 75% renewable generation capacity by 2023.

2019 saw the advancement of our renewable energy construction and development pipeline. We are pleased to report that construction is well underway for our 1.6 GW pipeline of wind and solar projects that we anticipate will nearly double our portfolio by 2023. This progress puts us well on track to achieving our goal of adding 2,000 MW of renewables between 2019 and 2023.

### Generating portfolio mix

Ren	ewable	Natur	al gas	Coal
2017	42%		51%	7%
2018	45%		48%	7%
2019	46%		47%	7%
2023 (	Goal)	75%		25%





## Wind for coal: Asbury retirement

In pursuit of reducing our GHG emissions inventory, we have taken tangible and immediate actions to improve the environmental impacts of the services we deliver to our customers. In 2019, we made the decision to retire our Asbury legacy coal-fired generation plant earlier than originally planned.

The plant closure reduces our GHG emissions by approximately one million metric tons of CO2e, which represents Asbury's average annual emissions in 2017, 2018 and 2019 – the three full calendar years that we have owned the facility. As a key component of the early plant retirement plan, we are committed to responsibly transitioning the plant's staff to new positions within our organization.

The emissions associated with the Asbury plant directly correlate with our 2023 Sustainability Goal to reduce our GHG emissions by one million metric tons from 2017 levels. Replacing the plant's generation capacity will see the build out of 600 MW of three new wind generation assets in the U.S. Midwest, beginning in 2020. Once these wind farms, collectively referred to as the Customer Savings Plan, are fully operational, they are expected to generate customer savings of approximately \$300 million over 30 years.





# Wind makes our community stronger

Our power generation business focuses on the increasing opportunities to economically build and operate renewable energy generation capacity. 600 MW of new wind facilities in the U.S. Midwest is under construction to replace the Asbury coal generation plant. The \$1.1 billion Customer Savings Plan initiative is a prime example of how we are leading the transition to a low-carbon economy by greening our generation fleet while continuing to provide safe, affordable, and reliable energy services to our customers.



#### Innovation at home

Bringing innovation and the latest technology to energy generation keeps costs competitive and lets customers and communities control their energy future.



### **Economic development**

Keeping energy costs competitive helps our communities retain jobs and attract development.



#### Local investment and income

Generating up to 600 MW in a region means more than \$1 billion in investment, plus landowners get a new source of steady income and tax revenue is created for local communities.



#### **Healthier communities**

Cleaner energy makes our communities healthier, and more sustainable.



### **Under construction**

### Neosho Ridge Wind Farm

**Location:** Neosho County, Kansas

**Design:** 139 turbines across the wind farm, generating approximately 300 megawatts of wind energy

### North Fork Ridge and Kings Point Wind Farms

**Location:** Barton, Dade, Jasper, and Lawrence Counties, Missouri

**Design:** 138 turbines across the two wind farms, generating approximately 300 megawatts of wind energy

**<42>** 

There are several TE programs currently

in development, including some that

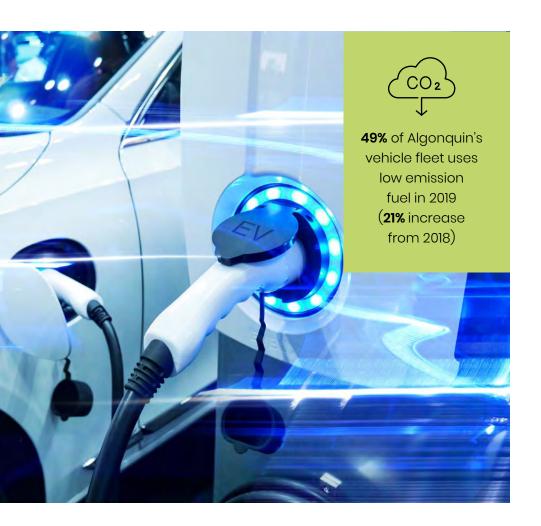
are focused on providing rebates

for residential customers and small businesses to install EV charging stations.

We are also working on developing

a Fast Charger program and installing

charging stations to help public schools



### **Transportation electrification**

We are committed to making a positive impact on the environment and in the communities we serve by promoting transportation electrification (TE). We have worked to transition our light-duty vehicle fleet to electric vehicles (EVs), provided public charging infrastructure, and engaged our customers on the benefits of TE.

transition to using electric buses.

Having a robust TE program not only advances our vision of a low-carbon energy future, it also enables us to actively partner with businesses and our communities while meeting evolving customer expectations and growing market needs. We look forward

to exploring new ways to promote transportation electrification for a more sustainable future



**76 EV charging stations** installed for employee vehicles in 2019



### Partners in decarbonization: Texas Maverick Creek

We believe that, while it's incredibly important for us to manage our environmental impacts, there are significant opportunities for us to influence and contribute to commercial and industrial operation decarbonization outside of our own operations. That's why we partner with like-minded companies and international governments to accelerate the reduction of global GHG emissions and build a more sustainable future.



In November 2019, we broke ground on the Texas Maverick Creek wind project. With a generating capacity of 492 MW, this will be our largest wind project to date, and is expected to enable us to offset emissions for two major energy purchasers – General Mills and Kimberly-Clark.

Investing in renewable energy sources like wind and solar is core to our business strategy and to meeting our ESG goals. By working with sustainability leaders like General Mills and Kimberly-Clark, we have been able to maximize the positive impact of the clean energy

technologies we are proud to develop and offer to communities across North America and the world.

Alongside the positive environmental effects expected from the Maverick Creek project, we also anticipate significant social and economic impacts. The project created almost 400 temporary construction jobs and is expected to create 25 full-time jobs during operation, over \$3M a year in tax revenues for the local school district, county, hospital and water district, and approximately \$2.4M in landowner payments per year.

### **Maverick Creek Project**



**\$3M/year** expected in community investments



~425 new jobs expected



**492 MW** of projected generating capacity

<44>



"As part of our commitment to Bermuda's economy, we are excited to invest an additional \$5 million into the Sustainable Bermuda Foundation, which is led by local stakeholders focused on economic growth and renewable energy in Bermuda."

**Johnny Johnston**Chief Operating Officer

#### **Our commitment to Bermudians**

In August 2019, we received overwhelming shareholder support for the pending acquisition of Ascendant Group Limited (Ascendant) – a Bermuda-based, publicly-traded company providing electric utility service to Bermuda's 63,000 residents and businesses through Bermuda Electric Light Company (BELCO). This support was based on careful consideration of the needs of BELCO employees, customers, and the broader Bermuda community.

Beyond the sale of Ascendant, which will inject \$200 million into the Bermuda

economy, we have committed to investing \$300 million in renewable generation in Bermuda, which will accelerate the 85% renewable energy goal set by the Integrated Resource Plan (IRP).

By achieving greater efficiencies and economies of scale, the purchase or Ascendant is committed to projected savings of \$5 million to save Algonquin and producing lower rates for our Bermuda customers. The anticipated sale has the support of many Bermudians, local businesses,

and Ascendant shareholders because we are ready to contribute to the Bermuda economy and work with local stakeholders to accelerate Bermuda's goal of reducing energy prices through clean, renewable technologies.

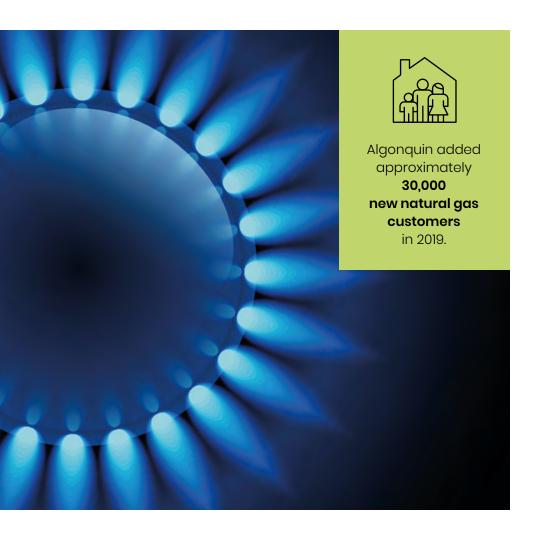


Algonquin committed to investing **\$500,000,000** into Bermuda's economy.



In the aftermath of Hurricane Humberto, Algonquin joined with BELCO to aid in restoring electricity to the island.

**<45>** 



# Natural gas - an enabler of decarbonization

We know we have a strong role to play in the transition towards greener energy solutions for our customers. As such, we recognize natural gas as an important enabler for decarbonization through opportunities to displace more carbon-intensive sources, particularly in terms of power generation, transportation, and home heating. In addition, we are working closely with governments and regulatory bodies to better understand developing opportunities for renewable natural gas and green hydrogen throughout our distribution networks.

To reduce methane emissions from our natural gas utilities, we are proactively monitoring and replacing aged pipelines. Our regulated subsidiary voluntarily participates with the United States Environmental Protection Agency's Natural Gas STAR Methane Challenge Program where we report on our systematic and comprehensive actions to reduce methane emissions in the United States.

Our commitments to the program include the replacement of cast iron and unprotected steel mains at a rate of 6.5% per year in our networks in Massachusetts, New Hampshire, and Illinois.

# Percentage of pipeline that is cast/wrought iron

2017	2.58%
2018	2.41%
2019	2.05%

# Percentage of pipeline that is unprotected

2017	1.98%	
2018	1.63%	
2019	1.41%	

<46>





SASB: IF-EU-140a.1, EU-140a.3, WU-440a.3, WU-450a.4, WU-000.A, WU-000.E **GRI:** 203-1, 203-2, 303-1, 303-2

## Healthy water ecosystems

We are committed to providing safe and reliable drinking water and wastewater services while maintaining healthy water ecosystems. We pride ourselves in employing best practices in efficiency, conservation, re-use, and recycling of water.

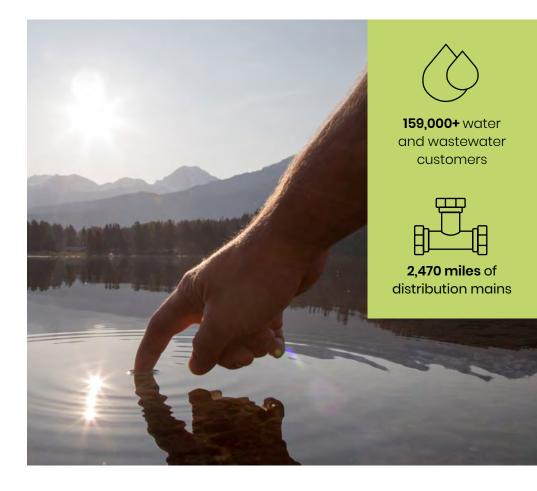
At Algonquin and Liberty, we encourage efficient use and re-use of water resources to reduce the environmental impacts that result from utilization of freshwater resources. We also deploy new technologies that reduce the demand for freshwater resources and the carbon intensity associated with them. We are also committed to upgrading water infrastructure to provide safe and reliable drinking water to the communities we serve.

Percentage of electric utility water withdrawn in regions with high or extremely high baseline water stress

2017	2.01%
2018	1.75%
2019	1.11%



Total water recharged in 2019: **1,823,130 m³** 







### Smart water use

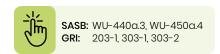
Our responsibility to operate as cleanly and efficiently as possible for the benefit of future generations means that we take significant strides to incorporate green technology and water reclamation into our everyday business practices. While we are committed to creating environmentally responsible, low-impact services while delivering safe, reliable drinking water to our customers, we also providing them with the knowledge and tools needed to be water-wise.

We pump, treat, and deliver fresh drinking water to homes, schools, hospitals, and businesses. The adoption of clean technologies and environmentally sound practices helps us to be a leader in efficiency, reduce stress on our environment, protect our water resources, and ensure reliable water services will be available for the long-term.

# Climate change and our water assets

In 2019, we engaged with external consultants to develop a climatechange disclosure in line with recommendations from the TCFD. In 2020, we presented three climate-change scenarios to our water distribution and wastewater management group via a workshop that included discussion on future changes to the energy mix, differences in carbon pricing, and emerging technologies such as producing biomethane from wastewater. Individuals participating in the workshop categorized impacts to various elements of our business into four areas: Market Impact, Technology Impact, Policy/Regulatory Impact, and Reputational Impact.

Workshop participants leveraged their expertise to analyze the different scenarios and how they may impact our business both in presenting new and increased risks. Participants also considered how they may provide opportunities for growth and innovation.



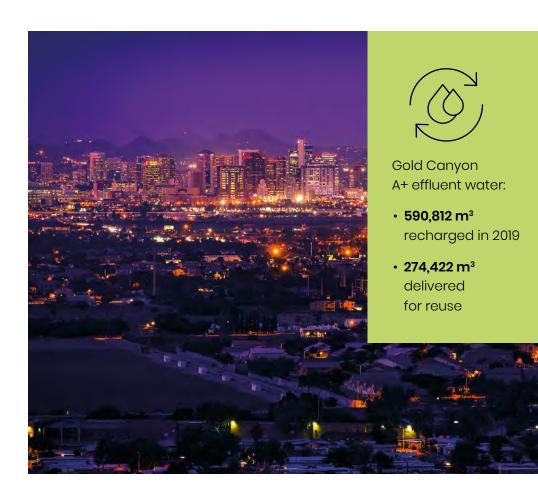
### Aquifer and water replenishment in Arizona

We strive to help the communities we serve to be more resilient and sustainable in times of drought. We operate two aquifer water replenishment facilities in Arizona, an area considered high or extremely high for baseline water stress. In our 2019 Sustainability Report, we discussed the Liberty Aquifer Replenishment Facility (LARF) which had received significant recognition for our local partnerships and the long-term value the facility would provide to the community. Our second water reclamation facility in Arizona takes an innovative approach to supporting the resilience of Arizona's communities.

### Gold Canyon Waste Water Reclamation Facility

The Liberty Gold Canyon Waste Water Reclamation Facility (GCWWRF) is a water recharge and re-use facility that is permitted by the Arizona Department of Water Resources (ADWR) as an underground aquifer storage facility. This unique facility provides 100% recharge or re-use for irrigation with 0% of the effluent being discharged to a receiving water body or land area.

The primary goal of our partnership with ADWR is to enhance water sustainability in Arizona through the underground storage of high-quality effluent water for future use in times of drought. The direct impact of the aquifer recharge will be a gradual rise in the Arizona water table that had been declining for years. The GCWWRF also delivers A+ effluent water to the neighboring Gold Canyon RV Resort, and Mountain Brook and Superstition Mountain golf courses, where it is stored in ponds and used for irrigation.





## **Biodiversity and conservation**

Land-use and biodiversity conservation is increasingly important as we transition to a low-carbon economy, continue to develop our renewables portfolio, and operate our utility businesses. As part of our commitment to making a positive environmental impact, we are constantly looking for new ways to protect wildlife and their habitats. We are proud of the steps we are taking to provide solutions that help protect species populations as we continue to grow.

Liberty maintains electric generation facilities, 1,270 miles of transmission and 5,611 miles of distribution corridors in our U.S. Central Region across southeast Kansas, northeast Oklahoma, northwestern Arkansas, and southwestern Missouri. Transmission corridors (often leased rights-of-way) convert terrestrial forest habitat to low-growing shrub/scrub/grassland habitat that is conducive to the safe and reliable transmission of energy.

Periodic utility vegetation management (UVM) is required to maintain vegetation in a state that promotes the safe and reliable transmission and distribution of energy to our customers. UVM seeks to establish and conserve early successional grassland habitat which has environmental benefits beyond regulatory compliance. We employ Integrated Vegetation Management (IVM) which simultaneously maintains infrastructure security and benefits wildlife conservation initiatives.





In 2019, our regulated utility business in the United States identified all sites owned, leased, managed, or adjacent to protected areas and areas of high biodiversity value outside of protected areas where vegetation management practices on their rights-of-way are being performed. To positively impact biodiversity on and adjacent to these sites, we employ Integrated Vegetation Management (IVM) and closely monitor the impacts of vegetation management on these sites. Where possible, we have changed our vegetation management practices to enhance compatible habitat on rights-of-ways. Our UVM program employs IVM, including habitat conservation moving activities, for the secondary benefit of wildlife conservation.

Surveying rights-of-way for plant community composition was addressed in 2019 with assistance from the Missouri Department of Conservation. Compatible plants were selected based on the following criteria:

- Maximum growth heights that do not interfere with the integrity of the transmission and distribution system;
- Pollinator value, based on recommendations made by Pollinator Partnership;
- Bloom period, allowing for management of a continuous bloom cycle from Spring until Fall; and,
- 4) Abundance, a short list that narrowed down 650 species to approximately 250 compatible plant species for monitoring and promotion.

We are seeking certification of our IVM Training Program from the Wildlife Habitat Council (WHC), and once received, Liberty will be the first electric utility to have obtained this type of WHC certification. Moving forward, as part of our IVM program, Best Management Practices will actively modify and enhance plant species compositions to favor compatible and desirable species identified within our plant list standards.

In addition, our Power to the Pollinators program is continuing to expand provisions of pollinator habitat acres across their rights-of-way and the establishment and maintenance of community pollinator gardens and we are continuing to promote community awareness to support pollinator initiatives through the use of interpretive signs at their demonstration sites.

We engaged our employees in helping to support pollinators by developing a "How To" guide on building pollinator gardens in their own backyards.



"Together, we created a standard rights-of-way plant list that included greater than 650 compatible plant species – those plant species that do not affect the safe and reliable transmission of energy on our network."

#### Jason Grossman

Manager, Vegetation Management

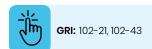


# **In This Section**

### **Topics covered** Performance highlights Alignment to **UN sustainable Employee** development engagement goals Health and safety Exceed 30% women in Achieve top-quartile leadership roles employee engagement Talent attraction and retention **Priority ESG issues** Learning and development Talent Diversity Transition and Safety of Culture attraction and inclusion succession employees and retention

**<53>** 





## **Employee engagement**

Each year, we communicate the importance of our *Employee Engagement Survey* to all employees. We use the feedback from survey results to take action and make changes according to what's most important to our employees. The "You Said, We Did" engagement survey awareness campaign we annually conduct demonstrates examples of how we are listening and responding to all employee feedback



1. Improved by 5% in 2020.

### You said

Employees want a quick and easy way to order supplies and materials to support our business.

### We did

We're working on implementing Ariba, a front-end supply chain software solution that allows users to enter online requisitions for materials and services that ultimately will work with our existing SAP Concur service. Part of the Ariba implementation will include the capabilities to use online catalogs to order commonly purchased non-inventory materials required to support our business. We expect catalogs for office supplies, safety tools, computer supplies, and clothing to be available through the portal for online ordering.

### You said

Arizona- and Texas-based employees said that they wanted to see improvements to internal communications processes.

### We did

Leaders began incorporating more icebreakers in team meetings to help strengthen team bonds. In addition, we piloted a Liberty Local meeting format. These are an opportunity for managers to share valuable information and recognize team and individual successes as part of a monthly team meeting. Our goal is that every team member (regardless of location or role) receives the information they need to do their job effectively, be up-to-date on the latest news and projects, and learn about the organization's strategy. Positive feedback from employees included that they received a good mix of information and they liked the more frequent monthly sharing of information

### You said

Employees expressed a desire to improve opportunities for learning and development as well as safety training.

#### We did

In 2019, our Safety and Learning & Development departments came together to complete development of our new Safety and Training Center in Missouri. This new center enables the departments to:

- Provide flexible classroom environments and office space for employee education.
- 2. Develop future phases of hands-on demonstration laboratories for gas, electric, water, and fiber service training.
- 3. Develop a future "utility city" that will provide our employees with real-world training by simulating conditions in the field.

**<54>** 



# SASB: EU-320a.1 GRI: 403

## Health and safety

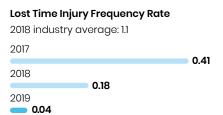
Across our organization, health and safety is a fundamental part of our culture. Our goal is always to have zero injuries. In our pursuit of that goal, it's crucial that safety awareness is woven into our daily activities.

We continue to align our safety culture with the Dupont-Bradley Curve™ safety model, which encourages organizations to shift away from a reactive "accidents will happen" approach to a team-based, interdependent approach where employees believe that "all accidents are preventable". By following this model, we believe that "zero injuries" is an attainable and sustainable objective.



**Zero** fatalities in 2017, 2018 and 2019

Recordable Incident Rate
(per 200,000 hours worked)
2018 industry average: 1.9
2017
2018
1.76
2019





"Our commitment to sustainability is rooted in ensuring the safety, health, and well-being of our most vital resource—our people. Safety is about behaviors. Positive behavior is how we fulfill our safety commitments. Every decision is focused on helping people live better lives every day and prosper tomorrow. Safety is also about teamwork. By taking a collaborative approach to advancing our safety culture, we have been able to achieve great results. In 2019, we have achieved new lows in Recordable Incident and Lost Time Injury Frequency rates

Through our sustained focus and active participation in safety programs such as Take Two, SafeStart, Smith System Driver Training®, Safety Observations and Life-Saving Behaviours, we are shaping the way we work together to achieve and sustain safety excellence. A shared mindset, built upon the right beliefs, supported by the right knowledge, and reinforced by the right behaviors is what drives the safety excellence outcomes we strive for."

#### **Timothy Deppmeyer,**

Director,

Environmental Health & Safety

**<55>** 





# Talent attraction and retention

Talent attraction and retention are the pillars upon which we build our employee lifecycle. We know that the competition for talent is real, and an organization is only as good as their workforce. At Algonquin and Liberty, our workforce is our family, and we pride ourselves in the way we grow our family.





# Disruption of unconscious bias in our hiring processes

We believe that in order to attract top-notch talent that contributes to our positive work culture and ambition of sustainability, it's important that we take a holistic and inclusive hiring approach that focuses on candidates' passions and capabilities without the presence of unconscious bias.

An initiative undertaken by our Talent Acquisition team to address unconscious hiring bias includes our eight-step recruitment process. For starters, we understand that traditional phone interviews can rely heavily

on the sole recruiter's perceptions – which may include their unconscious biases. Therefore, we have taken steps to replace traditional phone screening with one-way video interviews. This way, the recruiter, hiring leader, and team manager can review video interviews in collaboration and come to a consensus on whether or not to proceed forward with a panel interview. By involving multiple individuals during this stage, we can work towards removing any potential unconscious bias that may come from only involving a singular individual to make initial hiring decisions.

Successful candidates are brought in for a panel interview with the recruiter, hiring leader, and team manager. Once again, we ensure that the candidate is interviewed by a diverse group of individuals so as to reduce individual biases. We also take steps to ensure that interview questions include a mix of behavioural, situational, and technical questions, followed by a brief discussion on diversity, equity, and inclusion measures. This helps us ensure that we are incorporating diversity and inclusion measures into our final hiring decision.

#### Workforce by age

<b>0.4%</b> 2017	33.8%	30.5%	34.9%	0.4%
<b>1.1%</b> 2018	39.1%	30.2%	29.4%	0.2%
<b>1.9%</b> 2019	41.4%	30.5%	26.0%	0.16%
<b>Gen Z</b> >1995	<b>Millennials</b> 1977-1995	<b>Gen X</b> 1965-1976	<b>Baby</b> <b>boomers</b> 1946-1964	Silent generation <1946



**<57>** 





### Learning and development

We are dedicated to the education, development, and empowerment of a high-performing workforce. Our employee development programs are unique and offer challenging and interesting work and learning opportunities for employees at all levels



**34,827** hours in training

**\$2,798,000+** invested in training

### **Achievement Fund**

We believe that supporting our employees' education and development is a strategic investment in the future – both our employees' and our business's. Our Achievement Fund provides employees with the ability to pursue learning opportunities that will expand their knowledge and skills, and enhance their job performance. All employees are eligible to receive \$4,000 per year (up to a \$30,000 lifetime maximum) to pursue professional and personal development opportunities through external, government-recognized educational institutions.

"In 2019, I was able to achieve my Certified Associate in Project Management at the Project Management Institute, as well as complete three classes towards my B.A. degree at McMaster University. The Fund is about more than simply allowing Algonquin's employees to take classes, it also enables us to pursue professional and personal growth. Since joining Algonquin, I have had the opportunity to work closely with my manager to advance my career goals and grow within the company. Without the Achievement Fund, I am certain that I would not have been able to accomplish so much in such a short time."

#### Kristina Labre

Supervisor –
Project Coordination



**<58>** 



# Applied Learning Projects (ALP)

The ALP team-based learning program focuses on tackling a business challenge or industry disruptor.

The ALP enables employees and their teammates to think broadly about industry topics and learn about our business while working with individuals they might not otherwise regularly encounter.

Each ALP is a journey of collaboration, researching, learning, and creating relationships across the business. We are constantly impressed with the innovative outcomes our employees create through the ALP, and we work to incorporate them into company operations.

# 2019 ALP themes

# Workplace flexibility as a business strategy

Following our Leadership Summit in September 2019, it was made clear by the presenting ALP team that encouraging flexible work arrangements is extremely important for a variety of reasons, including the attraction and retention of our employees. As a result of the findings of this ALP, we revised our Flex Place Flex Time policy to better support our employees in achieving a solid work-life balance. The revised policy focuses on encouraging employees and their leaders to have transparent conversations around flexibility while respecting employee and team needs.

### Workforce of the Future – the Competing Forces Shaping 2030

In 2019, one of the Leadership Summit presenting ALP teams were asked to explore the "Four Worlds of Work" as imagined by PricewaterhouseCoopers in their report Workforce of the Future: The Competing Forces Shaping 2030. The research conducted by the ALP team helped to inform the design of our new leadership development program pilot, which aims to balance the development of core leadership capabilities with the development of new leadership literacies focused on innovation, sustainability, and emerging or disruptive technologies.



**<59>** 





## Diversity, equity, and inclusion

We foster diversity in our business model, and within our workforce. One of the core tenets of our operations is our belief in the importance of our employees living and working in the communities where we operate. In order to best serve our communities, it is integral that our workforce be representative of those communities and reflects the ideas and expertise inherent of diverse communities.

Research has shown, time and again, that diverse teams deliver better business results. We believe that building an inclusive work environment, where all of our team members feel a sense of belonging, is critical to unlock the benefits of diverse teams.

We have made strides towards gender equality through increased female representation across all levels of our organization, and we are committed to continuing to build upon this progress. Gender, however, is only one facet of diversity. Our objectives around diversity, inclusion, and belonging are to widen our scope and consider how we can ensure that all underrepresented employees-existing and prospective—are given equal footing for all opportunities. In order to advance this commitment, we have recently launched two new Business Resource Groups: one for LGBTQIA+ employees, and the second focused on ethnicity. We have much to learn and do. But, we believe that by listening to our employees and including them on this journey, we can continue making Algonquin and Liberty a great place to work.



"COVID-19 has further blended the delineation between work and home lives. In many situations, this has resulted in a greater understanding of colleagues who are balancing personal challenges while continuing to meet their work objectives. I am proud of our workforce for their agility, resilience, and continued commitment to doing great work. The empathy and sharing of perspectives that have been elevated during this time is a foundation upon which we can continue to grow, learn, and foster inclusivity."

#### **Kirsten Olsen**

Chief Human Resources Officer

<60>



### **Gender equality**

The promotion of gender diversity in the workplace is a critical component of our strategy to be an employer of choice. We believe that an environment that promotes diversity positively impacts our ability to attract and retain top-notch talent. We've adopted several initiatives and sustainability goals to measure our progress in increasing diversity.

When utilizing internal and external recruiters, we require that recruiters provide gender-diverse shortlisted candidates for all senior roles.

To encourage more diverse candidates, we recently undertook an audit and refreshment of job descriptions to remove unconscious bias and support gender neutrality.

Additionally, each year, gender diversity is considered as part of the executive succession planning process to ensure the development of women for leadership roles.

Our continuous efforts to improve diversity within our company have enabled us to receive recognition in the *Bloomberg Gender Equality Index* in 2019. We are proud of this achievement and look forward to continuing on our journey to provide equal opportunities.



### **Board diversity**

We recognize and support the benefits of diversity, both on the Board of Directors and our Executive Management Team. Our Board is committed to increasing board diversity. To date, we have been successful in increasing diversity both in terms of gender and regional knowledge. In 2019, 33.3% of board members were women.

Our Diversity Policy aims to ensure that diversity is considered in determining board composition and in connection with succession planning and the appointment of members to our Executive Management Team.

Our Board's Human Resources and Compensation Committee is mandated with periodically assessing the effectiveness of leadership processes at achieving our diversity objectives.

### Women are:



**33.3%** of our Board of Directors (2019 industry benchmark: 17%)



31.5% of our total workforce



**37.5%** of our Executive Management Team (2019 industry benchmark: 16%)



**32.7%** of our VPs and Directors (2019 industry benchmark: 20%)



# Diversity and Inclusion Council

In 2018, we established our Diversity and Inclusion Council, bringing representatives from across our business together to lead our commitment to diversity and inclusion. The Council is mandated to provide informed, authentic leadership for cultural equity and promote equal opportunity within the workplace. The Council meets regularly to review, address, and advise on policies and practices centered on ensuring that we continue to position diversity and inclusion as an integral part of our organizational purpose, mission, and business strategy.

# Lean in Circles

Our approach to diversity extends beyond the Board of Directors. We believe that in order to have a positive impact, our organization as a whole must have a diverse mix of experiences, backgrounds, genders, age, and geographic expertise, representing the locations where we do business.

We also recognize that despite our best efforts to provide equal opportunities to our employees, many of them still face challenges and obstacles throughout their career paths. That's why we developed our very own Liberty Lean In program, inspired by Lean In Circles, in which small groups of women meet regularly to engage in peer support, learning activities, and accountability partnerships. Currently, there are nine active Lean In Circles across our U.S. offices, and one at our head office in Canada. Given the success of the Lean In program, we are currently working on developing a support package that enables all our offices to establish their own Lean In Circles to empower women across our enterprise.



"In 2017 we decided it was time to share what we were doing with the rest of the organization and other women like me jumped in: they came out of their comfort zone to support other women by leading their own local Lean In Circles, In 2018, I was promoted to a leadership position. I felt like I was being recognized for the skills, knowledge, education, and experience I was bringing to the table, and that I was being entrusted with new and meaningful responsibilities. I believe that this promotion was a result of the support and trust that my peers and leader placed in me, along with my new found confidence and the courage to have difficult conversations.

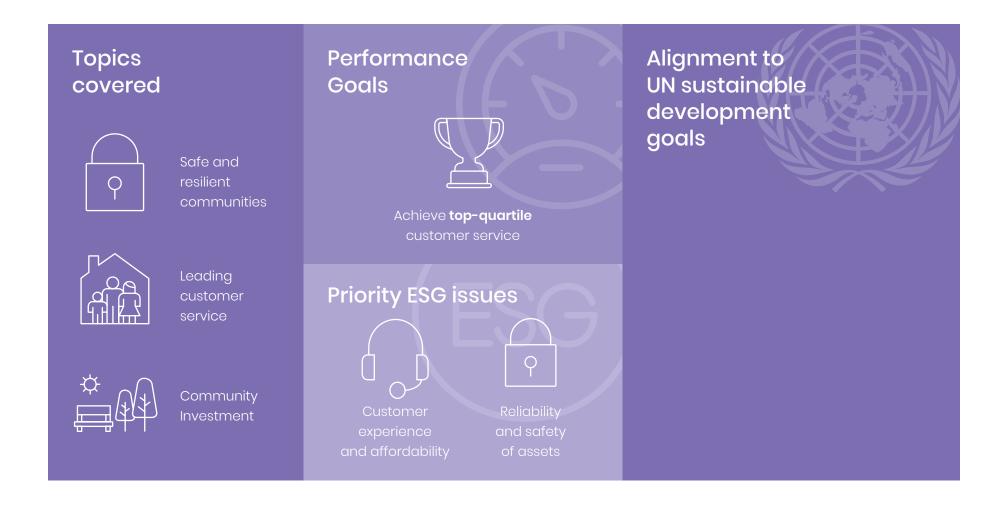
Our Lean In Circles can have a great impact in fostering an inclusive and equitable environment in our organization. Sometimes, all it takes for each of us is a great leader and a willingness to learn and get out of our comfort zone to accomplish great things and to help support others do the same."

#### **France Poirier**

Learning and Development Manager (and Lean In Leader)



# **In This Section**







# Safe and resilient communities

We are committed to delivering cost-effective and reliable utility services by identifying capital and operational efficiency opportunities to drive lower customer costs. By adding more low-cost renewable energy into our supply mix, investing in infrastructure technology to reduce our operating costs, and operating our business as efficiently as possible, we can achieve lower costs for our customers.

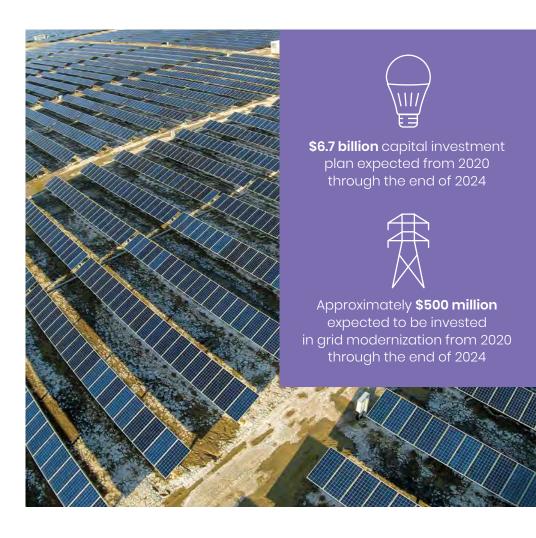
Customer electricity savings from efficiency measures: **20,338 MWh** in 2019

Ensuring the reliability and safety of our assets, while providing affordable utility services, helps us deliver helps us deliver value to our customers and communities as we navigate the evolving landscape of stakeholder needs and expectations.

Our regulated utility subsidiary sets state regulator-approved customer rates that reflect the cost to provide customer care, emergency and outage services, maintain and improve infrastructure, and recover operating costs. Prices also reflect the value and obligation of safely and reliably serving our customers.



Customer gas savings from efficiency measures: **198,690 MMBTu** in 2019





# Grid modernization and using batteries in innovative ways

Like most industries affected by social and technological changes, the utility industry is undergoing rapid change and disruption. Our communities and customers are growing, demanding more flexibility, reliability, and resiliency from utility service providers—all at highly competitive rates. With respect to our electric utilities, we are striving to give our customers exactly what they want by modernizing our power grids and exploring innovative new ways of storing energy.

Behind-the-meter storage gives our customers the flexibility to manage energy purchases with a battery connected directly to their premises, downstream of the utility electric meter. This battery can charge itself during the night when electricity costs are lowest. Energy stored in the battery can then be used by the customer to reduce electricity purchased during the day when rates are higher. This helps

reduce customer energy costs. In a similar way, microgrids (consisting of a small collection of customers sharing a battery) can help more extensive operations maximize availability and reduce costs.

Communities across North America have embarked on Smart City campaigns where they invest in "smarter" infrastructure to attract more businesses and drive economic growth. We are focused on delivering new and better ways to serve the energy needs of these customers so we can be a part of the solution. Currently, we have two micogrid pilot projects underway, as well as a behind-the-meter battery storage pilot. We know these technologies are going to be an essential part of our service mix in the future, and we're excited with the opportunity to better understand how to maximize the value they bring.

## Battery Storage Pilot Program

Our battery storage program saves our customers money by reducing demand on the electric grid and provide residential customers with a backup power source during an outage. The program is built around a home storage power battery. Customers who participate in the program will have a new meter installed that will allow us to measure electric usage from the grid through a cellular network.



### **Smart metering**

Advanced metering is foundational to meeting the needs of customers in the future. In 2019, we began working to deploy our advanced metering project. Through the more frequent reads and two-way communications these meters provide, our customers are able to receive more information and insights about their consumption. This will help them to make more sustainable choices that will help them save money and minimize their environmental impacts.

The meters will also enable us to provide more proactive information on outages, avoid estimated billing, simplify move-in and -out processes for our customers, and help to improve our network designs as we gain a better understanding of customer behaviors. We are excited to see the impacts of this project in the coming years.





# **GRI:** 102-21, 102-43, 416

## Leading customer service

We care deeply about our customers' experiences and the quality of the local services we deliver. We consistently strive to provide top-quartile customer service and pride ourselves in the local, responsible, and caring relationships we foster with our customers.

### **Customer First in focus**

A key element in our strategy to improve customer satisfaction is the roll-out of our Customer First initiative: a multi-year project involving the enterprise-wide implementation of new business systems that improve customer experience through enhanced online functionality and service capabilities for our regulated utility business. The Customer First program is expected to equip us with the processes and technology we need to better serve our customers and to ensure that we remain well-positioned to meet customer needs - today and in the future.

The Customer First program places customers at the center of everything we do. The initiative gives our employees the tools they need to deliver the experience that our customers are looking for, whether it's providing sustainable energy solutions or seamless interactions. It's important for us to provide a personalized customer

experience where customers have choices as to how they consume and manage energy, in a way that is simple and easy to use.

The program is already well underway; employees who represent our regions and communities have been attending design workshops to help us come up with the best solutions for our business and our customers. We are thrilled to see the passion and energy that our people bring to these sessions.

Customer First will be staged in several releases over the next four years. We are excited to see the positive impacts this program will help us create.





# **GRI:** 203-1

## **Community investment**

We believe our role in society extends beyond our workplace and into the fabric of the communities where we work and live. Our company investments, community partnerships, and employee giving initiatives help to make lives better every day. Through continuous dialogue and collaboration, we endeavor to build and support resilient communities. We strive to apply our "Think Global, Act Local" approach in fostering mutually beneficial relationships with the communities where we work and live. This approach

is supported across all levels of our organizations, and we pride ourselves in having compassionate and committed employees who work hard to make their communities a better place.





# Employee volunteerism and local giving

Many of our employees volunteer with local charities—whether coaching a youth sport or teaching an adult to read, they are constantly interacting with our customers and community members. Our goal is to support programs directly related to our business objectives at a local level. While we support and partner with national organizations such as United Way, we choose to participate in programs that resonate with the communities we directly serve. As we continue to grow and increase our community reach, we are developing a formalized Community Giving policy and program that will help us exceed our current charitable donations of approximately \$1 million per year, while ensuring that our contributions remain local and relevant to the needs of our customers and employees.

Each year, employees are invited to spend up to three paid days during regular working hours volunteering in their community by taking part in local activities that reflect the company's goals and brand.

### Stakeholder driven project development

We are committed to forming meaningful and lasting stakeholder relationships while developing and operating our renewable energy and infrastructure projects. Our project teams work hard to ensure that mutual and continuous stakeholder dialogue is maintained during all phases of a given project, from a project's inception through the course of its long-term operation.

The community and stakeholder outreach events we host—such as town halls and landowner dinners—support our ability to build meaningful relationships while providing ongoing updates and facilitating dialogue regarding project performance and related operational issues that may impact our communities.

In many cases, as part of the development of our projects, long-term community benefit agreements are put in place. In 2019, we made payments of approximately \$19 million under community contribution agreements, land rentals, or municipal taxes that support local communities where we operate.





### Influencing policy in regulated energy

During 2020, the Algonquin government affairs team developed a three-year roadmap to drive its government affairs approach and define its role within the broader corporate strategy of sustaining energy and water for life. An effective government affairs strategy will enable Algonquin to:

- Have an "early warning system" in place to guard against stroke of pen risks to our critical operations and assets;
- Build and maintain robust relationships with all stakeholders we interact with on the state, regional and federal levels; and
- Enable us to set policy agendas and create new business opportunities supporting our commitment to sustainability.

Our government affairs path forward has three tiers – philosophy and process, mitigating high risks to our operations, and advancing Algonquin's strategic initiatives. Many of these strategic initiatives support our corporate commitment to sustainability and include policies ranging from advancing clean energy such as renewable natural gas (RNG), meaningful state renewable energy goals and our California C-100 plan, to advocating for microgrid, electric transportation and energy storage initiatives in the states in which we serve customers.



In 2020 we made meaningful in-roads in advancing these strategic policy initiatives, including:

- In California, through our outreach to key federal agencies and Congressional offices, we helped support the approval process for our Luning II expansion project whereby Liberty will add 70 MW of solar and 70 MW of battery storage at an existing solar site. This is a key component of C-100, our California electric utility's commitment to attain 100 percent of its supply from renewable resources.
- In Missouri, we worked with the RNG Coalition and a group of gas suppliers to advance RNG legislation for the 2021 session for the adoption of a state-wide gas utility renewable natural gas program.

 In New Hampshire, we collaborated with legislators, environmental groups and third party energy storage developers to advance legislation enabling greater utility ownership of energy storage projects. Advancing energy storage provides more grid flexibility to more easily accommodate intermittent renewable energy resources, and also increases the capacity factor of existing resources.

Algonquin's government affairs team is proud to be an important part of our company's sustainable future and eagerly pursues opportunities to advance sustainable and positive energy policies in the states in which we serve customers.

"Government affairs is a key component of the broader corporate strategy in sustaining energy and water for life. Successfully developing and implementing our government affairs strategy not only protects our assets and operations, but positions us as industry thought leaders, allowing us to seize strategic opportunities by affecting positive policy changes for our communities and customers."

**Sandi Hennequin**Vice President,
Governmental Affairs



# **Appendices**



## Forward-Looking Statements and Forward-Looking Information

Specific forward-looking information in this report includes, but is not limited to, statements relating to: expected future growth; ongoing and planned projects and initiatives including grid modernization; smart metering and battery storage; expectations regarding generation availability, capacity and production; sustainability strategy, initiatives, targets and goals, including related to reducing greenhouse gas emissions, de-carbonization and increasing renewable generation; community investment and engagement efforts; customer savings; continued commitment to maintaining healthy water eco-systems; sustainability governance; ongoing and planned acquisitions and projects, including expectations regarding costs, timing, in-service dates and completion dates; future renewable energy projects and opportunities, including those with Chevron and in Bermuda; regulatory and governmental policy initiatives; anticipated timing and benefits of the Customer First program; response measures to COVID-19; expected future environmental and social impacts of our renewable energy,

water replenishment and wastewater reclamation projects; biodiversity and conservation initiatives; employee engagement initiatives; and the potential impacts of climate change. All forward-looking information is given pursuant to the "safe harbor" provisions of applicable securities legislation.

The forecasts and projections that make up the forward-looking information contained herein are based on certain factors or assumptions which include, but are not limited to: the receipt of applicable regulatory approvals and requested rate decisions; the absence of any material equipment breakdown or failure; the absence of significant operational, financial or supply chain disruptions or liability due to natural disasters, diseases or other force majeure events; availability of financing on commercially reasonable terms; the absence of a severe and prolonged downturn in general economic, credit, social and market conditions; the successful and timely development and construction of new projects; the closing of pending acquisitions substantially in accordance

with the expected timing for the same; the continuation of observed weather patterns and trends; the continued competitiveness of electricity pricing; the absence of a material change in political conditions or public policies and directions by governments; the ability to obtain and maintain licenses and permits; favourable relations with external stakeholders; the viability, financial and otherwise, of community engagement efforts and sustainability projects; the reliability of scientific evidence upon which sustainability efforts are based; the availability of diverse suppliers and qualified personnel to satisfy continued diversity and inclusion efforts. Given the uncertainty and evolving circumstances surrounding the COVID-19 pandemic and related response from governments, regulatory authorities, businesses and customers, there is more uncertainty associated with the Corporation's assumptions and expectations as compared to periods prior to the onset of COVID-19.

(continued...)

#### (...continued)

The forward-looking information contained herein is subject to risks, uncertainties and other factors that could cause actual results to differ materially from historical results or results anticipated by the forwardlooking information. Factors which could cause results or events to differ materially from current expectations include, but are not limited to: changes in general economic, credit, social and market conditions; changes in customer energy usage patterns and energy demand; changes related to the anticipated effects of global climate change; advancements in environmental science; the development of new sustainable technologies; the incurrence of environmental liabilities: natural disasters, diseases and other force majeur events; seasonal fluctuations and variability in weather conditions and natural resource availability; reductions in demand for electricity, gas and water; fluctuations in commodity prices; an increase in financing costs or limits on access to credit and capital markets; failure to maintain required regulatory

authorizations; failure to comply with and/or changes to environmental laws, regulations and other standards; failure to identify attractive acquisition or development candidates necessary to pursue the Corporation's growth strategy; delays and cost overruns in the design and construction of projects, including as a result of COVID-19; facilities being condemned or otherwise taken by governmental entities; the severity and duration of the COVID-19 pandemic and its collateral consequences, including the disruption of economic activity, volatility in capital and credit markets and legislative and regulatory responses; and the loss of key customers. There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Some of these and other factors are discussed in more detail under the heading "Enterprise Risk Factors" in the Corporation's most recent annual information form and under the heading "Enterprise Risk Management" in the Corporation's most recent annual and interim management discussion and analysis.

# Appendix I: Operational metrics

## Operations

2017	2018	2019	
265,000	266,000	267,000	
337,000	338,000	369,000	
160,000	164,000	168,000	
762,000	768,000	804,000	
2017	2018	2019	
5,843	6,524	6,433	
4,543	4,656	4,749	
10,386	11,180	11,182	
37.39	40.25	40.26	
31.96	36.5	37.87	
69.35	76.75	78.13	
2017	2018	2019	
63,992	59,897	57,553	
8,426	8,635	8,850	

<sup>1.</sup> The decrease in water provided to customers from 2017 to 2018 can be attributed to the disposition of the Mountain Water System in Montana in the second quarter of 2017.



Operations (continued)			
Electricity generation capacity (MW) <sup>2</sup>	2017	2018	2019
Coal	213	213	213
Natural gas	1,496	1,496	1,496
Wind	876	1,026	1,101
Hydroelectric	125	125	125
Solar	90	165	230
Total	2,949	3,099	3,164
Renewable energy total	1,241	1,391	1,456
Renewable energy portfolio (%)	42	45	46
Net electricity generated (GWh)	2017	2018	2019
Coal	801	760	823
Natural gas	3,901	4,380	4,086
Wind	3,660	3,623	3,652
Hydroelectric	624	586	567
Solar	208	324	349
Total	9,380	9,754	9,477
Renewable energy total	4,492	4,532	4,568
Renewable energy portfolio (%)	48	46	48
Electricity purchased by Algonquin and resold for customer use (GWh)	2017	2018	2019
From renewables (wind, solar, and hydro)	801	760	669
From the grid, mixed sources	4,964	5,412	4,706

<sup>2.</sup> MW capacity is based on installed generator nameplate capacity.

Operations (continued)				
operations (continued)				
Energy reliability	201	7 2018	2019	
SAIDI – System Average Interruption Duration Index (minutes)	140.6	7 109.84	165.33	
SAIFI – System Average Interruption Frequency Index (rate)	1.15	1.03	1.23	
CAIDI – Customer Average Interruption Duration Index (minutes)	122.3	5 106.67	7 134.41	
Electricity transmission and distribution	201	7 2018	2019	
Length of transmission lines (km)	4,04	5 4,146	4,306	
Length of distribution lines (km)	11,69	6 11,932	13,383	
То	otal 15,74	0 16,078	3 17,690	1
Natural gas transmission and distribution	201	7 2018	2019	
Length of transmission lines (km)	18	18	21	
Length of distribution lines (km)	11,69	0 11,641	12,276	
То	otal 11,70	8 11,659	12,297	
Water utility water mains and sewer pipes	201	7 2018	2019	
Length of water mains (km)	3,52	2 3,594	3,976	
Length of sewer pipes (km)	953	1,034	1,037	
То	otal 4,47	4,628	5,013	
Cyber security	201	7 2018	2019	GR1418
Substantiated complaints received concerning breaches of customer privacy	0	0	0	
Identified leaks, thefts, or losses of customer data	0	0	1	

Operations (	(continued)
Operations (	(COITHII IACA)

Economic value distributed (\$ millions)	2017	2018	2019	GRI201-1
Economic value generated (EVG)				
EVG - revenue	1,585.4	1,809.8	1,806.2	
Economic value distributed				
Operating costs	650.4	695.9	667.9	
Employee wages and benefits	227.5	242.8	259.9	
Payments to providers of capital	349.8	395.6	467.8	
Payments to government (US and CAN)	81.4	88.5	103.9	
Community investments	1.8	1.0	1.0	
Economic value retained (regulated)	222.7	296.4	199.1	
Economic value retained (unregulated)	51.8	89.7	106.5	
Total Economic Value Retained	274.5	386.1	305.7	
Community engagement	2017	2018	2019	GRI413-1
Operations with local community engagement	-	-	100%	
Payments under community contribution agreements, land rentals, or municipal taxes (\$ millions)	15.6	17.9	19.0	
Liberty days used – hours volunteers by employees	-	-	5,499	

## Health & safety <sup>3</sup>

Work-related injury <sup>4,5</sup>		2017	2018	2019	GRI403-9
Description of the second of t	Employees:	61	40	31	
Recordable injures	Non-employees:	0	0	3	
Recordable Injury Rate (RIR)		2.78	1.76	1.27	
Work-	related injuries included:	muscle strains, cuts	k-related injuries identified fo , and abrasions. The primary v mployees are arc flash burns	work-related injuries	
Lost Time Injury Frequency (LTIFR)		0.41	0.18	0.04	
Near Miss Frequency Rate (NMFR)		30.43	23.85	27.67	
High apparent on a wark related injuries (accepted)	Employees:	9	4	1	
High-consequence work-related injuries (number)	Non-employees:	0	0	3	
High-consequence work-related injuries (rate)		0.41	0.18	0.04	
High-consequence work-related Injuries included:		electrical shocks, fa were identified thro The high-consec	consequence work-related ir Ils from heights, struck agains ough job safety analysis and p Juence work-related injuries ir ourn and manual work with er	t injuries. These risks ore-job inspections. ncluded potential	
Injury elimination/mitigation strategy:		Algonquin's injury elimination/mitigation strategy follows local action plans and a 5-year occupational health and safety plan following the hierarchy of controls methodology.			
Total hours worked		4,390,468	4,544,309	4,886,529	



<sup>3.</sup> Zero workers have been excluded from all Health & safety indicators disclosures

<sup>4.</sup> Rate Hours Used: 200,000

<sup>5.</sup> Work-related injury rates for non-employees is unavailable due to total non-employee hours worked being unknown.

Work-related ill health		2017	2018	2019	GRI403-10
Fatalities from work-related ill health (Number)	Employees:	0	0	0	
ratalities from work-related iii nealth (Number)	Non-employees:	0	0	0	
Pagardella wark valetad ill bardth agrae (Nivelaar)	Employees:	0	0	1	
Recordable work-related ill health cases (Number)	Non-employees:	0	0	0	
Main types of work-related ill health		None	None	Heat stroke	
Work-related hazards	Primary work-related hazards posing ill health risks include soft muscle injury and chemical exposure. These risks were identified through job safety analysis and pre-job inspections. The ill health case reported in 2019 included manual work with ergonomic stressors.				
Injury elimination	Algonquin's injury elimination/mitigation strategy follows local action plans and a 5-year occupational health and safety plan following the hierarchy of controls methodology.				
Fatalities from work-related Injury		2017	2018	2019	GRI403-9
Fatalities	Employees:	0	0	0	
ratuities	Contractors	0	0	0	
Workers covered by an EHS management system		2017	2018	2019	GRI403-8
Employees covered by EHS system		100%	100%	100%	
Francisco and the sinks wealth of FLIC contains	Employees:	30%	25%	30%	
Employees covered by internally audited EHS system	Non-employees:	100%	100%	100%	
51	Employees:	5%	2%	5%	
Employees covered by externally audited EHS system	Non-employees:	N/A	N/A	N/A	
Employees covered by externally audited EHS system		Employees: 5% Non-employees: N/A	Employees: 2% Non-employees: N/A	Employees: 5% Non-employees: N/A	

## Workforce and social indicators

## Employee demographics

Number and geographical location of employees:		2017	2018	2019	GRI102-8
	Permanent	276	299	339	
Canada	Temporary	16	14	17	
United States	Permanent	1,940	1,941	2,103	
United States	Temporary	9	11	8	
Total Algonquin / Liberty Employees		2,241	2,265	2,467	
Percentage of employees who are Algonquin / Liberty emplo	yees	96.55%	93.94%	87.42%	
Percentage that are non-Algonquin / Liberty employees		3.45%	6.06%	12.58%	
By age group		2017	2018	2019	
Generation Z (>1995)		0.4%	1.1%	1.9%	
Millennials (1977-1995)		33.8%	39.1%	41.4%	
Generation X (1965-1976)		30.5%	30.2%	30.5%	
Baby boomers (1946-1964)		34.9%	29.4%	26.0%	
Silent generation (<1946)		0.4%	0.2%	0.2%	
Average age (years)		2017	2018	2019	
Female employees		45	44	46	
Male employees		45	45	46	
All employees		45	45	46	

Employee demographics (continued)					
Employees by union / salaried		2017	2018	2019	GRI102-4
Salaried		67%	69%	71%	
Unionized		33%	31%	29%	
Gender and self-Identification		2017	2018	2019	
Women		31.1%	32.0%	31.5%	
Men		68.9%	68.0%	68.5%	
Self-identified minorities		0.1%	6.7%	8.3%	
Self-identified veterans		1.3%	1.9%	1.7%	
By employment contract		2017	2018	2019	GRI102-8
Development and a series	Female:	684	708	778	
Permanent employees ———————————————————————————————————	Male:	1,532	1,532	1,664	
Tonon overs appellation	Female:	3	12	7	
Temporary employees ———————————————————————————————————	Male:	22	13	18	
By employment type		2017	2018	2019	GRI102-8
	Female:	683	714	779	
Full-time employees ———————————————————————————————————	Male:	1,546	1,534	1,669	
	Female:	4	6	6	
Part-time employees ———————————————————————————————————	Male:	4	9	5	
Once of a grant control of the contr	Female:	0	0	0	
Casual employees —————	Male:	4	2	8	

Employee demographics (continued)					
Leadership roles (sr. manager and above)		2017	2018	2019	
Women		26.0%	32.1%	32.7%	
Men		74.0%	67.9%	67.3%	
Self-identified minorities		0.7%	4.8%	4.4%	
Executive team		2017	2018	2019	
Women		12.5%	12.5%	25%	
Men		87.5%	87.5%	75%	
Self-identified minorities		0%	0%	0%	
Employee compensation		2017	2018	2019	
Women in top 10% of salaries		24.3%	26.8%	29.7%	
Average employee salary (excluding Executive Team)	\$US	\$76,573	\$78,451	\$81,726	
Average pay – women to men in leadership roles		94.4%	98.8%	91.2%	
Average pay – women to men in front line team		62.8%	62.8%	75.7%	
Women to men pay ratio by level	Senior management:	0.85	0.84	0.88	
worner to men pay ratio by level	Middle management:	0.91	0.95	0.95	
Marsan to poor non-retire by ich function	Office:	0.71	0.73	0.77	
Women to men pay ratio by job function	Field:	0.81	0.80	0.76	
Woman to man now ratio by radion	Canada:	0.76	0.75	0.77	
Women to men pay ratio by region	United States:	0.73	0.75	0.78	
Annual total compensation ratio (CEO to employee median)		51: 1	51:1	50:1	GRI102-
Percentage increase in annual total compensation (C	EO to employee median)	1:0.7	1:1.4	1:2.1	GRI102-

Employee compensation (continued)		2017	2018	2019	
Ratios of entry level wage to local minimum wage (b	y region and gender)	2017	2018	2019	GRI202-1
Canada	Female:	1.99	1.65	1.67	
Gariada	Male:	2.03	1.92	1.62	
USA	Female:	1.96	1.97	1.90	
	Male:	2.43	2.52	2.47	
Employee attraction and retention					
Hiring rates		2017	2018	2019	GRI401-1
Employees hired by age	< 30 years:	30%	32%	38%	
	30-50 years:	17%	13%	15%	
	> 50 years:	9%	7%	5%	
For the control of the control	Female:	19%	15%	16%	
Employees hired by gender	Male:	13%	11%	12%	
Employees hired by region	Canada	28%	22%	29%	
employees filled by region	USA	12%	11%	11%	
Turnover rates		2017	2018	2019	GRI401-1
Volunteer employee turnover rate		4%	4%	7%	
	< 30 years:	9%	10%	26%	
Employee turnover by age	30-50 years:	12%	8%	10%	
	> 50 years:	17%	15%	10%	
Employee turnover by gender	Female:	15%	11%	15%	
employee turnover by gender	Male:	13%	11%	10%	
Employee turnover by region	Canada	18%	16%	15%	
Employee turnover by region	USA	13%	10%	11%	



### Employee attraction and retention (continued)

Parental leave		2017	2018	2019	GRI401-3
Employees entitled to parental leave	Female:	680	704	773	
	Male:	1,530	1,529	1,663	
Employees that took parental leave	Female:	4	14	6	
Employees that took parentaneave	Male:	4	5	4	
Employees that took parental leave and returned -	Female:	4	8	3	
	Male:	4	5	2	
Return to Work Rate	Female:	100%	57%	50%	
Retain to Work Rate	Male:	100%	100%	50%	_
Employees that took parental leave and were retained	Female:	2	6	3	_
Employees that took parental leave and were retained -	Male:	3	5	2	
Parental Leave Retention Rate -	Female:	50%	42.8%	50%	
	Male:	75%	100%	50%	

Employee attraction and Retention (continued)					
Training (average number of hours)		2017	2018	2019	GRI404-
By gender	Female:	_	-	14.97	
by gender	Male:	_	-	12.29	
By level	Senior management:	-	-	26.45	
	Middle management:	-	-	18.53	
By job function	Office:	-	-	13.45	
By Job Tunction	Field:	-	-	15.75	
Total nu	mber of hours used for training	-	-	34,827	
Amount invested i	n employee training (\$ millions)	-	1.8+	2.8+	
Regular performance / career development reviews		2017	2018	2019	GRI404-3
Percentage of employees who received performance		2017	2010	2010	ONITOT C
	ce reviews	_	_	100	
	ce reviews	-	-	100	
	ce reviews	2017	2018	100 <b>2019</b>	
. , ,	ce reviews				
Executive	ce reviews	2017	2018	2019	
Executive  Executive team members		<b>2017</b> 8	<b>2018</b> 8	<b>2019</b> 8	
Executive  Executive team members  Women on executive team		<b>2017</b> 8 12.5%	<b>2018</b> 8 12.5%	<b>2019</b> 8 25%	GRI201-3
Executive  Executive team members  Women on executive team  Average pay – women to men in executive team (executive team)		2017 8 12.5% 63.6%	2018 8 12.5% 76.4%	2019 8 25% 82.5%	GRI201-3
Executive  Executive team members  Women on executive team  Average pay – women to men in executive team (ex	coluding CEO)	2017 8 12.5% 63.6% 2017	2018 8 12.5% 76.4%	2019 8 25% 82.5%	GRI201-3

## Governance and policy

emographics		2017	2018	2019	GRI40
By gender	Female:	33.3%	33.3%	33.3%	
y 901 1401	Male:	66.7%	66.7%	66.7%	
	< 30 yrs. old:	0.0%	0.0%	0.0%	
By age	30-50 yrs. old:	0.0%	0.0%	0.0%	
	> 50 yrs. old	100.0%	100.0%	100.0%	
perience and background		2017	2018	2019	
		<b>2017</b> 7	<b>2018</b> 7	<b>2019</b> 7	
Independent directors (number)					
		7	7	7	
Independent directors (number)  Average tenure (years)	nce (number)	7 5.8	7 6.8	7 8.0	
Average tenure (years)  Directors with utility/energy experience (number)	nce (number)	7 5.8 6	7 6.8 6	7 8.0 8	

_	
Comp	liance
COLLID	IIGI ICC

inalgenous relations	2017	2018	2019	GRI4II-I
Incidents of violations involving rights of indigenous peoples	-	-	0	
Human rights	2017	2018	2019	GRI412-1
Operations in Canada subject to human rights reviews / impact assessments	-	-	100%	
Operations in the USA subject to human rights reviews / impact assessments	-	-	100%	



Compliance (continued)				
Compilative (continued)				
Anti-corruption Control of the Contr	2017	2018	2019	GRI205-1-
Operations assessed for corruption related risks - Includes government relations, conflicts of interest, and foreign interests	-	-	100%	
Governance body members and employees who have received anti-corruption communications and received anti-corruption policy training	-	100%	100%	
Contractors who have received anti-corruption communications	-	100%	100%	
Incidents of corruptions and actions taken	-	0	0	
Percentage of employees who completed annual  Code of Business Conduct and Ethics training	-	99.0%	99.7%	
Number of times Ethics Reporting Line was used	-	=	5	
Number of times Ombudsperson was contacted	-	-	12	
Anti-competitive	2017	2018	2019	
Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	-	-	0	
Customer health & safety	2017	2018	2019	GRI416-
Incidents of non-compliance with regulations resulting in fines or warnings	0	0	0	
Incidents of non-compliance with voluntary codes	0	0	0	
Social and economic compliance	2017	2018	2019	GRI419
Total monetary value of significant fines (\$)	-	-	0	
Number of non-monetary sanctions	-	-	0	

#### **Environment**

#### Greenhouse gas (GHG) emissions (Mt CO<sub>2</sub>e)<sup>6,7,8</sup>

Scope 1 emissions		2017°	2018	2019	GRI305-1
Power generation – thermal		3,084,242	2,742,513	2,649,076	
Power generation – hydroelectric		118	121	63	
Power generation – solar		-	87	34	
Power generation – wind		1	145	159	
Utilities – electric, gas, and water/wastewater		94,849	95,030	100,644	
	Total Scope 1 emissions	3,179,210	2,837,896	2,749,976	,
Owned-vehicle emissions		-	-	10,899	
SF <sub>6</sub> fugitive emissions		-	-	995	
Scope 2 emissions <sup>10</sup>		2017	2018	2019	GRI305-2
Power generation – thermal		705	411	422	
Power generation – hydroelectric		631	616	423	
Power generation – solar		129	193	540	
Power generation – wind		1,041	1,049	953	
Utilities – electric, gas, and water/wastewater		38,601	40,565	40,492	
	Total Scope 2 emissions	41,107	42,835	42,830	

- 6. Greenhouse gases included in calculations: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and SF<sub>6</sub>. 2017 and 2018 do not include SF<sub>6</sub>.
- 7. Emission factors sourced from Greenhouse Gas Inventories, by USEPA (2020) and Canadian National Inventory Report (NIR)
- 8. GHG emissions are calculated through an operational-control approach
- 9. Base year identification: 2017
- 10. Previously, emissions associated with Transmission and Distribution (T&D) losses from Algonquin's electric distribution utility based in Missouri, Kansas, Oklahoma, and Arkansas were combined with emissions from power generation and presented under the "Thermal power generation" category. Starting from the 2019 inventory, this utility's T&D loss emissions are included under the "Utilities and offices" category. In the table above, 2017 and 2018 emissions have also been updated accordingly using this new allocation approach.



### GHG emissions (Mt CO<sub>2</sub>e) (continued)

Downstream: natural gas combustion

Downstream: investments 12

Scope 1 and Scope 2 emissions		2017	2018	2019	
	Scope 1 + 2 emissions	3,220,317	2,880,731	2,792,806	
Total emissions from power generation		3,091,384	2,751,646	2,651,670	
Total power generation (MWh)		9,379,882	9,753,968	9,477,090	
GHG emission intensity (Mt CO <sub>2</sub> e/MWh)		0.3296	0.2821	0.2798	GRI305-4
Scope 3 emissions		2017	2018	2019	GRI305-3
Upstream: fuel production and extraction		-	-	373,872	
Upstream: fuel transportation		-	=	5,897	
Upstream: employee commuting <sup>11</sup>		-	-	2,678	
Upstream: T&D losses for purchased grid electricity		-	-	1,369	

**Total Scope 3 emissions** 



1,906,237

127,618 **2,417,671** 

<sup>11.</sup> Employee commuting data collected through employee survey with 36% response rate

<sup>12.</sup> Scope 3 investment emissions are from a 7.52% and 12% ownership in Plum Point and latan coal power plants respectively

GHG emissions (Mt CO <sub>2</sub> e) (continued)				
Other emissions from electricity generation	2017	2018	2019	GRI305-
NO <sub>x</sub> emissions (in tonnes)	1,360	1,274	1,162	
SO <sub>x</sub> emissions (in tonnes)	918	753	734	
Mercury emissions (in tonnes)	0	0	0.0008	
Particulate matter emissions (in tonnes)	171	167	139	
Lead emissions (in tonnes)	0	0	0.00007	
Persistent organic pollutants (in tonnes)	-	-	0	
Volatile organic compounds (in tonnes)	-	-	93.4	
Hazardous air pollutants (in tonnes)	-	-	5.8	
SF <sub>6</sub> fugitive emissions (in tonnes)	-	-	995	
Fleet	2017	2018	2019	
Vehicle fleet using low emission fuel	20%	28%	49%	
Number of CNG capable vehicles	-	70	279	
Volume of CNG gas gallon equivalent used (GGE)	-	11,657	50,210	
EV chargers installed for employee vehicles	-	-	76	
Environmental compliance	2017	2018	2019	GRI306-3
Number of spills or releases with an associated fine 13	0	0	0	
Biodiversity	2017	2018	2019	
Acres and square feet of land developed for pollinators	-	20 acres 2,000 ft <sup>2</sup>	25.11 acres 28,552 ft <sup>2</sup>	



<sup>13.</sup> Algonquin characterizes significant spills as those included in financial disclosures

## Appendix II: SASB index

## **Electric utilities**

GHGs and ene	rgy resource planning	2017	2018	2019	
	Gross Scope 1 emissions (Mt CO <sub>2</sub> e)	3,092,440	2,751,187	2,657,196	
EU-110a.1	Percentage covered under emission-limiting regulations <sup>14</sup>	99.01	98.85	99.69	
	Percentage covered under emission-reporting regulations	99.19	99.96	99.74	
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	S 39 – Trans and c	S 5 – Letter from Arun Banskota, President & Chief Executive S 39 – Transitioning to a low-carbon economy and addressing climate change S 40 – De-carbonizing our energy portfolio		
FIL 310 -: 4	Number of customers served in markets subject to renewable portfolio standards (RPS)	92,360	92,941	93,482	
EU-110a.4	Percentage of fulfillment of RPS target	100%	100%	100%	
Air quality 15		2017	2018	2019	
	NO <sub>x</sub> (Mt CO <sub>2</sub> e)	1,360	1,274	1,162	
	SO <sub>x</sub> (Mt CO <sub>2</sub> e)	918	753	734	
EU-120a.1	PM <sub>10</sub> (Mt CO <sub>2</sub> e)	171	167	139	
	Lead (Mt CO <sub>2</sub> e)	0	0	0.00007	
	Mercury (Mt CO <sub>2</sub> e)	0	0	0.0008	



<sup>14. 2017-2018</sup> values have been revised due to the inclusion of permit-based emission-limiting regulations

<sup>15. 100%</sup> of  $\mathrm{NO}_{\mathrm{x}}$   $\mathrm{SO}_{\mathrm{x}}$   $\mathrm{PM}_{\mathrm{10}}$  lead, and mercury emissions are near population centers

Water manage	ement	2017	2018	2019
FIL 1401	Total water withdrawn (m³ 000s)	10,266	12,320	41,41516
EU-140a.1	Percentage in water stressed regions	2.01	1.75	0.01
EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	S 47	- Healthy water ecosys	stems
Coal ash mand	agement	2017	2018	2019
	Amount of coal combustion residuals (CCR) generated (Mt CO <sub>2</sub> e)	36,215	31,189	30,375
EU-150a.1	Percentage of CCR recycled	42.62	45.85	45.59
EU-150a.2	CCR impoundments by hazard and structure	• Siç • Lo Stru	ard potential classifica gnificant hazard potent w hazard potential: 2 ctural integrity assessr tisfactory: 3	tial: 1
			· · · · · · · · · · · · · · · · · · ·	
Energy afforda	bility	2017	2018	2019
EU-240a.1	Average retail rate for residential customers (\$/kWh)	0.14	0.14	0.14
EU-2400.I	Average retail rate for commercial and industrial customers (\$/kWh)	0.10	0.10	0.115
EU-240a.3	Number residential disconnections (non-payment)	<del>-</del>	_	6,366
E0-2400.3	Percentage reconnected within 30 days	<del>-</del>	_	57%
EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory		S 10 – COVID-19 Response S 65 – Safe and resilient communities	
		2017	2018	2019
Workforce hea	itn & safety			
Workforce hea	Total Recordable Incident Rate (TRIR)	2.78	1.76	1.27
<b>Workforce hea</b> EU-320a.1	,	2.78 0	1.76 0	1.27 0



<sup>16. 2017</sup> and 2018 only included electric thermal facilities. 2019 includes domestic and operational water withdrawal in all electric facilities

End-use efficien	ncy and demand	2017	2018	2019
EU-420a.1	Percentage of electric utility revenue that is decoupled	10.29	10.19	24.00
EU-420a.3	Customer electricity savings from efficiency measures (MWh)	6,710	8,146	18,610
Grid resiliency		2017	2018	2019
EU-550a.1	Number of violations of cyber security regulations	2	3	2
E0-550d.i	Number of reportable losses of customer data	N/A	0	1
	SAIDI – System Average Interruption Duration Index (minutes)	140.68	109.84	165.33
EU-550a.2	SAIFI – System Average Interruption Frequency Index (rate)	1.15	1.03	1.23
	CAIDI – Customer Average Interruption Duration Index (minutes)	122.35	106.67	134.41
Activity metrics		2017	2018	2019
EU-000.A	Residential customers served	223,200	225,200	227,200
LO 000.A	Commercial and industrial customers served	39,200	37,800	38,100
EU-000.B	Electricity delivered to residential customers (MWh)	2,320,100	2,535,100	2,488,120
LO 000.B	Electricity delivered to commercial and industrial customers (MWh)	3,523,100	3,988,900	2,599,862
EU-000.C	Length of transmission lines (km)	4,045	4,146	4,306
E0-000.C	Length of distribution lines (km)	11,696	11,932	13,383
	Total electricity generated (MWh)	9,380,000	9,754,000	9,477,090
	Percentage by energy source			
	Coal	(%)	9	9
EU-000.D	Natural gas (	(%) 42	45	43
EU-UUU.D	Hydropower (	7	6	6
	Solar	(%) 2	3	4
	Wind (	(%) 39	37	39
	Percentage in regulated marks	ets -	-	51.87

Total wholesale electricity purchased (MWh)

EU-000.E



1,910,416

2,057,114

1,956,293

## **Water utilities**

Energy manag	ement	2017	2018	2019	
WU-130a.1	Total energy consumed (GJ)	73,178	75,284	225,430 17	
	Percentage grid electricity	90%	94%	91%	
oistribution ne	work efficiency	2017	2018	2019	
WU-140a.1	Water main replacement rate	0.0155	0.0153	0.0114	
WU-140a.2	Volume of non-revenue real water losses (m³ 000s)	6,496	6,258	7,420	
ffluent quality	management	2017	2018	2019	
WU-140b.2	Discussion of strategies to manage effluents of emerging concern	are currently not r concerns in its w	While contaminants of emerging concern (CECs) are currently not regulated, Algonquin may address the concerns in its wastewater effluents on a case-by-cabasis through education, recycling, new technologic		

Water affordab	ility and access	2017	2018	2019
WIL 040 ml	Average retail rate for residential customers (\$/100 CCF)	0.04	0.03	0.06
WU-240a.1	Average retail rate for commercial and industrial customers (\$/100 CCF)	0.03	0.04	0.04
VALL 040 ~ 2	Number residential disconnections (non-payment)	-	-	8,280
WU-240a.3	Percentage reconnected within 30 days	=	-	90
WU-240a.4	WU-240a.4 Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory		0 – COVID-19 Respons Ife and resilient comr	



and limiting the source of the constituent.

<sup>17. 2017</sup> and 2018 only included water utility facility energy consumption. 2019 includes both water and wastewater facilities.

Drinking Water	Quality	2017	2018	2019
WU-250a.2	Discussion of strategies to manage drinking water contaminants of emerging concern	to protecting public he federal health standa it does business. To he we have been collected Contaminant Monitorical about the occurrifirst step in the EPA's eregulated. Water quality business and well in the standard of t	ence of unregulated c efforts to determine wh	rpasses all state and e communities where ace of drinking water, nce the <i>Unregulated</i> Collecting information ompounds is the aether they should be of our regulated water dvance of proposed
End-Use Efficie	nev	2017	2018	2019
WU-420a.2	Customer water savings from efficiency measures (m³)	-	-	89,732
	, , , , ,			·
Water Supply R	esiliency	2017	2018	2019
NAUL 440 . 1	Total water sourced from regions with high or extremely high baseline water stress (%)	-	-	8.33
WU-440a.1	Percentage purchased from third-party	-	-	5.53
WU-440a.2	Volume of recycled water delivered to customers (000s m³)	1,397	1,823	1,571
WU-440a.3	Discussion of strategies to manage risks associated with the quality and availability of water resources	S 47 -	- Healthy water ecosys	tems
Network Resilie	ncy and Impacts of Climate Change	2017	2018	2019
WU-450a.1	Wastewater treatment capacity located in 100-year flood zones (m³/day)	95	95	829
	Number of Sanitary sewer overflows (SSO)	13	16	32
WU-450a.2	Volume of Sanitary sewer overflows (SSO) – (m³)	605	490	504
	Percentage of volume recovered	1.25	0.03	4.03

Network resilien	cy and impacts of climate change (continued)		2017	2018	2019
	Unplanned service disruptions (number of occurrences and number of customers affected)	< 4 Hours	Number: 91 Customers: 2,783	Number: 62 Customers: 1,157	Number: 220 Customers: 949
WU-450a.3		4 – 12 Hours	Number: 14 Customers: 468	Number: 10 Customers: 205	Number: 33 Customers: 197
		> 12 Hours	Number: 1 Customers: 50	Number: 0 Customers: 0	Number: 1 Customers: 12
WU-450a.4	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure		S 47	– Healthy water ecosys	tems
activity metrics			2017	2018	2019
\A/    000 A	Wastewater connections		41,000	42,200	43,900
WU-000.A	Water distribution connections		121,400	112,800	115,500
	Total water sourced (m³ 000s)		-	_	53,046 18
WU-000.B		Groundwater	-	-	97.1
	Percentage of water sourced by source type	Third-party water	-	-	2.9
WU-000.C	Wastewater treated (m³ 000s)		8,426	8,638	8,850
WU-000.C	Water provided (m³ 000s)		63,992	57,553	59,897
	Average volume of wastewater treated per day by sanitary sewer (m³/d	ay)	-	=	19,896
WU-000.D	Average volume of wastewater treated per day by storm water sewer (r	n³/day)	-	=	0
	Average volume of wastewater treated per day by combined sewer (m³/day)		-		470
WILL 000 F	Length of water mains (km)		3,522	3,594	3,976
WU-000.E	Langeth of source pines (less)		OE3	1024	1007

953

1,034

Length of sewer pipes (km)



1,037

<sup>18. 2019</sup> values for 3 water distribution facilities utilized 3 year water withdrawal averages. Data was unattainable due to COVID-19 pandemic limiting office accessibility.

## Gas utilities

Energy afforda	pility	2017	2018	2019
	Average retail rate for residential customers (\$/MMBtu)	12.62	12.11	12.35
GU-240a.1	Average retail rate for commercial and industrial customers (\$/MMBtu)	8.92	9.73	6.48
	Average retail rate for transportation customers (\$/MMBtu)	1.50	1.52	0.85
011 040 0	Number of residential disconnections (non-payment)	-	-	17,333
GU-240a.3	Percentage reconnected within 30 days	-	-	53
GU-240a.4	Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory		10 – COVID-19 Respons Safe and resilient comr	
End-use efficie	ncy	2017	2018	2019
GU-420a.1	Percentage of gas utility revenue from rate structures that are decoupled	-	_	86
GU-420a.2	Customer gas savings – efficiency measures (MMBtu)	141,716	179,235	198,690
Integrity of gas	delivery infrastructure	2017	2018	2019
	Number of reportable pipeline incidents	5	2	7
GU-540a.1	Number of corrective action orders (CAO)	0	0	0
	Number of notices of probable violation (NOPV)	18	5	15
011 540 . 0	Distribution pipeline that is cast/wrought iron (%)	2.58	2.41	2.05
GU-540a.2	Distribution pipeline that is unprotected (%)	1.98	1.63	1.41
GU-540a.3	Gas transmission pipelines inspected (%)	23.2	0.92	23.3
GU-540a.4	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions	S 71 – Influ	encing policy in regula	ed energy



Activity metrics	S	2017	2018	2019
CII 000 A	Residential customers served	287,100	288,700	303,100
GU-000.A	Commercial and industrial customers served	31,700	31,700	35,600
011 000 B	Gas delivered to residential customers (MMBtu)	17,621,000	20,065,000	20,213,000
GU-000.B	Gas delivered to commercial and industrial customers (MMBtu)	12,672,000	14,529,000	15,676,000
011,000,0	Length of transmission pipelines (km)	18	18	21
GU-000.C	Length of distribution pipelines (km)	11,690	11,641	12,276

## Appendix III: GRI content index

#### Legend:

✓ Metric is required for GRI Core compliance AR Annual Report

A Annual Information Form M Management Information Circular

S Sustainability ReportW External Website

## General disclosures

Organizational profiles						
✓	102-1	Name of organization	S 13 – About Us A 1.1 – Name, address, incorporation			
✓	102-2	Activities, brands, products, services	S 13 – About Us A 2 – General development of the business			
✓	102-3	Location of headquarters	S 13 – About Us A 1.1 – Name, address, incorporation			
✓	102-4	Location of operations	S 13 – About Us			
✓	102-5	Ownership and legal form	A 1.2 – Intercorporate relationships			
✓	102-6	Markets served	S 13 – About Us A 3 – Description of the business			
<b>✓</b>	102-7	Scale of the organization	S 13 – About Us A 3 – Description of the business			
✓	102-8	Information on employees and other workers	Appendix I – Workforce and social indicators			
✓	102-9	Description of organization's supply chain	W – Supplier Code of Conduct A 3 – Description of the business			
		Significant changes to the organization and its supply chain				
✓	102-10	Changes in organization size/structure	AR 8 – Regulated services group highlights AR 32 – Development of renewable energy assets AR 33 – 2019 annual property plant and equipment expenditures			
		Supply chain structure and selection changes	No significant changes in structure of Algonquin's supply chain since 2018. Similarly, no significant changes have been made to the supplier selection process since 2018.			



Organizatio	onal profile	es (continued)	
✓	102-11	Precautionary principle or approach	Algonquin's operations are carried out in accordance with the precautionary principle Algonquin acknowledges that when an activity poses a threat to human health or the environment, precautionary measures should be taken.
<b>√</b>	102-12	External initiatives	S 22 – Our commitment to the UN SDGs S 19 – Awards and recognition S 61 – Gender equality Appendix II – SASB index Appendix III – GRI content index W – EPA methane challenge partners
<b>√</b>	102–13	Membership of association	S 19 – Awards and recognition  Industry Associations:  • American Gas Association (AGA)  • American Wind Energy Association  • Canadian Electricity Association  • Edison Electric Institute (EEI)  • Global Business Alliance  • National Association of Water Companies  • Solar Energy Industry Association
			Governmental Agencies:  • Department of Energy (DEO)  • Environmental Protection Agency (EPA)  • Independent Electric Systems Operator (IESO)  • National Energy Board (NEB)
trategy			
$\checkmark$	102-14	Statement from senior decision-maker	S 5 – Letter from Arun Banskota, President & Chief Executive Officer
	102-15	Key impacts, risks, and opportunities	\$ 5 - Letter from Arun Banskota, President & Chief Executive Officer

102-15

Key impacts, risks, and opportunities



S 29 - Priority ESG factors

Ethics and	Integrity		
✓	102-16	Values, principles, standards, and norms of behavior	W – Investor Centre > Other Documents M 40 – Corporate and Board policies
	102-17	Mechanisms for advice and concerns about ethics	S 36 – Compliance and ethics W – Investor Centre > Other Documents M 40 – Corporate and Board policies W – Ethics Reporting Policy
Governan	ce		
√	102-18	Governance structure	S 32 – Sustainability governance S 33 – Office of Sustainability Mandate M 29 – Corporate governance practices
	102-19	Delegating authority	S 32 – Sustainability governance S 35 – Effective ESG oversight M 35 – Committees of the Board of Directors M 38 – Position descriptions W – Investor Centre > Other Documents > Mandates
	102-20	Executive-level responsibility for economic, environmental, and social topics	S 32 – Sustainability governance S 33 – Office of Sustainability Mandate M 62 – Corporate scorecard and results
	102-21	Consulting stakeholders on economic, environmental, and social topics	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 26 – Stakeholder engagement S 29 – Priority ESG factors S 54 – Employee engagement S 68 – Leading customer service
	102-22	Composition of the highest governance body and its committees	W – Corporate Governance Committee Mandate M 29 – Corporate governance practices
	102-23	Chair of the highest governance body	M 25 – Director Profiles > Kenneth Moore W – Position Description, Chair of the Board
	102-24	Nominating and selecting the highest governance body	M 18 - Director nominees

ınce (continu	ed)	
102-25	Conflicts of interest	W – <i>Code of Business Conduct and Ethics</i> M 55 – Risk management and compensation
102-26	Role of highest governance body in setting purpose, values, and strategy	S 32 – Sustainability governance M 29 – Corporate governance practices
102-27	Collective knowledge of highest governance body	M 18 - Director nominees
102-28	Evaluating the highest governance body's performance	M 29 – Corporate governance practices
102-29	Identifying and managing economic, environmental, and social impacts	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 29 – Priority ESG factors
102-30	Effectiveness of risk management processes	W – Risk Committee Mandate
102-31	Review of economic, environmental, and social topics	S 32 – Sustainability governance A 23 – Oversight of sustainability W – Corporate Governance Committee Mandate
102-32	Highest governance body's role in sustainability reporting	S 32 – Sustainability governance A 23 – Oversight of sustainability W – Corporate Governance Committee Mandate
102-33	Communicating critical concerns	S 34 – Enterprise risk management S 36 – Compliance and ethics S 35 – Improving our compliance framework
102-34	Nature and total number of critical concerns	No critical concerns have been identified.
102-35	Remuneration policies	M 48 – Executive compensation M 76 – Executive compensation information
102-36	Process for determining remuneration	S 35 – Alignment with management compensation M 48 – Executive compensation
102-37	Stakeholders' involvement in remuneration	S 35 – Alignment with management compensation M 48 – Executive compensation
102-38	Annual total compensation ratio	Appendix I – Workforce and social indicators
102-39	Percentage increase in annual total compensation ratio	Appendix I – Workforce and social indicators



keholo	der engagen	nent	
$\checkmark$	102-40	List of stakeholder groups	S 26 – Stakeholder engagement
✓	102-41	Collective bargaining agreements	Appendix I – Workforce and social indicators
✓	102-42	Identifying and selecting stakeholders	S 26 – Stakeholder engagement
✓	102-43	Approach to stakeholder engagement	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 26 – Stakeholder engagement S 29 – Priority ESG factors S 54 – Employee engagement S 68 – Leading customer service S 70 – Stakeholder driven project development
✓	102-44	Key topics and concerns raised	S 29 – Priority ESG factors
eporting	g practice		
✓	102-45	Entities included in the consolidated financial statements	A 1.2 – Intercorporate relationships This report focuses on operationally controlled/owned assets.
✓	102-46	Defining report content and topic boundaries	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 11 – About this report S 12 – Base year and recalculation policy S 12 – Reporting frameworks S 20 – Our sustainability approach S 29 – Priority ESG factors
<b>✓</b>	102-47	List of material topics	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 29 – Priority ESG factors Appendix IV – Algonquin's priority issues and relevant GRI indicators



Reporting	j practice (c	ontinued)	
✓	102-48	Restatements of information	AR 8 – Acquisitions S 12 – Base year and recalculation policy Measurement methodology changes are noted in footnotes throughout report.
<b>✓</b>	102-49	Changes in reporting	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 32 – Sustainability governance
✓	102-50	Reporting period	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 11 – About this report
✓	102-51	Date of most recent report	S 11 - About this report
✓	102-52	Reporting cycle	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 11 – About this report
✓	102-53	Contact point for questions regarding the report	S – Back cover
<b>√</b>	102-54	Claims of reporting in accordance with the GRI standards	S 5 – Letter from Arun Banskota, President & Chief Executive Officer S 12 – Reporting frameworks Appendix III – GRI content index
✓	102-55	GRI content index	Appendix III – GRI content index
<b>√</b>	102-56	External assurance	S 5 – Letter from Arun Banskota, President & Chief Executive Officer Appendix V – <i>KPMG Verification Statement</i>

## **Economic metrics**

Economic	c performan	ce	
	103-1	Explanation of the material topic and its boundary	
	103-2	The management approach and its components	AR – MD&A
	103-3	Evaluation of the management approach	
✓	201-1	Direct economic value generated and distributed (\$USD)	Appendix I – Workforce and social indicators
<b>√</b>	201-3	Defined benefit plan obligations and other retirement plans	<ul> <li>Plan's liabilities are met by organization's general resources</li> <li>Separate fund exists to pay for the plan's pensions liabilities</li> <li>Scheme's liabilities are 100% covered, estimated</li> <li>on actuarial basis calculated annually</li> </ul>
		Salary contributed by employee/employer	Appendix I – Workforce and social indicators
		Level of participation in retirement plans	Appendix I – Workforce and social indicators
Market pr	resence		
	103-1	Explanation of the material topic and its boundary	
	103-2	The management approach and its components	AR – MD&A
	103-3	Evaluation of the management approach	
✓	202-1	Ratios of entry level wage to local minimum wage	Appendix I – Workforce and social indicators



Indirect economic impacts					
203-1	Services supported		S 17 – How we create value		
	Infrastructure investments	AR 32 – <i>D</i> AR 33 – <i>2019 Anr</i> S 40 -	W – Investment Program  AR 8 – Regulated Services Group Highlights  AR 32 – Development of Renewable Energy Assets  AR 33 – 2019 Annual Property Plant and Equipment Expenditures  S 10 – COVID-19 Response  S 40 – De-carbonizing our energy portfolio  S 47 – Healthy water ecosystems  S 65 – Safe and resilient communities  S 69 – Community investment		
	Nature of investments	Algonquin's investments are largely commercial in nature. Corporate volunteering is in-kind and corporate donations are pro-bono.			
203-2	Significant indirect economic impacts	S 40 – De-carbonizing our energy portfolio S 44 – Texas Maverick Creek Project S 47 – Healthy water ecosystems S 65 – Safe and resilient communities S 70 – Employee volunteerism and local giving			
Procurement practices		2017	2018	2019	
204-1	Procurement budget used for local suppliers	1%	1%	2%	
		Algonquin's operations in California are considered Certified Diverse as per <i>Dun and Bradstreet</i> .			



Anti-corru	uption		
	103-1	Explanation of the material topic and its boundary	
	103-2	The management approach and its components	W – Code of Conduct
	103-3	Evaluation of the management approach	
✓	205-1	Operations assessed for risks related to corruption	Appendix I – Governance and policy
<b>√</b>	205-2	Communication and training about anti-corruption policies and procedures	Appendix I – Governance and policy
✓	205-3	Confirmed incidents of corruption and actions taken	Appendix I – Governance and policy
Anti-com	petitive beh	aviour	
	103-1	Explanation of the material topic and its boundary	
	103-2	The management approach and its components	W – Code of Conduct - "Fair Dealing"
	103-3	Evaluation of the management approach	
✓	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Appendix I – Governance and policy

## **Environmental metrics**

Energy			2017	2018	2019
	103-1	Explanation of the material topic and its boundary			
	103-2	The management approach and its components		W – Environmental Policy	
	103-3	Evaluation of the management approach			
		Energy consumption within the organization			
		Non-renewable sources (MWh)			
		Gasoline/Petrol	-	-	24,889
		Diesel	-	-	28,331
		Liquid petroleum gas (LPG)	-	-	6,090
$\checkmark$	302-1	Coal	-	-	2,758,931
		Natural gas	-	-	9,469,790
		Fuel oil	-	-	42,717
		Electricity consumption (MWh)	-	-	70,805
		Electricity sold (MWh)	-		9,477,091
		Total energy consumption (MWh)	-	-	12,401,553
	302-3	Energy intensity (ratio for organization)			
./		Energy consumed / produced	-	-	1.3086
•		Energy consumed / \$ revenue	-	-	0.0069
		Energy consumed / customers served	=	=	0.0648



Nater and	d effluents		2017	2018	2019
	103-1	Explanation of the material topic and its boundary			
	103-2	The management approach and its components		S 47 – Healthy water ecosystem  W – TCFD Disclosure	S
	103-3	Evaluation of the management approach		W TOTE Disclosure	
✓	303-1	Interactions with water as a shared resource		S 47 – Healthy water ecosystem	S
✓	303-2	Management of water discharge-related impacts		S 47 – Healthy water ecosystem	S
		Water withdrawal by source (m³)			
		Surface water	-	-	35,900,840
		Ground water	-	-	56,850,111
		Third-party water	-	-	2,731,162 19
$\checkmark$	303-3	Total water withdrawal	-	=	95,482,113
		Water withdrawal from areas with water stress (m³)			
		Surface water	-	-	0
		Ground water	-	=	29,602,450
		Third-party water	_	=	1,528,070
		Water discharge by destination (m³)			
		Surface water	_	=	40,045,695
		Ground water	_	=	0
		Third-party water	-	=	18,397,187
$\checkmark$	303-4	Total water discharge	-	-	58,442,881
		Water discharge in areas with water stress (m³)			
		Surface water	_	-	0
		Ground water	_	-	0
		Third-Party water	_	-	14,946,540



<sup>19. 2019</sup> values for 3 water distribution facilities utilized 3-year water withdrawal averages. Data was unattainable due to COVID-19 pandemic limiting office accessibility.

Biodiversity <sup>20</sup>			2017	2018	2019
3	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Algonquin / Liberty has identified 25 operation portions of, and are adjacent to, protected are located in Arkansas, Kansas, Missouri, covering 353 hectares of right-of-way op The biodiversity value on each site is terres an IUCN protected area classification monument/feature (III) or protected lar		d areas. These sites ri, and Oklahoma operational land. estrial and carries on of natural
3	304-2 Significant impacts of activities, products, and services on biodiversity		S 50 – Biodiversity and conservation		
3	804-3	Habitats protected or restored	S 50 – Biodiversity and conservation		
		IUCN Red List species and national conservation list species with habitats in areas affected by operations			
		Critically endangered	-	-	0
3	804-4	Endangered	-	-	11
		Vulnerable	=	-	8
		Near threatened	=	-	7
		Least concern	<del>-</del>	_	0
Emissions			2017	2018	2019
1	103-1	Explanation of the material topic and its boundary			
10	03-2	The management approach and its components		S 23 – Climate action S 37 – Life on our planet	
10	03-3	Evaluation of the management approach		3 37 Life of Four Planet	
<b>√</b> 3	305-1	Direct (Scope 1) GHG emissions		Appendix I – Environmer	t
<b>√</b> 3	805-2	Energy indirect (Scope 2) GHG emissions		Appendix I – Environmer	t
<b>√</b> 3	305-3	Other indirect (Scope 3) GHG emissions		Appendix I – Environmer	t

<sup>20.</sup> Biodiversity disclosures only apply to operations located in Arkansas, Kansas, Missouri, and Oklahoma (representing approximately 42% of Algonquin's service delivery territory).

An enterprise-wide biodiversity program is currently being developed.



Emission	s (continued		2017	2018	2019
		GHG emissions intensity			
	205.4	Emission intensity of electricity delivered (CO <sub>2</sub> e/MWh)	0.1683	0.1498	0.2947
•	305-4	Emission intensity of revenue (CO <sub>2</sub> e/\$)	0.00212	0.00175	0.00172
		Emission intensity of customers served (CO <sub>2</sub> e/C <sub>X</sub> )	4.2261	3.7510	3.4736
<b>√</b>	305-5	Reduction of GHG emissions	S 39 – Trans and S 40 – De- S 41 – W	S 23 – Climate action S 37 – Life on our Planet itioning to a low-carbo addressing climate cha carbonizing our energ 'ind for coal: Asbury reti ppendix I – Environmer	n economy ange y portfolio rement
	305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	А	ppendix I – Environmer	nt
Effluents	and waste				
	306-3	Significant spills	Α	ppendix I – Environmer	nt

## **Social metrics**

nt		
103-1	Explanation of the material topic and its boundary	
103-2	The management approach and its components	\$ 56 - Talent attraction and retention
103-3	Evaluation of the management approach	
401-1	New employees hires and employee turnover	Appendix I – Workforce and social indicators
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	100% of Algonquin's full-time employees are eligible for the following benefits:  • Life insurance  • Health care  • Disability and invalidity coverage  • Parental leave  • Retirement provision  • Stock ownership
401-3	Parental leave	Appendix I – Workforce and social indicators
nagement i	relations	
402-1	Minimum notice periods regarding operational changes	Algonquin adheres to notice periods identified in relevant union agreements. In instances without union agreements, an internal review process identifies appropriate time periods to notify employees of significant operational changes.
nal health	& safety	
103-1	Explanation of the material topic and its boundary	
103-2	The management approach and its components	S 55 – Health and safety
103-3	Evaluation of the management approach	
403-1	Occupational health & safety management system	An internal management system is in place. Algonquin is currently in the process of implementing OHSAS18001 certification.
	103-1 103-2 103-3 401-1 401-2 401-3 402-1 103-1 103-2 103-3	103-1 Explanation of the material topic and its boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach 401-1 New employees hires and employee turnover  401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees  401-3 Parental leave  402-1 Minimum notice periods regarding operational changes  402-1 Minimum notice periods regarding operational changes  403-1 Explanation of the material topic and its boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach



Occupation	Occupational health & safety (continued)					
✓	403-2	Hazard identification, risk assessment, and incident investigation	Current practices to identify hazards, assess risks, and investigate incidents include pre-job hazard analysis and collaborative discussions.			
<b>√</b>	403-3	Occupational health services	The occupational health services currently contributing to hazard identification, minimization, and elimination include Job Safety Analysis (JSA) and Job Hazard Analysis (JHA). Standards and guidelines are followed.			
<b>✓</b>	403-4	Worker participation, consultation, and communication on occupational health & safety	Worker participation, consultation, and communication on occupational health & safety is facilitated through collaboration with Union and collective bargaining units.  Annual regional safety planning meetings are also held.			
✓	403-5	Worker training on occupational health & safety	Worker training on occupational health & safety is facilitated by following site annual safety plans.			
<b>✓</b>	403-6	Promotion of worker health	Worker health is promoted through safety standards and guidelines, a 5-year safety plan, and Safety Symposiums.			
✓	403-7	Prevention and mitigation of occupational health & safety impacts directly linked by business relationships	Occupational health & safety impacts are mitigated and prevented through collaborative partnerships with the American Gas Association (AGA) and the Edison Electric Institute (EEI).			
✓	403-8	Workers covered by an occupational health & safety management system	Appendix I – Health and safety			
✓	403-9	Work-related injuries	Appendix I – Health and safety			
✓	403-10	Work-related ill health	Appendix I – Health and safety			
Training a	nd educatio	on				
	103-1	Explanation of the material topic and its boundary				
	103-2	The management approach and its components	S 58 – Learning and development			
	103-3	Evaluation of the management approach				
✓	404-1	Average hours of training per year per employee	Appendix I – Workforce and social indicators			

Training a	nd educatio	on (continued)	
			S 58 – Learning and development S 62 – Lean in Circles
✓	404-2	Programs for upgrading employee skills and transition assistance programs	Upgrading employee skills: Leadership and professional skills are developed through various leadership training courses, trainer qualification programs, and mentorship opportunities. Specialized skills are developed by facilitating over 35 in-house training programs and hundreds of online training courses.
			Transition assistance programs: Led through the Employee Assistance Program. This program provides pre-retirement planning and services such as counselling and training for adjusting to post-work changes.
✓	404-3	Employees receiving regular performance and career development reviews	Appendix I – Workforce and social indicators
Diversity o	ınd equal o <sub>l</sub>	pportunity	
	103-1	Explanation of the material topic and its boundary	
	103-2	The management approach and its components	S 60 – Diversity, equity, and inclusion
	103-3	Evaluation of the management approach	
✓	405-1	Diversity of governance bodies and employees	Appendix I – Workforce and social indicators Appendix I – Governance and policy
✓	405-2	Ratio of basic salary and remuneration of women to men	Appendix I – Workforce and social indicators
Rights of in	ndigenous p	peoples	
	411-1	Incidents of violations involving rights of indigenous peoples	Appendix I – Governance and policy
Human rig	jhts assessi	ment	
	412-1	Operations that have been subject to human rights reviews or impact assessments	Appendix I - Governance and policy
Local com	munities		
	413-1	Operations with local community engagement, impact assessments, and development programs	Appendix I – Governance and policy



Political contributions	In 2019, Alg in the United S in two states re including party political contribu	onquin made political co tates, donating \$47,500 t presenting various levels campaign committees tions made by Algonqui	ontributions to 45 recipients s of public office, . Information on
		S 71 – Influencing policy in regulated energy In 2019, Algonquin made political contributions in the United States, donating \$47,500 to 45 recipient in two states representing various levels of public offic including party campaign committees. Information of political contributions made by Algonquin's employee- political action committee is available at www.fec.go	
afety	2017	2018	2019
Explanation of the material topic and its boundary			
The management approach and its components	\$ 10 - COVID-19 Response		
Evaluation of the management approach	0.00	oaro aria rosmorit corrir	TGI IICIOO
Assessment of the health & safety impacts of product and service categories	Not ap	plicable to Algonquin's b	usiness.
Incidents of non-compliance concerning health & safety impacts	Appe	ndix I – Governance and	policy
Explanation of the material topic and its boundary			
The management approach and its components	W – Code of Cond	luct – "Handling of Confid	dential Information
Evaluation of the management approach			
Substantiated complaints concerning breaches of customer privacy and losses of customer data		Appendix I – Operations	;
	The management approach and its components  Evaluation of the management approach  Assessment of the health & safety impacts of product and service categories  Incidents of non-compliance concerning health & safety impacts  Explanation of the material topic and its boundary  The management approach and its components  Evaluation of the management approach  Substantiated complaints concerning breaches	The management approach and its components  Evaluation of the management approach  Assessment of the health & safety impacts of product and service categories  Not ap  Incidents of non-compliance concerning health & safety impacts  Explanation of the material topic and its boundary  The management approach and its components  Evaluation of the management approach  Substantiated complaints concerning breaches	The management approach and its components  Evaluation of the management approach  Assessment of the health & safety impacts of product and service categories  Incidents of non-compliance concerning health & safety impacts  Explanation of the material topic and its boundary  The management approach and its components  Evaluation of the management approach  Substantiated complaints concerning breaches

Non-compliance with laws and regulations in the social and economic area

419-1

Appendix I – Governance and policy

## Appendix IV: Algonquin's priority issues and relevant GRI indicators

Customer	experience and affordability	
103-1	Explanation of the material topic and its boundary	S 10 – COVID-19 Response S 68 – Leading customer service W – Code of Conduct AR – MD&A
103-2	The management approach and its components	S 10 – COVID-19 Response S 68 – Leading customer service W – Code of Conduct AR – MD&A
103-3	Evaluation of the management approach	S 10 – COVID-19 Response S 68 – Leading customer service W – Code of Conduct AR – MD&A
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Appendix I – Governance and policy
416-2	Incidents of non-compliance concerning the health & safety impacts of products and services	Appendix I – Governance and policy
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Appendix I - Operations
Reliability	and safety of assets (including cyber security and risk management)	
103-1	Explanation of the material topic and its boundary	S 10 – COVID-19 Response S 68 – Leading customer service W – <i>Code of Conduct</i> AR – MD&A
103-2	The management approach and its components	S 10 – COVID-19 Response S 68 – Leading customer service W – <i>Code of Conduct</i> AR – MD&A
103-3	Evaluation of the management approach	S 10 – COVID-19 Response S 68 – Leading customer service W – Code of Conduct AR – MD&A



Reliability a	nd safety of assets (including cyber security and risk management) (continued)	
416-2	Incidents of non-compliance concerning the health & safety impacts of products and services	Appendix I – Governance and policy
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Appendix I - Operations
Talent attra	ction and retention	
103-1	Explanation of the material topic and its boundary	S 56 – Talent attraction and retention S 58 – Learning and development AR – MD&A
103-2	The management approach and its components	S 56 – Talent attraction and retention S 58 – Learning and development AR – MD&A
103-3	Evaluation of the management approach	S 56 – Talent attraction and retention S 58 – Learning and development AR – MD&A
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Appendix I – Workforce and social indicators
401-1	New employee hires and employee turnover	Appendix I – Workforce and social indicators
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Appendix III - GRI content index
401-3	Parental Leave	Appendix I – Workforce and social indicators
404-1	Average hours of training per year per employee	Appendix I – Workforce and social indicators
404-2	Programs for upgrading employee skills and transition	S 58 – Learning and development S 62 – Lean In Circles Appendix III – GRI content index
404-3	Percentage of employees receiving regular performance and career development reviews	Appendix I – Workforce and social indicators

Safety of er	nployees	
103-1	Explanation of the material topic and its boundary	S 55 – Health and safety
103-2	The management approach and its components	S 55 – Health and safety
103-3	Evaluation of the management approach	S 55 – Health and safety
403-1	Occupational health & safety management system	Appendix III – GRI content index
403-2	Hazard identification, risk assessment, and incident investigation	Appendix III - GRI content index
403-3	Occupational health services	Appendix III - GRI content index
403-4	Worker participation, consultation, and communication on occupational health & safety	Appendix III – GRI content index
403-5	Worker training on occupational health & safety	Appendix III – GRI content index
403-6	Promotion of worker health	Appendix III – GRI content index
403-7	Prevention of mitigation of occupational health & safety impacts directly linked by business relationships	Appendix III - GRI content index
403-8	Workers covered by an occupational health & safety management system	Appendix I – Health and safety
403-9	Work-related injuries	Appendix I – Health and safety
403-10	Work-related ill health	Appendix I – Health and safety
Culture		
103-1	Explanation of the material topic and its boundary	S 56 – Talent attraction and retention S 60 – Diversity, equity, and inclusion W – Code of Conduct
103-2	The management approach and its components	S 56 – Talent attraction and retention S 60 – Diversity, equity, and inclusion W – Code of Conduct
103-3	Evaluation of the management approach	S 56 – Talent attraction and retention S 60 – Diversity, equity, and inclusion W – Code of Conduct
205-1	Operations assessed for risks related to corruption	Appendix I – Governance and policy
205-2	Communication and training about anti-corruption policies and procedures	Appendix I – Governance and policy
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Appendix I – Governance and policy



Culture (continued)					
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Appendix I – Workforce and social indicators			
401-3	Parental Leave	Appendix I – Workforce and social indicators			
405-1	Diversity of governance bodies and employees	Appendix I – Workforce and social indicators Appendix I – Governance and policy			
405-2	Ratio of basic salary and remuneration of women to men	Appendix I – Workforce and social indicators			

Climate change				
103-1	Explanation of the material topic and its boundary	S 23 – Climate action S 37 – Life on our planet W – <i>Environmental Policy</i> AR – MD&A		
103-2	The management approach and its components	S 23 – Climate action S 37 – Life on our planet W – <i>Environmental Policy</i> AR – MD&A		
103-3	Evaluation of the management approach	S 23 – Climate action S 37 – Life on our planet W – <i>Environmental Policy</i> AR – MD&A		
302-1	Energy consumption within the organization	Appendix III – GRI content index		
302-3	Energy intensity	Appendix III – GRI content index		
305-1	Direct (Scope 1) GHG emissions	S 47 – Healthy water ecosystems		
305-2	Energy indirect (Scope 2) GHG emissions	S 47 – Healthy water ecosystems		
305-3	Other indirect (Scope 3) GHG emissions	Appendix III – GRI content index		
305-4	GHG emissions intensity	Appendix III – GRI content index		
305-5	Reduction of GHG emissions	Appendix I – Environment		



Climate change (continued)					
303-1	Interactions with water as a shared resource	Appendix I – Environment			
303-2	Management of water discharge-related impacts	Appendix I – Environment			
303-3	Water withdrawal by source (m³)	Appendix III – GRI content index			
303-4	Water discharge by destination (m³)	S 39 – Transitioning to a low-carbon economy and Addressing climate change			

Transition to a low-carbon economy and succession of talent to a leadership team and workforce with the necessary skills to navigate to the new economy				
103-1	Explanation of the material topic and its boundary	\$ 56 – Talent attraction and retention \$ 58 – Learning and development \$ 60 – Diversity, equity, and inclusion		
103-2	The management approach and its components	S 56 – Talent attraction and retention S 58 – Learning and development S 60 – Diversity, equity, and inclusion		
103-3	Evaluation of the management approach	S 56 – Talent attraction and retention S 58 – Learning and development S 60 – Diversity, equity, and inclusion		
401-1	New employee hires and employee turnover	Appendix I – Workforce and social indicators		
404-1	Average hours of training per year per employee	Appendix I – Workforce and social indicators		
404-2	Programs for upgrading employee skills and transition	Appendix III - GRI content index		
404-3	Percentage of employees receiving regular performance and career development reviews	Appendix I – Workforce and social indicators		
405-1	Diversity of governance bodies and employees	Appendix I – Workforce and social indicators Appendix I – Governance and policy		
405-2	Ratio of basic salary and remuneration of women to men	Appendix I – Workforce and social indicators		





ISO 14064-3:2006 GHG Verification Report Algonquin Power & Utilities Corp August 17, 2020 Page 8

## E. Verification Statement

To Algonquin Power & Utilities Corp,

We have been engaged by Algonquin Power & Utilities Corp (the Company) to examine the Company's assertion for corporate scope 1 and 2 greenhouse gas (GHG) emissions of 2,792,806 tonnes of CO<sub>2</sub> equivalent for the period from January 1, 2019 to December 31, 2019.

The Company is responsible for the preparation and presentation of the scope 1 and 2 greenhouse gas emissions. Our responsibility is to express a conclusion as to whether anything has come to our attention to suggest that the greenhouse gas assertion is not presented fairly in accordance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition (The GHG Protocol).

Our duties in relation to this report are owed solely to Algonquin Power & Utilities Corp. Accordingly, we do not accept any responsibility for any loss occasioned to any third party acting or refraining from action as a result of this report.

We completed our examination in accordance with ISO 14064-Part 3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions. As such, we planned and performed our work in order to provide limited, rather than absolute assurance with respect to the greenhouse gas assertion. Our examination criteria were based on the GHG protocol. We believe our work provides a reasonable basis for our conclusion.

Based on our examination, nothing has come to our attention that causes us to believe that the greenhouse gas assertion for corporate scope 1 and 2 GHG emissions is not presented fairly in all material respects in accordance with the GHG Protocol.

Greenhouse gas and energy use data are subject to inherent limitations. A number of different measurement techniques may be utilized in accordance with the requirements of the GHG Protocol which may vary in precision and /or outcome, resulting in different greenhouse gas emissions estimates.

KPMG Performance Registrar Inc.

KPMG PRI

Vancouver BC August 17, 2020



Head Office: 354 Davis Road, Oakville, Ontario, Canada L6J 2XI



Tel: 905-465-4500



Fax: 905-465-4514



AQN\_Utilities



www.linkedin.com/company/algonquin-power-&-utilities-corp



www.AlgonquinPowerandUtilities.com



