

ESG Performance Index 2022

Sustaining energy
and water for life



Algonquin

 Liberty™

2022 ESG performance index¹

Summary

		Historical		
		2022	2021	2020
Environment				
Greenhouse gas (GHG) emissions (Mt CO ₂ e) ²	Scope 1	2,542,820 [†]	2,282,609	2,582,317
	Scope 2	89,200 [†]	97,106	87,014
	Intensity (Mt CO ₂ e/\$USD revenue)	0.0010	0.0011	0.0013
Energy consumption intensity	Power generation assets: MWh consumed/MWh generated	0.79	0.88	1.13
	Algonquin/Liberty: MWh consumed/\$USD revenue	0.0042	0.0047	0.0066
	Regulated business: MWh consumed/customer connections	8.73	8.65	11.56
Water usage (thousand m ³)	Water delivered	157,545	106,737	73,130
	Water withdrawal	204,397 [†]	145,250	69,033
	Water discharge	80,357 [†]	73,642	26,188
Social				
Total number of employees		3,944 [†]	3,464	3,429
Female representation	Board	44.4%	37.5%	33.3%
	Executive Team	44.4%	40.0%	37.5%
	Leadership roles – Canada and US only ³	31.0%	30.0%	32.2%
	Workforce – Canada and US only	33.4%	32.9%	32.8%
Health and safety	Workforce fatalities	0 [†]	0	0
	Lost Time Injury Rate (LTIR) – Canada and US only	0.03	0.00	0.04
	Recordable Injury Rate (RIR) – Canada and US only	0.52	0.56	0.84
Electricity grid reliability	System Average Interruption Duration Index (SAIDI)	138.00 [†]	187.36	115.92
	System Average Interruption Frequency Index (SAIFI)	1.13 [†]	1.30	1.01
Community investment (\$USD millions)		31.2 [†]	34.9	18.1
Governance				
Incidents of corruption		0 [†]	0	0
Legal actions for anti-competitive practices		1 [†]	0	1
Violations involving rights of indigenous peoples		0 [†]	0	0
Substantiated complaints received regarding customer privacy		0 [†]	0	0

† See breakdown by country under the heading "2022 ESG performance index - country breakdown" beginning on pg. 23.

1. 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 at December 31 of the specified year. Unless specifically noted, all relevant metrics include Bermuda and Chile. Unless explicitly noted, all relevant metrics are provided for operationally controlled assets only, and data is provided on a 100% basis for each such asset. Historical data that was not available is represented by "-".
2. 2020 and 2021 GHG emissions have been recalculated following Algonquin's GHG Base Year Recalculation Policy, to include full-year emissions from Liberty New York Water. Previously published emission figures (2017–2021) will differ. See footnote 22 for details.
3. Leadership roles refer to employees in the following job levels: Executive, Senior Vice President, Vice President, President, Senior Director, Director, and Senior Manager.

Operational metrics

	Historical		
	2022	2021	2020
Utility connections			
Electricity	308,698 [†]	307,000	306,000
Natural gas	375,000 [†]	373,000	371,000
Water and wastewater	559,562 [†]	413,000	410,000
Total	1,243,260	1,093,000	1,087,000

Energy delivered to our customers

	2022	2021	2020
Electricity (GWh) – regulated (retail)	6,749	6,471	5,892
Electricity (GWh) – unregulated (contractual agreements)	8,179	6,851	5,046
Total electricity (GWh)	14,927	13,322	10,937
Total electricity (PJ)	53.7	48.0	39.4
Natural gas (PJ)	43.8	41.6	41.8
Total (PJ)	97.5	89.5	81.1

Water and wastewater services provided to our customers

	2022	2021	2020
Water provided (thousand m ³)	157,545	106,737	73,130
Wastewater treated (thousand m ³)	12,238	10,478	9,596

Electricity generation capacity (MW)⁴

	2022	2021	2020
Natural gas ⁵	1,496 [†]	1,496	1,496
Heavy fuel oil	140 [†]	140	140
Wind	2,593 [†]	2,537	1,452
Hydroelectric	132 [†]	134	134
Solar	332 [†]	329	258
Total	4,692[†]	4,636	3,479
Renewable energy total	3,056 [†]	3,000	1,843
Renewable energy portfolio (%)	65% [†]	65%	53%

4. MW capacity is based on installed generator nameplate capacity. Facilities that are not operationally controlled by Algonquin are excluded.

5. Includes 100% nameplate capacity of the State Line natural gas facility.

Operational metrics (continued)

	Historical		
	2022	2021	2020
Net electricity generated (GWh)			
Natural gas	4,434 [†]	3,784	4,635
Heavy fuel oil	545 [†]	563	85
Wind	8,277 [†]	7,332	3,833
Hydroelectric	601 [†]	583	543
Solar	627 [†]	575	404
	Total	14,484[†]	12,838
	Renewable energy total	9,505 [†]	8,490
	Renewable energy portfolio (%)	66% [†]	50%
Customer satisfaction	2022	2021	2020
J.D. Power CSAT Score ⁶	699	703	686
Percentage of customer emails sent ⁷	35%	35%	33%
Energy reliability	2022	2021	2020
SAIDI (minutes)	138.00 [†]	187.36	115.92
SAIFI (rate)	1.13 [†]	1.30	1.01
CAIDI – Customer Average Interruption Duration Index (minutes)	122.22 [†]	143.81	114.77
Electricity transmission and distribution	2022	2021	2020
Length of transmission lines (km) – US only	2,026	2,021	2,279
Length of distribution lines (km) – US only	13,917	13,780	13,616
Transmission losses in % – US only	2.90%	2.90%	2.90%
Technical distribution losses in % – US only	4.30%	4.20%	4.20%
Natural gas transmission and distribution	2022	2021	2020
Length of transmission lines (km)	16	16	20
Length of distribution lines (km)	13,719	13,623	13,486
Leakage rate in distribution infrastructure	0.0161	0.0100	0.0146

6. 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 in the Canada and the US. Scores are consolidated into an enterprise-wide value, based on a customer connection weighting.

7. 2022 data has been revised to include the percentage of emails sent to our customers. 2021 and 2020 data have also been revised.

Operational metrics (continued)

		Historical	
		2021	2020
Water utility water mains and sewer pipes			
	2022		
Length of water mains (km)	8,341 ¹⁸	7,181	3,208
Length of sewer pipes (km)	3,148 [†]	3,153	980
Cybersecurity			
	2022	2021	2020
Substantiated complaints received concerning breaches of customer privacy	0 [†]	0	0
Identified leaks, thefts, or losses of customer data	0 [†]	0	0
Economic value generated and distributed (\$USD millions)			
	2022	2021	2020
Economic value generated (EVG) – revenue	2,981.7 [†]	2,561.5	1,849.9
Economic value distributed (EVD)			
Operation costs	1,646.2 [†]	1,174.2	740.6
Employee wages and benefits	342.5 [†]	352.8	294.7
Payments to providers of capital	660.1 [†]	535.1	453.1
Payments to government – Canada and US only	5.5 [†]	5.0	5.6
Community Investments – Canada and US only	1.4	1.4	0.8
Economic value generated and distributed (EVG&D) by market			
Economic value retained (regulated)	303.7 [†]	391.9	241.9
Economic value retained (unregulated)	16.8 [†]	101.0	113.1
Total Economic value retained	320.5 [†]	492.9	355.1
Community engagement			
	2022	2021	2020
Operations with local community engagement	See regional breakdowns for detail	100%	100%
Payments under community contribution agreements, land rentals, or municipal taxes (\$USD millions) – Canada and US only	31.2 [†]	34.9	18.1
Cash contributions (\$USD)	See regional breakdowns for detail	1,185,000	1,672,000
Management overheads	96,000	188,961	158,471
Liberty Days used – hours volunteered by employees – Canada and US only	10,697	5,334	3,375

8. The increase in the length of water mains in 2022 was due to the inclusion of New York American Water.

Workforce and social indicators

Health and Safety ⁹		Historical		
Work-related injury		2022	2021	2020
Fatalities from work-related injury	Employees	0 [†]	0	0
	Non-employees	0 [†]	0	0
Recordable injuries	Employees	21 [†]	19	21
	Non-employees	N/A ¹⁰	2	2
RIR – Canada and US only		0.52 ^{†11}	0.56	0.84
Work-related injuries include:		The primary work-related injuries identified for employees in 2022 are muscle strains, cuts, and abrasions.		
High-consequence work-related injuries (number)	Employees	1 [†]	0	1
	Non-employees	0 [†]	2	2
LTIR – Canada and US only		0.03	0.00	0.04
Near Miss Frequency Rate (NMFR) – Canada and US only		13.66	30.00	32.97
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.		
Total hours worked by employees		7,913,991 [†]	7,368,526	5,204,161

9. 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.

10. Safety rates are typically reported based on the overall performance of contractors and cannot be specifically obtained for activities carried out on "Liberty sites." As a result, the precise rates pertaining to these sites are currently unavailable.

11. Chile and Bermuda RIR data is available in the country breakdown section.

Health and Safety (continued)

		Historical		
Work-related ill health		2022	2021	2020
Fatalities from work-related ill health	Employees	0 [†]	0	0
	Non-employees	0 [†]	0	0
Recordable work-related ill health cases	Employees	0 [†]	0	0
	Non-employees	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 2022.		
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 environmental, health, and safety (EHS) management system

		2022	2021	2020
Workers covered by EHS system		100%	100%	100%
Workers covered by internally audited EHS system	Employees	100% ^{†12}	40%	35%
	Non-employees	100%	100%	100%
Employees covered by externally audited EHS system ¹³	Canada and US	N/A ¹⁴	5%	5%

Employee demographics

		Historical		
Number and geographic location of employees		2022	2021	2020
Canada	Permanent	665	564	500
	Temporary	18	25	21
US	Permanent	2,424	2,064	2,113
	Temporary	14	13	15
Bermuda	Permanent	366	345	341
	Temporary	1	12	-
Chile	Permanent	456	422	439
	Temporary	0	19	-
Total Algonquin/Liberty workers		3,944	3,464	3,429
Algonquin/Liberty employees		See regional breakdowns for detail	67.5%	72.6%
Non-employees		See regional breakdowns for detail	32.5%	27.4%

12. During the years 2020 and 2021, audits were primarily concentrated on specific parts of the company. However, the auditing process was limited and affected by the constraints imposed by the COVID-19 pandemic. With the easing of COVID-19 restrictions, we have resumed conducting in-person audits to ensure a more comprehensive assessment of safety measures and practices within the company.

13. Our Chile operation is ISO 45001 certified while our US, Canada, and Bermuda operations have internal management systems in place.

14. No external audits were conducted in 2022.

Employee demographics (continued)

			Historical		
By age group			2022	2021	2020
Age ranges		< 30 years	See regional breakdowns for detail	11.0%	11.5%
		30–50 years	See regional breakdowns for detail	55.3%	52.4%
		> 50 years	See regional breakdowns for detail	33.8%	36.1%
Average age (years)			2022	2021	2020
Female employees			See regional breakdowns for detail	45	45
Male employees			See regional breakdowns for detail	44	45
		All employees	See regional breakdowns for detail	44	45
Gender and employment categories			2022	2021	2020
Employee function by gender	Office	Female	See regional breakdowns for detail	40.5%	42.7%
		Male	See regional breakdowns for detail	59.5%	57.3%
	Field	Female	See regional breakdowns for detail	3.1%	3.3%
		Male	See regional breakdowns for detail	96.9%	96.7%
Employee level by gender	Senior managers and above	Female	See regional breakdowns for detail	30.4%	32.2%
		Male	See regional breakdowns for detail	69.6%	67.8%
	Middle managers	Female	See regional breakdowns for detail	31.3%	35.8%
		Male	See regional breakdowns for detail	68.8%	64.2%
Age and employment categories			2022	2021	2020
Employee function by age	Office	< 30 years	See regional breakdowns for detail	11.2%	11.2%
		30–50 years	See regional breakdowns for detail	55.2%	52.5%
		> 50 years	See regional breakdowns for detail	33.7%	36.2%
	Field	< 30 years	See regional breakdowns for detail	10.0%	12.3%
		30–50 years	See regional breakdowns for detail	55.9%	52.0%
		> 50 years	See regional breakdowns for detail	34.1%	35.7%
Employee level by age	Senior managers and above	< 30 years	See regional breakdowns for detail	0.0%	0.0%
		30–50 years	See regional breakdowns for detail	37.7%	49.7%
		> 50 years	See regional breakdowns for detail	62.3%	50.3%
	Middle managers	< 30 years	See regional breakdowns for detail	0.0%	2.8%
		30–50 years	See regional breakdowns for detail	51.4%	59.9%
		> 50 years	See regional breakdowns for detail	48.6%	37.3%

Employee demographics (continued)

		Historical		
Collective bargaining agreement coverage – Canada and US only		2022	2021	2020
Percentage of employees who are salaried	Canada	100%	73%	73%
	US	67%		
Percentage of employees covered by collective bargaining agreements	Canada	0%	27%	27%
	US	33%		
Gender and self-identification		2022	2021	2020
Women		See regional breakdowns for detail	32.9%	32.8%
Men		See regional breakdowns for detail	67.1%	67.2%
Self-identified minorities		See regional breakdowns for detail	13.7%	9.8%
Self-identified veterans		See regional breakdowns for detail	3.1%	2.0%
Self-identified employees with disability		See regional breakdowns for detail	0.3%	0.5%
By employment contract¹⁵		2022	2021	2020
Permanent employees	Female	1,192 [†]	860	857
	Male	2,719 [†]	1,768	1,756
Temporary employees	Female	20 [†]	18	13
	Male	13 [†]	20	23
By employment type¹⁵		2022	2021	2020
Full-time employees	Female	1,196 [†]	869	865
	Male	2,722 [†]	1,777	1,766
Part-time employees	Female	12 [†]	8	5
	Male	4 [†]	6	8
Casual employees	Female	4 [†]	1	0
	Male	6 [†]	5	5
Female representation		2022	2021	2020
All management positions – Canada and US only		32.0%	33.2%	34.3%
Junior management positions – Canada and US only		32.2%	35.9%	35.8%
Top management and above – Canada and US only		29.6%	30.4%	32.2%
Revenue-generating positions – Canada and US only		18.6%	31.3%	31.9%
STEM-related positions – Canada and US only		27.9%	25.5%	26.3%

15. Historical numbers do not include our operations in Chile and Bermuda.

Employee demographics (continued)

		Historical		
Leadership roles (senior manager and above)		2022	2021	2020
Women – Canada and US only		30.98%	30.0%	32.2%
Men – Canada and US only		69.02%	70.0%	67.8%
Self-identified minorities – Canada and US only		11.46%	10.7%	8.6%
Executive team		2022	2021	2020
Members		9	10	8
Women		44.4%	40.0%	37.5%
Men		55.6%	60.0%	62.5%
Self-identified minorities		11.1%	10.0%	12.5%
Self-identification of employees working in the US ¹⁶		2022	2021	2020
Percentage of employees working in the US		63.2%	60.0%	80.3%
Share of racial, ethnic, and indigenous self-identifications	Asian	1.9%	1.8%	1.5%
	Black or African American	3.7%	4.0%	2.1%
	Hispanic or Latino	6.9%	6.8%	4.7%
	Caucasian	78.6%	83.7%	62.5%
	Indigenous or Native	0.9%	1.1%	1.1%
	Other	8.0%	2.6%	28.2%
Employee pay ratios – Canada and US only		2022	2021	2020
Pay ratio of CEO total compensation to median employee compensation ¹⁷	Canada	50.62	55.02	50.82
	US	48.79		
Base pay ratio (highest paid to median) by region	Canada	6.36	9.23	9.50
	US	3.60	3.56	3.62
Salary growth ratio (highest paid to median) by region	Canada	1.76	(0.23)	0.73
	US	1.65	0.63	0.61

16. Self-identification declarations are voluntary in Canada.

17. CEO compensation used in the calculation includes Base Salary (BS), Short-Term Incentive Pay (STIP), Long-Term Incentive Pay (LTIP), cash allowance for business use vehicle, and compensatory change (pension) for the reporting year. Median employee compensation includes salaries, wages, bonuses, incentives, benefits, and any other forms of remuneration where applicable. The calculation has included all employees, including senior executives but excluding CEO. Historical ratios have been updated to reflect the definition change of the calculation.

Employee demographics (continued)

Historical

Employee compensation by gender and level – Canada and US only		2022	2021	2020	
Equal pay ratio (female/male) by level	Executive (base pay only)	0.82	0.94	0.85	
	Executive (base pay + other)	0.70	-	0.61	
	All managers and above (base pay only)	Canada	0.95	0.93	0.92
		US	0.96		
	All managers and above (base pay + other)	Canada	0.87	0.92	0.91
		US	0.95		
	Non-managers (base pay only)	Canada	0.94	0.75	0.75
		US	0.74		
Equal pay ratio (female/male) by function	Office	Canada	0.77	0.77	
		US			0.67
	Field	Canada	0.91	0.89	
		US			0.81
Equal pay ratio (female/male) by region	Canada	0.84	0.90	0.88	
	US	0.80	0.80	0.80	
Women in top 10% of salaries	Canada	30.0%	27.0%	28.7%	
	US	23.0%			

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

		2022	2021	2020
Canada	Female	1.48	1.80	1.76
	Male	1.56	1.53	1.46
US	Female	1.42	1.18	1.26
	Male	1.40	1.83	2.52

Employee attraction and retention

Hiring rates

	2022	2021	2020
Percentage of open positions filled by internal candidates	36.0%	26.0%	20.0%
Total number of employee hires	812	443	458

Hiring rates (continued)

		2022	2021	2020
Employees hired by gender	Female	See regional breakdowns for detail	0.39	0.39
	Male	See regional breakdowns for detail	0.61	0.61
Employees hired by region (ratio between Canada and US)	Canada	0.33	0.44	0.32
	US	0.67	0.56	0.68

Turnover rates

			2022	2021	2020
Total employee turnover rate			See regional breakdowns for detail	0.15	0.07
Volunteer employee turnover rate			See regional breakdowns for detail	0.13	0.05
Employee turnover rate by gender – Canada and US only	Female	Canada	0.16	0.18	0.08
		US	0.16		
	Male	Canada	0.15	0.14	0.07
		US	0.14		
Employee turnover rate by region – Canada and US only	Canada	0.15	0.16	0.05	
	US	0.14	0.15	0.08	

Employee attraction and retention

Parental leave

			2022	2021	2020
Employees entitled to parental leave	Female	See regional breakdowns for detail	990	842	
	Male	See regional breakdowns for detail	2,046	1,720	
Employees that took parental leave	Female	See regional breakdowns for detail	32	13	
	Male	See regional breakdowns for detail	15	4	
Employees that took parental leave and returned	Female	See regional breakdowns for detail	18	7	
	Male	See regional breakdowns for detail	14	4	
Return to work rate	Female	See regional breakdowns for detail	0.56	0.54	
	Male	See regional breakdowns for detail	0.93	1.00	
Employees that took parental leave and were retained	Female	See regional breakdowns for detail	18	7	
	Male	See regional breakdowns for detail	14	4	
Parental leave retention rate	Female	See regional breakdowns for detail	0.50	0.46	
	Male	See regional breakdowns for detail	0.80	1.00	

Employee attraction and retention (continued)

			Historical		
Defined benefit plan			2022	2021	2020
Salary contributed by employee/employer – Canada and US only	Employee	Canada	1%	0%	0%
		US	8%		
	Employer	Canada	5%	4% – 8%	4% – 8%
		US	401{k} = 3.6% Pension = 8.5%		
Level of participation in retirement plans – Canada and US only			100%	100%	100%
Defined benefits plan and other retirement plans:			<ul style="list-style-type: none"> - 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

	2022	2021	2020
Employee engagement score	See regional breakdowns for detail	62%	73%
Percentage of employees covered	See regional breakdowns for detail	83%	88%

Learning and development

			Historical		
Training ¹⁸			2022	2021	2020
Average training hours by gender	Female		22.0 [†]	18.0	13.6
	Male		20.0 [†]	17.0	14.6
Average training hours by level	Senior managers and above ¹⁹		10.0 [†]	21.0	13.5
	Middle managers ²⁰		15.0 [†]	26.0	17.3
Average training hours by job function	Office		18.0 [†]	18.0	13.1
	Field		23.0 [†]	16.0	17.8
Average training hours per employee			21.0 [†]	15.0	14.0
Average amount spent per employee on training (\$USD/employee)			1,050 [†]	1,469	1,361
Amount invested in employee training (\$USD) ²¹			3,644,131 [†]	2,792,187	2,047,115

Non-discrimination

			Historical		
Performance reviews			2022	2021	2020
Percentage of employees who received performance review – Canada and US only			100% ²²	100%	100%

18. The data presented in column 2022 includes Algonquin's operations in Canada, US, and Bermuda (both regulated and unregulated).

19. Historical definition of Senior Manager included positions of Senior Manager and above. 2021 and 2022 definition has been revised to Vice President and above.

20. Historical definition of Middle Manager included positions of Managers up to Team Leaders. 2021 and 2022 definition has been revised to Senior Directors and Directors.

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

22. Only regular full-time, regular part-time, and non-union employees who have joined before September 30 were eligible for performance review.

Non-discrimination (continued)

Discrimination incidents

	Historical		
	2022	2021	2020
Number of incidents of discrimination	1†	3	8
Number of incidents reviewed by Algonquin	1†	3	8
Number of incidents no longer subject to action	1†	3	8
	Remediation plans implemented and/or being implemented	All actions that were recommended were completed.	

Governance and policy

Board of directors		Historical		
Experience and background		2022	2021	2020
Independent directors		8	8	8
Average tenure (years)		5.9	5.3	7
Directors with operational experience ²³		4	7	9
Directors with governance and/or risk management experience		9	9	9
Directors with senior executive experience		8	8	7
	Total Board members	9	9	10

Demographics		2022	2021	2020
By gender	Female	44%	40%	33%
	Male	56%	60%	67%
By age	< 30 years	0%	0%	0%
	30–50 years	0%	0%	0%
	> 50 years	100%	100%	100%

Compliance		Historical		
Indigenous relations		2022	2021	2020
Violations involving rights of indigenous peoples		0 [†]	0	0

Human rights		2022	2021	2020
Operations subject to human rights reviews and impact assessments	Canada	100%	100%	100%
	US	100%	100%	100%

23. The number of directors with operational experience has decreased due to the modification of criteria which previously included directors with utility/energy experience.

Compliance (continued)

	Historical		
	2022	2021	2020
Anti-corruption			
Operations assessed for corruption-related risks (government relations, conflicts of interest, and foreign interests) ²⁴	100% [†]	100%	100%
Board of directors and employees who received anti-corruption communications and received anti-corruption policy training ²⁵	100%	100%	100%
Incidents of corruption and actions taken	0 [†]	0	0
Percentage of employees who completed annual Code of Business Conduct and Ethics training	100%	100%	100%
Number of times Ethics Reporting Line was used	17 [†]	23	10
Anti-competitive behaviour			
Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	1 [†]	0	1
Social and economic compliance			
Total monetary value of significant fines (\$USD millions)	0	4	1
Number of non-monetary sanctions	0	0	0
Political spending			
Amount spent on lobbying (\$USD)	1,068,200 [†]	745,000	807,397
Amount spent on trade associations (\$USD)	1,208,800 [†]	1,042,000	785,000

24. Algonquin has not performed risk assessments for all our operating assets, and our approach to risk assessment is not solely focused on "corruption." We have conducted risk assessments for activities related to corruption based on the available resources and collaboration with the business. However, there is still a possibility of unidentified corruption-related risks that may exist.

25. Currently, anti-corruption training is embedded into the Annual Code of Business Conduct and Ethics training.

Environment

GHG emissions (Mt CO ₂ e) ²⁶⁻²⁹	Historical		
Scope 1 emissions³⁰	2022	2021	2020
Power generation – thermal ³¹	2,250,381	1,984,603	2,297,508
Power generation – renewable ³²	580	472	521
Utilities – electric	12,059	17,343	6,840
Utilities – natural gas	73,662	79,728	82,037
Utilities – water/wastewater	205,916	200,228	194,139
Other uncategorized ³³	223	235	1,274
Total Scope 1 emissions	2,542,820	2,282,609	2,582,317
Scope 2 emissions³⁴	2022	2021	2020
Power generation – thermal	250	392	278
Power generation – renewable ³⁵	3,212	2,514	1,786
Utilities – electric	16,188	17,529	16,752
Utilities – natural gas	1,614	2,001	1,294
Utilities – water/wastewater	67,883	74,576	66,650
Other uncategorized	53	94	253
Total Scope 2 emissions	89,200	97,106	87,014

26. GHG gases included in calculations: CO₂, CH₄, N₂O, and SF₆. Global Warming Potentials (100-year time horizon) published in the IPCC Fourth Assessment Report are used in the emissions calculation. All emission figures are in metric tons CO₂e (Mt CO₂e). 2022 Scope 1 and 2 emissions by gas type: CO₂: 2,355,771 Mt CO₂e, CH₄: 266,185 Mt CO₂e, N₂O: 3,118 Mt CO₂e, and SF₆: 6,947 Mt CO₂e.

27. GHG emissions are calculated following the Greenhouse Gas Protocol Corporate Standard (GHG Protocol) and Corporate Value Chain (Scope 3) Account and Reporting Standard. Emission factors are sourced from best-practice references such as the Canadian National Inventory Report (NIR, published in 2022), USEPA's GHG Emission Factors Hub (published in 2022), IEA's Emissions Factors Database (published in 2022), and UK DEFRA's GHG Conversion Factors (published in 2022). Regarding emission factors for grid electricity, US facilities use 2020 eGRID factors published by USEPA in 2022, Chile facilities use 2020 factors published by IEA in 2022, and Canadian facilities use 2019 factors published in the 2022 NIR.

28. GHG emissions are consolidated through an operational-control approach.

29. Base year identification: 2017. Base year and historical year GHG emissions have been recalculated following Algonquin's GHG Base Year Recalculation Policy to include full-year emissions from Liberty New York Water. 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. The recalculated Scope 1 and 2 emissions in 2017 are 3,759,264 Mt CO₂e and 88,248 Mt CO₂e, respectively.

30. Immaterial sources include fugitive emissions – leakage of refrigerants used in buildings and release of CO₂ from fire extinguishers.

31. This category includes Algonquin's thermal power generation facilities in the US and Bermuda.

32. This category includes Algonquin's wind, solar, and hydroelectric power generation facilities that were fully operating in 2022 from both regulated and unregulated businesses.

33. This category includes all other sites that are not included in above categories, such as some office buildings. Due to the change of the GHG calculation platform starting from the 2021 reporting year, the included sites under this category in 2020 are slightly different from 2021 and onwards.

34. Scope 2 emission figures are location-based. Market-based emissions are equal to location-based emissions because there are no contractual instruments used in the calculation of Scope 2 emissions.

35. Historical Scope 2 emissions from renewable power generation facilities were adjusted to remove the Tinker hydroelectric facility, as it has been using self-generated renewable electricity.

GHG emissions (Mt CO₂e)(continued)

Scope 1 and Scope 2 emissions and emission intensities

	2022	2021	2020
Total Scope 1 + 2 emissions	2,632,020	2,379,715	2,669,331
Total emissions from power generation (Mt CO ₂ e)	2,254,423	1,987,981	2,300,093
Emission intensity – power generation (Mt CO ₂ e from power generation/MWh power generation)	0.1608	0.1997	0.2091
Emission intensity – revenue (Mt CO ₂ e/\$USD revenue)	0.0010	0.0011	0.0013
GHG reduction below 2017 baseline (%)	-31.6%	-38.1%	-30.6%

Scope 3 emissions³⁶

	2022	2021	2020
Category 3 – Fuel and energy-related activities (not included under Scope 1 and 2) ³⁷	1,161,196	1,081,376	1,088,463
Category 11 – Use of sold product ³⁸	2,205,268	2,092,670	2,102,071
Category 15 – Investments ³⁹	1,878,009	2,041,826	1,867,132

Other emissions (Mt)

Other emissions from electricity generation (Mt)⁴⁰

	Historical		
	2022	2021	2020
NO _x emissions	508	483	493
SO _x emissions	10	11	10
Mercury emissions	0.102070	0.00000	0.00003
Particulate matter emissions	74	79	100
Lead emissions	0.0003	0.0000	0.0001
Persistent organic pollutants	-	-	-
Volatile organic compounds	16	46	84
Hazardous air pollutants	7	5	5
Ozone-depleting substances	-	-	-

36. All emissions for Categories 3, 11, and 15 are calculated using actual data, obtained either through Algonquin's internal tracking system, or from suppliers or other value chain partners.

37. This Category includes emissions from the following subcategories: 1) upstream generation emissions of distributed electricity, 2) upstream production and transmission emissions of distributed gas, 3) upstream emissions of purchased and consumed fuels, 4) upstream emissions of purchased and consumed electricity, and 5) transmission and distribution loss emissions of purchased and consumed electricity. Emissions were calculated by applying appropriate upstream emission factors sourced from various jurisdictions, such as the UK DEFRA and USEPA, to the amount of fuels and electricity that Algonquin consumed and delivered.

38. This was calculated by applying the natural gas combustion emission factor sourced from USEPA's GHG Emission Factors Hub (published in 2022) to the total amount of natural gas that was delivered to industrial, commercial, and residential customers in the 2022 reporting year.

39. Investment emissions were calculated by applying Algonquin's percentage ownership to a facility's total gross Scope 1 and 2 emissions. The reported emissions include emissions from a 7.52% and 12.0% ownership in the Plum Point and Iatan coal power plants respectively, and approximately 43–44% ownership interest (specifically, 42.9% in 2022, 43.6% in 2021, and 44.2% in 2020) in Atlantica Sustainable Infrastructure PLC. 2021 and 2020 emissions have been updated to use Atlantica's gross Scope 1 emissions.

40. Metrics provided below are for US thermal facilities only.

Energy consumption and generation capacity

		Historical		
Internal energy consumption (MWh)		2022	2021	2020
Non-renewable sources	Gasoline	32,438 [†]	39,163	17,369
	Diesel	77,591 [†]	62,123	48,282
	Liquified petroleum gas (LPG)	2,192 [†]	1,850	5,246
	Natural gas	10,152,537 [†]	8,624,164	10,583,263
	Fuel oil	1,307,337 [†]	1,488,153	164,138
Electricity consumption		179,802 [†]	155,334	91,954
Total internal energy consumption (MWh)		11,751,897[†]	10,370,787	10,910,252
Electricity generated and sold		14,483,858	10,269,746	9,499,073
Energy consumption intensity	Power generation assets: MWh consumed/MWh generated	0.79	0.88	1.13
	Algonquin/Liberty: MWh consumed/\$USD revenue	0.0042	0.0047	0.0066
	Regulated business: MWh consumed/Customer connections	8.73	8.65	11.56
Generation capacity		2022	2021	2020
Nameplate capacity of generation assets by source (MW)	Natural gas	1,496 [†]	1,496	1,496
	Heavy fuel oil	140 [†]	140	140
	Hydroelectric	132 [†]	134	134
	Solar	332 [†]	329	258
	Wind	2,593 [†]	2,537	1,452
	Total generation capacity (MW)	4,692[†]	4,636	3,479
Energy capacity mix (%)	Natural gas	32% [†]	32%	43%
	Heavy fuel oil	3% [†]	3%	4%
	Hydroelectric	3% [†]	3%	4%
	Solar	7% [†]	7%	7%
	Wind	55% [†]	55%	42%
	Total renewable generation capacity (%)	65%[†]	65%	53%

Water and effluents

	Historical			
	2022	2021	2020	
Water withdrawal				
Water withdrawal by source (thousand m ³)				
	Surface water	31,247 [†]	27,860	9,546
	Ground water	164,086 [†]	109,006	79,486
	Third-party water	9,059 [†]	8,380	9,599
	Other source	5 ^{†41}	1	164
	Total water withdrawal	204,397[†]	145,248	98,795
Water withdrawal from water stressed regions by source (thousand m ³)				
	Surface water	1,265 [†]	0	-
	Ground water	72,968 [†]	13,560	-
	Third-party water	7,035 [†]	7,475	-
	Other source	0 [†]	0	-
Water discharge				
Water discharge by source (m ³)				
	Surface water	52,491,457 [†]	46,574,167	12,967,475
	Ground water	261,883 [†]	136,005	350,048
	Seawater ⁴²	27,169,423 [†]	25,358,995	7,805,834
	Third-party water	434,361 [†]	1,582,615	5,064,148
	Total water discharge	80,357,124[†]	73,651,782	26,187,505
Water discharge in water stressed regions by source (m ³)				
	Surface water	0 [†]	0	-
	Ground water	62 [†]	58	-
	Ocean and seawater	0 [†]	11	-
	Third-party water	208 [†]	935	-
Water consumption				
Total water consumption (thousand m ³)	22,063 [†]	74,209 ⁴³	25,665	
Total water consumption in water stressed regions (thousand m ³)	11,722 [†]	4,013	-	
Water utility energy usage				
Water supplied to customers (thousand m ³)	157,537	117,215	82,726	
Energy used by water utilities (MWh)	187,178	143,567	81,313	
Energy intensity of water supply (MWh/thousand m ³)	1.19	1.22	0.98	

41. "Other source" data reported for 2021 and 2022 includes harvested rainwater from BELCO.

42. Seawater discharge was from ESSAL (re-branded to Suralis in May 2023) operations.

43. This number was updated in 2023. Previously, the water consumption for ESSAL was calculated using the amount of water billed. It has been updated to reflect 2021 water consumption after discounting total water delivered to customers.

Waste

Waste generation (Mt)		2022	2021	2020
Waste generated	Hazardous waste ⁴⁴	15,989 [†]	51,864	20,797
	Non-hazardous waste	17,790 [†]	25,793	312,827
	Total waste generated	33,778[†]	77,657	333,624
Waste diverted (Mt)		2022	2021	2020
Hazardous waste diverted by recovery type (offsite)	Reuse	0 [†]	0	2
	Recycling	5,805 [†]	6,104	9,678
	Other – recovery (including energy recovery) and composting	2,236 [†]	40,044	-
	Total hazardous waste diverted	8,041[†]	46,148	9,680
Non-hazardous waste diverted by recovery type (offsite)	Reuse	0 [†]	0	1,689
	Recycling	2,019 [†]	7,304	221,672
	Other – recovery (including energy recovery) and composting	629 [†]	615	0.003
	Total non-hazardous waste diverted	2,648[†]	7,918	223,362
Waste directed to disposal (Mt)		2022	2021	2020
Hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	0 [†]	2	23
	Incineration without energy recovery	10 [†]	0	49
	Landfilling	7,938 [†]	5,714	10,754
	Other	0 [†]	0	292
	Total hazardous waste disposed	7,948[†]	5,716	11,117
Non-hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	0 [†]	3	549
	Incineration without energy recovery	1 [†]	0	0.15
	Landfilling	15,141 [†]	17,872	77,754
	Other	0 [†]	0	11,162
	Total non-hazardous waste disposed	15,142[†]	17,875	89,465

44. In 2021, Liberty completed significant environmental remediation projects (in Massachusetts) which resulted in increased amounts of both hazardous and non-hazardous wastes.

Biodiversity

Species impact

		Historical		
		2022	2021	2020
Land developed for pollinators	Square feet	3,728,623	2,546,645	1,430,753
IUCN Red List species and national conservation list species with habitats in areas affected by operations	Critical endangered	4	4	2
	Endangered	36	36	52
	Vulnerable	25	25	13
	Near threatened	9	9	2
	Least concern	14	14	-

Fleet and Compliance

		Historical		
		2022	2021	2020
Fleet				
Percentage of vehicle fleet using low-emission fuel		67%	68%	45%
Number of Compressed Natural Gas (CNG) capable vehicles		249	275	279
Volume of CNG Gas Gallon Equivalent used (GGE)		83	181	385
Electric ports installed for employee vehicles		161 ⁴⁵	151	97
Percentage of employees with access to electric vehicle charging at office		65% ⁴⁶	61%	51%

Compliance with environmental laws and regulations

		2022	2021	2020
Number of violations with environmental laws and regulations	See regional breakdowns for detail		24	7
Monetary value of environmental fines (\$USD millions)	See regional breakdowns for detail		3.7	0.7
Environmental liability accrued at year end (\$USD millions)	See regional breakdowns for detail		69.2	-

45. This includes all charging ports located on Liberty properties including those also accessible for public use.

46. This is for Canada, US, and Bermuda only.

2022 ESG performance index – country breakdown⁴⁷

Summary

Environment

		Canada	US	Bermuda	Chile
GHG emissions (Mt CO ₂ e)	Scope 1	3,034	2,025,017	341,705	173,064
	Scope 2	344	55,789	0	33,067
Water usage (thousand m ³)	Withdrawal	28	134,941	7 ⁴⁸	69,421
	Discharge	0.02	13,717	2.04 ⁴⁸	66,638

Social

		Canada	US	Bermuda	Chile
Total number of employees		683	2,438	367	456
Health and safety	Workforce fatalities	0	0	0	0
	SAIDI	N/A	140.40	118.57	N/A
Electricity grid reliability	SAIFI	N/A	1.15	0.98	N/A
	Community investment (\$USD millions)	3.9	27.3	-	-

Governance

		Canada	US	Bermuda	Chile
Incidents of corruption		0	0	0	0
Legal actions for anti-competitive practices		0	0	0	1
Violations involving rights of indigenous peoples		0	0	0	0
Substantiated complaints received regarding customer privacy		0	0	0	0

47. Figures in this "2022 ESG performance index - country breakdown" section present 2022 data only. See footnote 1. Due to rounding or calculation of metrics, the amount may not sum to the total Algonquin figure presented above. When data is not applicable to a business operation or region, it is denoted as "N/A".

48. This figure only includes BELCO.

Operational metrics

Utility connections

	Canada	US	Bermuda	Chile
Electricity	N/A	302,228	6,470	N/A
Natural gas	3,934	371,066	N/A	N/A
Water and wastewater	N/A	315,725	N/A	243,837

Electricity generation capacity (MW)

	Canada	US	Bermuda	Chile
Natural gas	0	1,496	0	N/A
Heavy fuel oil	0	0	140	N/A
Wind	440	2,153	0	N/A
Hydroelectric	116	16	0	N/A
Solar	10	322	0	N/A
Total	565	3,987	140	N/A
Renewable energy total	565	2,491	0	N/A
Renewable energy portfolio (%)	100%	62%	0%	N/A

Net electricity generated (GWh)

	Canada	US	Bermuda	Chile
Natural gas	0	4,434	0	N/A
Heavy fuel oil	0	0	545	N/A
Wind	1,372	6,905	0	N/A
Hydroelectric	549	52	0	N/A
Solar	15	612	0	N/A
Total	1,936	12,002	545	N/A
Renewable energy total	1,936	7,569	0	N/A
Renewable energy portfolio (%)	100%	63%	0%	N/A

Operational metrics (continued)

Energy reliability

	Canada	US	Bermuda	Chile
SAIDI (minutes)	N/A	140.40	118.57	N/A
SAIFI (rate)	N/A	1.15	0.98	N/A
CAIDI (minutes)	N/A	122.32	121.23	N/A

Water utility water mains and sewer pipes

	Canada	US	Bermuda	Chile
Length of water mains (km)	N/A	6,108	N/A	2,233
Length of sewer pipes (km)	N/A	1,191	N/A	1,957

Cybersecurity

	Canada	US	Bermuda	Chile
Substantiated complaints received concerning breaches of customer privacy	0	0	0	0
Identified leaks, thefts, or losses of customer data	0	0	0	0

Economic value generated and distributed (\$USD millions)

	Canada	US	Bermuda	Chile
Economic value generated (EVG) – revenue	261.1	2,359.0	267	94.6
Economic value distributed (EVD)				
Operation costs	47.0	1,409.5	147.3	42.4
Employee wages and benefits	33.3	239.4	54.2	15.6
Payments to providers of capital	55.7	593.1	6.7	4.6
Payments to government – Canada and US only	3.8	1.7	-	-
Economic value generated and distributed (EVG&D) by market				
Economic value retained (regulated)	112.6	105.7	58.8	26.6
Economic value retained (unregulated)	8.7	8.1	0.0	0.0
Total Economic value retained	121.3	113.8	58.8	26.6

Community engagement

	Canada	US	Bermuda	Chile
Operations with local community engagement	50%	60%	40%	-
Payments under community contribution agreements, land rentals, or municipal taxes (\$USD millions) – Canada and US only	3.9	27.3	-	-
Cash contributions (\$USD)	\$152,726	\$791,749	-	\$33,979

Workforce and social indicators

Health and Safety

Work-related injury

		Canada	US	Bermuda	Chile
Fatalities from work-related injury	Employees	0	0	0	0
	Non-employees	0	0	0	0
Recordable injuries	Employees	0	15	5	1
	RIR	0.00	0.52 ⁴⁹	1.25	0.20
	Work-related injuries include:	The primary work-related injuries identified for employees in 2022 are muscle strains, cuts, and abrasions.			
High-consequence work-related injuries	Employees	0	1	0	0
	Non-employees	0	0	0	0
	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.			
Total hours worked by employees		-	6,104,288 ⁴⁹	800,204	1,009,499

Work-related ill health

		Canada	US	Bermuda	Chile
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	0	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 2022.			
	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.			

49. This includes both Canada and US.

Health and Safety (continued)

Workers covered by an EHS management system

		Canada	US	Bermuda	Chile
Workers covered by EHS system		100%	100%	100%	100%
Workers covered by internally audited EHS system	Employees	100%	100%	100%	100%
	Non-employees	100%	100%	100%	100%

Employee demographics

Number and geographic location of employees⁵⁰

		Canada	US	Bermuda	Chile
Number and geographic location of employees ⁵⁰	Algonquin/Liberty employees	94.3%	95.0%	100.0%	100.0%
	Non-employees	5.7%	5.0%	0.0%	0.0%

By age group⁵⁰

		Canada	US	Bermuda	Chile
Age ranges	< 30 years	12.5%	13.0%	13.8%	8.8%
	30–50 years	63.5%	53.5%	59.2%	59.4%
	> 50 years	24.0%	33.6%	27.0%	31.8%

Average age (years)⁵⁰

		Canada	US	Bermuda	Chile
Female employees		42	44	43	43
Male employees		41	43	42	45
	All employees	42	44	42	45

Gender and employment categories⁵⁰

			Canada	US	Bermuda	Chile
Employee function by gender	Office	Female	43.0%	50.1%	38.5%	43.0%
		Male	57.0%	49.9%	61.5%	57.0%
	Field	Female	22.8%	18.3%	18.1%	19.4%
		Male	77.2%	81.8%	81.9%	80.6%
Employee level by gender	Senior managers and above	Female	32.4%	26.5%	42.9%	0.0%
		Male	67.6%	73.5%	57.1%	100.0%
	Middle managers	Female	31.3%	28.3%	23.4%	20.0%
		Male	68.8%	71.7%	76.6%	80.0%

50. Bermuda data is for BELCO only.

Employee demographics (continued)

Age and employment categories⁵¹

			Canada	US	Bermuda	Chile
Employee function by age	Office	< 30 years	12.4%	11.9%	4.3%	5.0%
		30–50 years	64.6%	52.8%	71.4%	51.5%
		> 50 years	23.0%	35.4%	24.3%	43.6%
	Field	< 30 years	12.6%	13.8%	14.7%	9.6%
		30–50 years	59.1%	54.0%	55.9%	64.3%
		> 50 years	28.4%	32.2%	29.4%	26.0%
Employee level by age	Senior managers and above	< 30 years	0.0%	0.0%	0.0%	0.0%
		30–50 years	46.0%	23.5%	90.9%	55.6%
		> 50 years	54.1%	76.5%	9.1%	44.4%
	Middle managers	< 30 years	0.0%	0.0%	0.0%	0.0%
		30–50 years	65.0%	45.5%	73.3%	50.0%
		> 50 years	35.0%	54.6%	23.3%	50.0%

Gender and self-identification⁵¹

		Canada	US	Bermuda	Chile
Women		39.2%	31.8%	22.7%	20.8%
Men		60.8%	68.2%	77.3%	79.2%
Self-identified minorities		11.9%	15.3%	0.0%	0.0%
Self-identified veterans		0.3%	3.8%	0.0%	0.0%
Self-identified employees with disability		0.4%	0.3%	0.0%	1.1%

By employment contract

		Canada	US	Bermuda	Chile
Permanent employees	Female	258	766	73	95
	Male	407	1,658	293	361
Temporary employees	Female	10	9	1	0
	Male	8	5	0	0

By employment type

		Canada	US	Bermuda	Chile
Full-time employees	Female	765	263	73	95
	Male	411	1,657	293	361
Part-time employees	Female	8	3	1	0
	Male	1	3	0	0
Casual employees	Female	2	2	0	0
	Male	3	3	0	0

51. Bermuda data is for BELCO only.

Employee attraction and retention

Hiring rates

		Canada	US	Bermuda	Chile
Employees hired by gender	Female	0.46	0.39	0.33	0.28
	Male	0.54	0.61	0.67	0.72

Turnover rates

		Canada	US	Bermuda	Chile
Total employee turnover rate		0.16	0.14	0.05 ⁵²	-
Volunteer employee turnover rate		0.13	0.12	0.03 ⁵²	-

Parental leave⁵²

		Canada	US	Bermuda	Chile
Employees entitled to parental leave	Female	221	572	-	-
	Male	255	1,292	-	-
Employees that took parental leave	Female	6	20	1	11
	Male	2	21	5	0
Employees that took parental leave and returned	Female	4	12	1	11
	Male	2	20	5	0
Return to work rate	Female	0.67	0.60	1.00	1.00
	Male	1.00	0.95	1.00	0.00
Employees that took parental leave and were retained	Female	3	11	1	-
	Male	2	20	5	-
Parental leave retention rate	Female	0.50	0.55	1.00	-
	Male	1.00	0.95	1.00	-

Employee engagement⁵²

		Canada	US	Bermuda	Chile
Employee engagement score		73%	70%	70%	73%
Percentage of employees covered		86%	81%	77%	83%

52. Bermuda data is for BELCO only.

Learning and development

Training

		Canada	US	Bermuda	Chile
Average training hours by gender	Female	19.0	22.0	34.0	-
	Male	16.0	13.0	64.0	-
Average training hours by level	Senior managers and above	8.0	9.0	21.0	-
	Middle managers	15.0	13.0	35.0	-
Average training hours by job function	Office	16.0	14.0	61.0	-
	Field	22.0	17.0	53.0	-
Average training hours per employee		18.0	16.0	58.0	-
Average amount spent per employee on training (\$USD/employee)		1,057	926	1,863	-
Amount invested in employee training (\$USD)		711,417	2,252,820	679,894	-

Discrimination incidents

	Canada	US	Bermuda	Chile
Number of incidents of discrimination	0	1	0	0
Number of incidents reviewed by Algonquin	0	1	0	0
Number of incidents no longer subject to action	0	1	0	0

Remediation plans implemented and/or being implemented

All actions that were recommended were completed.

Governance and policy

Compliance

Indigenous relations

	Canada	US	Bermuda	Chile
Violations involving rights of indigenous peoples	0	0	0	0

Anti-corruption

	Canada	US	Bermuda	Chile
Operations assessed for corruption related risks (government relations, conflicts of interest, and foreign interests)	100%	100%	100%	100%
Incidents of corruption and actions taken	0	0	0	0
Number of times Ethics Reporting Line was used	3	7	1	6

Anti-competitive behaviour

	Canada	US	Bermuda	Chile
Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	0	0	0	1

Political spending

	Canada	US	Bermuda	Chile
Amount spent on lobbying (\$USD)	0	1,008,200	0	60,000
Amount spent on trade associations (\$USD)	35,798	1,103,002	0	70,000

Environment

Energy consumption and generation capacity

Internal energy consumption (MWh)

	Canada	US	Bermuda	Chile	
Non-renewable sources	Gasoline	1,427	29,347	0	1,664
	Diesel	321	21,595	50,722	4,952
	Liquified petroleum gas (LPG)	144	2,048	0	0
	Natural gas	1,511	10,151,026	0	0
	Fuel oil	0	72,419	1,234,918	0
Electricity consumption	3,281	97,752	0	78,768	
Total internal energy consumption (MWh)	6,684	10,374,189	1,285,640	85,384	

Generation capacity

	Canada	US	Bermuda	Chile	
Nameplate capacity of generation assets by source (MW)	Natural gas	0	1,496	0	N/A
	Heavy fuel oil	0	0	140	N/A
	Hydroelectric	116	16	0	N/A
	Solar	10	322	0	N/A
	Wind	440	2,153	0	N/A
	Total generation capacity (MW)	565	3,987	140	N/A
Energy capacity mix (%)	Natural gas	0%	38%	0%	N/A
	Heavy fuel oil	0%	0%	100%	N/A
	Hydroelectric	20%	0.4%	0%	N/A
	Solar	2%	8%	0%	N/A
	Wind	78%	54%	0%	N/A
	Total renewable generation capacity (%)	100%	62%	0%	N/A

Water and effluents

Water withdrawal

	Canada	US	Bermuda	Chile	
Water withdrawal by source (thousand m ³)	Surface water	0	5,728	0	22,895
	Ground water	0	120,185	0	46,525
	Third-party water	28	9,028	2	0
	Other source	0.003	0.08	5	0
	Total water withdrawal	28	134,941	7	69,421
Water withdrawal from water stressed regions by source (thousand m ³)	Surface water	0	1,265	N/A	N/A
	Ground water	0	72,968	N/A	N/A
	Third-party water	0.09	7,035	N/A	N/A

Water discharge

	Canada	US	Bermuda	Chile	
Water discharge by source (m ³)	Surface water	0	13,442,659	0	39,048,799
	Ground water	0	61,758	2,037	198,088
	Seawater	0	0	0	27,169,423
	Third-party water	23	212,280	0	222,058
	Total water discharge	23	13,716,696	2,037	66,638,368
Water discharge in water stressed regions by source (m ³)	Surface water	0	-	N/A	N/A
	Ground water	0	62	N/A	N/A
	Ocean/seawater	0	-	N/A	N/A
	Third-party water	0	208	N/A	N/A

Water consumption

	Canada	US	Bermuda	Chile
Total water consumption (thousand m ³)	28	20,003	2,024	7
Total water consumption in water stressed regions (thousand m ³)	0.09	11,722	N/A	N/A

Waste

Waste generation (Mt)

		Canada	US	Bermuda	Chile
Waste generated	Hazardous waste	3	9,206	175	6,604
	Non-hazardous waste	560	11,073	346	5,811
	Total waste generated	563	20,280	521	12,415

Waste diverted (Mt)

		Canada	US	Bermuda	Chile
Hazardous waste diverted by recovery type (offsite)	Reuse	0	0	0	0
	Recycling	1	205	0	5,599
	Other – recovery (including energy recovery) and composting	2	2,233	0	0
	Total hazardous waste diverted	3	2,439	0	5,599

Non-hazardous waste diverted by recovery type (offsite)	Reuse	0	0	0	0
	Recycling	44	1,975	0	0
	Other – recovery (including energy recovery) and composting	13	616	0	0
	Total non-hazardous waste diverted	57	2,591	0	0

Waste directed to disposal (Mt)

		Canada	US	Bermuda	Chile
Hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	0	0	0	0
	Incineration without energy recovery	0	10	0	0
	Landfilling	0	6,758	175	1,005
	Other	0	0	0	0
	Total hazardous waste disposed	0	6,768	175	1,005

Non-hazardous waste disposed by disposal operation (offsite)	Incineration with energy recovery	0	0	0	0
	Incineration without energy recovery	0	0	1	0
	Landfilling	503	8,482	345	5,811
	Other	0	0	0	0
	Total non-hazardous waste disposed	503	8,482	346	5,811

Fleet and Compliance

Compliance with environmental laws and regulations

	Canada	US	Bermuda	Chile
Number of violations with environmental laws and regulations	0	67	0	0
Monetary value of environmental fines (\$USD millions)	0	0.0002	0	0
Environmental liability accrued at year end (\$USD millions)	0	0	0	0