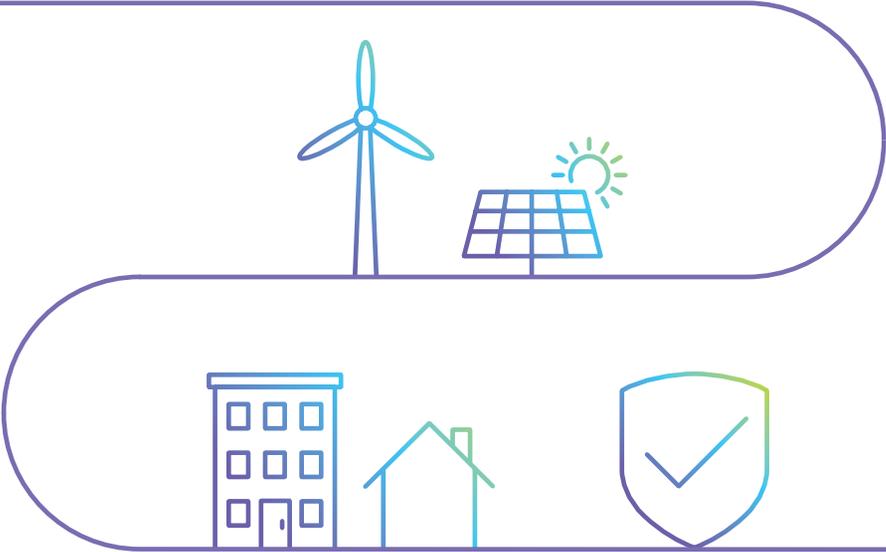


Algonquin Power & Utilities Corp.

Net-zero by 2050



Algonquin

 Liberty™

How to use this report

Land use and biodiversity

We strive to manage our operations in ways that are mindful of impacts on natural resources and wildlife. Given the broad geographical footprint of our operations, we seek to employ innovative solutions to protect our surrounding wildlife while ensuring that we can minimize our impact to the environment while providing resilient and reliable services to our customers.

Total area of land that Algonquin uses for pollinators increased by 29% in 2020

Year	Area (acres)
2019	25.1
2020	32.5

What's all the buzz?

Pollinators across the country are in trouble, with honeybees and monarch butterfly populations experiencing some of the most drastic declines in the past 20 years. Utilities are uniquely positioned to boost the health of pollinators through tracts of largely undeveloped land, including transmission line rights-of-way (ROW). In 2018, Liberty began implementing pollinator protection projects as part of its corporate social responsibility efforts.

Our customers can also help the health of bees, butterflies, birds, bats, and other pollinators by increasing the number of pollinator-friendly gardens and landscapes in their community.

Learn more about our Power to the Pollinators Program!

Learn how you can create your own pollinator garden.

GRI: 304

GRI and SASB

Disclosures In this report, GRI and SASB disclosures are tagged to indicate where report content fulfills the corresponding standards.

Interactive links

To view additional information, click on the following:

- Internal and external links
- Videos
- Popups for additional information

In this section

Featured ESG issues

- Transition to a low-carbon economy
- Greenhouse gas and air emissions
- Climate resiliency
- energy efficiency
- Land use and biodiversity
- Waste and materials management
- Circular economy

Performance goals

- Target of 75% renewable generation by the end of 2023
- Reduce GHG emissions by one million metric tonnes from 2017 levels
- 2021 ESG Report

2021 ESG Report

Navigation

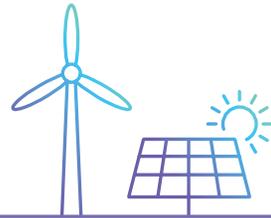
- Go directly to a section
- View bookmarks
- Go to table of contents
- Return to previous view
- Go to previous page
- Go to next page

Section dashboards

Each section in this report includes a dashboard that outlines the following:

- Topics covered
- Performance goals
- Priority issues
- Alignment to UN Sustainable Development Goals

2021 ESG Report



Letter from Chair of the Board	4
Letter from President and Chief Executive Officer	5
The pathway to net-zero by 2050	8
COVID-19 response	10
About this report	11
About us	12
Sustainability approach	16
ESG goals and performance scorecard	30

Environmental

Environmental dashboard	35
Transitioning to a low-carbon economy and managing our emissions	36
Climate resiliency and energy efficiency	44
Land use and biodiversity	46
Waste and materials management	49
Water management	51

Social

Social dashboard	54
Public health and safety	55
Energy reliability	57
Customer experience and affordability	58
Talent attraction and retention	60
Employee health and safety	62
Diversity, equity, and inclusion	63
Indigenous relations	66
Infrastructure investment and resiliency	67
Community support and economic development	69

Governance

Sustainability dashboard	71
Sustainability governance	72
Ethics and integrity	73
Risk management	74
Cybersecurity	75
Transparency and disclosure	77
Sustainable procurement	78
Governmental affairs and public policy	79

Appendices

Appendix I: Forward-looking statements and forward-looking information	81
Appendix II: 2020 Algonquin ESG performance index	83
Appendix III: SASB index	108
Appendix IV: GRI content index	116
Appendix V: Our stakeholders' priority ESG issues defined	136
Appendix VI: KPMG Verification Statement	137
Stay connected!	140

Forward-looking statements and forward-looking information

This report contains forward-looking information which is based on certain factors and assumptions and subject to certain risks. All forward-looking information in this report is given pursuant to the "safe harbor" provisions of applicable securities legislation. Please refer to "Forward-looking statements and forward-looking information" in the Appendices starting on [pg. 83](#) of this report.

* Unless otherwise indicated herein, the information in this report is provided as of December 31, 2020.

* All dollar references in this report are to US dollars unless otherwise indicated.

Letter from Ken Moore, Chair of the Board¹



Sustainability continues to be an integral priority at Algonquin Power & Utilities Corp. (Algonquin or the Company), and environmental, social, and governance (ESG) matters remain part of one cohesive business strategy that we continuously seek to improve.

This year, we have demonstrated our prioritization of sustainability through the rollout of important ESG initiatives, such as our new enterprise-wide goal to achieve net-zero by 2050. This goal furthers our resolve to continue having a positive climate impact and seizing the growth opportunities presented by climate change. In addition, this year saw us directly align compensation to sustainability performance; with our Short-term Incentive Plan (STIP) for eligible employees; enhancing gender representation in leadership; successfully implement a new vision for Algonquin through our three strategic pillars of growth, operational excellence, and sustainability; and further enhance our regional integration of sustainability matters through our regional sustainability councils – just to name a few.

As we continue to invest in ESG enhancements on data quality and quantity, improved sustainability communications and engagement, we are seeing the benefits materialize, not only through improved ESG ratings performance and positive stakeholder feedback, but also through important projects that are reducing Algonquin's greenhouse gas (GHG) emissions. By continuing to address the risks associated with climate change, and identifying the many opportunities that arise from it, we will continue to serve our customers with the quality, reliability, and affordability that they've come to expect from us.

At Algonquin, we continue to demonstrate a strong commitment to our purpose of *sustaining energy and water for life* and continue to position ourselves as a contributing sustainability leader in the power and utilities sectors. And, we recognize that this is largely due to our talented and dedicated employees. This past year especially, our employees demonstrated their leadership, talent, and ability to overcome challenges posed by the pandemic as well as climate change impacts and social inequities. In addition to adapting to new conditions in their professional lives, many of our employees took on further roles as caretakers, teachers, and providers for their families and friends. I am proud of the determination, ambition, and commitment shown by Algonquin employees in carrying out our mission-critical business operations. On behalf of the Board of Directors, I want to thank each and every employee for their ongoing dedication and resiliency.

Now, more than ever, we are reminded of the importance of advancing our sustainability commitments to not only build and grow our business, but also to build a better future for people and the planet. As we continue to advance our sustainability journey and progress towards our goals, I am confident that we will continue to support a promising future for the stakeholders and communities we serve, while delivering the products and services that meet or exceed the needs and expectations of our customers.

Sincerely,

A handwritten signature in black ink that reads "Ken Moore".

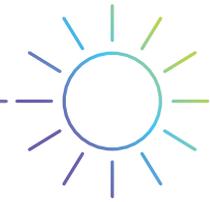
Ken Moore
Chair of the Board of Directors



In 2021, women make up 37.5% of our Board of Directors and 40% of our Executive Leadership Team.

¹ Information contained within this letter is as of September 30, 2021.

Letter from Arun Banskota, President and Chief Executive Officer¹



A mindset of sustainability and entrepreneurship empowers us to help build resilient communities and a clean energy future for all.

It has been 33 years since we started our company, building small renewable energy projects. Today, we play an increasingly important role in providing renewable energy and mission-critical energy and water services to over one million customer connections spread out over multiple jurisdictions. Our purpose of *sustaining energy and water for life* continues to drive growth in our renewables and regulated businesses, support operational excellence across our assets, and deliver sustainable solutions for our stakeholders. With this *2021 ESG Report*, I am excited to share highlights of the initiatives and the positive impacts we continue to make under our strategic pillar of sustainability.



We are proud to establish a net-zero by 2050 target for our scope 1 and scope 2 emissions across our business operations.

Transitioning to the low-carbon economy

In our *2019 Sustainability Report*, we outlined nine targets for 2023 that cover ESG metrics. Algonquin's GHG emissions have been reduced by approximately 31%² since 2017, and we have eliminated over one million metric tonnes of GHG emissions – well ahead of our 2023 target. Our 2023 goal to add 2,000 MW of additional renewable generation into our supply mix is on track with the completion of 1,418 MW of renewables construction since 2019. We are also investing significantly to reach our goal of 75% renewable generation capacity. Our 2020 carbon intensity of 0.0013 Mt CO₂e per dollar of revenue is already among the lowest in our industry, and we are committed to continuing our position amongst leaders with environmental sustainability.

We own and operate a diverse portfolio of energy and water assets spread across multiple geographies, which provides us with resiliency in the face of climate change. And, as a solutions-provider in the transition to a low-carbon economy, we pride ourselves in seizing new opportunities to develop clean energy solutions for our customers, our partners, and our communities.

Throughout our 33 years of existence as a company, we ourselves have never added to the global stock of emissions by developing thermal or coal-based facilities. At the same time, we pride ourselves on being good stewards of energy and water infrastructure. By leveraging our *Greening the Fleet* expertise in building renewables into the rate base, we develop solutions that lower long-term costs for customers, provide growth opportunities for investors, and deliver on our commitment of sustainability for the planet.

¹ Information contained within this letter is as of September 30, 2021.

² Calculation includes preliminary base-year emissions estimates for ESSAL (Chile) and Ascendant (Bermuda), each acquired in 2020. These annualized estimates are based on actual emissions data for these entities during the 2020 post-acquisition period. Formal base-year recalculations for ESSAL and Ascendant are expected to be performed in connection with Algonquin's 2021 calendar year ESG disclosure.



Putting people first

Our recently completed \$1.1 billion investment in the U.S. Midwest is a testament to the benefits of our *Greening the Fleet* program. We retired our only owned and operated coal plant in March of 2020 (approximately 15 years ahead of schedule) and replaced it with 600 MW of new wind development. As a result, GHG emissions for our U.S. Midwest utility have been reduced by 33% from 2017 to 2020. At our California electric utility, the addition of new solar power in Nevada (for our California customers) has contributed to a 38% GHG emission reduction from 2017 to 2020 for our California-based electric utility operations.

We are committed to progressing towards a decarbonized economy. Our expertise in utilities asset management, combined with our track record in renewables development, positions us well to continue leading by example as responsible stewards of energy infrastructure.

At the core of our environmental commitments is our goal to achieve net-zero by 2050 for scope 1 and 2 emissions across our business operations. We set our goal after extensive due diligence of the assets in our portfolio, and thus feel confident in meeting this goal. As we gain momentum on our pathway to decarbonization, we will evaluate opportunities to accelerate the timeline and broaden the scope of this goal.

Besides our leadership position on the “E”, we also continue to make progress on our “S” and “G” metrics. In 2020 we introduced a new brand for our operating group, Liberty, centered on our radiant hearts. Over the course of my first 18 months at Algonquin, it has become clear that this branding is an accurate reflection of our employees, in the care and extra effort they demonstrate every day to deliver on our mission-critical purpose of *sustaining energy and water for life*.

2020 was our most impactful year to date in terms of fundraising and community support, with more than \$200,000 raised as part of our partnership with United Way. This is only one of many instances where our employees have banded together to support the communities where we live and do business.

Part of being a good corporate citizen means putting all people first. I am proud of the significant strides we have made on our ongoing journey towards better diversity, equity, and inclusion (DE&I). Our Diversity & Inclusion Council expanded the number of business resource groups (BRGs) that exist for our employees to join and come together in safe spaces to share their stories and connect with one another. We believe that everyone deserves to feel like they belong, and it’s been wonderful to see our female, LGBTQIA+, and ethnically diverse employees join these BRGs and take our DE&I story to new heights.

Putting people first also means taking care of our employees when our operational priorities change. We support implementing a just and equitable transition across our business as we navigate to a low-carbon economy; we will continue to offer retraining opportunities for employees as they take on greener roles that positively impact their own communities.



Our five employee-led sustainability councils, representing the diverse areas of our business, came together to develop local sustainability plans that align with our enterprise ESG objectives and advance our sustainability commitments.



Governing in good faith

Advancing our purpose of *sustaining energy and water for life* relies on our ability to foster positive environmental and social impacts. We recognize that in order to push this purpose forward effectively, we must employ good governance across our company — and that requires carefully listening to all of our stakeholders: our employees, customers, investors, regulators, and community members.

At the beginning of 2021, we did just that. We underwent an updated ESG materiality assessment, founded on robust and comprehensive stakeholder engagement, to identify what matters most to our company and to those who work for us, do business with us, and rely on us. Our stakeholders talked



Throughout the COVID-19 pandemic, Algonquin employees have demonstrated resilience and innovation as we continue to adjust to the new normal. I am proud of and grateful for the incredible progress that has been made across the organization, despite the individual and unique challenges we all continue to experience.

to us, and we listened. I encourage you to read more about the results from this stakeholder engagement activity beginning on [pg. 26](#). I am proud of the commitment demonstrated by our employees to listen to and act upon what our stakeholders tell us, and I look forward to putting their insights into action over the coming years.

Our 2021 ESG materiality assessment has guided the development and content of this report and we are pleased by the feedback and increased transparency around what matters most to our stakeholders, while continuing to advance sustainability initiatives that make a positive difference to the people we serve.

Good ESG governance also means that sustainability is embedded across all levels of our organization. I am in awe of the deep-rooted and enthusiastic commitment demonstrated by the various employees across different business units and geographical locations who came together — on a voluntary basis — to form regional sustainability councils and put our “Think Global, Act Local” mindset to action by aligning uniquely tailored regional sustainability plans to our broader ESG ambitions.

Embedding sustainability into our strategy also means incorporating the management of ESG issues into our business practices. Our 2020 climate scenario analysis activities provided confirmation that we are on the right track to manage risks and capitalize on opportunities presented by climate change.

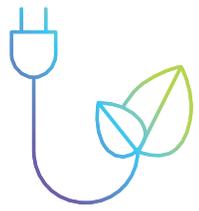
In 2021, we took further steps towards integrating those insights into our business processes and strategies.

We plan to continue evolving our responses to the guidelines of the Task Force for Climate-related Financial Disclosures (TCFD) and enhance our climate competency as we develop and deliver solutions against the impacts of climate change.

It has been an honor to witness and participate in the rapid expansion of our sustainability strategy and the development of innovative, long-lasting ESG solutions. While we may not always know what the future holds, we do know what we are good at: transitioning to clean energy, championing change for people and our planet, and delivering reliable and affordable energy and water for our customers.

Our pathway is clear and I’m confident that as the world evolves towards a decarbonized transformation, our journey of sustainability will continue to evolve with it.

Arun Banskota,
President and Chief Executive Officer



The pathway to net-zero by 2050

We continue to build on our ESG goals by announcing our next sustainability target: **achieve net-zero across our business operations for scope 1 and scope 2 emissions by 2050**. This goal is deeply rooted in our purpose of *sustaining energy and water for life*, and a prime example of our strategy in action.

While our net-zero target may be new, our dedication to being green has been a core part of our business since our establishment in 1988. Over the last 33 years we have demonstrated time and again how we continue to push the transition envelope further. Being an active participant in the transition to a low-carbon energy future means we're regularly looking for opportunities to grow our business while drawing upon our decades of experience to continue reducing emissions and embracing our role in positively impacting climate change.

At Algonquin, we feel well positioned to meet our net-zero target because of our strong

decarbonization track record, extensive experience in regulated utility management, and deep expertise in renewables development. In this report, you will find many of the incredible stories we already have to tell that highlight our transition efforts and capabilities.

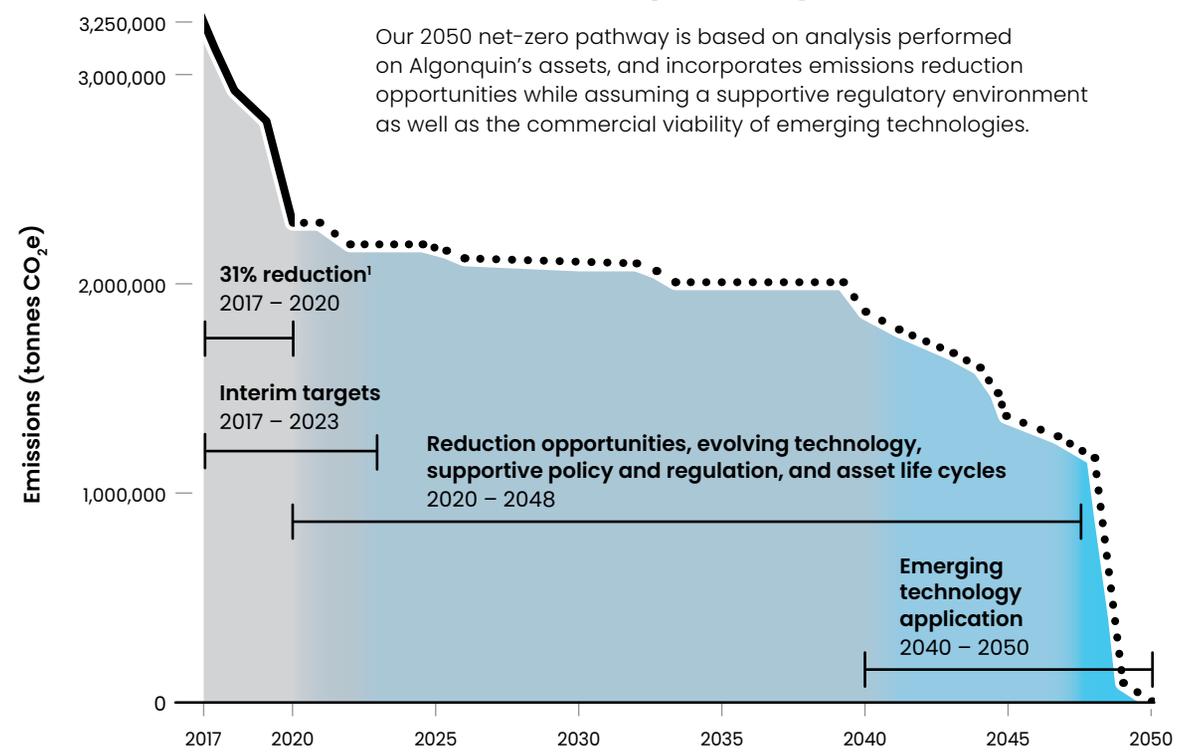
The interim targets we have set through 2023 demonstrate our commitment to sustainability and the progress we've made to date. As our journey to net-zero continues to evolve, we intend to establish additional interim goals as we complete the

underlying work necessary to set meaningful targets aligned with our business strategy that consider the impact of our plans on our stakeholders.

As we navigate towards our net-zero destination, we are guided by our purpose and fueled by the dedication of our employees. We are proud to announce our net-zero target, and look forward to continuing on this journey towards a greener future for all.

2050 net-zero pathway

Our 2050 net-zero pathway is based on analysis performed on Algonquin's assets, and incorporates emissions reduction opportunities while assuming a supportive regulatory environment as well as the commercial viability of emerging technologies.

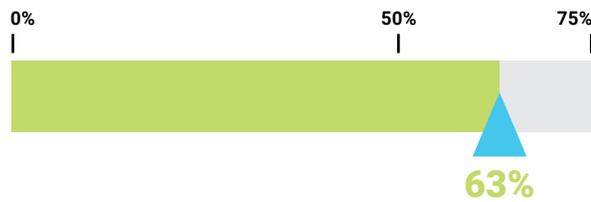


¹ Calculation includes preliminary base-year emissions estimates for ESSAL (Chile) and Ascendant (Bermuda), each acquired in 2020. These annualized estimates are based on actual emissions data for these entities during the 2020 post-acquisition period. Formal base-year recalculations for ESSAL and Ascendant are expected to be performed in connection with Algonquin's 2021 calendar year ESG disclosure.

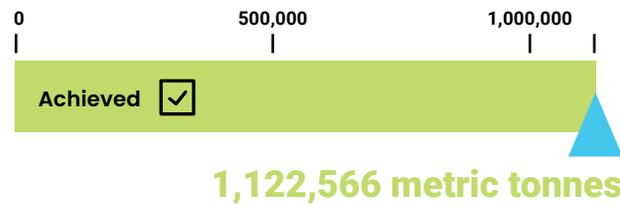
Net-zero interim targets¹ (as of August 31, 2021)



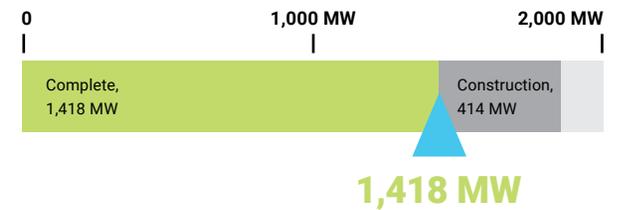
Target of 75% renewable generation by the end of 2023



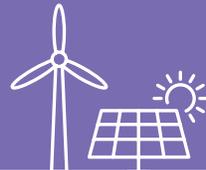
Reduce GHG emissions by one million metric tonnes from 2017 levels



Add 2,000 MW of renewables between 2019 and the end of 2023



Net-zero emissions reduction opportunities and technology innovations



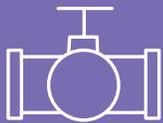
Greening the Fleet
Transitioning to renewable generation



Heating with green fuels
Introducing renewable natural gas (RNG) and green hydrogen to our distribution network



Fugitive emissions capture
Incorporating innovative technologies



Pipe leak reduction
Upgrading and replacing infrastructure



Transmission and distribution loss avoidance
Upgrading and replacing infrastructure



Replace grid electricity with renewable electricity
Enhancing behind-the-meter solutions



Regulatory engagement
Working with governments and regulators to develop effective Integrated Resource Plans (IRPs)

¹ We expect to develop and announce interim targets as we progress our work affirming that the transition to net-zero meets the needs of our stakeholders.



COVID-19 response

As an operator of electric, water, and gas utility systems and a generator of electricity, Algonquin provides essential services to communities in Canada, the United States, Bermuda, and Chile – making us a mission-critical entity. We have strived to ensure that our utility services have continued uninterrupted since the onset of the public health measures taken to address the COVID-19 pandemic. We are proud and grateful for the commitment demonstrated by our employees in keeping each other and our customers safe, while also keeping our key services running throughout this challenging period.

At the date of this report, Algonquin is operating with approximately 65% of our employees working remotely. We are continuing to monitor the effects of

COVID-19 closely and have formed a remobilization task force to develop a phased framework for returning employees back into the office environment, as and when it is safe to do so. The task force is assessing each of our work locations for readiness and implementing additional safety protocols to support re-entry activities where necessary.

Despite the ongoing challenges posed by the COVID-19 pandemic, our workforce has come together and demonstrated the highest levels of resilience, patience, collaboration, and agility. We are grateful to each one of our employees for prioritizing the safety and wellbeing of themselves, their families, and their colleagues, while we adjust to the “new norm” of remote working and make preparations for re-entry to the office. We know that the best way to keep each other safe and create a path forward to get beyond the pandemic is to get vaccinated, and look forward to welcoming our team members back to the office in the safest way possible. As we navigate this pandemic, our customers have demonstrated resiliency and patience, which we are grateful for.

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 providing safe and reliable energy and water services. It’s a responsibility we take very seriously, and we continue striving to deliver on the promise we’ve made to our customers through this challenging time.

COVID-19 Experience

Emmett was sick for 20 days.



Emmett Duprey, Site Manager, discussed his COVID-19 experience at our Annual Safety Symposium.



COVID-19 operational measures

At Algonquin, we hold the health, safety, and well-being of our employees, customers, and the communities in which we operate as a top priority. We are continuing to employ operational measures intended to protect the health and safety of our employees and customers and limit the risk of exposure to COVID-19. Some of these measures include:

- Restricted business travel,
- Work-from-home arrangements where possible,
- Physical distancing requirements between employees, customers, and the general public,
- Restricted visitor interactions, including closure of local customer-facing offices,
- Widespread adoption of virtual meeting technologies,
- Precautions with respect to employee and facility hygiene, and
- Supplying customer-facing and other front-line employees with personal protective equipment (PPE).

About this report

With the obstacles and challenges that 2020 brought us, it has become clearer than ever that transparent communication is integral to the success of our business. We recognize that our stakeholders expect the organizations they interact with to act ethically and transparently, especially during times of difficulty. We aim to support those expectations through active stakeholder engagement, mutual dialogue, and transparent communication on our ESG performance.

Our 2021 ESG Report communicates our strategies, initiatives, goals, and performance as they pertain to the three foundational elements of sustainability:



Environment
in which we live and work.

Social
matters important to our core purpose and our key stakeholders.

Governance
framework that guides our strategy and performance.

In alignment with our priority ESG issues (as informed by our stakeholders through our 2021 ESG materiality activities), this report includes a variety of stories that highlight the implementation of our sustainability vision and strategy through various programs, initiatives, and projects.



Reporting boundary

Unless otherwise stated, the data in this report covers the Company's progress and achievements during the period of January 1, 2020 through December 31, 2020. Data from 2017, 2018, and 2019 may be included for contextual and comparative purposes. Our 2023 Goals and Performance Scorecard, beginning on [pg. 3](#), reflects performance data beyond our 2020 reporting period in order to demonstrate our most recent progress against our ESG goals.

Our ESG reporting is based on assets under operational control. Therefore, information reflecting Algonquin's pro rata interest in Atlantica Sustainable Infrastructure plc and certain other assets, comprising over 2.4 GWs of renewable energy projects, is not included in this report.²

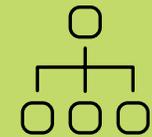


Base-year and Recalculation Policy

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 (e.g., the retirement of our Asbury coal facility, and the acquisitions of ESSAL and Ascendant in late 2020), 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, our *Base-year and Recalculation Policy* serves as a guideline that defines the circumstances and thresholds that may trigger a base-year and historical 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

Algonquin's sustainability framework was developed in alignment with several ESG reporting methodologies and tools to effectively organize and communicate our commitments and progress.

Our 2021 ESG Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: **Comprehensive** Option – a progression from the Core Option alignment of our 2020 Sustainability Report. Our GRI Index can be found in the appendices of this report and online.

This report also aligns to the Sustainability Accounting Standards Board (SASB) framework; our SASB Index can be found in the appendices of this report and online.

Our sustainability strategy, framework, and reporting are also aligned to the United Nations (UN) Sustainable Development Goals (SDGs). We have updated our alignment to the SDGs to include additional goals and targets that reflect our sustainability commitments and ambitions.

1 Unless otherwise indicated, all dollar amounts in this report are in U.S. dollars

2 "Materiality", as used in this report, and sometimes referenced as "ESG materiality", and our materiality review process, are different than the definitions and/or meanings ascribed to these and similar terms in the context of applicable Canadian and U.S. securities laws and our filings with securities regulatory authorities in Canada and the U.S. Items deemed material for purposes of this report and for purposes of determining our ESG disclosure, evaluations, strategies, and initiatives may not be considered material for reporting purposes under applicable Canadian and U.S. securities laws.

About us¹

Who we are

Algonquin, parent company of Liberty, is a diversified international generation, transmission, and distribution utility with over \$16 billion of total assets. Through its two business groups, the Regulated Services Group and the Renewable Energy Group, Algonquin is committed to providing safe, secure, reliable, cost-effective, and sustainable energy and water solutions through its portfolio of electric generation, transmission, and distribution utility investments to over one million customer connections, largely in the United States and Canada. Algonquin is a global leader in renewable energy through its portfolio of long-term contracted wind, solar, and hydroelectric generating facilities. Algonquin owns, operates, and/or has net interests in over 4 GW of installed renewable energy capacity.

Algonquin is committed to delivering growth and the pursuit of operational excellence in a sustainable manner through an expanding global pipeline of renewable energy and electric transmission development projects, organic growth within its rate-regulated generation, distribution, and transmission businesses, and the pursuit of accretive acquisitions.²

Since our inception in 1988, our operations have grown to include 39 renewable energy facilities in North America. We are supported by more than 3,400 skilled and motivated employees, each of whom plays a vital role in our success. With our robust, diversified, and growing presence in communities across the United States, Canada, and internationally, we are continually demonstrating our “Think Global, Act Local” business model.

Regulated Services

Our Regulated Services Group provides rate-regulated water, electricity and gas utility services, and power generation to communities across the United States, Canada, Chile, and Bermuda.

Serving over one million customer connections, we are committed to the community, conservation, and customer service. The Regulated Services Group upholds high 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 six states (Arizona, Arkansas, California, Illinois, Missouri, and Texas) and in Chile
- Approximately 409,000 customer connections

Electricity generation, distribution, and transmission

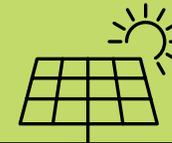
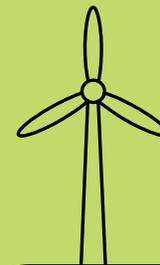
- Electricity distribution operations in six states (Arkansas, California, Kansas, Missouri, New Hampshire, and Oklahoma) and Bermuda
- Approximately 306,000 customer connections

Natural gas distribution

- Natural gas distribution operations in seven states (Georgia, Illinois, Iowa, Massachusetts, Missouri, New Hampshire, and New York) and one province (New Brunswick)
- Approximately 371,000 customer connections

Power Generation

The Renewable Energy Group generates and sells electrical energy produced by its diverse portfolio of non-regulated generation facilities primarily located across Canada and the United States. Its directly owned and operated diversified fleet consists of hydroelectric, wind, solar, and thermal facilities.



Wind

Solar

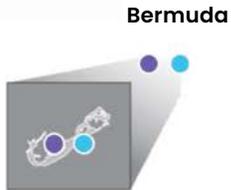
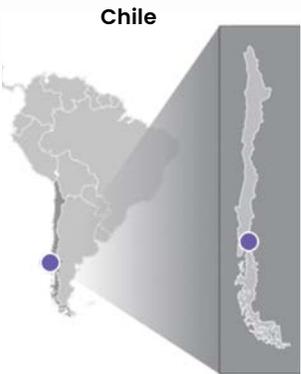
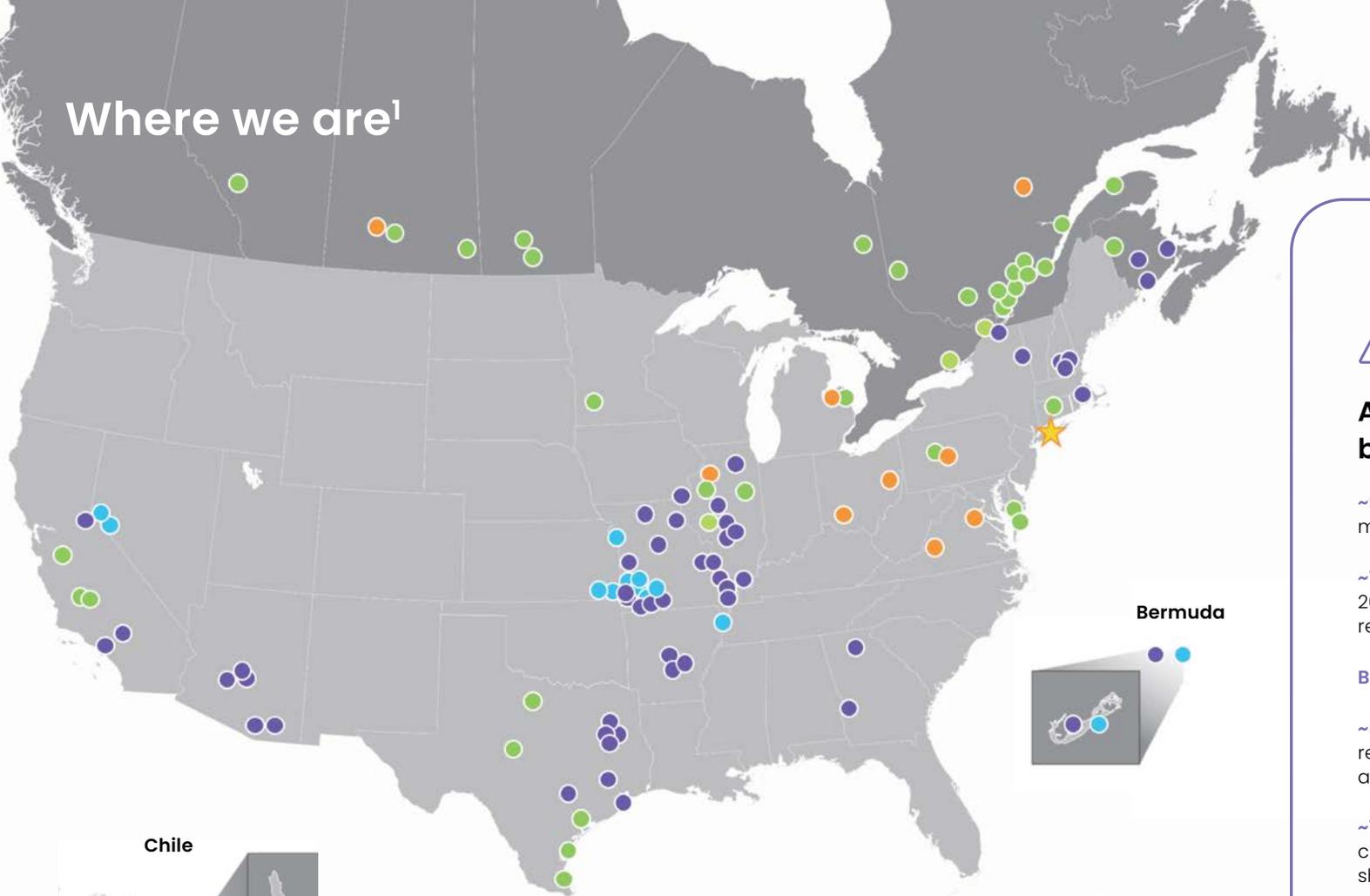
Hydroelectric

Thermal

¹ As of September 30, 2021

² Through its Regulated Services Group and Renewable Energy Group, the Company directly owns and operates hydroelectric, wind, and solar facilities with a combined net generating capacity of approximately 2.8 GW. In addition to directly owned and operated assets, the Company has investments in renewable generating assets with approximately 1.3 GW of net generating capacity.

Where we are¹



Legend

- Utility distribution system (Regulated Services Group)
- Rate-based power generation (Regulated Services Group)
- ★ Pending utility acquisition (Regulated Services Group)
- Operational power generation site (Renewable Energy Group)
- Development projects (Renewable Energy Group)



Algonquin by the numbers

~\$9.8 billion
market cap

~19%
2020 total shareholder return (TSR)²

BBB credit rating

~3 GW
renewables in operation and under construction

~141%
cumulative five-year total shareholder return²

\$9.4 billion
five-year CapEx plan from 2021 through 2025

3,400+
employees

1988
company founded

¹ As of December 31, 2020

² TSR calculations on Toronto Stock Exchange (TSX)



Our strategic pillars and guiding principles

Our corporate purpose is a deep-rooted commitment 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, recognized for exceptional performance in terms of safety, customer experience, employee engagement, diversity, equity and inclusion, environmental and social responsibility, and financial results.



Our strategic pillars

Growth

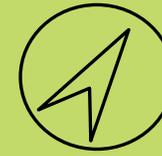
Algonquin has always been growth oriented. And, we focus on sustainable, rapid growth through strategic acquisitions and ongoing development of world-class renewables.

Operational Excellence

We believe in doing everything to the best of our capabilities. Our vision of operational excellence is focused on safety, security, and reliability.

Sustainability

Leading the transition to a low-carbon economy through the pursuit of global decarbonization partnership opportunities with like-minded corporate citizens.



Our guiding principles

Customer centric

Foster a positive internal and external customer experience at every stage of the customer journey to build customer loyalty and satisfaction. Always consider the outcomes our decisions will have on the customer.

Integrity

Always be honest, do the right thing, and adhere to moral and ethical principles for self and team.

Entrepreneurial

Have an optimistic interpretation of adverse events and see problems as potential opportunities; highly resilient, resourceful, and solution-oriented even within highly uncertain, resource-constrained environments.

Outcome focused

Have passion to exceed ambitious goals and safely deliver high-quality business results. Strive to delegate for outcomes rather than by task.

Teamwork, trust, inclusion, and respect

Value diverse teams of people. Encourage and help each other through collaboration. Inspire the exchange of ideas to come up with creative ways of doing things. Extend trust and create a feeling of belonging, listen for understanding to different perspectives by being respectful and professional.

Owner mindset

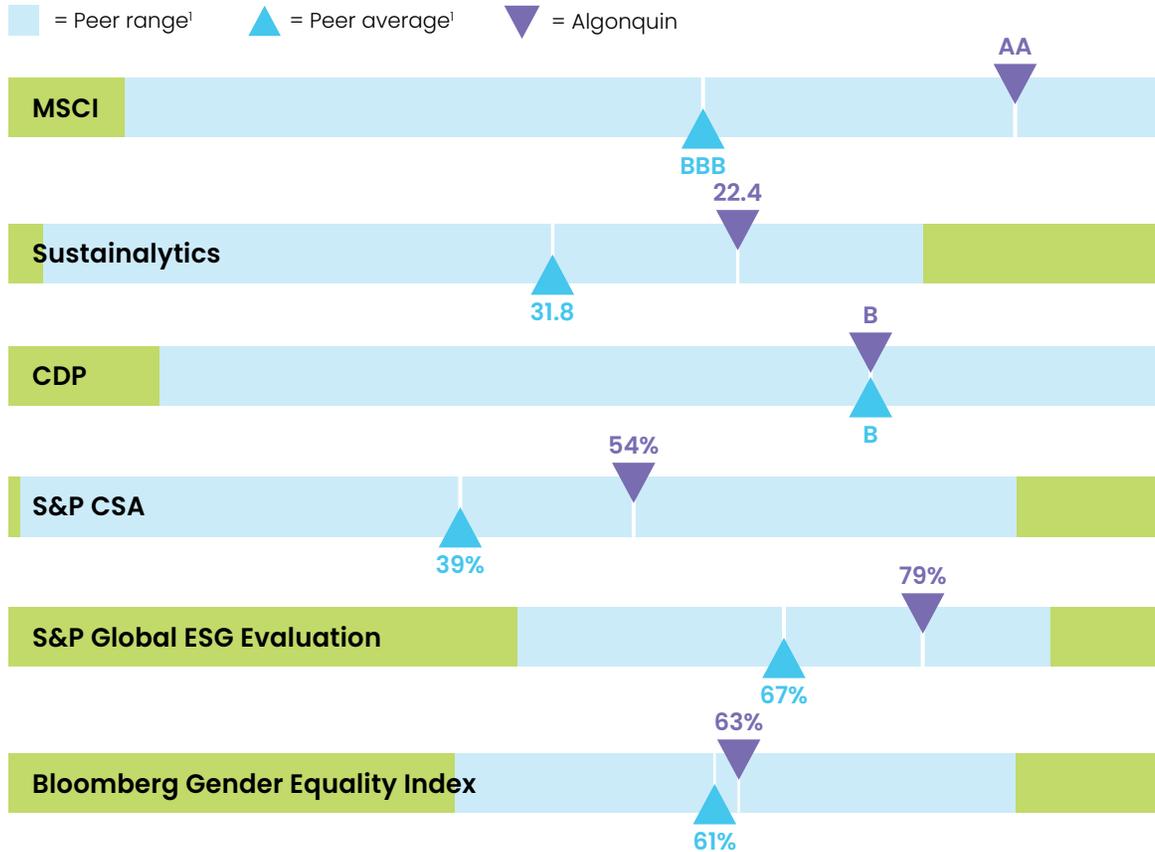
Demonstrate ownership, taking smart risks, while remaining aligned to organizational pillars. Encourage individuals to take responsibility to hold themselves and others accountable.

Continuous learning

Be inquisitive and open-minded, actively seek new and varied experiences and ideas. Be passionate about continual learning for self and team.



ESG rating agency performance (as of August 31, 2021)



Awards and recognition



2021
REPORT ON BUSINESS
WOMEN LEAD HERE

¹ Peer averages: MSCI – Utilities; Sustainalytics – Multi-Utilities; CDP – Renewable Power Generation; S&P CSA – Multi and Water Utilities; S&P Global – Universe; Bloomberg – Universe



Sustainability approach

Sustainability is at the heart of what we do. It's not just a silo of our business; 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 world in as good, or in a better, state for our children than the state we found it in – ensuring a healthy life for generations to come.

Sustainability at Algonquin is about taking action against climate change and being mindful of our **environmental** footprint. But, it is also about our **social** footprint: building meaningful and authentic connections between individuals and fostering a safe, inclusive atmosphere that attracts and retains top talent. It is also about **governance**: ensuring that we have the right policies, processes, and programs in place to actively manage and improve our ESG impacts.

It takes determination, ambition, and courage to do the right thing every day. It requires a bold vision, optimistic attitude, and creative thinking to seek and capture opportunities that others don't see.

It is with this mindset that we strive to make a positive difference – today and tomorrow.

But our commitment to sustainability goes beyond doing the right thing. It is integral to our longevity and success; we believe in doing well by doing good. Our ESG efforts are intended to create meaningful and long-lasting value for our loyal customers, talented employees, and committed investors. We understand that our purpose of *sustaining energy and water for life* means extending our reach beyond our own organization and committing 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 footprint. We are proud of the progress we have made in integrating sustainability into our business decisions and are confident that our future holds growth and new green investment opportunities.

We have committed to measuring our sustainability efforts, performing well against them, and transparently communicating our results to our stakeholders. Reporting on relevant ESG information is our way of demonstrating how we drive positive change. We are proud to share our story, and the data to back it up, within this report.



George Trisic
Chief Governance Officer and Corporate Secretary

“Algonquin’s sustainability team continues to make great strides in enhancing our internal processes and disclosures. This year’s report has evolved in accordance

with the GRI Standards: Comprehensive Option, we have launched a new online ESG Data Hub for our investors, conducted a fulsome ESG materiality assessment, and engaged across our business to analyze our assets during the development of our new net-zero target. Our efforts continue to demonstrate results through improved ESG scores from S&P, Sustainalytics, and ISS – just to name a few. We are continually striving for greater transparency and stakeholder engagement on our sustainability journey and pathway to a zero-carbon world, and the passion and dedication of all of our employees continues to propel us in the right direction.”



Our sustainability commitment

We strive to build and operate our business such that we make a positive and durable contribution for *sustaining energy and water for life*.



We support the global goal of limiting planetary temperature rise to less than 2 degrees Celsius by the end of this century to reduce the impact of climate change.



We strive to leverage emerging technologies and business models in the delivery of clean, efficient, and reliable energy at a fair price to facilitate the transition to a low-carbon economy.



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



We believe that diversity, equity, and inclusion results in a more just society, resilient communities, and a high-performing workforce.



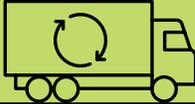
We seek open dialogue and collaboration with the communities in which we operate.



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.





Our ESG evolution

Sustainability is at the heart of what we do, and is one of our three strategic pillars. It underpins the way we operate our business, whether through investments, acquisitions, or day-to-day operations. We formalized our commitment through the establishment of the Office of Sustainability, overseen by our Chief Governance Officer. Over the past few years, the Office of Sustainability has been tasked with developing and rolling out Algonquin's sustainability plans and strategies, in close collaboration with business leaders and volunteer ESG champions from across all business modalities. Together, our team members work towards bringing enthusiastic and diverse perspectives to continuously improve Algonquin's strategic planning, reporting processes, and fostering positive ESG impacts in all of the communities we operate in.

We began our journey with the development of our *Sustainability Plan* and framework in alignment with our priority ESG issues, select UN SDGs, and the commitments set out in our sustainability policy. Algonquin's sustainability plan outlines key strategic ESG objectives as well as the enterprise initiatives programs that will help us achieve our objectives. Our 2023 Sustainability Goals provide measurable and ambitious targets for us to work towards, and as we get closer to the achievement of these goals – some of which have already been met – we are continuing to enhance, refine, and develop relevant key performance indicators to measure our ESG progress on a variety of fronts.

Algonquin's ESG reporting has evolved significantly since we made a conscious decision to showcase our efforts in our inaugural *2019 Sustainability Report*. This first report laid the foundation for our sustainability story, with an introduction to our then-new corporate sustainability strategy, along with an elementary alignment to globally recognized frameworks, including the UN SDGs, GRI, and SASB. Since then, our reporting lens has become more targeted and intentional, with our *2020 Sustainability Report* having been prepared in accordance with the GRI: Core Option, showcasing an improved alignment to relevant UN SDG sub-targets, and a thorough ESG Performance Index.

Our *2021 ESG Report* aims to take Algonquin's ESG evolution one step further. Our recently conducted ESG materiality assessment is reflected throughout this report, with many stakeholder-informed priority ESG issues acting as the building blocks for this year's disclosures. This year's report has also been prepared in accordance with the GRI: Comprehensive Option, and we have further enhanced our alignment to the UN SDGs, with the introduction of new goals and sub-targets that we feel align best with our business and strategy.

We deeply appreciate the ongoing interest and support given to our sustainability efforts by our stakeholders, and we look forward to continuing this journey together.





Our commitment to the SDGs

The United Nations Sustainable Development Goals are a set of 17 goals for all countries – and increasingly, businesses – to come together in a global partnership to tackle issues such as poverty, health and education, reduced inequalities, economic growth, and environmental protection. This set of global goals is an integral element of the UN's *2030 Agenda for Sustainable Development*.

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.

At the start of our sustainability journey, we identified six SDGs that we felt were most relevant to our business and to our sustainability commitments. Our chosen SDGs act as a foundation for our sustainability strategy and selection of our priority ESG issues. In recent years, we have expanded on our alignment to specific SDG targets in order to further complement our approach to advancing the UN's *2030 Agenda for Sustainable Development*.



SUSTAINABLE DEVELOPMENT GOALS

As we continue to grow and expand our business operations, we have revisited and reflected on how we can maximize our contribution to the SDGs. As a result of our recently updated ESG materiality assessment, we have identified four additional SDGs and ten additional sub-targets where we feel we can make a meaningful and impactful contribution.



 New additions: 9, 10, 12 and 15



Our target

Champion equality to strive towards a more equitable society

Initiatives

- Creating an inclusive culture by enabling the creation and support of existing resource groups
- Striving towards gender parity on boards and in our senior leadership team
- Creating awareness of unconscious bias and mitigating the negative impacts to achieve our commitment

UN SDG targets

- 5.1** End all forms of discrimination against all women and girls everywhere
- 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
- 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

Alignment rationale

Gender inequality in society makes it difficult for women to thrive in their personal and professional lives. It makes decent work, autonomy, advancement, and inclusion harder for women to achieve. At Algonquin, we believe that building an inclusive work environment, where all our team members feel a sense of belonging, is critical to unlocking the benefits of diverse teams and attracting and retaining a high-performance culture.



Our target

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

Initiatives

- Encouraging efficient use and re-use of water resources
- Deploying new technologies that reduce the demand for freshwater resources and the carbon intensity of providing those resources
- Upgrading infrastructure to continue providing safe and reliable drinking water

UN SDG targets

- 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 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
- 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
- 6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes

Alignment rationale

Across the globe, people unfortunately have to live without access to safely managed drinking water and sanitation. Our company's core purpose of *sustaining energy and water for life* is grounded in the knowledge that the services we provide are essential to our customers' quality of life and wellbeing.



Our target

Deliver cost-effective and reliable utility services

Initiatives

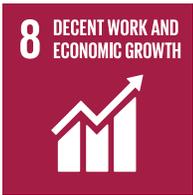
- Incorporating low-cost renewable energy into our supply mix
- Investing in infrastructure to reduce operating costs
- Operating our business with excellence and resiliency

UN SDG targets

- 7.1** By 2030, ensure universal access to affordable, reliable, and modern energy services
- 7.2** By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3** By 2030, double the global rate of improvement in energy efficiency
- 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

Alignment rationale

Access to affordable and clean energy is crucial in supporting all sectors of life and industry. At Algonquin, we are committed to providing reliable, safe, and affordable services to our customers while leading the transition to a low-carbon energy future by expanding our renewables portfolio.



Our target

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

Initiatives

- Engaging Board and senior executives in sustainability
- Developing and maintaining a positive compliance culture
- Increasingly adopting TCFD recommendations into our business
- Attracting, developing, and retaining world-class talent
- Driving top-quartile employee engagement
- Promoting employee safety and a Drive-to-Zero safety culture
- Developing and promoting employee BRGs

UN SDG targets

- 8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- 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
- 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
- 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

Alignment rationale

We are committed to ensuring that employees across all levels of our organization are well-equipped to perform their jobs to the best of their capabilities and in a safe, productive manner. We pride ourselves in having policies and processes in place to ensure that all employees are given equal opportunity and feel empowered to bring their best selves to work every day.



Our target

Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

Initiatives

- Investing in clean energy infrastructure
- Performing gas and water infrastructure upgrades
- Progressing our innovative Battery Storage Pilot Program

UN SDG targets

- 9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.2** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Alignment rationale

Innovation and infrastructure investments are key to the sustainable longevity of industries. Across the globe, companies are implementing innovative technologies and investing in infrastructure to sustain their economic growth while generating income and employment. At Algonquin, we are committed to acting as stewards of infrastructure and using innovation to continue the transition to a low-carbon economy.



Our target

Eliminate inequalities from our business while advocating for equality to build a more just society

Initiatives

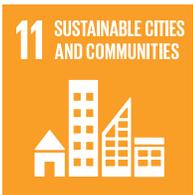
- Adopting our *Human Rights Policy*
- Incorporating hiring processes that seek to reduce unconscious bias
- Committing to diversity and inclusion through our Diversity and Inclusion Council
- Developing and promoting employee BRGs
- Empowering women through our Lean In Circle program

UN SDG targets

- 10.2** By 2030, empower and promote the social, economic, and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status
- 10.3** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
- 10.4** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

Alignment rationale

Across the globe, inequalities based on age, sex, race, religion, gender, sexual orientation, and income continue to persist. We are committed to empowering and taking steps to provide equal opportunities for all of our employees through our *Human Rights Policy*, Employee Resource Groups, Diversity and Inclusion Council, and unconscious bias training.



Our target

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

Initiatives

- Fostering constructive and supportive relationships with the communities we serve
- Striving to provide a top-quartile customer service experience
- Actively engaging with supply chain partners to operationalize our *Sustainability Plan*

UN SDG targets

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

Alignment rationale

As countries around the globe continue to urbanize, the need for sustainable, safe, and inclusive communities is more important than ever. We are committed to supporting the communities that we operate in by striving to deliver cost-effective, reliable utility services with a top-quartile customer service experience.



Our target

Ensure sustainable consumption and production patterns

Initiatives

- Actively seek out suppliers with a proactive stance on ESG issues
- Adopting procurement standards to ensure we are working with like-minded suppliers
- Abiding by our *Supplier Code of Conduct*
- Fostering relationships with vendors to collaborate with and seek guidance on end-of-life recycling and sustainable disposal programs
- Customer conservation programs

UN SDG targets

- 12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7** Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Alignment rationale

By prioritizing ethical suppliers and minimizing overproduction and waste, we can increase the efficiency of supply and demand management while sourcing and acquiring goods and services that align with our ESG objectives.



Our target

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 leveraging emerging technologies and business models to decarbonize our energy portfolio

Initiatives

- Striving to reduce the carbon content of the products we deliver to our customers
- Growing our renewables portfolio
- Striving to reduce the internal carbon intensity of our operations
- Working with our customers to help them meet their sustainability goals

UN SDG targets

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2** Integrate climate change measures into national policies, strategies, and planning
- 13.3** Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning

Alignment rationale

Climate change affects all aspects of life on this planet. Each of us has a part to play in addressing climate change, and at Algonquin, we are playing our part by pursuing sustainable alternatives to certain of our fossil-based energy sources and reducing the carbon content of the services we deliver to our customers. Through our target of net-zero by 2050, we intend to continue advancing towards a greener common future.



Our target

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Initiatives

- Managing our operations in ways that are mindful of impacts on biodiversity
- Seeking to employ innovative solutions to protect natural resources and wildlife
- Improving the safety and reliability of our energy resources through our vegetation management program
- Protecting the endangered gray bat (*Myotis grisescens*) species through the purchase of Buffalo Quarry

UN SDG targets

- 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Alignment rationale

Despite efforts to halt biodiversity loss, biodiversity is declining at a rapid speed. The Earth's forests are home to over 80% of all plant, animal, and insect species. Despite this, forest degradation remains a prevalent and worsening issue. We believe that it is our responsibility to consider the effects that we have on natural resources and biodiversity in managing our operations.



Listening to our stakeholders

Stakeholder engagement

Stakeholder dialogue not only guides our reporting process and informs our report content selection, but it is also 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 is included in this section of the report.

Stakeholder group



Customers

How we engage

- Annual *J.D. Power Customer Satisfaction Survey*
- *Net Promoter Score surveys*
- ESG materiality assessment engagement with commercial and industrial customers
- Ongoing business development and outreach activities for our commercial and industrial customers
- Call centers
- Community education programs
- Conservation and outreach programs
- Regular email communications
- Focus groups
- Local customer walk-in centers
- Local media outlets
- Participation in and sponsorship of local events, teams, and charitable foundations
- Social media

Frequency of engagement

Annual and ongoing

Key concerns raised

- Customer service improvements
- Rates and pricing
- Digital billing and payments
- Communications (i.e., outage alerts)
- Increased community involvement
- Low-income household needs
- Support during COVID-19 pandemic
- Emissions reductions and offsetting for commercial and industrial customers

How we address stakeholder concerns

- Customer First Program
- eCustomer project
- Updated Outage Management system
- Communications via email, social media, and bill inserts on local community engagement
- Customer Savings Program
- Working with commercial and industrial customers to understand and analyze their opportunities to achieve their emissions reductions goals

Stakeholder group



Employees

How we engage

- Annual *Employee Engagement Survey*
- Employee Ethics Reporting Line
- Annual goal setting, development planning, and performance discussions
- Employee-led BRGs
- Ombudsperson service
- A variety of regular internal communication activities, including townhalls, employee Q&A sessions, and email bulletins
- Training
- Union relations and consultations
- ESG materiality assessment
- Safety Symposiums

Frequency of engagement

Annual and ongoing

Key concerns raised

- Increased community inclusion in early development efforts
- Increased support for local organizations and direct community benefits
- Community support during COVID-19 pandemic
- Career development and guidance

How we address stakeholder concerns

- Annual employee business strategy communications (*Liberty LookBook*)
- Individual development plans
- Achievement Fund
- Annual performance and career development discussions
- Succession planning
- Regular health and safety training modules
- ESG target of embedding ESG performance in compensation model (accomplished in 2021)

Stakeholder group



Communities

How we engage

- Charitable activities
- Community consultation meetings
- Community events
- Community partnerships and sponsorships
- Community partnerships survey
- Education and outreach programs
- Educational institutions
- Landowner dinners and information sessions
- Liberty Days (employee volunteer events)
- Local chambers of commerce
- Local media outlets
- Military events and organizations
- Rotary clubs

Frequency of engagement

Annual and ongoing

Key concerns raised

- Increased community inclusion in early development efforts
- Increased support for local organizations and direct community benefits
- Community support during COVID-19 pandemic

How we address stakeholder concerns

- Increased consultation and external engagement efforts when first entering a new community
- Early engagement with community and local agricultural organizations to share the benefit of contributions
- Collaboration with local officials to identify opportunities to benefit communities
- COVID-19 support via monetary and equipment donations

Stakeholder group



Investors and analysts

How we engage

- Annual Investors Day events hosted virtually as required
- Quarterly earnings calls
- Ongoing direct investor engagement
- Sustainability Day event
- Third-party interviews (via independent consultant)
- Institutional investor interviews through third-party ESG consultants
- ESG materiality assessment
- Industry conferences
- Broker-hosted investor conferences

Frequency of engagement

Annual and ongoing

Key concerns raised

- Coal exposure
- Management succession
- Growth opportunities
- Energy generation mix and energy reliability
- Development of long-term targets for decarbonizing footprint
- Employee satisfaction, talent attraction, and retention
- Transparent and robust ESG disclosures
- Diversity, Equity, and Inclusion
- Finding creative ways to lower customer bills while maintaining profitability
- Infrastructure resiliency to withstand changing climates
- Better transparency on reaching short- and long-term ESG targets

How we address stakeholder concerns

- *Greening the Fleet* projects and Asbury coal plant closure
- Increased exposure to, and engagement with, executive management team
- Enhanced ESG reporting against GRI and SASB standards
- Development of ESG Data Hub
- Engagement across our business for our new net-zero target
- Updated ESG materiality assessment to identify priority ESG issues
- Improvements to ESG ratings scores from S&P, Sustainalytics, MSCI, and others
- Employee groups (D&I Council, EDGE, Friends at Liberty, Lean In)

Stakeholder group



Government and regulatory agencies

How we engage

- Building local relationships
- Participation in industry associations and advisory groups
- Proactive self-reporting
- Regular outreach
- Regular site visits and management briefings

Frequency of engagement

Annual and ongoing

Key concerns raised

- Climate action
- Affordable energy
- Greater stakeholder involvement in project development and planning
- Safety
- Enabling the deployment of renewable energy
- COVID-19 pandemic impacts on customers

How we address stakeholder concerns

- Building and maintaining long-lasting and meaningful relationships with a wide variety of stakeholders
- Communicating stakeholder concerns with internal decision makers on a regular basis
- Early engagement with stakeholders prior to finalization of policies and initiatives
- Demonstrating the alignment of company priorities with those of stakeholders when appropriate
- Working directly with state and federal government and community groups to aid policy makers in targeting relief funds to help those in key legislative areas



2021 ESG materiality assessment

In today's rapidly evolving ESG landscape, it is of utmost importance to stay abreast of changing stakeholder needs and ESG issues. As a result, we recently engaged with our stakeholders to hear their recent views on ESG issues they feel are most important for Algonquin to consider, relative to our ongoing operations and performance.

This recent ESG materiality assessment "refresh" followed the GRI's recommended three-step process to identify, prioritize, and validate the ESG issues that matter most to our stakeholders. We identified a list of priority ESG issues by benchmarking our previous ESG materiality assessment results against industry trends and best practices, as well as surveying and interviewing key internal and external stakeholders to gauge their perceptions on which ESG issues should be most important to our business, which issues we can have the greatest positive impact against, and areas in which we could improve our ESG performance. Data from our stakeholder engagement yielded a list of 22 ESG issues, which can be found in the graphic to the right, with the top six stakeholder priority issues mapped at the top. Results from our materiality assessment are undergoing validation, which has included a series of workshops with internal groups, including Algonquin's Office of Sustainability, sustainability councils, and ESG Steering Committee.

Our refreshed stakeholder feedback will serve to inform the development of our ongoing business strategy to ensure it captures our ESG planning and initiatives – and we have developed our *2021 ESG Report* framework to discuss how we are



Our stakeholders' priority ESG issues

Top six ESG issues

- Transition to a low-carbon economy
- Climate resiliency
- Energy reliability
- Public health and safety
- Customer experience and affordability
- Talent attraction and retention

Environmental

- Energy efficiency
- Greenhouse gas and air emissions
- Land use and biodiversity
- Waste and materials management
- Water management

Social

- Community support and economic development
- Customer experience and affordability
- Diversity, equity, and inclusion
- Employee health and safety
- Energy reliability
- Indigenous relations
- Infrastructure investment and resiliency
- Public health and safety
- Talent attraction and retention

Governance

- Cybersecurity
- Ethics and integrity
- Governmental affairs and public policy
- Risk management
- Sustainable procurement
- Transparency disclosure

currently addressing the issues that our stakeholders feel are most important. In alignment with the GRI three-step process, we have begun validating our materiality assessment results through ongoing internal dialogue to meaningfully incorporate

stakeholder feedback in our journey of improving our ESG performance. A list of our stakeholders' priority ESG issues and definitions can be found in the appendix on [pg. 136](#).

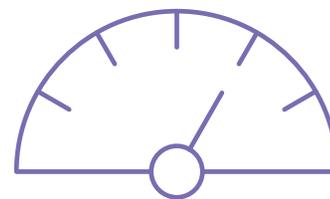


ESG goals and performance scorecard

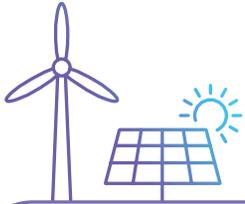
Our *Sustainability Plan* is built on an ambitious set of ESG goals to be achieved through 2023. We are confident in our performance against these goals and are proud of the progress we have made towards their achievement to date.

Our 2023 Sustainability Goals include the first set of interim targets on our journey to reach net-zero by 2050. We are committed to refreshing our 2023 goals and introducing new targets as we complete the underlying work needed to prepare for our next set of interim goals.

Although this *2021 ESG Report* discloses data from January 1 – December 31, 2020 for reporting purposes, we have included performance data up to August 31, 2021 to indicate the most recent status of our progress against our 2023 ESG Goals. As of August 31, 2021, we have achieved three out of nine targets and are progressing on the other six.



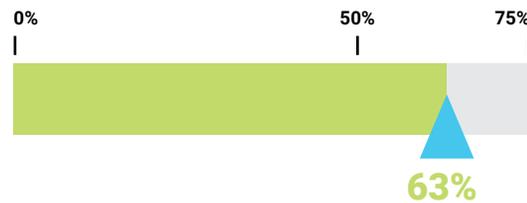
Progress on our ESG goals (as of August 31, 2021)



Environmental



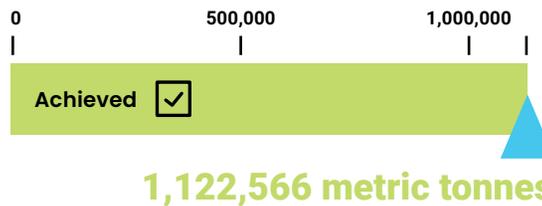
Target of 75% renewable generation by the end of 2023



This goal is focused on the total nameplate capacity (MW) of operationally controlled assets added to our renewable portfolio. These assets include wind, solar, and hydroelectric sites in both our regulated and non-regulated businesses. In line with our pipeline of existing and anticipated projects to be constructed between 2018 and 2023, our progress is on track to reach a generation capacity consisting of 75% renewable energy by 2023. As of August 31, 2021, we are currently operating at 63% renewable generation capacity.



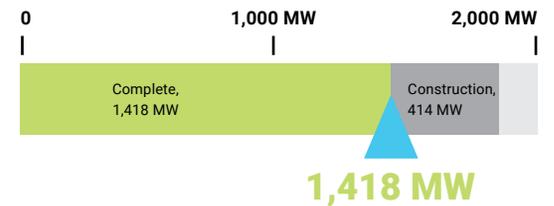
Reduce GHG emissions by one million metric tonnes from 2017 levels



Our reduction target reflects an absolute reduction expressed as a fixed amount of GHGs that we will avoid by shutting down our legacy Asbury coal facility and replacing it with an equivalent amount of wind power generation. With the early retirement of the Asbury facility, taking place in March of 2020, we demonstrate a cumulative reduction of 1,122,566 metric tonnes of carbon dioxide equivalents from our operations – exceeding our goal well ahead of our 2023 target.



Add 2,000 MW of renewables between 2019 and the end of 2023



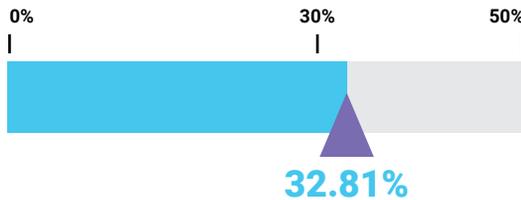
This goal targets the addition of 2,000 MW of renewable nameplate capacity to our existing portfolio, and is based on completion of projects in our renewables pipeline, as well as newly sourced projects. As of August 31, 2021, we have added 1,418 MW against our goal and have an additional 414 MW currently under construction.



Social



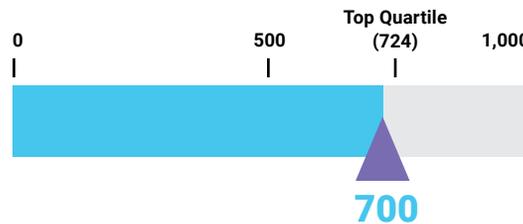
Exceed 30% women in leadership roles^{1,2}



We are pleased to report that in 2020 we exceeded 30% of women in leadership roles. This goal is measured with the amount of women versus the total amount of employees with the job title of Senior Manager or above. For August 31, 2021, we reported 32.81% women in leadership roles. Although we are proud of our progress so far, we will continue to create opportunities for women to excel in leadership capacities and view this goal as an ongoing effort to exceed our 30% target by 2023.



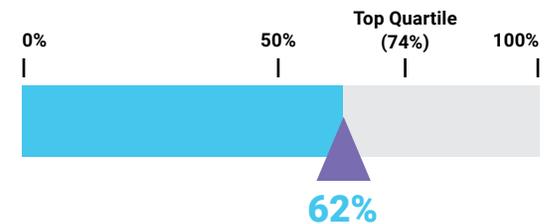
Achieve top-quartile customer service



Although we engage with our customers through several formats, we measure our customer service satisfaction through the annual *J.D. Power Customer Service Satisfaction Survey*. Our current 2021 J.D. Power ranking is 700, which has improved since 2019. Our goal to achieve top-quartile customer service is based on reaching a score of 724. J.D. Power considers a customer satisfaction score of 724 or higher as top-quartile engagement in the utilities industry.



Achieve top-quartile employee engagement



Each year, our employees take part in our engagement survey, managed through a third-party to ensure anonymity. We use the results to measure our employee engagement and implement new programs and policies based on the feedback we receive. Our 2021 employee engagement score of 62% is 12% below the 74% top-quartile employee engagement score threshold.

1 Bermuda and ESSAL are excluded from this metric

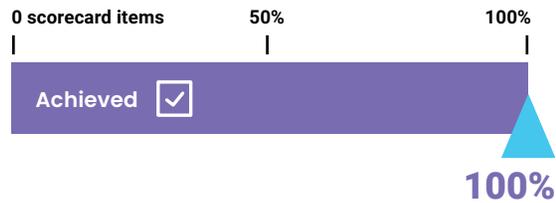
2 Leadership roles refer to employees in the following job levels: executive, senior vice president, vice president, president, director, and senior manager.



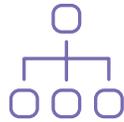
Governance



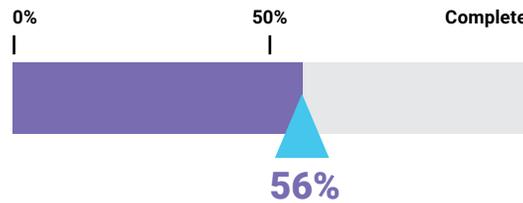
Embedding sustainability into our compensation model



Our compensation model includes an annual corporate scorecard which is used to broadly measure success against our overall business goals. The results of the scorecard are included in the calculations for the annual Short-term Incentive Plan provided to eligible employees. We have successfully embedded and performed against ESG metrics in our 2020 Corporate Scorecard and have achieved our goal ahead of our 2023 target. We intend to continue reviewing the inclusion of additional sustainability metrics, such as those pertaining to diversity and inclusion as well as compliance, as a component of the assessment of both short-term and long-term management performance.



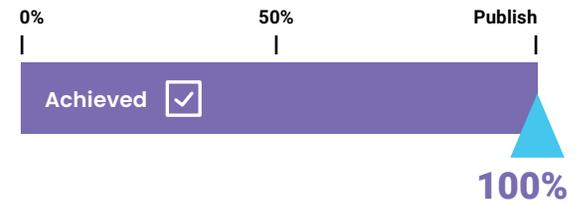
Build a robust compliance framework



In 2019, we appointed key individuals to our Compliance and Risk Office charged with advancing our compliance framework. To date, we have accomplished 56% completion of the plan, demonstrating a 26% progression from our 2020 reporting period. Our 2023 goal is centered around 100% completion of the plan, which is inclusive of a plan refresh with external consultants.

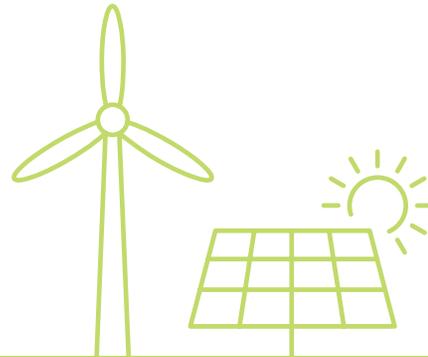


Publish a TCFD-aligned disclosure



Our commitment to publish a TCFD-aligned disclosure has come to fruition ahead of schedule with the publishing of our 2020 Climate Change Assessment report in December of 2020. The report sets the groundwork for deep analysis on the risks and opportunities presented to our portfolio under various climate scenarios.

Environmental



In this section

Featured ESG issues



Transition to a low-carbon economy



Land use and biodiversity



Greenhouse gas and air emissions



Waste and materials management



Climate resiliency



Water management



Energy efficiency

Performance goals



Target of 75% renewable generation by the end of 2023



Reduce GHG emissions by one million metric tonnes from 2017 levels



Add 2000 MW of renewables between 2019 and the end of 2023

Alignment to UN SDGs

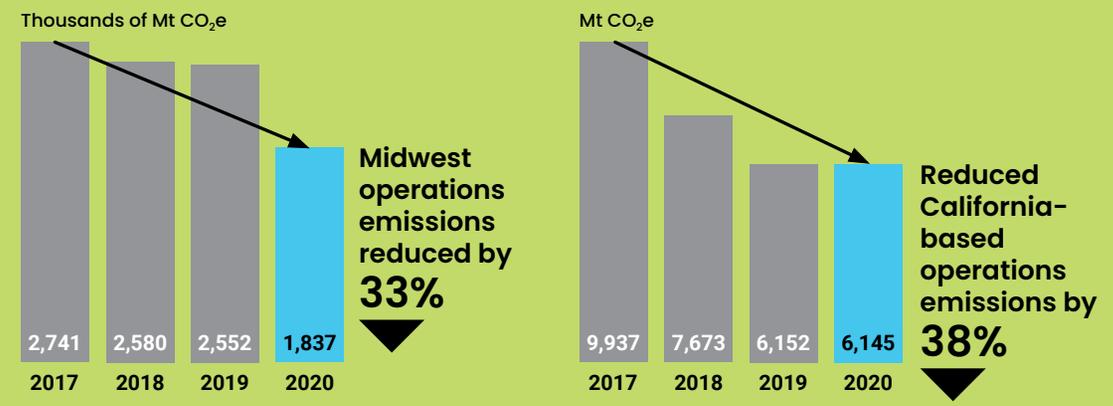
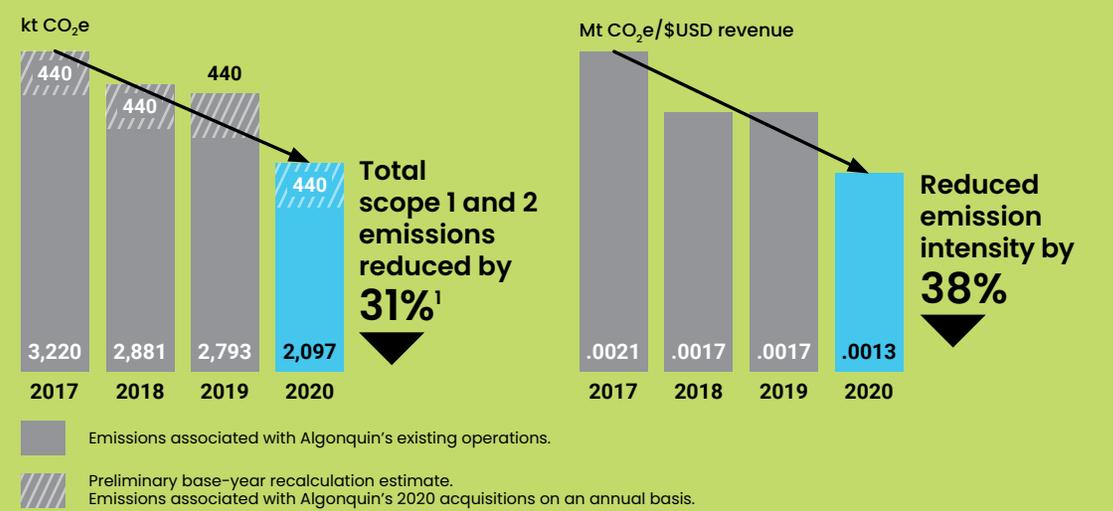




Net-zero by 2050: Transitioning to a low-carbon economy and managing our emissions

The pace at which the world is taking action to fight climate change is accelerating, and power and utilities companies are increasingly taking responsibility to play their part in the transition to a low-carbon energy future. Utilities of the future are advancing clean energy and new technologies for the benefit of us all, and we are actively engaged in seizing the opportunities presented by this important transition. Through our track record in renewables development and emission reduction, and our goal of net-zero by 2050, we strive to be amongst industry leaders on sustainability matters. We are committed to progressing toward an economy that is driven by low-carbon power sources with minimal or neutral output of GHG emissions into the atmosphere. Where possible, we work to manage, measure, and reduce emissions from our operations and activities and minimize our environmental impacts.

Emissions reduction track record



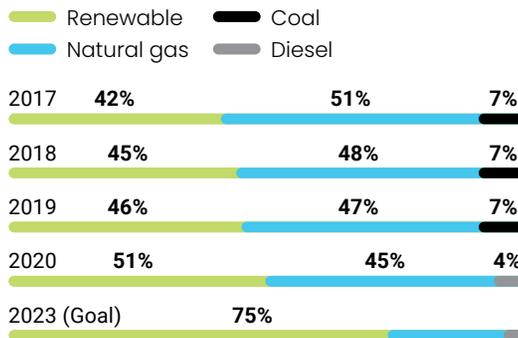
¹ Calculation includes preliminary base-year emissions estimates for ESSAL (Chile) and Ascendant (Bermuda), each acquired in 2020. These annualized estimates are based on actual emissions data for these entities during the 2020 post-acquisition period. Formal base-year recalculations for ESSAL and Ascendant are expected to be performed in connection with Algonquin's 2021 calendar year ESG disclosure.



Stewards of infrastructure and the environment

We recognize the important role that we play in the pathway to decarbonize the world's energy resources. We believe that our expertise in utilities asset management, combined with our history of excellence in renewables development, positions us to continue leading by example as world-class stewards of infrastructure as the energy sector continues along its low-carbon transition. As Algonquin grows, through developments and acquisitions, we are well-equipped to play our part in the low-carbon transition while continuing to fulfill our obligation to provide safe, reliable, affordable, and sustainable energy and water.

Generating portfolio mix



Striving for 100% renewable and zero carbon in California

Our California electric utilities provide electric distribution service to the Lake Tahoe basin and surrounding areas. The service territory, centered on a highly popular tourist destination, has a customer base spread throughout Alpine, El Dorado, Mono, Nevada, Placer, Plumas, and Sierra counties in northeastern California. This area's connection base serves approximately 50,000 customers, consisting of primarily residential connections along with commercial connections centered around tourism sites and ski resorts, hotels, hospitals, schools, and grocery stores.

Algonquin's service agreement with neighboring utility NV Energy, in combination with our Luning and Turquoise solar facilities, enables us to support California's Renewables Portfolio Standard requirement as we provide clean energy to our customers. This agreement also lowers fixed rates for our customers within the region, while providing us with future opportunities to increase our renewable generation capacity.



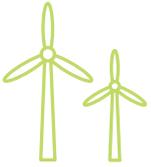
Did you know?

Our Luning and Turquoise solar facilities in Nevada provide nearly all of the daytime load for our California utility.



Green bond financing

In 2020, we completed our second "green" financing, the first for our regulated business. Liberty Utilities Finance GPI, the financing entity for Liberty Utilities Co., issued \$600 million bond of "green" senior unsecured notes in September 2020, with proceeds used to partially fund the 600 MW Midwest Wind Development Project. This was an inaugural offering by Liberty Utilities Finance GPI into the U.S. 144a market and investors were very receptive of the offering. Additionally, in 2020, we updated our Green Financing Framework to expand the Algonquin entities under the framework, the types of securities we can issue, and permissible uses of proceeds.



Greening the Midwest

In 2017, our Regulated Services Group filed an application with the Missouri Public Service Commission for an investment in strategically located wind energy generation. The approval of the new wind development led to the subsequent retirement of our Asbury legacy coal plant almost 15 years ahead of schedule. In March 2020, the Asbury coal facility was closed, and 600 MW of new wind generation began construction with commercial operation achieved in the first half of 2021.

The early retirement of the Asbury plant has led to the reduction of more than 1 million metric tonnes of CO₂e and contributed significantly to a 31%¹ reduction in GHG emissions from the Company's 2017 base year and a 38% reduction in our emissions intensity.

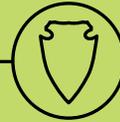
Unique achievements with Midwest wind

The North Fork Ridge Wind site began commercial operations in December 2020, and Neosho Ridge Wind and Kings Point began commercial operations in the first half of 2021. Collectively, the new wind development has already seen many unique achievements!

Lease options for 50,000 acres, representing more than 120 landowners



Collaboration with the U.S. Army Corp of Engineers and the Osage Nation, clearing the way for construction while protecting habitats and the cultural heritage of the Osage Nation



Jobs for as many as 750 people during construction across the three projects, plus managing the impact of COVID-19 on that workforce



Five main erection cranes installing some of the tallest turbines in the country at a blade tip height of 594 feet – that's taller than the Statue of Liberty!

Retired Asbury coal plant while retraining and transitioning many Asbury employees to wind energy jobs



Over 30 ships and countless trains delivering equipment and components from across the world to the three project sites



As part of our mitigation efforts, ongoing management of our own bat cave, home to some 13,000 gray bats, is helping to enable the recovery of this threatened species



As of December 31, 2020, this investment represented approximately 10% of our corporate asset portfolio



¹ Calculation includes preliminary base-year emissions estimates for ESSAL (Chile) and Ascendant (Bermuda), each acquired in 2020. These annualized estimates are based on actual emissions data for these entities during the 2020 post-acquisition period. Formal base-year recalculations for ESSAL and Ascendant are expected to be performed in connection with Algonquin's 2021 calendar year ESG disclosure.



Did you know?

In 2020, Algonquin had one of the lowest emission intensities compared to a representative peer group.



Learn more about our bat cave on pg. 48.



Rapid expansion of renewables

It's commonly said that the most significant growth happens during times of greatest challenge and pressure. We certainly lived that adage in 2020 by continuing our rapid expansion during a year of immense and unexpected change. In fact, 2020 marked the Company's largest construction program in our history, with approximately 1,600 MW of renewable energy projects under construction – enough to power more than 500,000 homes.

We believe that renewable energy is an integral part of decarbonizing the energy sector. In addition to working towards greening our own fleet, we also continue to collaborate with our commercial and industrial customers in order to help meet their renewables ambitions. For decades now, we have been doing our part to build renewable energy across North America and globally, and we look forward to continuously increasing this capacity in years to come.

Great Bay II Solar

In August 2020, the 43 MW Great Bay II Solar Facility, located in Somerset County, Maryland achieved commercial operation.

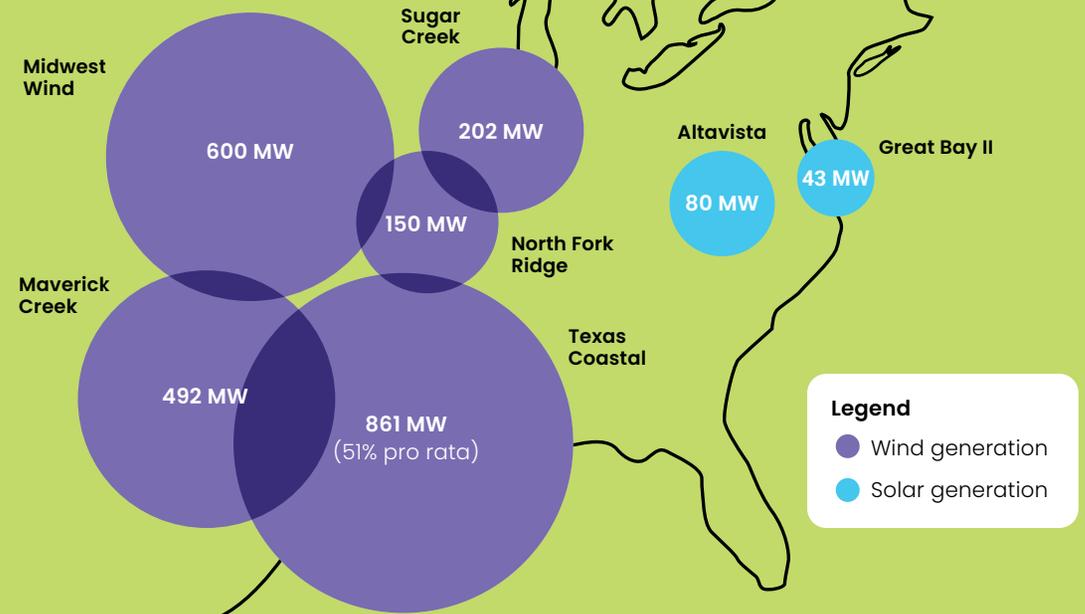
Altavista Solar

The 80 MW Solar Facility located in Campbell County, Virginia, placed in service 22 MW in October 2020 and another 31 MW in December 2020 for a total of 53 MW in 2020. The project achieved full commercial operation on June 2021.

Sugar Creek Wind

In November 2020, the 202 MW Sugar Creek Wind Facility, located in Logan County, Illinois, achieved commercial operation.

2020 – 2021 completed and acquired renewable energy facilities



North Fork Ridge Wind

In December 2020, the 150 MW North Fork Ridge Wind Facility in Missouri (part of the Midwest Wind Development Project) achieved COD.

Maverick Creek Wind

In December 2020, our Renewable Energy Group completed commissioning on 111 of the 127 total turbines at its 492 MW Maverick Creek Wind Facility, located in Concho County, Texas. The wind facility is expected to generate approximately 1920 GWh of energy per year – with the majority of output being sold through two long-term power purchase agreements with investment grade rated entities.

Texas Coastal Wind Facilities¹

Our Renewable Energy Group has acquired a 51% interest in a portfolio of four wind facilities (Stella, Cranell, East Raymond, and West Raymond) from RWE Renewables, a subsidiary of RWE AG. The wind facilities, located in the coastal region of south Texas, have an aggregate capacity of 861 MW.

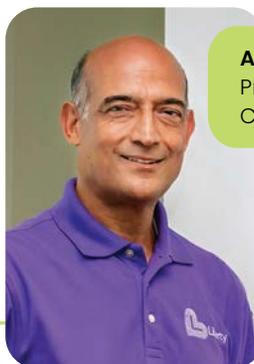
¹ Under current operational control approach, the South Texas wind facilities are not included in data calculations relating to our 2023 ESG goals as we do not operate the assets.



Chevron partnership

Algonquin is committed to working with our customers across all commercial and industrial sectors to further their decarbonization ambitions, while leveraging our experience in deploying renewable energy projects. In July of 2020, Algonquin and Chevron announced an agreement seeking to co-develop renewable power projects that will provide electricity to strategic assets across Chevron's global portfolio. Under the four-year agreement, Chevron plans to generate more than 500 MW of its existing and future electricity demand from renewable sources. The agreement advances Chevron's stated commitment to lower its carbon footprint by investing in renewable power solutions that are reliable, scalable, cost efficient, and directly support its core business. Through this partnership, we are working to build a better common future by developing affordable, reliable, and ever cleaner energy.

Initial renewable power projects are expected to be sited on or near Chevron lands, and construction is planned to start in 2021. The projects will be focused on powering Chevron's operations in the U.S. Permian Basin (TX and NM), and certain areas outside of North America. Projects will be jointly owned and codeveloped by both parties. Algonquin is expected to lead the design, development, construction, and operations of the projects. Chevron will purchase electricity from the jointly owned projects through power purchase agreements.



Arun Banskota
President and
Chief Executive Officer

"This partnership leverages Algonquin's technical and operational expertise in renewable power with Chevron's scale, land, and local knowledge to enable faster, more cost-effective cleaner energy solutions. Continuing to invest in renewable energy solutions is fundamental to our business strategy. By working with sustainability champions like Chevron, we maximize the positive impact of the low-carbon technologies we offer to communities across the U.S. and Canada, and internationally."



Growing our regulated footprint

In 2020, we successfully closed on our first two international utility acquisitions: Empresa de Servicios Sanitarios de Los Lagos (ESSAL) in Chile and Ascendant Group Limited (Ascendant) in Bermuda. The acquisition of Ascendant opened the door for us to explore the possibility of bringing our renewable energy expertise to its operations in Bermuda.

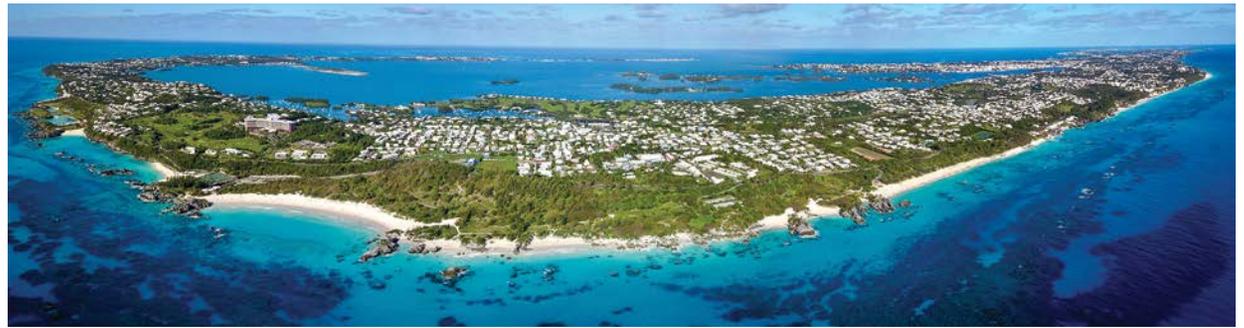
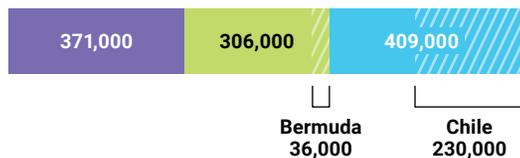
One million customer connections achieved in 2020

Gas Electricity Water and wastewater

2019 total:
804,000 customer connections



2020 total:
1,086,000 customer connections



Welcoming Bermuda to our journey

We announced the acquisition of Ascendant in June of 2019, and after receiving regulatory approvals in Bermuda, we closed the transaction in November of 2020. Ascendant is the parent company of several companies and brands, the largest of which is Bermuda Electric Light Company Limited (BELCO), the sole electrical energy utility on the island. We're thrilled to welcome over 300 Ascendant employees to the Algonquin family, and excited to work with them in achieving the island's sustainability goals. Our regional business in Bermuda is following the example of other Algonquin business units by making sustainability a key focus, and aligning its ESG efforts with our enterprise-wide strategies and targets.

The island of Bermuda is home to approximately 64,000 people who all depend on our regulated entity, BELCO, to power their homes and businesses. This Earth Day, BELCO publicly announced its commitment to sustainability, sharing an open letter with customers, social media followers, and the media. Environmentally, BELCO is committed to reducing dependence on fossil fuels and has a target to

move to 100% renewable energy in an initiative named B-100. As the current Integrated Resource Plan (IRP) supports offshore wind from the perspectives of customer savings and reliability, offshore wind is being closely evaluated as a renewable energy solution for powering Bermuda.

In preparation for B-100, BELCO has actively been modernizing its grid, which is currently limited in its capacity to support large scale renewable generation. Working closely with the Bermuda government's Department of Works and Engineering, new transmission cables are being installed in multi-service duct banks that will eliminate the need to dig up the roads for cable replacement in the foreseeable future. While installation of Advanced Metering Infrastructure (AMI) has been delayed due to COVID-19 restrictions in Bermuda, we still expect it to be completely rolled out by summer 2022. AMI will enable the local service teams to see outages immediately and will help ensure accurate billing, which is expected to lead to a better customer experience and greater system resilience.





Award-winning electric vehicle (EV) project in Lake Tahoe

We have partnered with Lake Tahoe Community College to develop a new Mobility Hub, an EV bus project as a part of our broader transportation electrification program. This unique project received the 2020 Tallac Achievement Award for its role in revitalizing and enhancing the economy and community of South Lake Tahoe. Our Regulated Services Group provided the make-ready infrastructure for the electric bus. For this project's second phase, we aim to provide the infrastructure and EV charging stations for two DC fast chargers and two dual-part Level-2 stations available for public charging in 2021. We are proud of our local collaborations and achievements and look forward to continuing to support our community in South Lake Tahoe.

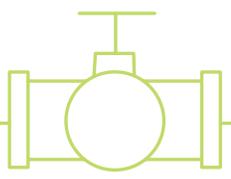


New Brunswick biogas pilot

Across the organization, we are exploring ways to responsibly decarbonize our energy portfolio and the services we deliver to our customers. In New Brunswick, we are exploring a partnership with a local municipal solid waste facility that is currently producing biogas on site. With this partnership, we intend to purify the biogas that is already being extracted from the ground into RNG using an RNG upgrading skid. Once the biogas has been upgraded to RNG, we intend to distribute the molecules into our local gas distribution system, offering our customers a carbon-neutral alternative that reduces the need for conventional natural gas.

Since its inception in 2019, we have made meaningful advancements on this project. In 2020, we engaged with an external engineering consultant to produce the preliminary design of the RNG upgrading skid and to evaluate the RNG production potential of the project. In addition to the technical work, we worked closely with local governments to progress legislation changes allowing us to distribute green molecules in our distribution system.

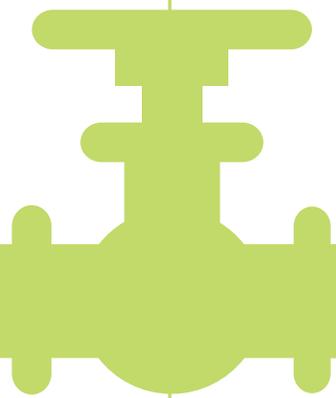
We are proud of the progress that we made on this front in 2020 and look forward to continuing our push towards offering renewable alternatives to our customers in the years to come.



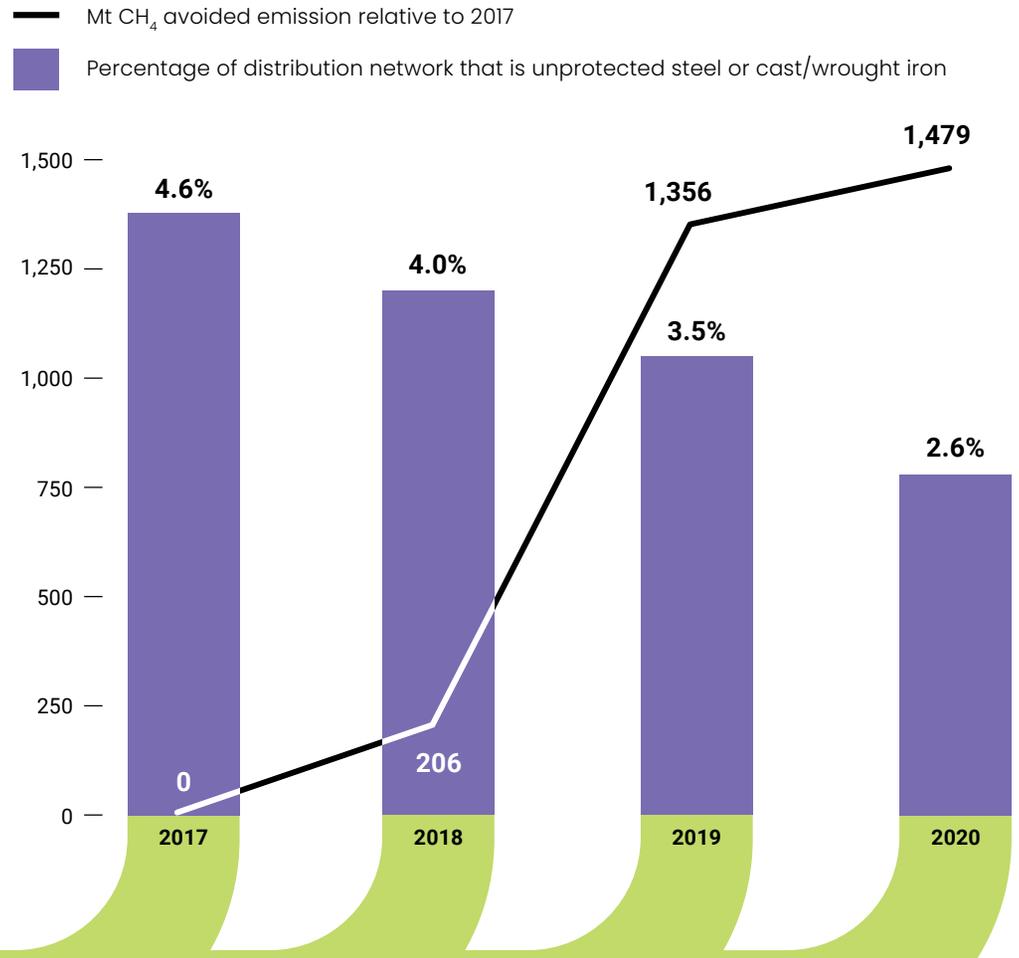
Surpassing the EPA's Methane Challenge

Our robust gas pipe replacement program has been making great progress for the last several years while balancing the impact on customers with regulatory support. Under the Environmental Protection Agency's (EPA) *Methane Challenge*, we have committed to a pipe replacement rate of at least 6.5% annually. However, we are proud to say that we consistently exceeded that goal period from 2017 to 2020. We are replacing cast iron and unprotected steel mains with plastic mains in our operating states of Massachusetts, New Hampshire, and Illinois.

In anticipation of more stringent operational requirements due to the evolving climate initiatives with federal and local governments, as well as enhanced regulatory support, our 2021 capital allocation plan includes \$70 million of capital investment in continued pipe replacement.



Methane emissions avoided through infrastructure upgrades



Did you know?
Methane is one of the most potent greenhouse gases – about 28 times stronger than carbon dioxide.





Climate resiliency and energy efficiency

Part of our commitment in being stewards of the environment is investing in our operational infrastructure, assets, and internal systems to proactively adapt to climate change. In 2020, we engaged in a variety of activities to further our understanding of climate-related risks and opportunities and strategize how to enhance our climate resiliency in our own processes and operations. Our approach to environmental stewardship is founded on efficiently managing our energy consumption while promoting energy reliability and affordability for our customers.

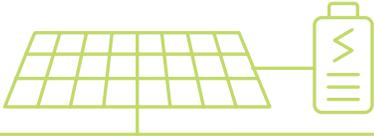


Climate scenario analyses

To analyze the resilience of our current strategy to climate-related transition and physical risks and opportunities, we conducted climate-related scenario analyses in early 2020. We engaged expert external consultants to lead internal stakeholders from across our business (including members of the management team) through three scenario-analysis workshops. During the workshops, we considered scenarios covering different policy and technology outcomes, and those covering the projected physical impacts resulting from political and societal inaction on climate change. The scenarios demonstrated the inverse relationship between the extent of transition-related actions in the short run, and the projected climate-related physical impacts felt in the long run.



Through the scenario analysis activities and resulting TCFD-aligned *Climate Change Assessment* report, we learned that we are well positioned to capitalize on transitions described in the selected mid- and low-carbon scenarios due to our renewable energy generation base, strong institutional knowledge, and ability to expand or adjust service offerings as needed over time. We are also positioned to take measures to harden infrastructure and increase resilience in the selected higher carbon scenario that has greater climate change impacts.



Award-winning microgrid

The Sagehen Microgrid project at the UC Berkeley Sagehen Creek Field Station is located in our Lake Tahoe, California service region. This unique project is focused on building climate change resilience, particularly against wildfires, while enhancing system resiliency. The project has 48 solar panels and 53 kWh of battery storage with a backup propane generator. The completed system is expected to operate on more than 95% renewable energy, reduce wildfire risk to the region, and provide power generation and balance to the system. The project has been awarded a Centre of Excellence Recognition of Industry Innovation award by the Canadian Electricity Association.



Increasing efficiency with community solar

Construction is underway at our Prosperity community solar facility. When complete, the facility will generate approximately 2.25 MW of electricity and our electric customers in Missouri will have the opportunity to subscribe to clean, renewable energy in 2021. But this project is more than just about clean solar energy. The solar facility is being built on 60 acres in Prosperity, Missouri, on reclaimed mining land. This land is a part of the Superfund site that the EPA, the state of Missouri, and the local community are working to develop and make useful again. Our solar facility offers customers new opportunities to reduce their energy costs while making productive use of local land.



Resilient asset management

In 2020, our Renewable Energy Group recognized the need to adopt an Enterprise Asset Management Framework and governance including new policies. The first of several new *Asset Management Governance Policies* was a new *Physical Asset Management (PAM) Policy* put in practice in 2020. This policy is intended to align our business with leading asset management philosophy and principles, and to govern our asset management activities in support of our strategic initiatives. The policy confirms and communicates our commitment to physical asset management and its importance in achieving our operational objectives, provides a framework that will enable us to implement plans, define goals, and work collaboratively towards continued growth, operational excellence, and sustainability in our approach to physical asset management, and leverages internal and leading industry practices to provide a consistent, systematic, and repeatable approach to managing our physical assets throughout their lifecycle, while improving strategic decision-making, accountability and transparency.

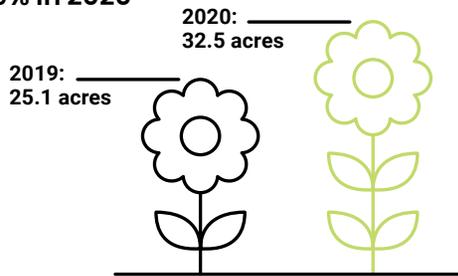
The guiding principles discussed in the policy identify more specific documentation which is already being implemented with the recent implementation of a new Strategic Asset Management Plan (SAMP) and *Capital Planning Policy* while work continues on the development of a new maintenance strategy to be implemented later in 2021.



Land use and biodiversity

We strive to manage our operations in ways that are mindful of impacts on natural resources and wildlife. Given the broad geographical footprint of our operations, we seek to employ innovative solutions to protect our surrounding wildlife while ensuring that we can minimize our impact to the environment while providing resilient and reliable services to our customers.

Total area of land that Algonquin uses for pollinators increased by 29% in 2020



What's all the buzz?

Pollinators across the country are in trouble, with honeybees and monarch butterfly populations experiencing some of the most drastic declines in the past 20 years. Utilities are uniquely positioned to boost the health of pollinators through tracts of largely undeveloped land, including transmission line rights-of-way (ROW). In 2018, Liberty began implementing pollinator protection projects as part of its corporate social responsibility efforts.

Our customers can also help the health of bees, butterflies, birds, bats, and other pollinators by increasing the number of pollinator-friendly gardens and landscapes in their community.





Tree Growth Regulators (TGR)

Algonquin's Vegetation Management department also uses TGRs on selected trees in order to reduce the frequency of trimming away from our power lines. We apply the TGR into the soil at the tree's base, which is then absorbed by the tree throughout the growing season. This specially designed compound limits growth in the crown of the tree while maintaining a stable and balanced tree.

TGRs have no adverse effect on critical processes that naturally occur in trees, and treated trees require no special care. TGRs have met the rigorous standards set by the EPA and they pose minimal effects to humans, animals, or the environment. Plus, TGRs do not accumulate in fruit or nuts, so there is not a risk to wildlife.

The use of TGR is a service we provide as part of normal maintenance and at no charge to the property owner.

In the wire zone

Our regulated services group has a Vegetation Management program intended to keep our system safely and reliably delivering electricity to our customers. The Vegetation Management Department is assigned the task of managing the vegetation on nearly 7,000 miles of power lines.

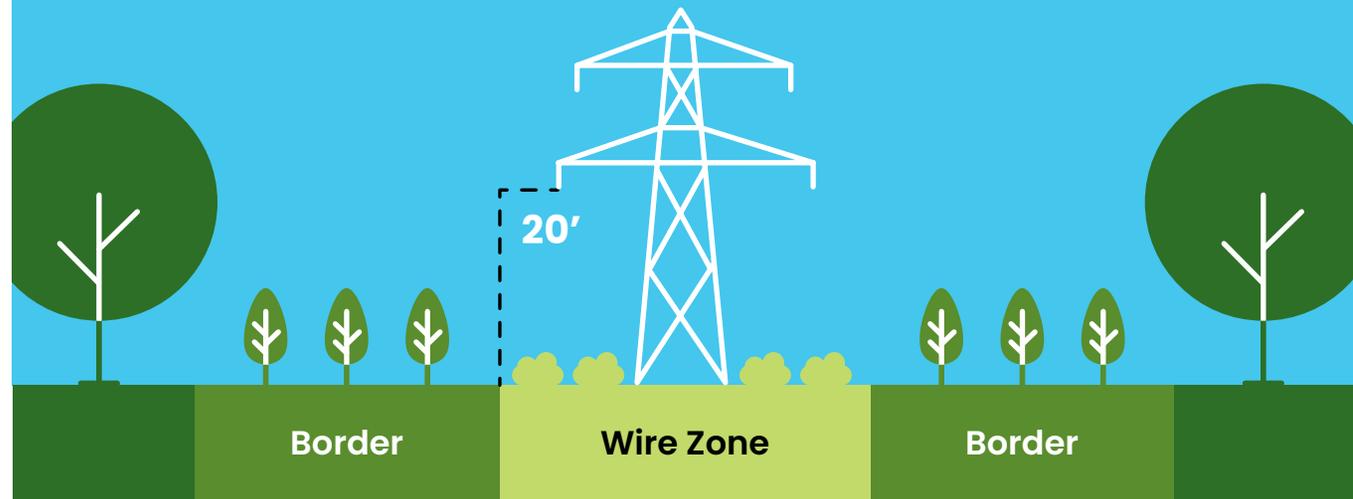
Wires Over Wildlife (WOW)

Algonquin has also implemented its WOW program that educates right of way (ROW) landowners about beneficial plants that perform well in the wire zone and near a transmission ROW. This program allows landowners to learn about planting options for ROWs so that there is a win-win for not only the transmission infrastructure, but also for nature and local wildlife. Through the planting of carefully selected native plant species in the ROW, it is possible to help prevent power outages while promoting habitats for wildlife such as deer, pollinators, native birds, and many other native species.

Transmission right of ways (TOW)

To control vegetation growth underneath and on both sides of a transmission structure, Algonquin often utilizes a zoned approach. The zone directly underneath and 20 feet beyond the wires is called the wire zone. Algonquin encourages growth of native grasses and other low-lying plant species. The zones on either side of the transmission structure are called the border zones, where scattered shrubs and dwarf trees are allowed. Beyond the border zone, plants of any height are managed by the hazards they may present to the lines.

Wire Zone – Border Zone method





Check out our Osprey nest live stream!

In early 2015, Algonquin moved an osprey nest from one of our transmission towers to this newly built nesting box. The pair had a nest burn in the previous summer after coming in contact with an energized electric line. The fire also did damage to the transmission tower and line, interrupting electric service. This new home for the pair of osprey is meant to be a safe nesting alternative while also increasing service reliability for our customers.



Buffalo Quarry: protecting endangered bat habitat

In 2019, we acquired ownership of Buffalo Quarry – an abandoned limestone quarry that had been widely known as the site of a Priority 1 Maternity Colony for the endangered gray bat (*Myotis grisescens*) species. Annually, a large population of gray bats occupies the maternity colony in Buffalo Quarry, doubling in size each year before the fall migration. During this season, the cloud of bats emerging from this site is large enough to register on a Doppler radar. Although the quarry itself provides the perfect balance for a gray bat summer maternity site, the surrounding areas are overwhelmed with trash and debris that have accumulated over time. As there are currently no Conservation Banks available for gray bats, the U.S. Fish and Wildlife Services (USFWS) and Missouri Department of Conservation (MDC) identified this site as a mitigation opportunity, and Algonquin responded by acquiring the site with the intention of protecting the endangered gray bat colony.

Our plans to restore and enhance this site began with a Liberty Volunteering Day in October 2020, where our employees came together along with local partners to remove 2.72 tonnes of trash and debris. Our Vegetation Management team has also been exploring opportunities to replace noxious plant species with local pollinator-friendly vegetation, and we are working to develop a Habitat Mitigation Plan in coordination with the USFWS and MDC.



Did you know?

Bats play a key role in ecosystems by controlling insect populations and acting as pollinators.



The Buffalo Quarry site offers a unique ecosystem supporting the health and future of the endangered gray bat population in Southwest Missouri. We plan to work with USFWS and MDC to offer the unique habitat for study opportunities with local stakeholders and explore the best way to promote public engagement in a safe manner.



Waste and materials management

We are committed to preventing and reducing hazardous and non-hazardous waste generated across our operations via reuse and recycling of materials to reduce negative impacts on our natural environment.

Waste and recycling diverted from landfill in 2020



233,042 tonnes
of waste diverted



100,582 tonnes of waste
directed to landfill



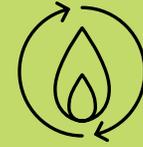
Office waste recycling: battery initiative

We have recently conducted a baseline inventory of our current waste management practices within our offices and facilities. One of the areas for improvement identified from this inventory has centered on the handling of mixed office-type batteries. In order to improve our waste management processes, we began developing a program in 2020 for proper recycling of mixed batteries and cellphones. This initiative is expected to recycle an estimated 200 pounds of waste annually, containing materials that are recoverable and reusable in new products and resulting in a slight reduction of our GHG emissions.



Waste management for distribution asset upgrades

Construction waste associated with distribution asset upgrades for our water, electric, and gas distribution utilities is often refurbished and reused. We plan to conduct a gap analysis to determine and confirm utility construction waste practices and quantify the on- and off-site volumes associated with generation and diversion. From this analysis, we will be able to better determine our material waste streams and establish appropriate waste diversion targets.



Biomass for vegetation management

The Vegetation Management group based out of our Tahoe location is working to increase efforts focused on removal and utilization of biomass generated from our line clearance and hazard tree removal work. To date, we have removed over 100 tonnes of biomass that previously would have been left on customers' property or the forest floor of public lands. We have more projects happening right now and that number should start quickly rising as we work towards our goal of 2,100 tonnes removed in 2021. The locations we haul to recycle 100% of the vegetation waste in various ways. End use of the material includes: wood chips, compost, firewood, and fuel for cogeneration facilities.



Did you know?

Algonquin sent 60,000 loads of vegetation waste to biomass facilities in 2020.



Used tire collection leads to environmental benefits

Every spring since 2009, our Regulated Services Group offers a free tire collection and recycling event for our customers in the Joplin, Missouri service area. Along with the City of Joplin, Algonquin employees work to remove tires from customers' vehicles and load them into trailers to be hauled by truck to a processing facility near Kansas City, where they are chipped into small pieces to create tire-derived fuel (TDF).

The use of TDF reduces the environmental hazards associated with improper disposal of used tires. Utilities are able to use TDF because their power plants provide a controlled atmosphere, which includes environmental controls and continuous emissions monitoring to protect the environment.

On average, more than 2,000 tires are donated annually at the event. Since 2012, more than 42,000 tires have been diverted from landfills.



Benefits of using tire-derived fuel



Saves landfill space and removes tires from the environment, reducing need for tire landfills



Reduces the amount of illegal tire dumping



Reduces mosquito populations, mosquito-breeding habitat, and the West Nile Virus



Preserves our natural resources by replacing coal and other fossil fuels



Did you know?

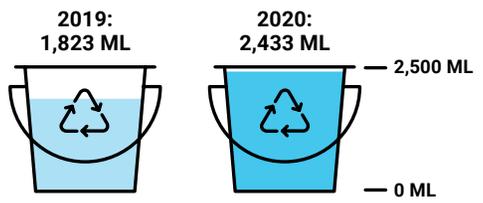
On average, one scrap tire per year is generated for each person in the United States.



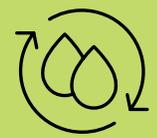
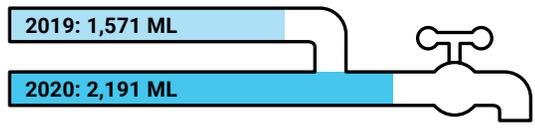
Water management

As we advance our purpose of *sustaining energy and water for life*, we will seek to reduce negative impacts on freshwater and groundwater sources through conservation, sustainable operations, reuse of wastewater, and sustainable water resource management across our operations.

Total water recharged



Total recycled water delivered

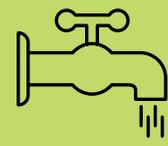


Water for all

We are all responsible for water's socially and environmentally conscious stewardship. Climate change continues to impact the availability of easily usable water and at Algonquin, we are committed to providing reliable and sustainable access to fresh water for all of our water customers. With the power generation sector being responsible for significant withdrawals of water, we realize how important it is to be a part of the solution for everyone. That's why we are incorporating green technology and reclaimed water into our everyday business practices. The adoption of clean technologies and environmentally sound practices helps us to be a leader in efficiency, reduces stress on our environment, protects our water resources, and helps ensure our water will be around for years to come. From leak detection in our systems to renewable

energy, Algonquin is creating environmentally responsible, low-impact services for our customers and the environment.

We are providing our customers with knowledge and tools to be water wise. Smart water use means using less water while achieving the same or better results. We encourage smart water use by providing customers with information and tools to make informed decisions about how to use water. Together, through proactive system maintenance and adopting energy and water efficient technologies and best management practices, we are able to improve service reliability today, while protecting our precious resources for tomorrow. Through sustainable planning, we are all able to reduce our environmental footprint and sustain our resources for future generations.



School water audit with Arizona Project WET

Algonquin's Regulated Services Group partnered with Arizona Project WET (APW) and Western Sky Middle School to conduct a school water audit to install new aerators to conserve water in January 2020. The School Water Audit Program APW offers is a student-driven inquiry where students install aerators and calculate the amount of water saved from the installation. Mrs. Renbarger's sixth grade class, APW, and Algonquin volunteers changed 83 aerators throughout the school, saving 8,605,339 liters per year!



Beginning our journey in Chile

In September of 2020, we announced our intention to acquire Empresa de Servicios Sanitarios de Los Lagos S.A. (ESSAL), a water and wastewater provider with approximately 230,000 customer connections in Southern Chile. Following closing of the acquisition and related transactions, Algonquin owns a majority interest in ESSAL, and has proudly welcomed more than 400 ESSAL employees to the Algonquin family. The acquisition of our first international water utility demonstrates our ability to enter new target markets, while also establishing a base in a supportive and growing economic region to pursue potential future water, clean energy, and utility opportunities.

At Algonquin, we are committed to a successful and seamless transition, under which ESSAL's customers will continue to receive safe, reliable, and cost-effective service. We also support ESSAL's commitment to community involvement. The ESSAL team works closely with their communities by providing environmental education about Chile's water resources, which includes visits to production and sanitation plants, and speaking with local students. In addition, it provides permanent support to sports, cultural, and social initiatives in the territories where it operates, with a goal of being known as a good corporate citizen focused on developing local communities. There is a great deal of knowledge and expertise to share between our companies, and we are excited that our journey together has begun.



Arun Banskota
President and
Chief Executive Officer

"As Algonquin's first international water utility, ESSAL should benefit from our core competency of responsible utility ownership, as well as leverage our company values of safety, operational excellence, and innovation. We are excited with this opportunity to serve the water needs of our Chilean customers."





Social



In this section

Featured ESG issues



Public health and safety



Diversity, equity, and inclusion



Energy reliability



Indigenous relations



Customer experience and affordability



Infrastructure investment and resiliency



Talent attraction and retention



Community support and economic development



Employee health and safety

Performance goals



Exceed 30% women in leadership roles



Achieve top-quartile customer service



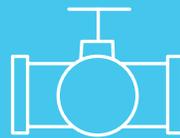
Achieve top-quartile employee engagement

Alignment to UN SDGs



Public health and safety

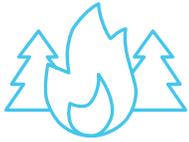
Public health and safety has always been a top priority for Algonquin, and this prioritization was amplified during 2020 as the COVID-19 pandemic worsened. Regardless of external factors, we strive to manage our assets and operations in a manner that safeguards the health, safety, and well-being of all stakeholders in the communities where we operate.



Gas main replacement

In 2020, we continued the replacement of gas “mains” throughout our East region. Aging steel and cast-iron pipes are more susceptible to corrosion and breakage, and therefore leakage, caused by weather events such as frost, flooding, and ground erosion. As a result, we are replacing certain sections of our steel and cast-iron gas pipes with polyethylene pipes, a flexible and durable plastic alternative. As part of the safety upgrade, we are also moving many old gas services and meter sets located within our customers’ buildings to safer exterior locations.

This provides our gas technicians with easier access to meter sets in the event of an emergency and better aligns with local, state, and federal safety guidelines and requirements. This initiative reduces the risk of gas leaks and fugitive methane emissions, thereby improving health and safety in our communities while reducing our scope 2 emissions. We are pleased to announce that replacements are complete in our Georgia territories, and current initiatives are in place for accelerated replacement in other locations across the East region.



Wildfire mitigation

Due to the dense vegetation and dry brush found across our operations in California, we have had to take actions to mitigate the risk of wildfires impacting the communities we serve. Our Wildfire Mitigation Plan is based on three pillars to guide us in keeping our communities safe, specifically surrounding forested areas that have been designated as elevated and extreme fire risk areas. The first pillar is vegetation management, which aims to eliminate combustible fuel under and around power lines. The second pillar is infrastructure hardening, which pertains to the upgrade and/or replacement of infrastructure that could potentially cause a spark or ignition. The third – usually used as a last resort – is the Public Safety Power Shutoff, which is implemented when weather conditions become an extreme fire risk and shutting power off to some or all of the electrical grid is deemed a necessary precaution to prevent a fire.



Did you know?

Climate change is resulting in an increase in the frequency and duration of wildfires.



Vegetation management

We have teams deployed year-round in our vulnerable regions to inspect trees and vegetation in the vicinity of power lines. Our arborists are readily available to inspect a vegetation powerline-related issue for customers who believe there may be a hazard to the nearby electrical infrastructure.



Public safety power shutoff

Our last resort is to execute a Public Safety Power Shutoff (PSPS). This is a safety procedure utilized within the electric utility industry to proactively turn off power when and where conditions present an increased wildfire risk. The practice of de-energization, which is becoming more and more frequent, is supported by the California Public Utilities Commission (CPUC) as a safety best practice.



Energy reliability

As an essential service provider, it is integral to our operations to meet our customers' energy needs by mitigating the frequency and duration of our service disruptions.

Decreasing the frequency and duration of service interruptions provides improved reliability for our customers

SAIFI

System Average Interruption Frequency Index



SAIDI

System Average Interruption Duration Index



CAIDI

Customer Average Interruption Duration Index



Performance improvements

During 2020, we made solid improvements in reliability, including electric reliability, water leak rates, and the Operational Performance Index for our renewable generation fleet. The majority of our metrics for electric, gas, and water reliability met or outperformed our targets. Additionally, 2020 saw Algonquin achieve a record for annual investment in infrastructure with more than \$600 million spent to replace aging infrastructure as well as building additional capacity (for example new wells, facilities, and substations) to make our systems more reliable for our customers.



Approximately 3,000 wildlife guards have been installed to protect against animal related outages.



Wildlife cover-up project

Algonquin's innovation team developed our Wildlife Cover-up Project to install wildlife protection devices on existing pole transformers and pole risers, and ultimately improve reliability for our customers. The protective wildlife covers are designed to keep animals like squirrels and birds from coming into contact with transformers on power poles. The goal? To prevent harm to wildlife caused by contact with our electrical equipment and reduce the number of outages caused by wildlife interaction.

Our system reliability team aided in the analysis of outage data to determine locations where animal-caused outages are high. Using smart maps, the group carried out meaningful work that is expected to improve our customers' experience. The initiative initially began in the Ozark area, but will continue through the rest of the system throughout 2021.



Did you know?

Wildlife is the second leading cause of electric outages, after weather.



Customer experience and affordability

Customers are the heart and soul of our business's longevity; we strive to deliver safe, secure, reliable, cost-effective, and sustainable energy and water solutions that meet or exceed the needs and preferences of our customers wherever possible.

End-use customer savings from efficiency measures



Electricity:
19,042 MWh



Gas:
195,890 MMBtu



Water:
75,213 m³



Top-quartile customer service

We measure our customer satisfaction (CSAT) using the *J.D. Power Customer Satisfaction Survey*, and are happy to share that our CSAT score increased by 21 points from 2019 to 2020. This demonstrates solid progress towards achieving top-quartile customer satisfaction as one of our nine ESG Goals.

We recognize how important service reliability is to our customers, and have worked hard to implement improvements on this front, resulting in outperforming our electric, gas, and water reliability goals.



J.D. Power Customer Satisfaction Score increased 21 points from 2019 to 2020.





Customer First

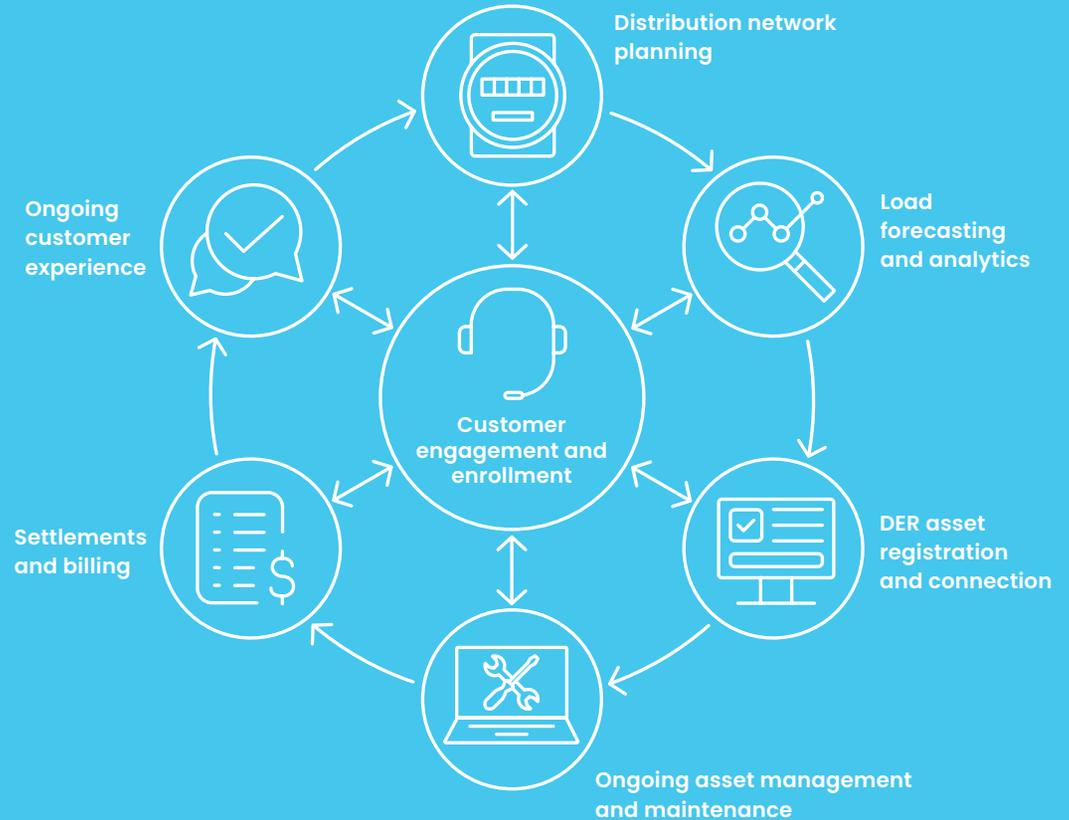
Algonquin’s Customer First program — a series of six projects — puts customers at the heart of everything we do. Our goal is to provide our employees with the tools and capabilities needed to deliver the exceptional experience our customers deserve, whether it’s providing sustainable energy solutions or effortless customer interactions.

Resiliency and agility have been the driving forces behind the launch of our Customer First projects. The launch and continued rollout of our Advanced Metering Infrastructure (AMI) project has resulted in the installation of over 170,000 smart meters across the region. We also launched Employee Central, Ariba (our Procure-to-Pay solution), and Kubra EZPay as part of our eCustomer project — a new integrated payment system for our customers to utilize when making one-time payments online or over the phone. This is a significant achievement that streamlines our billing processes for a more seamless customer experience.

We sincerely appreciate the dedication and agility demonstrated by our teams as we move forward to more Customer First rollouts, including the upcoming second release of Geographic Information System (GIS) for all of our water utilities, as well as GIS gas deployments across the enterprise. We will begin our GIS electric deployment, modernize our electric utilities’ outage management systems, and introduce the SAP Analytics Cloud Planning Tool to help standardize and integrate our financial planning and analysis processes used to evaluate, manage, and report on performance.

Customer First program intended to provide the tools for sustained improvements in customer engagement

We look forward to continuing the advancement of our Customer First program, and sincerely appreciate the dedication, agility, and resiliency demonstrated by our teams as we move forward on this journey together.





Talent attraction and retention

At Algonquin, we believe that fostering positive social change starts from within. This is why we are dedicated to attracting world-class talent and continuing their personal and professional growth so that they can bring their best selves to work and meaningfully advance our business purpose and strategy.

Employee turnover during 2020



2019: 9.68%



2020: 7.40%



Virtual hiring and onboarding

The most integral part of maintaining a high-performing workforce is attracting and retaining top-notch talent. We know that the competition for talent is real, and that an organization is only as good as its workforce. This understanding has been further solidified by the COVID-19 pandemic, during which the way we work has been significantly impacted.

During 2020, our Talent Acquisition team shifted to a completely virtual hiring process as a result of the pandemic. This transition brought with it some challenges, including the lack of face-to-face interaction and the "human aspect" of connecting with new candidates. However, we are proud to share that we successfully hired and virtually onboarded more than 400 new employees. In order to prioritize the safety and wellbeing of our new hires, we employed processes to deliver all necessary equipment (laptops, phones, etc.) to our employees' homes or remote working stations, so that they could avoid any potential exposure that would come with a trip to one of our offices.

With the ongoing impacts of the pandemic, remote work has become the norm across the globe. As an essential service provider, not all of our employees were able to perform their jobs remotely. We have immense respect and gratitude in their commitments to continue doing good work in the field. For those employees that were eligible for remote work, we adopted best practices to ensure that they had the support they needed to perform their jobs remotely and still feel connected to their colleagues. We held virtual town halls, lunchtime trivia events, snack and learn opportunities, and educational workshops to continue bringing our team members closer together. As we prepare for eventual re-entry into our offices, we are diligently working on establishing a formal *Work From Home Policy* which will provide our employees the flexibility and support they need in order to effectively reintegrate into a post-pandemic world.

Total employee hires during 2020



2019: 320



2020: 458



Employee health and safety

The health, safety, and well-being of our employees is of utmost importance to us. We are committed to creating and upholding a safety culture focused on the mental, emotional, and physical health of our employees and contractors.

2020 safety improvements

↓ Recordable Injuries rate decreased by **29%**

↓ **12%** Motor Vehicle Accident Reporting

↑ **108%** Safety Observations



Safety is more than just a metric

Metrics play an important role in achieving safety excellence at Algonquin. We recognize that in order to be an industry leader in safety, we need to know our historical performance, where we currently stand, and what we hope to achieve. Data and transparency are essential to capture our commitment to safety and to articulate the resiliency and sustainability of our business. In order to sustain safety excellence, we must focus on leading indicators – that is, proactive measures that track prevention efforts and can be observed and recorded prior to an injury taking place. By reporting Near Misses, Good Catches, and performing Safety Observations, we are able to use predictive analytics to determine where we are at the greatest risk for injury and ensure that we can mitigate that risk.

This commitment became more critical than ever in 2020, with the ongoing COVID-19 pandemic as well as a number of severe weather events impacting several of our locations. Not only did our teams keep our safety standards in place under these challenging conditions, in several instances, they exceeded previous performance metrics and achieved major safety milestones.

- Our Renewable Energy Group received the **2020 American Wind Energy Association (AWEA) Safety and Health Recognition Award**, making us one of just eight companies recognized for demonstrating safety as a core value and for actively advancing employee health and safety across the industry.
- We received the **National Safety Council Award** for the second time, based on our Central region's impressive track record of working three million hours without a Lost Time Incident.
- Our New Brunswick gas utility received the **2020 Canadian Gas Association's Safety Award for Excellence (SAFE)** to recognize our outstanding and deeply rooted dedication to safety.
- For the third year in a row, Algonquin was recognized by the American Gas Association for our employee safety performance and recordable injury rates. The **2020 Industry Leader Accident Prevention Award** recognized Algonquin for achieving a total Days Away, Restricted or Transferred (DART) incident rate below the industry average in the Medium Combination Utilities category.



Tim Deppmeyer
Senior Director,
EHS

"At Algonquin, one of the ways we embed safety into our day-to-day activities is through Safety Moments. Our teams begin their meetings by sharing a Safety Moment with their colleagues – a story about a personal near-miss, a friend who didn't take the proper precautions, or a proactive tip to keep in mind when navigating the office, the field, the season, or our personal lives. Starting a conversation with a Safety Moment is not just an agenda item – it is a representation of who we are and our commitment to help keep one another safe."



Diversity, equity, and inclusion

We recognize that having an inclusive workplace culture where everyone feels valued and heard will make Algonquin a stronger, more resilient organization. We also recognize that diverse teams deliver better business results, and are committed to promoting a culture of equity and inclusion, where employees receive fair and equitable treatment, diverse perspectives are celebrated, and all team members feel a sense of belonging. Our ongoing journey of diversity, equity, and inclusion (DE&I) is a reflection of this commitment, and we strive to continuously evolve our DE&I approach to reflect the inclusion of fresh perspectives as we grow our business. Though we recognize that there is still work to be done, we are proud of the progress we have made so far.



Building an inclusive workforce

In 2020, our Board was comprised of 33.3% women, in line with one of our [nine ESG Goals](#). Women also made up 37.5% of our executive team, 32.2% of leadership roles, and 32.8% of our total workforce. We are proud to share that our efforts to improve gender diversity within our company have enabled us to receive recognition in the *2020 Bloomberg Gender Equality Index*. We look forward to continuing our efforts to improve gender representation across our business.

Gender, however, is only one facet of diversity, and often the easier element to track and measure. Our objectives around diversity, equity, and inclusion are to widen our scope and consider how we can ensure that all employees – existing and prospective – are given equitable footing for opportunities. We encourage our employees to use our voluntary internal self-identification tool so we can better capture and track the diverse makeup of our workforce over time, and work towards building a more inclusive environment for all team members.

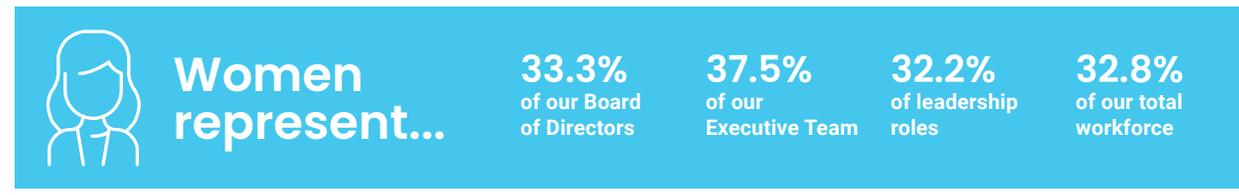


Training for a more inclusive future

As part of our ongoing efforts to build a more inclusive workplace, we have trained the majority of our senior leaders on addressing unconscious biases, and promoted awareness of how to effectively encourage and value diverse opinions and ideas across our business. Based on our *Workplace Civility Policy*, we also launched a mandatory e-learning program to educate our employees on how to cultivate a work environment free from discrimination and harassment. In the spirit of continuous learning, we have partnered with expert consultants to deliver virtual classroom-style DE&I workshops focused on identifying and addressing unconscious bias. These actions have enabled us to understand and value diverse perspectives and experiences, and we look forward to continue applying our learnings as our DE&I efforts evolve.



Did you know?
26.3% of positions related to science, technology, engineering, and math (STEM) at Algonquin are held by women





Diversity and Inclusion Council and employee BRGs

Established in 2018, our Diversity and Inclusion Council brings representatives from across our business together to lead our commitment to DE&I. The Council is mandated to provide informed leadership for cultural equity and to promote equal opportunity within the workplace. Led by our Chief Human Resources Officer, the D&I Council is building a strong foundation for Algonquin to develop and implement the appropriate programs to address DE&I issues across the business.

The D&I Council has supported the creation of three employee-led BRGs that work to promote continuous learning and create a safe space for diverse ideas and experiences to be shared and understood. Though our BRGs are recently formed, we are proud of our employees coming together to lead our DE&I efforts, and we look forward to seeing these initiatives grow and evolve to reflect our employees' needs.



Lean In

Our Lean In BRG was established with the mission to empower women to be their best selves, and to provide them with a supportive environment in which they can grow and be supported by their peers and allies. Lean In provides learning opportunities, hosts networking and educational events, and facilitates Lean In Circles as safe spaces where everyone feels comfortable to join in and discuss obstacles and opportunities for overcoming them. The COVID-19 pandemic has posed challenges to the longevity of our Lean In program, but we are proud of the progress

made in 2020. We have advanced partnerships between Lean In Circle leaders to implement virtual regional circles, and our existing Lean In Leaders, along with our executive sponsor, have joined to create the Algonquin Lean In Committee, which oversees Lean In activities and explores opportunities for further expansion and growth on this front. We currently have nine active Lean in Circles across our U.S. offices, and one at our head office in Canada.



Friends at Liberty

Our Friends at Liberty BRG operates to provide a comfortable, safe space for employees to connect while focusing on education and representation of the LGBTQIA+ community. In the spirit of intersectionality, we recognize that sexual orientation, gender identity, and gender expression can be influenced by various factors, including race, ethnicity, gender, culture, age, ability, status, class, and faith. This BRG aims to promote awareness and decrease prejudice against the LGBTQIA+ community through learning events, cultural celebrations, and networking opportunities.



Kirsten Olsen
Chief Human Resources Officer

“The journey towards a more equitable society is one we must all advance on together. Despite the challenges posed by the COVID-19 pandemic, it has been inspiring to see employees come together to do just that. Whether through engagement in our employee-led DE&I BRGs – including our newest EDGE BRG for ethnically diverse employees, facilitation of panel discussions on empowering marginalized employees, or participation in unconscious bias learning opportunities – our team members have shown dedication to fostering continuous learning and positive DE&I outcomes across our business.”



EDGE (Ethnically Diverse Group of Employees)

EDGE is the newest addition to our cohort of BRGs, with the mission to create and nurture an inclusive environment by providing a safe place of belonging, acceptance, empathy, and respect for our ethnically diverse employees, allies, and the disenfranchised.

2020 taught us a lot about systemic racism and social inequities faced by marginalized and racialized populations in North America and across the globe. In the face of ongoing social issues, our employees identified a need for a platform to come together and share their stories, listen and learn, identify, and address biases in a meaningful way, and to grow our commitment to DE&I.

As a result, EDGE was officially launched in December 2020, with monthly meetings that consist of cultural celebrations, educational materials, and member spotlights that provide employees an opportunity to share their stories with the rest of the group. We also conduct breakout sessions to discuss various topics of interest on race and ethnicity in a safe place, and propose solutions for any obstacles being experienced by our members.

In collaboration with our EDGE BRG members, we have developed a set of goals for 2021, focused on providing a safe space for constructive dialogue, creating opportunities for mentorship and talent development, celebrating our diverse cultures and traditions, improving cultural competence and disrupting unconscious bias, providing decision-making input into important enterprise-wide initiatives, policies and programs, and supporting inclusion at Algonquin and in the communities we serve. In order to advance on these goals, some EDGE members have volunteered to form our EDGE Connect Program and Edge Circle Program, launching in 2021 with the aim to provide opportunities for mentorship and connection between ethnically diverse employees, as well as encouraging constructive dialogue at the local level.

We are proud of the progress made by the EDGE BRG in a short period of time, and look forward to continuing our DE&I efforts to foster inclusivity, innovation, and improved employee wellbeing in the coming years.

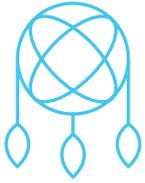


Lean In & EDGE: Panel discussion: supporting black, Indigenous, and people of colour (BIPOC) women

In the spirit of collaboration and intersectionality, our Lean In and EDGE BRGs came together in December 2020, to host an open and honest panel discussion, featuring BIPOC women from across our business, on how we can best foster a culture of collaboration and support where BIPOC women feel included, welcomed, and provided with equal opportunities to thrive.

Our panelists discussed what DE&I meant to them, how the intersection of race and gender can shape workplace experiences, what an inclusive leader and team looks like, and how Algonquin can ensure that BIPOC women are well-represented in the promotion pipeline. Following our panel discussion, our audience members participated in breakout sessions to discuss how to be more inclusive allies to BIPOC women.

We recognize that while having the right policies, programs, and processes is integral to advancing on our DE&I journey and fostering positive impacts, we also need to engage in “hands-on” opportunities that promote continuous learning and awareness for all employees across Algonquin. It is only by working together that we can achieve a culture that empowers every employee to bring their best, authentic selves to work, and know that they are valued. Events like this panel enable our diverse workforce to come together and learn about experiences that may be different from their own, hear new perspectives, and collaborate on building a better Algonquin for all of us.



Indigenous relations

We recognize the importance of honoring and respecting Indigenous Peoples, their cultures, stories, and their traditions, across the communities we serve in North America and abroad. We are committed to establishing and maintaining meaningful relationships with Indigenous communities by actively engaging with our Indigenous stakeholders, respecting their interests, and partnering with them on projects that create positive mutual impacts.



Indigenous Relations Committee

At Algonquin we recognize that there is a compelling need to address the historical and current treatment of Indigenous communities, and we are committed to establishing and maintaining meaningful relationships and influencing positive dialogue with our Indigenous stakeholders, while respecting their interest. In 2021, we aim to establish an Indigenous Relations Committee in New Brunswick with the goals of:

- Understanding the histories, values, and cultures of Indigenous Peoples
- Understanding the importance of engaging with Indigenous Peoples

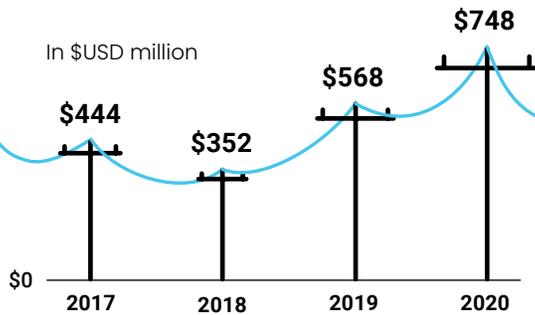
- Exploring learning opportunities on Indigenous Reconciliation Awareness for all employees
- Improving our communication and relationships with Indigenous Peoples

We are grateful for the partnerships that we maintain with our Indigenous stakeholders, and recognize that there is still work to be done on this front. We will continue to communicate, engage, and consult with Indigenous communities while advocating for better awareness within our organization.



Infrastructure investment and resiliency

In order to build resiliency in the face of climate change, and ensure that our communities stay protected, we look to modernize our infrastructure while exploring innovative ways to deliver reliable and resilient energy and water services for our customers.



Algonquin increased investments in grid modernization and resiliency by more than 40% from 2017–2020.

Customer-centric investment

The strategic plan for Algonquin continues with the 2020 network investment momentum guided by customer-centric grid modernization. Grid modernization is the process of upgrading existing grid infrastructure and incorporating new technologies to make the grid “smarter”. This smart grid allows for two-way communication between the utility and its customers, and the sensing along transmission lines. We are investing in grid modernization today in an effort to stay ahead of potential future reliability issues. However, instead of designing primarily based on the technologies, we are focusing on

customer experience in an attempt to provide better value than what our customers could receive from a competitor that would offer, for example, a behind-the-meter system.

Our grid modernization program is expected to draw on insights and expertise from across the organization to optimize utility integrated resource plans (IRP) and capital programs to strategically modernize the grid to achieve increased reliability, resiliency, affordability, sustainability, and intelligence in our rapidly changing industry.

\$4.1 billion planned organic investment from 2021 through 2025



\$2.9 billion in safety and reliability

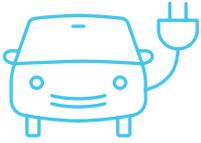
- Electric, gas, and water infrastructure replacement

\$0.9 billion in quality, efficiency and choice

- Customer First
- Grid modernization
- Microgrids
- Electric vehicles and smart cities

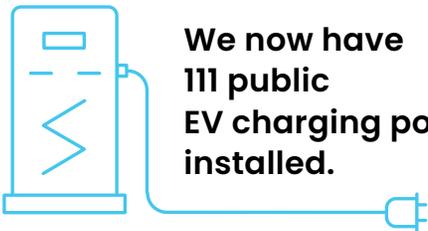
\$0.3 billion in customer growth

- Organic customer growth
- Acquisitions



Installing charging stations in Missouri

We are always excited to hear about local youth showcasing a passion for the environment and their communities, and for getting involved in energy efficiency improvements. Algonquin is proud to have helped a high school senior in Carl Junction, Missouri, in leading the effort to install two EV charging stations at his school! Nicolas initiated the conversation and led research on what the installation of a charging station entails, before working with school staff and Algonquin to make his vision a reality. Algonquin was honored to attend a ribbon-cutting ceremony to celebrate this hard work and determination to make the use of EVs more accessible for the students and faculty at Carl Junction.



We now have 111 public EV charging ports installed.



Investing in Cordes Lakes water infrastructure

Prior to acquiring the Cordes Lakes water system in Arizona in March 2019, the water system experienced service reliability issues that regularly impacted customers' daily lives. With severe drought conditions affecting this particular service area, our Cordes Lakes customers were experiencing water shortages, specifically in the summer months. Upon acquisition, we got to work quickly repairing and upgrading the system by obtaining an adequate water supply, improving existing infrastructure, securing proper equipment to facilitate faster response times, and educating our customers on water conservation best practices.

Within just over a year, we constructed one of our first major projects in Cordes Lakes, known as Well No. 7. Once constructed and put into service, this well began delivering up to 108 gallons of water per minute. Cordes Lakes customers now benefit from an additional quality water source to address water shortage issues. The goal of Well No. 7 is to reduce, if not eliminate, drought or water use restrictions due to insufficient infrastructure. In addition to Well No.7, we have also added two new 5,000-gallon Hydro Tanks, expanded a preventative maintenance program, and improved payment options for our customers to include paperless billing.

Every improvement made to the Cordes Lake water system is designed to improve service reliability, water safety, and customer satisfaction. In under two years, we have made great progress in improving the Cordes Lakes water system so that our stakeholders and communities can continue to receive the high-quality, reliable, and safe water services that they deserve.



Improving infrastructure in Chile

During 2020, ESSAL made investments that exceeded 19 billion pesos, or almost \$1 million, in expansion, replacement, and maintenance of infrastructure and systems, aimed at ensuring operational excellence in the services it provides to the community. Like other companies around the globe, the COVID-19 pandemic has posed numerous challenges for ESSAL, but they have risen to the occasion, putting measures in place that are intended to protect the health of their employees and ensure customers continue to receive essential water services. We are making good progress and taking steps to ensure that our presence in this beautiful country upholds our customer promise of service excellence.



Community support and economic development

At Algonquin, we pride ourselves in thinking globally and acting locally. Our commitment to our customers, and the communities where we operate, goes back to the very roots of our company's founding, and we continue to engage with the many people who count on us to deliver essential services and act as a good corporate citizen. We are committed to supporting and investing in community development in a meaningful way that stimulates local social, cultural, and economic growth.



Did you know?

Algonquin employees volunteered more than 3,375 hours in 2020.



Community giving

The COVID-19 pandemic has had adverse effects on all of us, on an individual and collective level. We believe that, in times of need, our duty to the communities we serve goes beyond providing essential services to our customers. It includes supporting those that have been impacted by the pandemic and those that are working to protect us from it. In April 2020, Algonquin announced a \$500,000 donation to support the communities in which we live and work. Funding was disbursed to a variety of community organizations and local assistance agencies, community partners, and customers in need. The decision to distribute local funds was not one made in isolation; all Algonquin employees were invited to make recommendations on where to best direct our funds and ensure that we were giving help to those who need it most.

As a part of our commitment to help our communities during the pandemic, we also committed to providing excess PPE to frontline healthcare workers. After reaching out to local organizations and first responders to determine who was in the greatest need, we found several rural volunteer fire departments that did not have immediate access to state and federal funds. In total, we are proud to have donated over 20,000 face masks to ensure that our local heroes can safely continue doing good work.



Did you know?

\$18 million in community contribution agreements, land rentals, and municipal taxes were provided by Algonquin during 2020.

Our community support pertaining to the COVID-19 pandemic was a part of a larger \$2 million contribution provided to our local communities. 2020 was also our most impactful fundraising year to date, with more than \$200,000 raised as a part of our United Way workplace campaign. In the spirit of our "Think Global, Act Local" model, these funds were distributed among the communities where we live and work, and helped to provide essential support to those who need it most. Our 2020 United Way campaign was another win for Algonquin and our communities – Prafull Koli, Manager of Transformation, was awarded with a Champions of Change award for his outstanding leadership, dedication, passion, and tenacity for inspiring his colleagues to get involved and give back to our communities. We are proud of this recognition, and proud of all our employees coming together to foster positive change.

Local investment and income

Generating up to 600 MW of clean wind power in our U.S. Midwest 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.



Governance



In this section

Featured ESG issues



Ethics and integrity



Transparency and disclosure



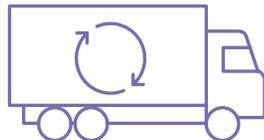
Risk management



Governmental affairs and public policy



Cybersecurity

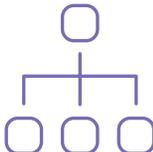


Sustainable procurement

Performance goals



Embedding sustainability into our compensation model



Build a robust compliance framework



Publish a TCFD-aligned disclosure

Alignment to UN SDGs



Sustainability governance

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

- Loyal and satisfied customers who value our brand; served by
- An engaged, talented, and safe workforce; funded by
- Dedicated and successful investors.



Governance of Algonquin’s sustainability activities begins with the Corporate Governance Committee of our Board of Directors. This Committee 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 our ESG 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.

In 2020, we broadened our sustainability governance to better reach all aspects of our business operations, beginning with our Office of Sustainability. Our dedicated sustainability team works diligently to meet the needs of our internal and external stakeholders with a focus on strategy development and implementation, stakeholder engagement, implementation of ESG tools for business units, procurement of credible, accurate, and verifiable ESG data, and the development of robust and comprehensive ESG disclosures.

2020 also brought the establishment of Algonquin’s ESG Steering Committee, comprised of senior leaders from across the organization with the task of guiding the development of our net-zero pathway as well as the centralization and standardization of sustainability efforts across the enterprise, in accordance with industry best practices and Algonquin’s specific ESG objectives. This committee meets regularly and provides insight, guidance, and leadership

in developing the approaches and frameworks required to deliver programs and goals for prioritized ESG activities.

Our sustainability governance also expanded with the establishment of our Regional Sustainability Councils (RSCs), comprised of employees from across Algonquin, coming together on a voluntary basis with the purpose of aligning our regional and business sector ESG initiatives with broader enterprise objectives. These RSCs were established by regional leadership to ensure alignment across the business in regard to sustainability programs and initiatives, while taking into consideration the unique factors that impact our teams on the basis of business functions and diverse geographies. The formation of these RSCs began with our Central, East, and West regions before expanding to include a Council within our Renewable Energy Group as well as in Bermuda.

In 2020, the RSCs developed their own Regional Sustainability Plans in alignment with our enterprise-wide ESG goals and our commitment to the UN SDGs. In preparation for the development of these Regional Sustainability Plans, the RSCs came together to participate in a series of virtual brainstorming workshops to recognize existing ESG initiatives across the business, brainstorm new ideas for advancement of our sustainability strategy, and identify risks, challenges and opportunities associated with any proposed ESG programs. Following the completion of their sustainability plans in 2020, the RSCs will play an integral role in supporting the implementation of our enterprise *Sustainability Plan* with consideration of regional and business sector opportunities and challenges.



Ariel Bautista
Director,
Sustainability

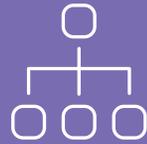
“Effective ESG engagement across the organization is rooted in listening carefully to our internal and external stakeholders. By collaborating closely with leaders from across the enterprise, we seek to leverage the deep knowledge and experience of our talented and diverse employees in order to effectively guide alignment of strategic business initiatives with priority sustainability programs.”



Ethics and integrity

Doing the right thing is one of our core values and is embedded into our business strategy. Providing safe, secure, and reliable energy and water services to our customers and communities is our mission and doing our job in the right ways – with a high level of integrity – enables us to meet our mission. We strive to maintain the highest standards of ethics and integrity throughout all areas of our business and our relationships with our stakeholders, complying with all applicable laws and regulations.

Not only is this what our customers and stakeholders expect from us, it's what we expect from each other. Having an ethical and compliance-focused culture is a key part of operating a sustainable business over the long term; it supports long-lasting positive relationships with customers, regulators, investors, and employees while helping us meet our business objectives.



Compliance and Ethics Framework

Building a robust compliance framework is one of our nine ESG goals included in our corporate scorecard supporting our strategic pillars of growth, operational excellence, and sustainability. We recognize the importance of building a culture in which employees have access to the information they need in order to work with integrity and high standards of ethical behavior.

Our *Code of Business Conduct and Ethics* is the overarching policy that guides Algonquin employees in their day-to-day work habits. It empowers employees to take appropriate actions across different situations while upholding our core value of integrity. Our Compliance and Ethics program provides our employees with supporting tools and resources to help us build and strengthen our culture of compliance, ethics, and governance.

Our Code of Business Conduct and Ethics employee resources



Email

We have a dedicated compliance question line that employees can email to ask about compliance or company policies.



Confidential Ombudsperson

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



Civility Policy

This policy outlines our expectations for treating all employees with respect and dignity, and for enabling them to contribute without fear of reprisal.



Ethics Reporting Line

Our employees can use this reporting line to anonymously report suspected breaches of our *Code of Business Conduct and Ethics*.



Risk management

To support the goals, objectives, and strategy of our business, enterprise risk management is integrated into governance, including decision making. Ongoing identification, assessment, and mitigation of risks helps drive our emphasis on ESG goals. Timely reporting, monitoring, review, and communication further embeds risk management and sustainability within our culture.



Integrating climate change risks into our business processes

In 2020, we engaged expert external consultants to conduct TCFD-aligned scenario analysis workshops with key internal stakeholders and leaders from across the organization. Through these workshops, we identified Algonquin's exposure to climate-related risks and opportunities pertaining to short-, medium-, and long-term climate scenarios for each area of our regulated and renewable businesses. Results from our scenario analysis can be found in our *2020 TCFD Disclosure*.

Leveraging the climate-related risks and opportunities identified during our scenario analysis workshops, we are working to improve the integration of climate-related insights into our governance structure, business strategy, and enterprise risk management processes. Following the release of our *2020 TCFD Disclosure*, we are continuing to identify, assess, and manage climate-related risks within our current risk management framework. We are committed to adjusting our insights and actions as we advance our understanding of the risk landscape relative to climate risks across various scenarios, time horizons, and geographies.

Given the regional implications of climate change and the diverse geographic dispersion of our business operations, the process of integrating climate risks into our enterprise risk management framework is focused on local ownership, supported by the enterprise risk management team. This support structure helps promote appropriate resource planning, timely implementation of mitigation plans, and effective risk oversight and decision making. We aim to continue building on this risk framework, closely monitoring market and regulatory trends, understanding stakeholder needs, evaluating emerging technologies, and integrating updated climate modeling in an effort to timely and effectively manage climate-related risks.



Cybersecurity

As the COVID-19 pandemic pushed a large majority of our workforce to adapt to remote and virtual working, cybersecurity became an even higher priority for our business. We recognize the importance of continuing to invest in proactive measures that strengthen our security controls with the implementation of best-practices and employee training to help prevent and mitigate the impact of any cyber incidents.



Zero
substantiated complaints received regarding customer privacy in 2020

Zero
identified leaks, thefts, or losses in 2020 regarding customer data



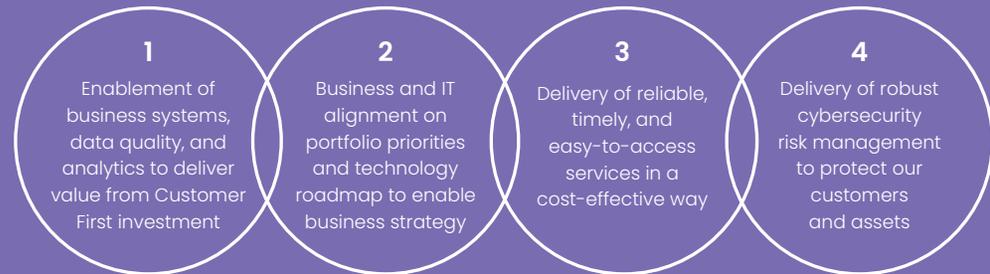
Critical infrastructure security and resiliency

Critical infrastructure is the lifeblood which enables our communities and society to prosper and grow. At Algonquin, we take our role as owners and operators of critical infrastructure seriously, not only in regard to providing clean, reliable energy and water, but also in ensuring the delivery of secure and safe services to the communities we serve.

Threats to critical infrastructure continue to evolve. As our world grows more interconnected, and our infrastructure grows more interdependent with other systems and functions, we assess risks from both a cyber and a physical perspective. The economic prosperity, health, and safety of our communities rely upon complex networks of physical and cyber systems.

A major storm or wildfire may interrupt or destroy a region's electric distribution network. We equally recognize that sophisticated adversaries who target critical infrastructure may wreak havoc on that same infrastructure from anywhere in the world, starting with a targeted phishing email. Either way, the safety, security, and reliability impacts can quickly ripple through the regions, affecting emergency response, transportation, and financial transactions. At Algonquin, we take a defense-in-depth approach in an effort to keep our communities and the critical infrastructure serving those communities safe and secure. Through cultivating a culture of cybersecurity safety and awareness, our strategy is to take a preventative approach in managing the cyber-physical threats facing our industry.

Cybersecurity roadmap





Cybersecurity during a global pandemic

The importance of cybersecurity awareness cannot be overstated. At Algonquin, we recognize that everyone is a frontline defender against cyber threats. The global pandemic has forced many of our employees to work from home with relatively little training or preparation for those who were unused to doing so. The current state of affairs heightens cybersecurity risks for businesses, and it's crucial for us to foster a safe remote work environment. Cybercriminals are targeting both individuals and organizations to steal information that can lead to a loss of identity, theft, fraud, as well many other risks posed to both individuals and organizations.

In 2020, we provided additional training, information, awareness, and support to our employees in an effort to better enable them to defend against cyber threats while navigating an ever-evolving cybersecurity landscape resulting from the effects of the COVID-19 pandemic.

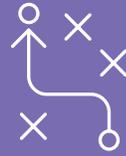


Just ahead of 2020's busy online holiday shopping season, we recognized November as National Cybersecurity Awareness month with a series of employee training modules, online activities, and information and awareness campaigns equipping our employees with the tools, knowledge, and best practices specifically geared towards remaining vigilant during the holiday season.



Transparency and disclosure

Transparency and accountability are at the center of our purpose of *sustaining energy and water for life*. We are committed to sharing reliable and accurate information on our ESG performance in a transparent and credible manner. This commitment relies on an understanding of how we can positively shape our societal and environmental impacts. We aim to communicate this understanding through our evolving ESG and climate-related disclosures.



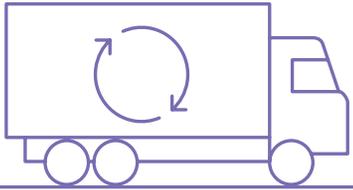
Climate and disclosure strategy ambitions

Following the release of our inaugural *TCFD Disclosure* in 2020, we have been working to develop a *Disclosure Strategy* with the aim to evolve our ESG disclosures to better meet the needs of our diverse stakeholders. Primarily, we aim to update our stakeholders on our progress of integrating the TCFD recommendations into our business and showcasing the evolution of this integration from the initial assessment towards a more strategic outlook on improving climate resiliency across the enterprise. Looking beyond 2021, our *Disclosure Strategy* will seek to drive communication on our ESG impacts on a variety of issues, including a comprehensive update on our quantitative risk and opportunity disclosures. This step forward on our journey of producing more in-depth climate-related disclosures will enable us to communicate our understanding of climate impacts, as well as how we plan to measure, monitor, and manage them moving forward. We look forward to sharing our evolving disclosures for years to come.



Automating our ESG data processes

In 2020, Algonquin's Office of Sustainability procured ESG data software to help us to streamline our data collection processes and reporting, while improving quality and independent verification processes. In preparation for the transition to using the interface, Algonquin's sustainability and environmental teams worked with teams across the Company to provide additional and more detailed data for our 2020 reporting period. Data enhancements achieved as a result of the preparation activities include improving facility-level detail, and additional scope 3 emissions inventory categories and relative data. In 2021, our teams plan to transfer Algonquin's GHG activity data into the system and begin expanding its use across to our user groups.



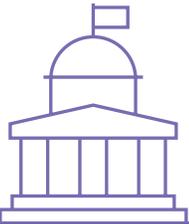
Sustainable procurement

As a company engaged in the renewable energy industry with a desire to integrate sustainability across all business modalities, we encourage and seek out suppliers who share our sustainability goals and take a proactive stance on ESG issues. This is why we are starting to adopt standards aimed at ensuring we work with like-minded suppliers who align with our social and environmental practices and considerations.



Our Supplier Code of Conduct

Our Supplier Code of Conduct, established in 2018, sets out the core values and corporate practices that we expect our suppliers, vendors, and partners to demonstrate. We continue to seek out opportunities to collaborate with, provide input to, and seek guidance from vendors on end-of-life recycling and sustainable disposal programs. We expect our suppliers to look for more sustainable ways to operate in alignment with key ESG standards and practices that minimize negative environmental and social impacts where possible. We have also made progress on developing a Vendor Audit and embedding ESG-related questions into our New Vendor Form.



Governmental affairs and public policy

At Algonquin, we pride ourselves on our proactive government affairs approach which allows us to manage risk, build long-lasting and mutually beneficial relationships with stakeholders at the federal, regional and provincial/state levels, and establish and support policy agendas that benefit our customers.

This approach positions us to seize strategic opportunities by affecting positive policy change. As the ESG landscape continues to evolve, we recognize the important role we play in exploring and pursuing opportunities that support our commitment to sustainability in a way that positively impacts our stakeholders.

The ongoing collaboration between our Government Affairs and Innovation teams is an example of this role in action. During 2020, the Government Affairs and Innovation teams worked together to identify risks to and opportunities for advancing electric transportation initiatives in the states in which we do business. In 2021, the collaboration has shifted from responding to existing legislative efforts to developing a proactive legislative strategy to advance policies that further expand EV penetration, providing environmental benefits and helping make EVs more accessible to our customers.

In addition to EV opportunities, the Government Affairs team also monitored and helped shape other state-level legislative policies, paving the way for transition to a low-carbon economy. In New Hampshire, the Government Affairs team actively engaged in a study commission formed by the state legislature to identify actions the state could take to mitigate emissions related to climate issues. In neighboring Massachusetts, the Government Affairs team aided in the development of legislation to create a next-generation climate policy roadmap.

During 2020, the Government Affairs team also focused on governance issues, developing a series of recommendations on how Algonquin can best participate in the political process to shape positive and sustainable public policies, while also protecting our customers' interests in a transparent fashion. Corporate-level political contributions were prohibited, and Algonquin committed to developing a Lobbyist Code of Conduct to guide the efforts of our external lobbyists, and an Algonquin political engagement policy to specifically identify our commitment to good governance principles in all our interactions with policy-makers, as well as trade associations and business groups advocating on our behalf.

We are proud of the progress we have made to date in fostering meaningful and positive change through our Government Affairs approach, and look forward to continuing to collaborate with our business units and external stakeholders to positively influence the development of regulatory constructs and legislation that support our collective journey to a low-carbon economy and equitable transition.



Appendices



Appendix I:

Forward-looking statements and forward-looking information

This document may contain statements that constitute “forward-looking information” within the meaning of applicable securities laws in each of the provinces of Canada and the respective policies, regulations and rules under such laws or “forward-looking statements” within the meaning of the *U.S. Private Securities Litigation Reform Act of 1995* (collectively, “forward-looking information”). The words “anticipates”, “believes”, “could”, “estimates”, “expects”, “forecasts”, “intends”, “may”, “might”, “plans”, “targets”, “projects”, “should”, “will”, “would”, “aims” and similar expressions are often intended to identify forward-looking information, although not all forward-looking information contains these identifying words. 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; expectations regarding the 2019 novel coronavirus (“COVID-19”), its impact on Algonquin and the Company’s response measures and office remobilization plan; sustainability and environmental strategy, initiatives, ventures, targets and goals, including related to reducing greenhouse gas emissions, decarbonization, net-zero targets (including interim targets to reach net-zero), renewable natural gas, pipe replacement, and renewable generation, and the expected benefits and results thereof; community investment and engagement efforts; customer benefits; continued commitment to maintaining healthy water ecosystems; integration of ESG-related analysis, insights and opportunities into Algonquin’s business processes

and strategies; sustainability governance; ongoing and planned acquisitions and projects, including expectations regarding costs, timing, in-service dates and completion dates; future renewable energy projects and “greening the fleet” opportunities, including those with Chevron and in Bermuda; expected future generation capacity of renewable energy projects and facilities; expected benefits of Advanced Metering Infrastructure; regulatory and governmental policy initiatives; anticipated timing and benefits of the Customer First program; expected future capital investments, including expected timing and impacts; expected future environmental and social impacts of our renewable energy, water, electric and natural gas projects; expected policies and approaches regarding the Company’s suppliers; 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 presence of a favourable regulatory environment (including for decarbonization initiatives and matters); the commercial viability of emerging technologies relating to decarbonization; the absence of any material equipment breakdown or failure; availability of financing (including tax equity financing and self-monetization transactions for U.S. federal tax credits) on commercially reasonable terms

and the stability of credit ratings of the Company and its subsidiaries; the absence of unexpected material liabilities or uninsured losses; the continued availability of commodity supplies and stability of commodity prices; the absence of sustained interest rate increases or significant currency exchange rate fluctuations; the absence of significant operational, financial or supply chain disruptions or liability due to natural disasters, diseases or other force majeure events; the continued ability to maintain systems and facilities to ensure their continued performance; 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 absence of significant counterparty defaults; the continuation of observed weather patterns and trends; the continued competitiveness of electricity pricing when compared with alternative sources of energy; the realization of the anticipated benefits of the Company’s acquisitions and joint ventures; the absence of a change in applicable laws, political conditions or public policies and directions by governments; the ability to obtain and maintain licenses and permits; the absence of a material decrease in market energy prices; maintenance of information technology infrastructure and the absence of a material breach of cybersecurity; 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;

Forward-looking statements and forward-looking information (continued)

and the availability of diverse suppliers and qualified personnel to satisfy continued diversity and inclusion efforts. Given the continued uncertainty and evolving circumstances surrounding the COVID-19 pandemic and related response from governments, regulatory authorities, businesses, suppliers and customers, there is more uncertainty associated with the Company's assumptions and expectations as compared to periods prior to the onset of COVID-19.

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 forward looking 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 prevailing attitudes and tolerances with respect to climate change and net-zero strategies and initiatives; changes in customer energy usage patterns and energy demand; global climate change; advancements in environmental science; the development of new sustainable technologies; the incurrence of environmental liabilities; natural disasters, diseases, pandemics and other force majeure events; critical equipment breakdown or failure; the failure of information technology infrastructure and cybersecurity; physical security breach; the loss of key personnel and/or labour disruptions; seasonal fluctuations and variability in weather conditions and natural resource availability; issues arising with respect to land use rights and access to the Company's facilities; terrorist attacks; 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; sustained increases in interest rates; currency exchange rate fluctuations; failure to maintain required regulatory authorizations; changes to health and safety laws, regulations or permit requirements; failure to comply with and/or changes to environmental laws, regulations and other standards; changes to applicable laws and regulations; compliance with foreign laws or regulations; failure of compliance programs; failure to identify attractive acquisition or development candidates necessary to pursue Algonquin'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. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, 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 Algonquin's most recent annual information form and under the heading "Enterprise Risk Management" in Algonquin's most recent annual and interim management discussion and analysis, each of which has been filed on SEDAR and EDGAR.

There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information.

While subsequent events and developments may cause the Company's views to change, the Company disclaims any obligation to update any forward-looking information or to explain any material difference between subsequent actual events and such forward-looking information, except to the extent required by law. All forward-looking information contained herein is qualified by these cautionary statements

Appendix II: 2020 Algonquin ESG performance index

Summary¹

Environment

		2020	2019	2018	2017
Greenhouse gas (GHG) emissions (Mt CO ₂ e)	Scope 1	2,133,528	2,749,976	2,837,896	3,179,210
	Scope 2	50,247	42,830	42,834	41,107
	Intensity (CO ₂ e/revenue)	0.0013	0.0017	0.0017	0.0021
Energy intensity ratios (see pg.102)	MWh consumed / MWh generated	1.13	1.29	-	-
	MWh consumed / \$ revenue	0.007	0.009	-	-
	MWh consumed / customer connection	11.66	14.54	-	-
Water and wastewater utilities (ML)	Water delivered	73,130	57,533	59,897	63,992
	Withdrawal	69,033	54,046	68,581	64,586
	Discharge	26,188	-	-	-

Social

		2020	2019	2018	2017
Total number of employees		3,429	2,467	2,265	2,241
Female representation	Board	33.3%	33.3%	33.3%	33.3%
	Executive team	37.5%	37.5%	25%	12.5%
	Leadership roles ²	32.2%	32.7%	32.1%	26.0%
	Workforce	32.8%	31.5%	32.0%	31.2%
Health and safety	Fatalities	0	0	0	0
	Lost time injury rate (LTIR)	0.04	0.04	0.18	0.41
	Recordable injury rate (RIR)	0.90	1.27	1.76	2.78
Service delivery and reliability	System Average Interruption Duration Index (SAIDI)	115.92	218.96	139.20	147.72
	System Average Interruption Frequency Index (SAIFI)	1.01	1.36	1.27	1.36
Community investment (\$USD millions)		18.1	19.0	17.9	15.6

Governance

		2020	2019	2018	2017
Incidents of corruption		0	0	0	-
Legal actions for anti-competitive practices (see pg.99)		1	0	0	-
Incidents of violations involving rights of Indigenous Peoples		0	0	-	-
Substantiated complaints received regarding customer privacy		0	0	-	-

¹ See footnote 3 for scope of disclosure.

² Disclosure interpretation: "0" is used when value of data is equal to zero. "-" is used when data is unavailable. Data is left blank when historical data is not applicable. Methodology changes and improvements have led to some data points disclosed in previous reports being replaced with any value or non-value in this disclosure.

Operational metrics ^{3 4}

Utility connections

	2020	2019	2018	2017
Electricity	306,000	267,000	266,000	265,000
Natural gas	371,000	369,000	338,000	337,000
Water and wastewater	409,000	168,000	164,000	160,000
Total	1,086,000	804,000	768,000	762,000

Energy delivered to our customers

	2020	2019	2018	2017
Electricity (GWh) – Regulated (retail)	5,892	6,433	6,524	5,843
Electricity (GWh) – Unregulated (contractual agreements)	5,046	4,749	4,657	4,541
Total electricity (GWh)	10,937	11,182	11,181	10,384
Total electricity (PJ)	39.4	40.3	40.3	37.4
Natural gas (PJ)	45.6	37.9	36.5	32.0
Total (PJ)	85.0	78.1	76.8	69.3

3 Scope of disclosure: Unless explicitly noted, annual data herein is presented for the fiscal year beginning on January 1 and ending on December 31 of the specified year, and data reflecting a specific point in time is given as of December 31 of the specified year. Unless explicitly noted, data does not include 2020 acquisitions; ESSAL (Chile) closed October 2020, and Ascendant (Bermuda) closed November 2020. Data includes acquisitions only includes months for which subsidiaries were under Algonquin's operational control.

4 Operational metrics disclosed on [pg. 84](#) and [85](#) include 2020 acquisitions.

Operational metrics (continued)

Electricity generation capacity (MW)⁵

	2020	2019	2018	2017
Coal ⁶	0	213	213	213
Natural gas	1,496	1,496	1,496	1,496
Diesel ⁷	140	0	0	0
Wind	1,302	1,101	1,101	1,026
Hydroelectric	134	134	134	134
Solar	258	230	165	90
Total	3,329	3,173	3,108	2,958
Renewable energy total	1,693	1,465	1,400	1,250
Renewable energy portfolio	51%	46%	45%	42%

Net electricity generated (GWh)

	2020	2019	2018	2017
Coal ⁶	0	823	841	987
Natural gas	4,635	4,086	4,380	3,901
Diesel ⁷	85	0	0	0
Wind	3,833	3,652	3,623	3,660
Hydroelectric	543	567	586	624
Solar	404	349	324	208
Total	9,499	9,477	9,754	9,380
Renewable energy total	4,779	4,568	4,533	4,492
Renewable energy portfolio	50%	48%	46%	48%

⁵ MW capacity is based on installed generator nameplate capacity.

⁶ Algonquin's sole coal-fired power plant closed in March 2020.

⁷ Acquisition of Ascendant introduced 140 MW of diesel-powered generation.

Operational metrics (continued)

Customer satisfaction

	2020	2019	2018	2017
J.D. Power CSAT Score ⁸	686	665	642	683
Percentage of customers interviewed	25%	-	-	-

Energy reliability

	2020	2019	2018	2017
SAIDI – System Average Interruption Duration Index (minutes)	115.92	218.96	139.20	147.72
SAIFI – System Average Interruption Frequency Index (rate)	1.01	1.36	1.27	1.36
CAIDI – Customer Average Interruption Duration Index (minutes)	114.77	161.24	109.61	108.62

Electricity transmission and distribution

	2020	2019	2018	2017
Length of transmission lines (km)	2,279	2,287	2,128	2,028
Length of distribution lines (km)	13,616	13,383	11,932	11,696
Transmission losses in percentage	2.90%	2.87%	2.97%	2.98%
Distribution losses in percentage	4.20%	4.43%	4.32%	4.46%

Natural gas transmission and distribution

	2020	2019	2018	2017
Length of transmission lines (km)	20	21	18	18
Length of distribution lines (km)	13,486	12,276	11,641	11,690
Leakage rate in distribution infrastructure	0.0146	0.0098	0.0128	0.0119

Water utility water mains and sewer pipes

	2020	2019	2018	2017
Length of water mains (km)	3,208	3,976	3,594	3,522
Length of sewer pipes (km)	980	1,037	1,034	953

⁸ Algonquin's J.D. Power Customer Satisfaction (CSAT) score is calculated internally based on J.D. Power CSAT scores for each of Algonquin's individual utilities. Scores are consolidated into an enterprise-wide value based on a customer connection weighting.

Operational metrics (continued)

Cybersecurity

	2020	2019	2018	2017
Substantiated complaints received concerning breaches of customer privacy	0	0	-	-
Identified leaks, thefts, or losses of customer data	0	1	-	-

Economic value generated and distributed (\$USD millions)

	2020	2019	2018	2017
Economic value generated (EVG) – Revenue	1,849.9	1,806.2	1,809.8	1,585.4
Economic value distributed (EVD)				
Operation costs	740.6	667.9	695.9	650.4
Employee wages and benefits	294.7	259.9	242.8	227.5
Payments to providers of capital	453.1	376.4	329.7	302.3
Payments to government (U.S. and Canada)	5.6	14.5	9.7	8.6
Community investments	0.8	1.0	1.0	1.8
Economic value retained (regulated)	241.9	199.1	296.4	222.7
Economic value retained (unregulated)	113.1	106.5	89.7	51.8
Total economic value retained	355.1	305.7	386.1	274.5

Community engagement

	2020	2019	2018	2017
Operations with local community engagement	100%	100%	-	-
Payments under community contribution agreements, land rentals, or municipal taxes (\$USD millions)	18.1	19.0	17.9	15.6
Hours volunteered by employees (based on Liberty Days used)	3,375	5,499	-	-

Workforce and social indicators⁹

Health and safety¹⁰

Work-related injury ¹⁰		2020	2019	2018	2017
Fatalities from work-related injury	Employees	0	0	0	0
	Non-employees	0	0	0	0
Recordable injuries	Employees	22	31	40	61
	Non-employees	2	3	0	0
Recordable injury rate (RIR)	Employees	0.85	1.27	1.76	2.76
	Non-employees	-	-	0	0
Work-related injuries included:		The primary work-related injuries identified for employees in 2020 are muscle strains, cuts, and abrasions. The primary work-related injuries identified for non-employees in 2020 are arc flash burns and broken bones.			
High-consequence work-related injuries	Employees	1	1	4	9
	Non-employees	2	3	0	0
Lost time injury rate (LTIR)	Employees	0.04	0.04	0.18	0.41
	Non-employees	-	-	0	0
Near-miss reporting rate (NMRR)		32.97	27.75	23.85	30.28
Work-related hazards posing high-consequence injury risk:		Identified through job safety analysis and pre-job inspections, primary high-consequence work-related injuries include electrical shocks, falls from heights, and "struck against" injuries. High-consequence work-related injuries included in this reporting period are potential for electric shock or burn and manual work with ergonomic stressors.			
Injury elimination/mitigation strategy:		Algonquin's injury elimination/mitigation strategy follows local action plans and a five-year occupational health and safety plan following the hierarchy of controls methodology.			
Total hours worked (employees)		5,204,161	4,886,529	4,845,080	4,418,636

⁹ Employees in Bermuda and Chile are not represented in any metrics with the exception of total employee count.

¹⁰ Algonquin does not have total hours worked by contractors and cannot normalize OH&S metrics. Algonquin will be seeking to improve OH&S disclosure for contractors.

Health and safety (continued)

Work-related ill health

		2020	2019	2018	2017
Fatalities from work-related ill health	Employees	0	0	0	0
	Non-employees	0	0	0	0
Recordable work-related ill health cases	Employees	0	1	0	0
	Non-employees	0	0	0	0

Work-related hazards posing ill health risks: Identified through job safety analysis and pre-job inspections, primary work-related hazards posing ill-health risks include soft muscle injury and chemical exposure. Zero work-related ill health injuries were reported in 2020.

Injury elimination/mitigation strategy: Algonquin's injury elimination/mitigation strategy follows local action plans and a five-year occupational health and safety plan following the hierarchy of controls methodology.

Workers covered by an EHS management system

	2020	2019	2018	2017
Employees and non-employees covered by EHS system	100%	100%	100%	100%
Employees and non-employees covered by internally audited EHS system	100%	100%	100%	100%
Employees covered by externally audited EHS system ¹¹	5%	5%	2%	5%

¹¹ Only Algonquin employees are included in this metric.

Employee demographics¹²

Number and geographical location of employees

		2020	2019	2018	2017
Canada	Permanent	500	339	299	276
	Temporary	21	17	14	16
United States	Permanent	2,113	2,103	1,941	1,940
	Temporary	15	8	11	9
Bermuda		341			
Chile		439			
Total Algonquin/Liberty workers		3,429	2,467	2,265	2,241
Algonquin/Liberty employees		72.6%	87.4%	93.9%	96.6%
Non-employees		27.4%	12.6%	6.1%	3.5%

Age cohorts

		2020	2019	2018	2017
Age ranges	< 30 years	11.5%	10.9%	11.3%	9.8%
	30-50 years	52.4%	48.6%	48.1%	47.8%
	> 50 years	36.1%	40.5%	40.7%	42.3%

Average age (years)

		2020	2019	2018	2017
Female employees		45	46	44	45
Male employees		45	46	45	45
All employees		45	46	45	45

¹² Unless explicitly noted otherwise, only permanent employees are included in employee demographic metrics.

Employee demographics (continued)

Gender and employment categories

			2020	2019	2018	2017	
Employee function by gender	Office	Female	42.7%	42.2%	43.2%	41.7%	
		Male	57.3%	57.8%	56.8%	58.3%	
	Field	Female	3.3%	6.7%	6.3%	7.0%	
		Male	96.7%	93.3%	93.7%	93.0%	
Employee level by gender	Senior managers and above ¹³		Female	32.2%	32.7%	32.1%	26.0%
			Male	67.8%	67.3%	67.9%	74.0%
	Junior managers ¹⁴		Female	35.8%	31.3%	31.4%	32.7%
			Male	64.2%	68.7%	68.6%	67.3%

Age and employment categories

			2020	2019	2018	2017	
Employee function by age	Office	< 30 years	11.2%	10.2%	9.0%	6.4%	
		30-50 years	52.5%	48.5%	46.0%	44.8%	
		> 50 years	36.2%	41.3%	45.0%	48.9%	
	Field	< 30 years	12.3%	10.1%	7.7%	6.3%	
		30-50 years	52.0%	48.1%	48.6%	45.0%	
		> 50 years	35.7%	41.8%	43.6%	48.7%	
Employee level by age	Senior managers and above		< 30 years	0%	0%	0%	0%
			30-50 years	49.7%	41.4%	38.7%	32.7%
			> 50 years	50.3%	58.6%	61.3%	67.4%
	Junior managers		< 30 years	2.8%	2.7%	2.1%	1.1%
			30-50 years	59.9%	51.1%	48.2%	42.5%
			> 50 years	37.3%	46.2%	49.7%	56.4%

¹³ "Senior managers and above" refers to employees in the following job levels: executive, senior vice president, vice president, president, senior director, director, and senior manager.

¹⁴ "Junior managers" refer to employees in the following job level: manager.

Employee demographics (continued)

Collective bargaining agreement coverage	2020	2019	2018	2017
Percentage of employees who are salaried	73%	71%	69%	68%
Percentage of employees covered by collective bargaining agreements	27%	29%	31%	32%

Gender and self-identification		2020	2019	2018	2017
Female		32.8%	31.5%	32.0%	31.2%
Male		67.2%	68.5%	68.0%	68.9%
Self-identified minorities		9.8%	8.3%	6.7%	0.1%
Self-identified veterans		2.0%	1.7%	1.9%	1.3%
Self-identified employees with disability		0.5%	-	-	-
Permanent employees	Female	857	778	708	684
	Male	1,756	1,664	1,532	1,532
Temporary employees	Female	13	7	12	3
	Male	23	18	13	22

Gender and employment type		2020	2019	2018	2017
Full-time employees	Female	865	779	714	683
	Male	1,766	1,669	1,534	1,546
Part-time employees	Female	5	6	6	4
	Male	8	5	9	4
Casual employees	Female	0	0	0	0
	Male	5	8	2	4

Employee demographics (continued)

Female representation	2020	2019	2018	2017
All manager positions and above	34.3%	-	-	-
Junior manager positions	35.8%	31.3%	31.4%	32.7%
Senior managers and above	32.2%	32.7%	32.1%	26.0%
Revenue-generating positions	31.9%	-	-	-
STEM-related positions	26.3%	-	-	-

Leadership roles ¹⁵ (senior managers and above)	2020	2019	2018	2017
Female	32.2%	32.7%	32.1%	26.0%
Male	67.8%	67.3%	67.9%	74.0%
Self-identified minorities	8.6%	4.4%	4.8%	0.7%

Executive team	2020	2019	2018	2017
Members	8	8	8	8
Female	37.5%	37.5%	25.0%	12.5%
Male	62.5%	62.5%	75.0%	87.5%
Self-identified minorities	12.5%	0%	0%	0%

Self-identification of employees working in the United States ¹⁶	2020	2019	2018	2017
Percentage of employees working in the United States	80.3%	-	-	-
Share of racial, ethnic, and Indigenous self-identifications	Asian	1.5%	-	-
	Black or African American	2.1%	-	-
	Hispanic	4.7%	-	-
	Caucasian	62.5%	-	-
	Indigenous or Native	1.1%	-	-
	Other	28.2%	-	-

¹⁵ Leadership roles refer to employees in the following job levels; executive, senior vice president, vice president, president, director, senior director, and senior manager.

¹⁶ Self-identification declarations are voluntary in Canada.

Employee demographics (continued)

Employee pay ratios

		2020	2019	2018	2017
Pay ratio of CEO total compensation to median employee total compensation		45.17	-	-	-
Pay ratio (highest base salary to median)	Canada	9.50	-	-	-
	United States	3.62	-	-	-
Salary growth ratio (highest base salary to median)	Canada	0.73	-	-	-
	United States	0.61	-	-	-

Employee compensation by gender and level

		2020	2019	2018	2017
Equal pay ratio (female/male) by level	Executive (base pay only)	0.85	-	-	-
	Executive (base pay + other)	0.61	-	-	-
	All managers and above (base pay only)	0.92	-	-	-
	All managers and above (base pay + other)	0.91	-	-	-
	Non-managers (base pay only)	0.75	-	-	-
Equal pay ratio (female/male) by function	Office	0.77	0.77	0.73	0.71
	Field	0.89	0.76	0.80	0.81
Equal pay ratio (female/male) by region	Canada	0.88	0.77	0.75	0.76
	United States	0.8	0.78	0.75	0.73
Women in top 10% of salaries		28.7%	29.7%	26.8%	24.3%

Ratios of entry level wage to local minimum wage (by region and gender)

		2020	2019	2018	2017
Canada	Female	1.76	1.67	1.65	1.99
	Male	1.46	1.62	1.92	2.03
United States	Female	1.26	1.19	1.97	1.96
	Male	2.52	2.47	2.52	2.43

Employee attraction and retention

Hiring rates

		2020	2019	2018	2017
Percentage of open positions filled by internal candidates		20.0%	20.0%	-	-
Total number of employee hires		458	320	274	274
Employees hired by age	< 30 years	0.32	0.31	0.28	0.20
	30-50 years	0.49	0.54	0.50	0.55
	> 50 years	0.19	0.15	0.23	0.24
Employees hired by gender	Female	0.39	0.38	0.38	0.41
	Male	0.61	0.62	0.62	0.59
Employees hired by region	Canada	0.32	0.30	0.24	0.28
	United States	0.68	0.70	0.76	0.72

Turnover rates

		2020	2019	2018	2017
Volunteer employee turnover rate		5.3%	7.0%	4.1%	4.4%
Total employee turnover rate		7.4%	9.7%	9.8%	9.1%
Employee turnover rate by age	< 30 years	7.6%	37.0%	16.0%	17.0%
	30-50 years	6.0%	9.0%	8.1%	11.0%
	> 50 years	8.2%	9.0%	13.0%	11.0%
Employee turnover rate by gender	Female	7.9%	14.0%	10.5%	13.0%
	Male	7.2%	9.0%	11.0%	10.6%
Employee turnover rate by region	Canada	5.3%	14.0%	14.0%	16.0%
	United States	7.9%	10.6%	10.6%	10.7%

Employee attraction and retention (continued)

Parental leave		2020	2019	2018	2017
Employees entitled to parental leave	Female	842	773	704	680
	Male	1,720	1,663	1,529	1,530
Employees that took parental leave	Female	13	6	14	4
	Male	4	4	5	4
Employees that took parental leave and returned	Female	7	3	8	4
	Male	4	2	5	4
Return to work rate	Female	0.54	0.50	0.57	1.00
	Male	1.00	0.50	1.00	1.00
Employees that took parental leave and were retained	Female	6	3	6	2
	Male	4	2	5	3
Parental leave retention rate	Female	0.46	0.50	0.43	0.50
	Male	1.00	0.50	1.00	0.75

Defined benefit plan		2020	2019	2018	2017
Salary contributed by employee/employer	Employee	0%	0%	0%	0%
	Employer	4-8%	4-8%	4-8%	4-8%
Level of participation in retirement plans for eligible employees		100%	100%	100%	100%

Defined benefits plan and other retirement plans:

- Plan's liabilities are met by organization's general resources
- Separate fund exists to pay for the plan's pension liabilities
- Scheme's liabilities are 100% covered, estimated on actuarial basis calculated annually

Employee engagement		2020	2019	2018	2017
Employee engagement score		73%	68%	70%	62%
Employee response rate		88%	87%	89%	86%

Learning and development

Training		2020	2019	2018	2017
Average training hours by gender	Female	13.6	12.3	-	-
	Male	14.6	15.0	-	-
Average training hours by level	Senior managers and above	13.5	26.5	-	-
	Junior managers	17.3	18.5	-	-
Average training hours by job function	Office	13.1	13.5	-	-
	Field	17.8	15.8	-	-
Average training hours per employee		14.3	15.0	-	-
Average amount spent per employee on training (\$USD per employee)		1,361	938	-	-
Amount invested in employee training (\$USD millions) ¹⁷		2.1	2.8	-	-

Performance reviews	2020	2019	2018	2017
Percentage of employees who received performance review	100%	100%	100%	100%

Discrimination Incidents	2020	2019	2018	2017
Number of incidents of discrimination	8	-	-	-
Number of incidents reviewed by Algonquin	8	-	-	-
Number of incidents no longer subject to action	8	-	-	-

Remediation plans implemented and/or being implemented

Recommendations in response to the incidents included additional workplace civility training, mediation sessions, coaching, and workplace assessments. All actions that were recommended were completed.

¹⁷ Investments in employee training only include hard costs (costs directly related to the development and administration of training initiatives).

Governance and policy

Board of Directors

Experience and background	2020	2019	2018	2017
Independent directors	8	7	7	7
Average tenure	5.8	8.2	6.8	5.8
Directors with utility/energy experience	8	8	6	6
Directors with governance and risk management experience	8	8	8	7
Directors with senior executive experience	6	6	6	6
Total Board members	9	9	9	9

Demographics		2020	2019	2018	2017
By gender	Female	33%	33%	33%	33%
	Male	67%	67%	67%	67%
By age	< 30 years	0%	0%	0%	0%
	30-50 years	0%	0%	0%	0%
	> 50 years	100%	100%	100%	100%

Board of directors

Political spending (\$USD)	2020	2019	2018	2017
Amount spent on lobbying	705,000	511,200	234,145	175,588
Amount spent on local, regional, and national campaigns	13,500	20,500	-	-
Amount spent on trade associations	807,397	762,441	697,186	710,149

Governance and policy (continued)

Compliance

Indigenous relations	2020	2019	2018	2017
Incidents of violations involving rights of Indigenous Peoples	0	0	-	-
Human rights	2020	2019	2018	2017
Operations subject to human rights reviews and impact assessments	100%	100%	-	-
Anti-corruption	2020	2019	2018	2017
Operations assessed for corruption-related risks (government relations, conflicts of interest, and foreign interests)	100%	100%	-	-
Anti-corruption communications and policy training	Employees	100%	100%	100%
	Directors	100%	100%	100%
Contractors who have received anti-corruption communications	100%	100%	100%	-
Incidents of corruption and actions taken	0	0	-	-
Employees who completed annual Code of Business Conduct & Ethics training	100%	99.7%	-	-
Number of times Ethics Reporting Line was used	10	5	-	-
Number of times Ombudsperson was contacted	9	12	-	-
Anti-competitive behaviour	2020	2019	2018	2017
Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1 ¹⁸	0	-	-
Social and economic compliance	2020	2019	2018	2017
Total monetary value of significant fines (\$USD millions) ¹⁹	1.0	0	-	-
Number of non-monetary sanctions	0	0	-	-

18 The National Economic Prosecutor's Office in Chile opened an investigation into unregulated businesses operated by any Chilean water utility, examining whether there has been any price manipulation. This case is still under investigation.

19 On January 5, 2021, FERC issued a public order approving a stipulation and consent agreement between FERC's Office of Enforcement and Algonquin Power Windsor Locks LLC, which included a civil penalty of \$1 million (and a disgorgement amount of \$1,119,073.15).

Environment¹⁹

Greenhouse gas (GHG) emissions (Mt CO₂e)^{20 21 22 23 24}

Scope 1 emissions	2020	2019	2018	2017
Power generation – thermal ²⁵	1,981,730	2,649,076	2,742,513	3,084,242
Power generation – hydroelectric	101	63	121	118
Power generation – solar	44	34	87	0
Power generation – wind	376	159	145	1
Utilities – electric, gas, and water/wastewater	151,277	100,644	95,030	94,849
Total scope 1 emissions	2,133,528	2,749,976	2,837,896	3,179,210
Owned-vehicle emissions	14,271	10,899	-	-
SF ₆ emissions (Mt CO ₂ e)	904	995	-	-
Scope 2 emissions	2020	2019	2018	2017
Power generation – thermal ²⁵	2,528	422	411	705
Power generation – hydroelectric	139	423	616	631
Power generation – solar	596	540	193	129
Power generation – wind	910	953	1,049	1,041
Utilities – electric, gas, and water/wastewater	46,074	40,492	40,565	38,601
Total scope 2 emissions	50,247	42,830	42,834	41,107
Scope 1 and scope 2 emissions	2020	2019	2018	2017
Total scope 1 + 2 emissions	2,183,775²⁶	2,792,806	2,880,730	3,220,317
Total emissions from power generation	1,986,424	2,651,670	2,745,135	3,086,867
Power generation GHG emission intensity (Mt CO ₂ e/MWh)	0.2091	0.2798	0.2814	0.3291
Algonquin's GHG emission intensity (Mt CO ₂ e/\$USD revenue)	0.0013	0.0017	0.0017	0.0021

19 All environment metrics (excluding biodiversity) include 2020 acquisitions of ESSAL (Chile) and Ascendant (Bermuda).

20 Scope 1 and 2 emissions have been verified by a third party. Please see *2020 GHG Verification Report* on Algonquin's website.

21 Greenhouse gases included in calculations: CO₂, CH₄, N₂O, and SF₆. 2017 and 2018 do not include SF₆.

22 Emissions are calculated using activity data. Emission factors sourced from *Greenhouse Gas Inventories* (USEPA 2020) and *Canadian National Inventory Report* (NIR).

23 GHG emissions are calculated through an operational-control approach.

24 Base-year identification: 2017. Comprehensive base-year recalculation expected to be performed in 2021 calendar year disclosure.

25 Includes emissions from open- and combined-cycle natural gas-fired generation facilities, coal-fired generation facilities, and diesel and fuel oil-fired generation facilities.

26 2020 scope 1 and 2 emissions represent a reduction of over 1 million metric tonnes of CO₂e, achieving Algonquin's 2023 GHG reduction target.

Greenhouse gas (GHG) emissions (Mt CO₂e) (continued)

Scope 3 emissions		2020	2019	2018	2017
Upstream	Purchased goods and services ²⁷	54,970	-	-	-
	Capital goods ²⁸	170,544	-	-	-
	Fuel production and extraction	371,413	373,872	-	-
	Generation of distributed electricity	353,434	-	-	-
	Production and transmission of distributed natural gas	633,579	-	-	-
	Transmission and distribution losses for purchased grid electricity	1,710	1,369	-	-
	Transportation and distribution ²⁹	0	5,897	-	-
	Business travel	3,664	-	-	-
	Employee commuting	2,936 ³⁰	7,628	-	-
Downstream	Natural gas combustion	3,392,132	1,906,237	-	-
	Investments ³¹	2,108,307	127,618	-	-
Other emissions from electricity generation (Mt)		2020	2019	2018	2017
NO _x emissions		493	1,162	1,274	1,360
SO _x emissions		10	734	753	918
Mercury emissions		0.00003	0.0008	0	0
Particulate matter emissions		100	139	167	171
Lead emissions		0.0001	0.0001	0	0
Persistent organic pollutants		0	0	-	-
Volatile organic compounds		84	93	-	-
Hazardous air pollutants		5	6	-	-
Ozone-depleting substances		0	0	-	-
Coal combustion residuals (CCR)		2020	2019	2018	2017
Percentage of CCRs recovered		0% ³²	45.6%	45.8%	42.6%

27 Scope 3 purchased goods and services reflect emissions from engineering and construction services.

28 Scope 3 capital goods reflect emissions from manufactured equipment.

29 Scope 3 transportation and distribution reflects emissions from freight shipments of coal to Algonquin's Asbury facility (which was retired in 2020).

30 Scope 3 employee commuting emissions reduced as approximately 65% of employees were working from home due to COVID-19.

31 Scope 3 investment emissions are from a 7.52% and 12% ownership in Plum Point and Iatan coal power plants respectively, and a 44.2% stake in Atlantica Sustainable Infrastructure PLC. 2019 scope 3 emissions from investments do not include Atlantica Sustainable Infrastructure plc.

32 Retirement of Asbury coal facility removed CCR recovery obligations in 2020.

Energy consumption and generation

Internal energy consumption (MWh)		2020	2019	2018	2017
Non-renewable sources	Gasoline/petrol	17,369	24,889	-	-
	Diesel	48,282	28,331	-	-
	LPG	5,246	6,090	-	-
	Coal	0	2,758,931	-	-
	Natural gas	10,583,263	9,469,790	-	-
	Fuel oil	164,138	42,717	-	-
Electricity consumption		91,954	70,805	-	-
	Total internal energy consumption	10,910,252	12,401,553		
Electricity sold		9,499,073	9,477,091		
Energy intensity ratios	MWh consumed / MWh generated ³³	1.13	1.29	-	-
	MWh consumed / \$ revenue ³⁴	0.007	0.009	-	-
	MWh consumed / customer connection ³⁵	11.66	14.54	-	-

³³ MWh consumed and MWh generated applies only to generation assets (regulated and unregulated).

³⁴ MWh consumed and \$ revenue applies to all Algonquin operations.

³⁵ MWh consumed and customer connection applies to Algonquin's regulated utilities (with 2020 acquisitions pro-rated for operational months).

Energy consumption and generation (continued)

Generation capacity		2020	2019	2018	2017
Nameplate capacity of generation assets by source (MW) ³⁶	Coal	0	213	213	213
	Natural gas	1,496	1,496	1,496	1,496
	Diesel	140	0	0	0
	Hydroelectric	134	134	134	134
	Solar	258	230	165	90
	Wind	1,302	1,101	1,101	1,026
	Total generation capacity (MW)	3,329	3,173	3,108	2,958
Energy capacity mix (%)	Coal	0%	7%	7%	7%
	Natural gas	45%	47%	48%	51%
	Diesel ³⁷	4%	0%	0%	0%
	Hydroelectric	4%	4%	4%	5%
	Solar	8%	7%	5%	3%
	Wind	39%	35%	35%	35%
Total renewable generation capacity (%)	51%	46%	45%	42%	

³⁶ MW capacity is based on installed generator nameplate capacity.

³⁷ Acquisition of Ascendant introduced 140 MW of diesel-powered generation.

Water and effluents³⁸

Water withdrawal (ML)		2020	2019	2018	2017
Water withdrawal by source	Surface water	9,545	-	-	-
	Ground water	79,486	-	-	-
	Third-party water	9,599	-	-	-
	Other source	164	-	-	-
	Total water withdrawal	98,795	-	-	-
Water withdrawal from water stressed regions by source	Surface water	2,861	-	-	-
	Ground water	11,754	-	-	-
	Third-party water	9,537	-	-	-
	Other source	164	-	-	-
Water discharge (ML)		2020	2019	2018	2017
Water discharge by source	Surface water	12,967	-	-	-
	Ground water	350	-	-	-
	Seawater	7,806	-	-	-
	Third-party water	5,064	-	-	-
Total water discharge	26,188	-	-	-	
Water discharge in water stressed regions by source	Surface water	824	-	-	-
	Ground water	0.005	-	-	-
	Third-party water	459	-	-	-
Water consumption (ML)		2020	2019	2018	2017
Total water consumption		25,665	-	-	-
Total water consumption in water stressed regions		20,362	-	-	-
Water utility energy usage		2020	2019	2018	2017
Water supplied to customers (ML)		73,130	57,553	-	-
Energy used by water utilities (MWh)		81,313	63,120	-	-
Energy intensity of water supply (MWh/ML)		1.11	1.10	-	-

38 2019 water and effluent data has been removed due to methodology improvements in 2020. Algonquin believes that the 2020 data more appropriately reflects its baseline water activity.

Waste³⁹

Waste generation (Mt)		2020	2019	2018	2017
Waste generated	Hazardous waste	20,797	-	-	-
	Non-hazardous waste	312,827	-	-	-
Total waste generated		333,624	-	-	-
Waste diverted (Mt)		2020	2019	2018	2017
Hazardous waste diverted by recovery type (offsite)	Reuse	2	-	-	-
	Recycling	9,678	-	-	-
	Other	0	-	-	-
Total hazardous waste diverted		9,680	-	-	-
Non-hazardous waste diverted by recovery type (offsite)	Reuse	1,689	-	-	-
	Recycling	221,672	-	-	-
	Other	0	-	-	-
Total non-hazardous waste diverted		223,362	-	-	-
Waste directed to disposal (Mt)		2020	2019	2018	2017
Hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	23	-	-	-
	Incineration without energy recovery	49	-	-	-
	Landfilling	10,754	-	-	-
	Other	292	-	-	-
Total hazardous waste disposed		11,117	-	-	-
Non-hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	549	-	-	-
	Incineration without energy recovery	0	-	-	-
	Landfilling	77,754	-	-	-
	Other	11,162	-	-	-
Total non-hazardous waste disposed		89,465	-	-	-

³⁹ Waste generation, diversion, and disposal data does not include waste generated from offsite contractor-led capital projects for our regulated utilities.

Biodiversity

Species impact

		2020	2019	2018	2017
Land developed for pollinators	Acres	32.5	25.1	20.0	-
	Square feet	47,542	26,800	2,000	-
<i>IUCN Red List</i> species and national conservation list species with habitats in areas affected by operations ⁴⁰	Critically endangered	2	0	-	-
	Endangered	52	11	-	-
	Vulnerable	13	8	-	-
	Near threatened	2	7	-	-
	Least concern	0	0	-	-

Fleet and compliance

Fleet

	2020	2019	2018	2017
Vehicle fleet using low emission fuel	44.9%	-	-	-
Number of CNG capable vehicles	279	266	-	-
Volume of CNG gas gallon equivalent used (GGE)	52,700	50,210	-	-
EV chargers installed for employee vehicles	97	-	-	-
Percentage of employees with access to electric vehicle charging at office	51%	-	-	-

Compliance with environmental laws and regulations

	2020	2019	2018	2017
Number incidents of non-compliance with discharge limits	10	-	-	-
Number of violations with environmental laws and regulations	7	-	-	-
Monetary value of environmental fines (\$USD)	674,830	-	-	-
Environmental liability accrued at year end	0	-	-	-

⁴⁰ Disclosures aligned with GRI304 include Algonquin's utilities based out of Arkansas, California, Kansas, Missouri, Nevada, and Oklahoma. Integration for Algonquin's remaining service territories is targeted for 2022. 2019 values represent Algonquin's utilities based out of Arkansas, Kansas, Missouri, and Oklahoma.

Glossary

Measurements

CO ₂ e	Carbon dioxide equivalent
GGE	Gasoline gallon equivalent
GWh	Gigawatt hours
km	Kilometer
ML	Megaliter
Mt	Metric tonne
MW	Megawatt
MWh	Megawatt hours
PJ	Petajoule
\$USD	United States dollar

Abbreviations

CAIDI	Customer Average Interruption Duration Index (in minutes)
CCR	Coal combustion residual
EHS	Environment, health, and safety
EVD	Economic value distributed
EVG	Economic value generated
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse gas
LTIR	Lost time injury rate (per 200,000 hours)
NMRR	Near-miss reporting rate
NO _x	Nitrous oxide
RIR	Recordable injury rate (per 200,000 hours)
SAIDI	System Average Interruption Duration Index (in minutes)
SAIFI	System Average Interruption Frequency Index (rate)
SO _x	Sulfur oxides

Appendix III: SASB index^{1,2}

Electric utilities and power generators

GHGs and energy resource planning

		2020	2019	2018	2017
EU-110a.1	Gross global scope 1 emissions (Mt CO ₂ e)	1,989,091	2,658,162	2,749,473	3,090,976
	Percentage covered under emission-limiting regulations	99.7%	99.7%	98.9%	99.0%
	Percentage covered under emission-reporting regulations	97.6%	99.7%	99.96%	99.2%
EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	Owned Power	1,859,642		
		Purchased power	353,434		
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 5 Letter from Arun Banskota, President and Chief Executive Officer S 8 The pathway to net-zero by 2050 S 36 Net-zero by 2050: Transitioning to a low-carbon economy and managing our emissions	
EU-110a.4	Number of customers served in markets subject to renewable portfolio standards (RPS)	95.3%	93.5%	92.9%	92.4%
	Percentage of fulfillment of RPS target	100%	100%	100%	100%

Air quality³

		2020	2019	2018	2017
EU-120a.1	NO _x (Mt)	493	1,162	1,274	1,360
	SO _x (Mt)	10	734	753	918
	PM10 (Mt)	100	139	167	171
	Lead (Mt)	0.00007	0.00007	0	0
	Mercury (Mt)	0.00003	0.0008	0	0

1 Scope of disclosure: Unless explicitly noted, annual data herein is presented for the fiscal year beginning on January 1 and end on December 31 of the specified year, and data reflecting a specific point in time is given as of December 31 of the specified year. Unless explicitly noted, data does not include 2020 acquisitions; ESSAL (Chile) closed October 2020, and Ascendant (Bermuda) closed November 2020.

Data that includes acquisitions only includes months in which subsidiaries were under Algonquin's operational control.

2 Disclosure interpretation: "0" is used when value of data is equal to zero. "-" is used when data is unavailable. Data is left blank when historical data is not applicable.

3 Gross global scope 1 emissions, EU-110a.2, EU-110a.3, EU-140a.1, EU-000.A, EU-000.B, EU-000.D, EU-000.E include 2020 acquisitions.

4 100% of NO_x, SO_x, PM₁₀, lead, and mercury emissions are near population centers.

Water management

		2020	2019	2018	2017
EU-140a.1	Total water withdrawn (ML)		8,273		
	Percentage of water withdrawn in regions with high or extremely high baseline water stress				
EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	7			
EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks				

S 16 Sustainability approach
 S 51 Water management
 S 74 Risk management
 AR 60 Enterprise Risk Management

Coal ash management

		2020	2019	2018	2017	
EU-150a.1	Amount of coal combustion residuals (CCR) generated (Mt CO ₂ e)	0	30,375	31,189	36,215	
	Percentage of CCR recycled	0.0%	45.6%	45.8%	42.6%	
EU-150a.2	Total CCR impoundments by hazard	High hazard potential	0	0		
		Significant hazard potential	0	1		
		Low hazard potential	1	2		
		Less than low hazard potential	0	0		
		Incised	0	0		
EU-150a.2	Total CCR impoundments by structural integrity assessment	Satisfactory	1	3		
		Fair	0	0		
		Poor	0	0		
		Unsatisfactory	0	0		
		Not applicable	0	0		

Energy affordability

		2019	2019	2018	2017
EU-240a.1	Average retail electric rate by customer type (\$/kWh)				
	Residential	0.14	0.14	0.14	0.14
	Commercial and industrial	0.12	0.12	0.10	0.10
EU-240a.3	Number of residential customer electric disconnections for non-payment	2,412	6,366	-	-
	Percentage reconnected within 30 days	58%	57%	-	-

EU-240a.4 Discussion of the impact of external factors on customer affordability of electricity, including the economic conditions of the service territory

S 10 COVID-19 response
 S 58 Customer experience and affordability
 S 67 Infrastructure investment and resiliency
 S 74 Risk management
 AR 60 Enterprise Risk Management
 T 14 Climate change risk control and mitigation

Workforce health and safety

		2020	2019	2018	2017
EU-320a.1	Total recordable incident rate (TRIR)	0.90	1.27	1.76	2.78
	Total recordable fatality rate	0	0	0	0
	Total recordable near-miss frequency rate (NMFR)	36.97	27.67	23.85	30.43

End-use efficiency and demand

		2020	2019	2018	2017
EU-420a.1	Percentage of electric utility revenues from rate structures	42.0%	24.0%	10.2%	10.3%
	Decoupled Lost revenue adjustment mechanism (LRAM)	0%	0%	-	-
EU-420a.2	Percentage of electric load served by smart grid technology (%/MWh)	63%	-	-	-
EU-420a.3	Customer electricity savings from efficiency measures by market (MWh)	19,042	20,338	8,146	6,710

Grid resiliency

		2020	2019	2018	2017
EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	1	2	3	2
EU-550a.2	System Average Interruption Duration Index (SAIDI)	115.9	219.0	139.2	147.7
	System Average Interruption Frequency Index (SAIFI)	1.0	1.4	1.3	1.4
	Customer Average Interruption Duration Index (CAIDI)	114.8	161.2	109.6	108.6

Activity metrics

		2020	2019	2018	2017
EU-000.A	Average active customer connections				
	Residential	262,100	227,200	225,200	223,200
	Commercial and industrial	42,200	38,100	37,800	39,200
EU-000.B	Total electricity delivered (MWh)				
	Residential	2,485,900	2,488,100	2,535,100	2,320,100
	Commercial and industrial	3,406,000	3,944,500	3,988,900	3,523,100
EU-000.C	Length of transmission lines (km)	2,279	2,287	2,128	2,028
	Length of distribution lines (km)	13,616	13,383	11,932	11,696

Activity metrics (continued)

		2020	2019	2018	2017
	Total electricity generated (MWh)	9,499,073	9,477,090	9,754,000	9,380,000
EU-000.D	Coal	0.0%	8.7%	8.6%	10.5%
	Natural gas	48.8%	43.1%	44.9%	41.6%
	Diesel	0.9%	0.0%	0.0%	0.0%
	Hydropower	5.7%	6.0%	6.0%	6.7%
	Solar	4.2%	3.7%	3.3%	2.2%
	Wind	40.3%	38.5%	37.1%	39.0%
	Percentage in regulated markets	49.7%	51.9%	-	-
EU-000.E	Total wholesale electricity purchased (MWh)	2,194,326	1,910,416	2,057,114	1,956,293

Gas utilities and distributors

Energy affordability

		2020	2019	2018	2017	
GU-240a.1	Average retail gas rate by customer type (\$/MMBtu)	Residential	11.18	12.35	12.11	12.62
		Commercial and industrial	6.41	6.48	9.73	8.92
		Transportation	1.01	0.85	1.52	1.50
GU-240a.3	Number of residential disconnections (non-payment)	6,228	17,333	-	-	
	Percentage reconnected within 30 days	55%	53%	-	-	

GU-240a.4 Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory

S 10 COVID-19 response
 S 58 Customer experience and affordability
 S 67 Infrastructure investment and resiliency
 S 69 Community support and economic development
 S 74 Risk management
 AR 60 Enterprise Risk Management
 T 16 Climate change risk control and mitigation

End-use efficiency

		2020	2019	2018	2017
GU-420a.1	Percentage of gas utility revenues from rate structures	86%	86%	-	-
	Decoupled Lost revenue adjustment mechanism (LRAM)	0%	0%	-	-
GU-420a.2	Customer gas savings – efficiency measures (MMBtu)	195,890	198,690	179,235	141,716

Integrity of gas delivery infrastructure

		2020	2019	2018	2017
GU-540a.1	Number of reportable pipeline incidents	12	7	2	5
	Number of corrective action orders (CAO)	1	0	0	0
	Number of notices of probable violation (NOPV)	13	15	5	18
GU-540a.2	Distribution pipeline that is cast/wrought iron (%)	1.60%	2.05%	2.41%	2.58%
	Distribution pipeline that is unprotected steel (%)	0.94%	1.41%	1.63%	1.98%
GU-540a.3	Gas transmission pipelines inspected (%)	48.7%	23.3%	0.9%	23.2%
GU-540a.4	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions	S 36 Net-zero by 2050: Transitioning to a low-carbon economy and managing our emissions S 67 Infrastructure investment and resiliency S 74 Risk management AR 60 Enterprise Risk Management T 16 Climate change risk control and mitigation			

Activity metrics

		2020	2019	2018	2017	
GU-000.A	Average active customer connections					
		Residential	317,100	303,100	288,700	287,100
		Commercial and industrial	37,700	35,600	31,700	31,700
GU-000.B	Gas delivered (MMBtu)					
		Residential	21,214,000	20,213,000	20,065,000	17,621,000
		Commercial and industrial	22,032,000	15,676,000	14,529,000	12,672,000
GU-000.C	Length of transmission pipelines (km)	19.8	20.9	18.2	18.3	
	Length of distribution pipelines (km)	13,485.7	12,276.4	11,640.7	11,689.6	

Water utilities and services

Energy management

			2020	2019	2018	2017
WU-130a.1	Energy consumption	Total energy consumed (GJ)	292,726	225,430	-	-
		Percentage grid electricity	93.0%	91.0%	-	-

Distribution network efficiency

			2020	2019	2018	2017
WU-140a.1	Water main replacement rate		0.050	0.011	0.015	0.016
WU-140a.2	Volume of non-revenue real water losses (ML)		7,600	7,420	6,258	6,496

Effluent quality management

			2020	2019	2018	2017
WU-140b.1	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations		7	-	-	-

WU-140b.2 Discussion of strategies to manage effluents of emerging concern

While contaminants of emerging concern (CECs) are currently not regulated, Algonquin may address these concerns in its wastewater effluents on a case-by-case basis through education, recycling, new technologies, and limiting the source of the constituent.

Water affordability and access

			2020	2019	2018	2017
WU-240a.1	Average retail water rate (\$/100 CCF)	Residential	0.5	0.06	0.03	0.04
		Commercial and Industrial	0.3	0.04	0.04	0.03
WU-240a.3	Number of residential disconnections (non-payment)		1,973	8,280	-	-
	Percentage reconnected within 30 days		80%	90%	-	-

WU-240a.4 Discussion of impact of external factors on customer affordability of water, including economic conditions of the service territory

S 10 COVID-19 Response
 S 51 Water management
 S 58 Customer experience and affordability
 S 67 Infrastructure investment and resiliency
 S 69 Community support and economic development
 S 74 Risk management
 AR 60 Enterprise Risk Management
 T 16 Climate change risk control and mitigation

Drinking water quality

			2020	2019	2018	2017
WU-250a.1	Number of drinking water violations	Acute health-based	0	-	-	-
		Non-acute health-based	0	-	-	-
		Non-health-based	1	-	-	-

Drinking water quality (continued)

WU-250a.2 Discussion of strategies to manage drinking water contaminants of emerging concern

Algonquin's regulated subsidiary, Liberty Utilities, is committed to protecting public health and meets or surpasses all state and federal health standards for tap water in the communities where it does business. To help advance the science of drinking water, we have been collecting data for the EPA since the Unregulated Contaminant Monitoring Rule was enacted. Collecting information about the occurrence of unregulated compounds is the first step in the EPA's efforts to determine whether they should be regulated. Water quality is at the foundation of our regulated water utility business and we act proactively, in advance of proposed regulations, to ensure the health and safety of our customers.

End-use efficiency

	2020	2019	2018	2017
WU-420a.2 Customer water savings from efficiency measures, by market (m ³)	75,213	89,732	-	-

Water supply resiliency

	2020	2019	2018	2017
WU-440a.1 Total water sourced from regions with high or extremely high baseline water stress (ML)	69,033	54,046	68,581	64,586
Percentage purchased from third-party	39%	55%	55%	67%
WU-440a.2 Volume of recycled water delivered to customers (ML)	2,191	1,571	1,823	1,397

WU-440a.3 Discussion of strategies to manage risks associated with the quality and availability of water resources

- S 51 Water management
- S 67 Infrastructure investment and resiliency
- S 74 Risk management
- AR 60 Enterprise Risk Management
- T 16 Climate change risk control and mitigation

Network resiliency and impacts of climate change

	2020	2019	2018	2017
WU-450a.1 Wastewater treatment capacity located in 100-year flood zones (m ³ /day)	1,341	829	-	-
WU-450a.2 Number of sanitary sewer overflows (SSO)	21	32	16	13
Volume of sanitary sewer overflows (SSO) – (m ³)	304	505	490	605
Percentage of volume recovered	37.4%	-	-	-

Network resiliency and impacts of climate change (continued)

			2020	2019	2018	2017
WU-450a.3	< 4 Hours	Occurrences	230	220	62	91
		Connections	3,711	949	1,157	2,783
	4 – 12 Hours	Occurrences	13	33	10	14
		Connections	129	197	205	468
	> 12 Hours	Occurrences	0	1	0	1
		Connections	0	12	0	50

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 8	The pathway to net-zero by 2050
		S 44	Climate resiliency and energy efficiency
		S 51	Water management
		S 67	Infrastructure investment and resiliency
		S 74	Risk management
		AR 60	Enterprise Risk Management
T 16	Climate change risk control and mitigation		

Activity metrics

			2020	2019	2018	2017
WU-000.A	Average active wastewater connections		45,300	43,900	42,200	41,000
	Average active water distribution connections		355,500	115,500	112,800	121,400
Total water sourced (ML)			69,033	-	-	-
WU-000.B	Percentage of water sourced by source type	Surface water	7.5%	-	-	-
		Groundwater	78.6%	-	-	-
		Third-party water	13.6%	-	-	-
		Other	0.2%	-	-	-
WU-000.C	Wastewater treated (ML)		9,596	8,850	8,638	8,426
	Water provided (ML)		73,130	57,553	59,897	63,992
WU-000.D	Average volume of wastewater treated per day (m ³ /day)	Sanitary sewer	46,465	-	-	-
		Storm water sewer	-	-	-	-
		Combined sewer	183,540	-	-	-
WU-000.E	Length of water mains (km)		3,208	3,976	3,594	3,522
	Length of sewer pipes (km)		980	1,037	1,034	953

5 WU-130a.1, WU-140b.1, WU-250a.1, WU-440a.1, WU-000.A, WU-000.B, WU-000.C, WU-000.D include 2020 acquisitions.

Appendix IV: GRI content index

Legend

A	2020 Annual Information Form
AR	2020 Annual Report
CC	2019 CDP Climate Change Survey
CW	2019 CDP Water Security Survey
E	ESG Performance Index
M	2021 Management Information Circular
S	2021 Sustainability Report
T	2020 TCFD Climate Change Assessment Report
W	External report

Organizational profile

No.	Disclosure	Source and notes	Priority issue alignment
102-1	Name of organization	W <i>Supplier Code of Conduct</i>	
		A 14 Description of the business	
102-2	Activities, brands, products, and services	S 140 Stay connected!	
		A 9 General development of the business	
102-3	Location of headquarters	S 140 Stay connected!	
		A 9 General development of the business	
102-4	Location of operations	S 140 Stay connected!	
102-5	Ownership and legal form	A 7 Intercorporate relationships	
102-6	Markets served	S 12 About us	
		A 14 Description of the business	
102-7	Scale of the organization	S 12 About us	
		A 14 Description of the business	
102-8	Information on employees and other workers	S 90 Employee demographics	
102-9	Supply chain	W <i>Supplier Code of Conduct</i>	
		A 14 Description of the business	
102-10	Significant changes to the organization and its supply chain	AR 7 Significant updates	
		AR 20 Development of renewable energy assets	
		AR 52 Summary of property, plant, and equipment expenditures	
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.	

Organizational profile (continued)

No.	Disclosure	Source and notes	Priority issue alignment
102-12	External initiatives	<p>S 19 Our commitment to the SDGs</p> <p>S 15 Awards and recognition</p> <p>S 66 Indigenous relations</p> <p>W EPA methane challenge partners (Liberty Utilities)</p>	
102-13	Membership of associations	<p>S 12 About us</p> <p>Industry Associations:</p> <ul style="list-style-type: none"> • American Gas Association (AGA) • American Wind Energy Association (AWEA) • Canadian Electricity Association (CEA) • Edison Electric Institute (EEI) • Global Business Alliance (GBA) • National Association of Water Companies (NWAC) • Solar Energy Industry Association (SEIA) <p>Governmental Agencies:</p> <ul style="list-style-type: none"> • Department of Energy (DEO) • Environmental Protection Agency (EPA) • Independent Electric Systems Operator (IESO) • National Energy Board (NEB) 	
102-14	Statement from senior decision maker	S 5 Letter from Arun Banskota, President and Chief Executive Officer	
102-15	Key Impacts, risks, and opportunities	<p>S 5 Letter from Arun Banskota, President and Chief Executive Officer</p> <p>S 29 2021 ESG materiality assessment</p>	

Ethics and integrity

No.	Disclosure	Source and notes	Priority issue alignment
102-16	Values, principles, standards, and norms of behavior	S 14 Our strategic pillars and guiding principles W Who we are M 43 Corporate and Board policies	
102-17	Mechanisms for advice and concerns about ethics	S 73 Ethics and integrity M 43 Corporate and board policies W Ethics reporting policy	

Governance

No.	Disclosure	Source and notes	Priority issue alignment
102-18	Governance structure	S 72 Sustainability governance S 18 Our ESG evolution M 28 Corporate governance practices	
102-19	Delegating authority	S 72 Sustainability governance S 30 Goals and performance scorecard M 36 Committees of the Board of Directors M 41 Position descriptions W <i>Risk committee mandate</i> W <i>Corporate governance committee mandate</i>	
102-20	Executive-level responsibility for economic, environmental, and social topics	S 72 Sustainability governance M 66 Corporate scorecard and results	
102-21	Consulting stakeholders on economic, environmental, and social topics	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 26 Listening to our stakeholders S 29 2021 ESG materiality assessment S 58 Customer experience and affordability	
102-22	Composition of the highest governance body and its committees	W <i>Corporate governance committee mandate</i> M 28 Corporate governance practices	
102-23	Chair of the highest governance body	M 25 Director profiles, Kenneth Moore W Position description, Chair of the Board	

Governance (continued)

No.	Disclosure	Source and notes	Priority issue alignment
102-24	Nominating and selecting the highest governance body	M 18 Director nominees	
102-25	Conflicts of interest	W Code of Business Conduct and Ethics M 61 Risk management and compensation	
102-26	Role of highest governance body in setting purpose, values, and strategy	S 72 Sustainability governance M 28 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 28 Corporate governance practices	
102-29	Identifying and managing economic, environmental, and social impacts	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 29 2021 ESG materiality assessment	
102-30	Effectiveness of risk management process	W Risk committee mandate	
102-31	Review of economic, environmental, and social topics	S 72 Sustainability governance A 30 Oversight of sustainability W Corporate governance committee mandate	
102-32	Highest governance body's role in sustainability reporting	S 72 Sustainability governance A 30 Oversight of sustainability W Corporate governance committee mandate	
102-33	Communicating critical concerns	S 73 Ethics and integrity S 74 Risk management	
102-34	Nature and total number of critical concerns	No critical concerns have been identified	
102-35	Remuneration policies	M 51 Executive compensation M 79 Executive compensation information	
102-36	Process for determining remuneration	M 51 Executive compensation	
102-37	Stakeholders' involvement in remuneration	M 51 Executive compensation	
102-38	Annual total compensation ratio	S 94 Employee pay ratios	
102-39	Percentage increase in annual total compensation ratio	S 94 Employee pay ratios	

Stakeholder engagement

No.	Disclosure	Source and notes	Priority issue alignment
102-40	List of stakeholder groups	S 26 Listening to our stakeholders	
102-41	Collective bargaining agreements	S 92 Collective bargaining agreement coverage	
102-42	Identifying and selecting stakeholders	S 26 Listening to our stakeholders	
102-43	Approach to stakeholder engagement	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 26 Listening to our stakeholders S 29 2021 ESG materiality assessment S 58 Customer experience and affordability	
102-44	Key topics and concerns raised	S 29 2021 ESG materiality assessment	

Reporting practice

No.	Disclosure	Source and notes	Priority issue alignment
102-45	Entities included in the consolidated financial statements	A 7 Intercorporate relationships	
102-46	Defining report content topic boundaries	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 11 About this report S 29 2021 ESG materiality assessment	
102-47	List of material topics	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 29 2021 ESG materiality assessment	
102-48	Restatements of information	S 11 About this report AR 22 Acquisitions	
102-49	Changes in reporting	S 5 Letter from Arun Banskota, President and Chief Executive Officer S 72 Sustainability governance	
102-50	Reporting period	S 11 About this report	
102-51	Date of most recent report	S 11 About this report	
102-52	Reporting cycle	S 11 About this report	

Reporting practice (continued)

No.	Disclosure	Source and notes	Priority issue alignment
102-53	Contact point for questions regarding the report	S 140 Stay connected!	
102-54	Claims of reporting in accordance with the GRI Standards	S 11 About this report	
102-55	GRI content index	S 116 Appendix: GRI index	
102-56	External assurance	S 137 2020 GHG Verification Report	

Economic

Economic performance

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	AR 15 MD&A	
103-3	Evaluation of the management approach		
201-1	Direct economic value generated and distributed	S 87 Economic value generated and distributed	<ul style="list-style-type: none"> • Climate resiliency • Transitioning to a low-carbon economy • Talent attraction and retention • Infrastructure investment and resiliency • Employee health and safety • Ethics and integrity • Transparency and disclosure • Risk management
201-2	Financial implications and other risks and opportunities due to climate change	T 16 Climate change risk control and mitigation CC 2 Risks and opportunities CW 4 Risks and opportunities	
201-3	Defined benefit plan obligations and other retirement plans	S 96 Defined benefit plan	
201-4	Financial assistance received from government	Algonquin receives various forms of financial assistance from various levels of government in the regions it operates. Algonquin does not currently track this information centrally. Financially material assistance from governments is reported in Algonquin's annual filings.	

Economic (continued)

Market presence

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	AR 15 MD&A	
103-3	Evaluation of the management approach		<ul style="list-style-type: none"> Talent attraction and retention Community support and economic development
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	S 94 Ratios of entry level wage to local minimum wage	<ul style="list-style-type: none"> Diversity, equity, and inclusion Ethics and integrity
202-2	Proportion of senior management hired from the local community	Algonquin does not document the location of employees prior to employment.	

Indirect economic impacts

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 12 About us	
103-2	The management approach and its components	S 14 Our strategic pillars and guiding principles	
103-3	Evaluation of the management approach	S 17 Our sustainability commitment	
		S 29 2021 ESG materiality assessment	
203-1	Infrastructure investments and services supported	S 12 About us S 13 Where we are S 67 Infrastructure investment and resiliency	<ul style="list-style-type: none"> Climate resiliency Transitioning to a low-carbon economy Greenhouse gas and air emissions Customer experience and affordability Energy reliability Talent attraction and retention Community support and economic development Infrastructure investment and resiliency
203-2	Significant indirect economic impacts	S 36 Net Zero by 2050: Transitioning to a low-carbon economy and managing our emissions S 69 Community support and economic development	<ul style="list-style-type: none"> Cybersecurity Governmental affairs Sustainable procurement

Procurement practices

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 78 Sustainable procurement	
103-2	The management approach and its components	W <i>Supplier Code of Conduct</i>	
103-3	Evaluation of the management approach		<ul style="list-style-type: none"> Community support and economic development
204-1	Procurement budget used for local suppliers	Algonquin spends approximately 2% of its annual procurement budget on local suppliers. This data is only collected as per regulatory requirements in Algonquin's California-based operations.	<ul style="list-style-type: none"> Sustainable procurement

Economic (continued)

Anti-corruption

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	W <i>Code of Business Conduct and Ethics</i>	
103-3	Evaluation of the management approach		
205-1	Operations assessed for risks related to corruption	S 99 Anti-corruption	<ul style="list-style-type: none"> • Ethics and integrity • Transparency and disclosure • Risk management • Cybersecurity
205-2	Communication and training about anti-corruption policies and procedures	S 99 Anti-corruption	
205-3	Confirmed incidents of corruption and actions taken	S 99 Anti-corruption	

Anti-corruption behavior

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	W <i>Code of Business Conduct and Ethics</i>	
103-3	Evaluation of the management approach		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	S 99 Anti-competitive behaviour	<ul style="list-style-type: none"> • Ethics and integrity • Transparency and disclosure • Risk management

Environment

Energy

No.	Disclosure	Source and notes	Priority issue alignment
		W <i>Our Commitment to Sustainability</i> W <i>Our Commitment to the Environment</i>	
103-1	Explanation of the material topic and its boundary	S 36 Net Zero: Transitioning to a low-carbon economy and managing our emissions	
103-2	The management approach and its components	S 44 Climate resiliency and energy efficiency	
103-3	Evaluation of the management approach	S 108 Electric utilities and power generators S 111 Gas utilities and distributors CC <i>CDP Climate Change Survey</i>	
302-1	Energy consumption within the organization	S 102 Internal energy consumption	<ul style="list-style-type: none"> • Transitioning to a low-carbon economy • Greenhouse gas and air emissions • Energy efficiency • Land use and biodiversity • Customer experience and affordability • Energy reliability • Risk management
302-2	Energy consumption outside of the organization	Downstream natural gas combustion is the largest source of energy consumption outside of the organization and is reported at 12,674 GWh for the amount of natural gas delivered to customers. Other sources of energy consumption have not been collected but are primarily from; Algonquin's investments in Atlantica Sustainable Infrastructure PLC, Plum Point and latan coal facilities; fuel production and extraction activities; and the generation of electricity distributed by Algonquin.	
302-3	Energy intensity	S 102 Internal energy consumption	
302-4	Reduction of energy consumption	Note: The decrease in energy consumption from 2019 to 2020 is primarily due to the retirement of Algonquin's Asbury coal facility.	
302-5	Reductions in energy requirements of products and services	S 83 Greenhouse gas emissions S 102 Internal energy consumption	

Environment (continued)

Water and effluents

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 51 Water management	
103-2	The management approach and its components	S 113 Water utilities and services	
103-3	Evaluation of the management approach	CW CDP Water Security Survey	
303-1	Interactions with water as a shared resource	S 51 Water management T 24 Regulated services: Climate-related risks and opportunities CW 1 Current State CW 3 Procedures	<ul style="list-style-type: none"> • Climate resiliency • Land use and biodiversity • Water management • Public health and safety • Customer experience and affordability
303-2	Management of water discharge-related impacts	S 51 Water management CW 1 Current State CW 3 Procedures	
303-3	Water withdrawal	S 104 Water withdrawal	
303-4	Water discharge	S 104 Water discharge	
303-5	Water consumption	S 104 Water consumption	

Environment (continued)

Biodiversity

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	W <i>Our Commitment to Sustainability</i>	
103-2	The management approach and its components	S 46 Land use and biodiversity	
103-3	Evaluation of the management approach		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	S 106 Species impact Algonquin has collected this information for its operations in the following regions; California (locations specific to Algonquin's California-based electric utility), Arkansas, Kansas, Missouri, and Oklahoma. Algonquin will evaluate opportunities to disclose this information publicly in the future.	
304-2	Significant impacts of activities, products, and services on biodiversity	Algonquin has collected this information for its operations in the following regions; California (locations specific to Algonquin's California-based electric utility), Arkansas, Kansas, Missouri, and Oklahoma. Algonquin will evaluate opportunities to disclose this information publicly in the future.	<ul style="list-style-type: none"> • Climate resiliency • Land use and biodiversity • Ethics and integrity • Risk management
304-3	Habitats protected or restored	Algonquin has collected this information for its operations in the following regions; California (locations specific to Algonquin's California-based electric utility), Arkansas, Kansas, Missouri, and Oklahoma. Algonquin will evaluate opportunities to disclose this information publicly in the future.	
304-4	<i>IUCN Red List</i> species and national conservation list species with habitats in areas affected by operations	Algonquin has collected this information for its operations in the following regions; California (locations specific to Algonquin's California-based electric utility), Arkansas, Kansas, Missouri, and Oklahoma. Algonquin will evaluate opportunities to disclose this information publicly in the future.	

Environment (continued)

Emissions

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 36 Net Zero: Transitioning to a low-carbon economy and managing our emissions	
103-2	The management approach and its components	T <i>TCFD Climate Change Assessment Report</i>	
103-3	Evaluation of the management approach	W <i>Our Commitment to Sustainability</i> CC <i>CDP Climate Change Survey ESG</i>	
305-1	Direct (scope 1) GHG emissions	S 100 Scope 1 emissions	
305-2	Energy indirect (scope 2) GHG emissions	S 100 Scope 2 emissions	
305-3	Other indirect (scope 3) GHG emissions	S 101 Scope 3 emissions	
305-4	GHG emissions intensity	S 100 Scope 1 and scope 2 emissions	
305-5	Reduction of GHG emissions	S 30 Goals and performance scorecard S 36 Net-zero: Transitioning to a low-carbon economy and managing our emissions S 100 Scope 1 emissions Note: GHG emission reductions are apparent on a year-over-year basis. See footnote 28 in the ESG Performance Index for details.	<ul style="list-style-type: none"> • Climate resiliency • Transitioning to a low-carbon economy • Greenhouse gas and air emissions • Public health and safety
305-6	Emissions of ozone-depleting substances (ODS)	S 101 Other emissions from electricity generation	
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	S 101 Other emissions from electricity generation	

Environment (continued)

Waste

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	S 49 Waste and materials management	
103-3	Evaluation of the management approach		
306-1	Waste generation and significant waste-related impacts	S 49 Waste and materials management	<ul style="list-style-type: none"> • Climate resiliency • Land use and biodiversity • Waste and materials management
306-2	Management of significant waste-related impacts	S 49 Waste and materials management	
306-3	Waste generated	S 105 Waste generation	
306-4	Waste diverted form disposal	S 105 Waste diverted	
306-5	Waste directed to disposal	S 105 Waste directed to disposal	

Environmental compliance

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 36 Net-zero: Transitioning to a low-carbon economy and managing our emissions	<ul style="list-style-type: none"> • Climate resiliency • Transitioning to a low-carbon economy • Ethics and integrity • Transparency and disclosure • Risk management
103-2	The management approach and its components	W <i>Our Commitment to the Environment</i>	
103-3	Evaluation of the management approach		
307-1	Non-compliance with environmental laws and regulations	S 106 Compliance with environmental laws and regulations	

Supplier environmental assessment

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 78 Sustainable procurement	
103-2	The management approach and its components	W <i>Supplier Code of Conduct</i>	
103-3	Evaluation of the management approach		
308-1	New suppliers that were screened using environmental criteria	Algonquin does not currently screen suppliers using environmental criteria. Algonquin has engaged primary suppliers with sustainability-focused questionnaires to gauge sustainability performance in the supply chain. Algonquin continues to evaluate opportunities to integrate environmental criteria into supplier screening processes.	<ul style="list-style-type: none"> • Climate resiliency • Ethics and integrity • Sustainable procurement
308-2	Negative environmental impacts in the supply chain and actions taken	Algonquin does not currently track supply chain environmental impacts. Algonquin's <i>Supplier Code of Conduct</i> holds suppliers to a high degree of compliance with all relevant environmental regulations.	

Social

Employment

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	S 60 Talent attraction and retention	
103-3	Evaluation of the management approach		
401-1	New employee hires and employee turnover	S 60 Talent attraction and retention S 95 Hiring rates S 95 Turnover rates	<ul style="list-style-type: none"> • Talent attraction and retention • Employee health and safety • Ethics and integrity
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Algonquin's full-time employees are eligible for the following benefits: life insurance, health care, disability and invalidity coverage, parental leave, retirement provision, and stock ownership.	
401-3	Parental leave	S 96 Parental leave	

Labour/management relations

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	S 62 Employee health and safety	
103-3	Evaluation of the management approach	W <i>Code of Business Conduct and Ethics</i>	<ul style="list-style-type: none"> • Public health and safety • Talent attraction and retention • Employee health and safety • Ethics and integrity
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.	

Occupational health and safety

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 62 Employee health and safety	
103-2	The management approach and its components	A 30 Environmental, health, and safety	
103-3	Evaluation of the management approach	A 48 Health and safety laws and regulations W Our Commitment to Health & Safety	
403-1	Occupational health and safety management system	An internal management system is in place. Algonquin is currently in the process of implementing OHSAS18001 certification.	
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.	
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.	
403-4	Worker participation, consultation, and communication on occupational health and safety	Worker participation, consultation, and communication on occupational health and safety is facilitated through collaboration with Union and collective bargaining units. Annual regional safety planning meetings are also held.	<ul style="list-style-type: none"> • Talent attraction and retention • Employee health and safety • Ethics and integrity
403-5	Worker training on occupational health and safety	Worker training on occupational health and safety is facilitated by following site annual safety plans.	
403-6	Promotion of worker health	Worker health is promoted through safety standards and guidelines, a five-year safety plan, and Safety Symposiums.	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and 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 and safety management system	S 89 Employees covered by an EHS management system	
403-9	Work-related injuries	S 88 Work-related injury	
403-10	Work-related ill health	S 89 Work-related ill health	

Training and education

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 60 Talent attraction and retention	
103-2	The management approach and its components	S 63 Diversity, equity, and inclusion	
103-3	Evaluation of the management approach	S 75 Cybersecurity	
404-1	Average hours of training per year per employee	S 97 Training	
404-2	Programs for upgrading employee skills and transition assistance programs	S 63 Diversity, equity, and inclusion 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.	<ul style="list-style-type: none"> • Transitioning to a low-carbon economy • Talent attraction and retention • Employee health and safety • Diversity, equity, and inclusion • Risk management
404-3	Percentage of employees receiving regular performance and career development reviews	S 97 Performance reviews	

Diversity and equal opportunity

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 63 Diversity, equity, and inclusion	
103-2	The management approach and its components	W Board and executive diversity policy	
103-3	Evaluation of the management approach		
405-1	Diversity of governance bodies and employees	M 20 Director skills matrix S 90 Board demographics S 98 Board of directors	<ul style="list-style-type: none"> • Talent attraction and retention • Diversity, equity, and inclusion • Ethics and integrity • Transparency and disclosure
405-2	Ratio of basic salary and remuneration of women to men	S 94 Employee compensation by gender and level	

Social (continued)

Non-discrimination

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	W <i>Code of Business Conduct and Ethics</i>	
103-3	Evaluation of the management approach		
406-1	Incidents of discrimination and corrective actions taken	S 97 Discrimination incidents	<ul style="list-style-type: none"> Talent attraction and retention Employee health and safety Diversity, equity, and inclusion Ethics and integrity Transparency and disclosure Risk management

Rights of Indigenous peoples

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary		
103-2	The management approach and its components	S 66 Indigenous relations	
103-3	Evaluation of the management approach		
411-1	Incidents of violations involving rights of Indigenous peoples	S 99 Indigenous relations	<ul style="list-style-type: none"> Public health and safety Indigenous relations Employee health and safety Diversity, equity, and inclusion Ethics and integrity

Human rights assessment

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	W <i>Human Rights Policy</i>	
103-2	The management approach and its components	W <i>Code of Business Conduct and Ethics</i>	
103-3	Evaluation of the management approach	W <i>Supplier Code of Conduct</i>	
412-1	Operations that have been subject to human rights reviews or impact assessments	S 99 Human rights	<ul style="list-style-type: none"> Public health and safety Talent attraction and retention Employee health and safety Ethics and integrity Risk management Sustainable procurement
412-2	Employee training on human rights policies or procedures	Algonquin's <i>Human Rights Policy</i> was developed in 2021 and the company continues to explore opportunities for employee training on the policy.	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Algonquin does not currently integrate human rights clauses or human rights screening into investment agreements and contracts. Algonquin's <i>Supplier Code of Conduct</i> holds suppliers to a high degree of compliance with relevant human rights regulations.	

Local communities

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 69 Community support and economic development	<ul style="list-style-type: none"> Public health and safety Community support and economic development Indigenous relations Ethics and integrity Transparency and disclosure Risk management Sustainable procurement
103-2	The management approach and its components	W Liberty economic development	
103-3	Evaluation of the management approach		
413-1	Operations with local community engagement, impact assessments, and development programs	S 87 Community engagement	
413-2	Operations with significant actual and potential negative impacts on local communities	All of Algonquin's 2020 socio-economic regulatory violations are outlined in this report and financially material non-compliance events are disclosed in it's annual filings.	

Supplier social assessment

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 78 Sustainable procurement	<ul style="list-style-type: none"> Public health and safety Community support and economic development Diversity, equity, and inclusion Ethics and integrity Transparency and disclosure Risk management Sustainable procurement
103-2	The management approach and its components	S 78 Our <i>Supplier Code of Conduct</i>	
103-3	Evaluation of the management approach		
414-1	New suppliers that were screened using social criteria	Algonquin integrates health and safety criteria in supplier screening processes. Algonquin has engaged primary suppliers with sustainability-focused questionnaires to gauge sustainability performance in the supply chain. Algonquin continues to evaluate opportunities to integrate additional social criteria into supplier screening processes.	
414-2	Negative social impacts in the supply chain and actions taken	Algonquin does not currently track supply chain social impacts outside of health and safety compliance. Algonquin's <i>Supplier Code of Conduct</i> holds suppliers to a high degree of complying with all relevant social regulations.	

Social (continued)

Public policy

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 79 Governmental affairs and public policy W Policy on Lobbyist Code of Conduct	<ul style="list-style-type: none"> Ethics and integrity Transparency and disclosure Risk management Governmental affairs and public policy
103-2	The management approach and its components		
103-3	Evaluation of the management approach		
415-1	Political contributions	In 2020, Algonquin made political contributions in the United States, donating \$13,500 to 15 recipients in two states representing various levels of public office, including party campaign committees. Information on political contributions made by Algonquin's employee-led political action committee is available at www.fec.gov . Algonquin is currently developing its Political Engagement Policy, expected to be released by the end of 2021.	

Customer health and safety

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 10 COVID-19 response S 55 Public health and safety	<ul style="list-style-type: none"> Public health and safety Customer experience and affordability Energy reliability Employee health and safety Ethics and integrity Transparency and disclosure Risk management
103-2	The management approach and its components		
103-3	Evaluation of the management approach		
416-1	Assessment of the health and safety impacts of product and service categories	Algonquin actively complies with all relevant regulations governing the health and safety of its customers.	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Algonquin was not involved in any incidents of non-compliance with regulations related to customer health and safety that resulted in fines in 2020.	

Customer privacy

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	W Code of Business Conduct and Ethics W Privacy Policy S 75 Cybersecurity	<ul style="list-style-type: none"> Public Health and Safety Customer experience and affordability Ethics and integrity Risk Management Cybersecurity Sustainable procurement
103-2	The management approach and its components		
103-3	Evaluation of the management approach		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	S 87 Cybersecurity	

Socioeconomic compliance

No.	Disclosure	Source and notes	Priority issue alignment
103-1	Explanation of the material topic and its boundary	S 30 Goals and performance scorecard	<ul style="list-style-type: none"> • Public health and safety • Ethics and integrity • Transparency and disclosure • Risk management • Governmental affairs and public policy
103-2	The management approach and its components	S 73 Ethics and integrity	
103-3	Evaluation of the management approach		
419-1	Non-compliance with laws and regulations in the social and economic area	S 99 Social and economic compliance	

Appendix V:

Our stakeholders' priority ESG issues defined



Environment

Climate resiliency

Investing in our operational infrastructure, assets, and internal systems to proactively mitigate risk and adapt to new climate change.

Transitioning to a low-carbon economy

Progressing toward an economy that is driven by low-carbon power sources with minimal or no output of greenhouse gas emissions into the atmosphere.

Greenhouse gas and air emissions

Managing, measuring, and reducing greenhouse gas and other emission that are released as a result of our operations and activities.

Energy efficiency

Efficiently managing our consumption (e.g., fuel and electricity) and promoting energy reliability, affordability, and demand reductions with our customers.

Land use and biodiversity

Managing our operations in a way that is mindful of impacts on natural resources, wildlife, and ecosystems.

Water Management

Effective withdrawal and consumption of water, treatment of wastewater, and management of wastewater discharge across our operations to minimize negative impacts on fresh water and groundwater sources while benefiting the communities where we operate.

Waste and materials management

Preventing, reducing, reusing, and recycling hazardous and non-hazardous waste generated across our operations and value chain to minimize negative impacts on air, land, water, natural resources, and wildlife.

Social

Public health and safety

Managing our assets and operations in a manner that safeguards the health, safety, and well-being of all stakeholders in the communities where we operate.

Community support and economic development

Supporting and investing in community development that stimulates local social, cultural, and economic growth.

Indigenous relations

Actively engaging with Indigenous communities, respecting their interests, and partnering with them on projects that create positive mutual benefits.

Customer experience and affordability

Delivering cost-effective and high-quality services that meet or exceed the needs and preferences of our customers.

Energy reliability

Consistently meeting our customers' energy needs by mitigating the frequency of outages or service disruptions associated with our transmission and pipeline infrastructure.

Infrastructure investment and resiliency

Continually modernizing our infrastructure while exploring innovative ways to deliver flexible, reliable, and resilient energy solutions for our customers.

Employee health and safety

Creating and upholding a safety culture focused on the mental, emotional, and physical health of employees and contractors.

Diversity, equity, and inclusion

Promoting a culture of equality and inclusion, where all employees receive fair and equal treatment and diverse perspectives are celebrated.

Talent attraction and retention

Attracting world-class employees and continuing their personal and professional growth in alignment with our business purpose, strategy, and the transition to a low-carbon economy.

Governance

Ethics and integrity

Maintaining the highest standards of ethics and integrity throughout all levels of our business, and in our working relationships with all stakeholders, while ensuring compliance with all applicable laws and regulations.

Transparency and disclosure

Committing to publicly sharing reliable and accurate information on our environmental, social, and governance performance.

Risk management

Forecasting, evaluating, and disclosing financial, environmental, social, and governance risks and identifying procedure, plans, or initiatives to avoid or minimize negative impacts of the associated risks.

Cybersecurity

Investing in proactive measures to strengthen our internal controls and adopting best-practice technologies and employee training to monitor for and prevent data breaches.

Governmental affairs and public policy

Having a proactive government affairs approach to manage risk, proactively influence and support policy agendas, and advocate for causes that affect our local communities and create opportunities.

Sustainable procurement

Adopting standards that ensure we work with like-minded suppliers who align with our social and environmental practices and considerations.

Independent Limited Assurance Report to Liberty Utilities (Canada) Corp.

We have been engaged by the management of Liberty Utilities (Canada) Corp. ('Liberty Utilities') to undertake a limited assurance engagement, in respect of the year ended December 31, 2020, on certain quantitative greenhouse gas emissions performance information described below and disclosed in The 2020 Sustainability Report Appendix – Environmental Metrics Table (the "Report") as described below.

Subject Matter Information and Applicable Criteria

The scope of our limited assurance engagement, as agreed with management, comprises the following greenhouse gas emissions performance information (the 'Subject Matter Information'):

Subject Matter	Key Performance Indicator	Units
Climate Change	Scope 1 greenhouse gas emissions	2,133,528 tonnes CO ₂ e
	Scope 2 greenhouse gas emissions	50,247 tonnes CO ₂ e

There are no mandatory requirements for the preparation, publication or review of greenhouse gas emissions performance metrics. As such, Liberty Utilities applies the World Resources Institute/World Business Council for Sustainable Development's Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (the 'GHG Protocol') and its own internal reporting guidelines and definitions for GHG reporting (Appendix A) (collectively the 'Applicable Criteria').

Management's responsibilities

Management is responsible for the preparation and presentation of the Subject Matter Information in accordance with the Applicable Criteria, current as at the date of our report. Management is also responsible for determining Liberty Utilities' objectives in respect of greenhouse gas emissions performance and reporting and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

Our responsibility and professional requirements

Our responsibility in relation to the Subject Matter Information is to perform a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements 3410 *Assurance Engagements on Greenhouse Gas Statements* (ISAE 3410), issued by the International Auditing and Assurance Standards Board. ISAE 3410 requires that we plan and perform our procedures to obtain the stated level of assurance, in accordance with the applicable criteria.

Assurance approach

We planned and performed our work to obtain all the evidence, information and explanations we considered necessary in order to form our conclusion as set out below. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Subject Matter Information, and applying analytical and other evidence gathering procedures to the Subject Matter Information, as appropriate. Our procedures included:

- Inquiries with relevant staff at the corporate and facility level to understand the data collection and reporting processes for the Subject Matter Information;
- Assessment of the suitability and application of the Applicable Criteria in respect of the Subject Matter Information
- Where relevant, performance of walkthroughs of data collection and reporting processes for the Subject Matter Information;
- Comparison of a sample of the reported data for the Subject Matter Information to underlying data sources;
- Inquiries of management regarding key assumptions and, where relevant, the re-performance of calculations;
- Completion of virtual site visits to a sample of Liberty Utilities' facilities, including walkthrough of data collection and reporting processes, interviews with senior management and relevant staff and virtual site tours; and,

- Reviewing the presentation of the Subject Matter Information in the Report to determine whether it is consistent with our overall knowledge of, and experience with, the greenhouse gas emissions performance of Liberty Utilities.

The extent of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore a lower level of assurance is obtained.

Independence, quality control and competence

We have complied with the relevant rules of professional conduct/code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The engagement was conducted by a multidisciplinary team which included professionals with suitable skills and experience in both assurance and in the applicable subject matters.

Inherent limitations

Non-financial information, such as that supporting the Subject Matter Information, is subject to more inherent limitations than financial information, given the characteristics of significant elements of the underlying subject matter and the availability and relative precision of methods used for determining quantitative greenhouse gas emissions information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable measurement techniques, which can result in materially different measurements and can impact comparability. The nature and methods used to determine such information, as well as the measurement criteria, may change over time.

Our conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that, for the year ended December 31, 2020, the Subject Matter Information, as described above and disclosed in The 2020 Sustainability Report Appendix – Environmental Metrics, has not been prepared and presented, in all material respects, in accordance with the Applicable Criteria, current as at the date of our report.

Handwritten signature of KPMG LLP in black ink, with a horizontal line underneath.

Chartered Professional Accountants, Licensed Public Accountants

June 23, 2021

Vancouver, Canada

Appendix A

Liberty Utilities (Canada) Corp. Greenhouse Gas (GHG) reporting Evaluation Criteria for Scope 1 (direct) and Scope 2 (energy indirect) emissions.

- The Company has selected the Operational Control approach to define its organizational boundaries and includes all material sources and sinks associated with its facilities and operations that it exercises direct operational control over.
- The Company has identified 2017 as its base year. A baseline recalculation is required when the following conditions are met: the facilities in operation in the reporting year changed from those in the base year in a non-organic way; changes in calculation methods, data monitoring, emissions factors and other assumptions have taken place; errors have been discovered in calculation methods and assumptions; operational boundaries have been modified in comparison to the base year; and the cumulative effect of expected changes from the base year recalculation exceed 5% of base year emissions.
- Scope 1 emissions are calculated using activity data (e.g. fuel consumption) and emission factors sourced from Greenhouse Gas Inventories, by USEPA (2020) and the Canadian National Inventory Report (NIR).
- Scope 2 emissions are calculated using activity data (e.g. electricity consumption) and emission factors sourced from Greenhouse Gas Inventories, by USEPA (2020) and the Canadian National Inventory Report (NIR).
- The Company applies the GHG protocol Scope 2 Guidance and report our scope 2 emissions using both market-based and location based-methods. Based on current operations, the results for the location-based and market-based methods are equivalent.
- The greenhouse gases included within the Company's inventory are CO₂, CH₄, N₂O, and SF₆.
- Immaterial sources include fugitive emissions – leakage of refrigerants used in buildings, release of CO₂ from fire extinguishers, CH₄ from coal piles.

Stay connected!



Greater Toronto Headquarters:
354 Davis Road
Oakville, Ontario L6J 2X1



905-465-4500



905-465-4514



AQN_Utilities



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



www.AlgonquinPowerandUtilities.com

Algonquin



Liberty™

