



APPENDIX



In this appendix you will find the following:

TCFD Reference Table

GRI/SASB Content Indexes

Independent Practitioners' Limited Assurance Report

2022 Performance Data Table

Endnotes and 2022 Restatements

Task Force On Climate-Related Financial Disclosure Reference Table

Alignment to the disclosure required by the TCFD is incorporated throughout the report. The table below references the disclosure required by the TCFD and where this information is located.

TCFD REFERENCE GUIDE

TCFD CATEGORY	Guidance	Report Section	Page
Governance	a. Describe the board's oversight of climate-related risks and opportunities.	Sustainability Governance	18
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	Sustainability Governance	18-19
Strategy	a. Describe climate-related risks and opportunities the organization has identified over the short term, medium term and long term.	Climate Change & Adaptation GHG Emissions & Energy Use	78-79 81, 84
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Climate Change & Adaptation GHG Emissions & Energy Use	78-79 81,84
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including at 2 °C or lower scenario.	Climate Change & Adaptation	74-76
Risk Management	a. Describe the organization's processes for identifying and assessing climate related risks.	Sustainability Governance	19
	b. Describe the organization's processes for managing climate related risks.	Sustainability Governance	19
	c. Describe how processes for identifying and managing climate-related risks are integrated into the organization's overall risk management.	Sustainability Governance Climate Change & Adaptation	18-19 72
Metrics and Targets	a. Disclose the metrics used by the organization to assess climate-related risk and opportunity in line with its strategy and risk management process.	Data Tables: Environment – GHG Emissions Biogenic CO2 Emissions GHG Emission Intensity Energy Energy Intensity Water Water Intensity Trees Planted Forest Harvest & Growth Rates	103-109 113-116 117
	b. Disclose Scope 1, Scope 2 and if appropriate Scope 3 greenhouse gas emissions and the related risks.	GHG Emissions & Energy Use: 2020-2022 GHG Emissions and Removals, GHG Intensity	89-90 103-105
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	GHG Emissions & Energy Use: Reporting to the PAS2060:2014 Standard	87-88

GRI Content Index

J.D. Irving, Limited has reported the information cited in this Global Reporting Index (GRI) content index for the period from 1 January 2022 to 31 December 2022 with reference to the GRI Standards. This means that our reporting has referenced selected General Disclosures, as well as selected Topic-Specific Standards we have deemed material. In this GRI Context Index, we list our disclosures with reference to the applicable GRI Standards and the location within the report where the disclosures are addressed. The GRI 1 used for this report is GRI 1: Foundation 2021.

GRI STANDARD #	INDICATOR NAME	LOCATION (page)
GRI 2: GENERAL DISCLOSURES 2021		
The organization and its sustainability reporting practices		
GRI 2-1	Organizational details	6
GRI 2-2	Entities included in the organization's sustainability reporting	6
GRI 2-3	Reporting period, frequency and contact point	8
GRI 2-4	Restatements of information	124
GRI 2-5	External assurance	9, 98-102
ACTIVITIES AND WORKERS		
GRI 2-6	Activities, value chain and other business relationships	6
GRI 2-7	Employees	28
GRI 2-8	Workers who are not employees	28
GOVERNANCE		
GRI 2-9	Governance structure and composition	18
GRI 2-11	Chair of the highest governing body	18-19
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	18-19
GRI 2-13	Delegation of responsibility for managing impacts	18-19
GRI 2-14	Role of the highest governance body in sustainability reporting	18-19
GRI 2-15	Conflicts of interest	28-29
GRI 2-16	Communication of critical concerns	19
STRATEGIES, POLICIES AND PRACTICES		
GRI 2-22	Statement on sustainable development strategy	7
GRI 2-25	Processes to remediate negative impacts	19
GRI 2-26	Mechanism for seeking advice and raising concerns	19
GRI 2-27	Compliance with laws and regulations	
GRI 2-28	Membership associations	28
STAKEHOLDER ENGAGEMENT		
GRI 2-29	Approach to stakeholder engagement	21
GRI 2-30	Collective bargaining agreements	122
GRI 3: MATERIAL TOPICS 2021		
GRI 3-1	Process to determine material topics	21
GRI 3-2	List of material topics	21
GRI 3-3	Management of material topics	21, 25

GRI STANDARD #	INDICATOR NAME	LOCATION (page)
GRI 201: ECONOMIC PERFORMANCE 2016		
GRI 201-1	Direct economic value generated and distributed	123
GRI 201-2	Financial implications and other risks and opportunities due to climate change	74-84
GRI 201-3	Defined benefit plan obligation and other retirement plans	123-124
GRI 203: INDIRECT ECONOMIC IMPACTS 2016		
GRI 203-1	Infrastructure investments and services supported	123
GRI 203-2	Significant indirect economic impacts	123
GRI 204: PROCUREMENT PRACTICES 2016		
GRI 204-1	Proportion of spending on local suppliers	123
GRI 205: ANTI-CORRUPTION 2016		
GRI 205-2	Communication and training about anti-corruption policies and procedures	28-29
GRI 205-3	Confirmed incidents of corruption and actions taken	125
GRI 206: ANTI-COMPETITIVE BEHAVIOUR 2016		
GRI 206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	125
GRI 301: MATERIALS 2016		
GRI 301-1	Materials used by weight or volume	116
GRI 301-2	Recycled input materials used	117
GRI 302: ENERGY 2016		
GRI 302-1	Energy consumption within the organization	108
GRI 302-3	Energy intensity	110
GRI 303: WATER AND EFFLUENTS 2016		
GRI 303-1	Interactions with water as a shared resource	64
GRI 303-2	Management of water discharge-related impacts	66-68
GRI 303-3	Water withdrawal	113
GRI 303-4	Water discharge	113-114
GRI 303-5	Water consumption	113, 115
GRI 304: BIODIVERSITY 2016		
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	56
GRI 304-2	Significant impacts of activities, products and services on biodiversity	56
GRI 304-3	Habitats protected or restored	62, 117
GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	117
GRI 305: EMISSIONS 2016		
GRI 305-1	Direct (Scope 1) GHG emissions	89, 103
GRI 305-2	Energy indirect (Scope 2) GHG emissions	89, 103
GRI 305-3	Other indirect (Scope 3) GHG emissions	89, 103

GRI STANDARD #	INDICATOR NAME	LOCATION (page)
GRI 305-4	GHG emissions intensity	90, 105
GRI 305-5	Reduction of GHG emissions	86
GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	65, 106
GRI 306: WASTE 2020		
GRI 306-3	Waste generated	111
GRI 306-4	Waste diverted from disposal	112
GRI 306-5	Waste directed to disposal	111
GRI 307: ENVIRONMENTAL COMPLIANCE 2016		
GRI 307-1	Non-compliance with environmental laws and regulations	107
GRI 401: EMPLOYMENT 2016		
GRI 401-1	New employee hires and employee turnover	119
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	123-124
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018		
GRI 403-1	Occupational health and safety management system	36
GRI 403-2	Hazard identification, risk assessment and incident investigation	34
GRI 403-4	Worker participation, consultation and communication on occupational health and safety	32-36
GRI 403-5	Worker training on occupational health and safety	36
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked to business relationships	32-33
GRI 403-9	Work-related injuries	32-33
GRI 404: TRAINING AND EDUCATION 2016		
GRI 404-1	Average hours of training per year per employee	122
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	122
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016		
GRI 405-1	Diversity of governance bodies and employees	122
GRI 405-2	Ratio of basic salary and remuneration of women to men	124
GRI 413: LOCAL COMMUNITIES 2016		
GRI 413-1	Operations with local community engagement, impact assessments and development programs	38-40, 125
GRI 418: CUSTOMER PRIVACY 2016		
GRI 418-1	Substantial complaints concerning breaches of customer privacy and losses of customer data	125
GRI 419: SOCIOECONOMIC COMPLIANCE 2016		
GRI 419-1	Non-compliance with laws and regulations in the social and economic area	125

CODE	ACCOUNTING METRIC	LOCATION (page)
PULP & PAPER INDUSTRY		
GREENHOUSE GAS EMISSIONS		
RR-PP-110a.1	Gross global Scope 1 emissions	103
RR-PP-110a.2	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	82, 86-87
AIR QUALITY		
RR-PP-120a.1	Air emissions of the following pollutants:	
	1) NO _x (excluding N ₂ O)	106
	2) SO ₂	106
	4) particulate matter (PM)	106
ENERGY MANAGEMENT		
RR-PP-130a.1	1) total energy consumed	108
	2) percentage grid electricity	109
	3) percentage from biomass	109
	4) percentage from other renewable energy	109
WATER MANAGEMENT		
RR-PP-140a.1	1) total water withdrawn	113
	2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	113
RR-PP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	66-68
SUPPLY CHAIN MANAGEMENT		
RR-PP-430a.1	Percentage of wood fibre sourced from:	
	1) third-party certified forestlands and percentage to each standard	117
	2) meeting other fibre sourcing standards and percentage to each standard	117
RR-PP-430a.2	Amount of recycled and recovered fibre procured	117
PULP & PAPER INDUSTRY ACTIVITY METRICS		
RR-PP-000.A	Pulp production	123
RR-PP-000.B	Paper production	123
RR-PP-000.C	Total wood fibre sourced	123

CODE	ACCOUNTING METRIC	LOCATION (page)
FORESTRY MANAGEMENT		
ECOSYSTEM SERVICES & IMPACTS		
RR-FM-160a.1	Area of forestland certified to a third-party forest management standard, percentage certified to each standard	117
RR-FM-160a.2	Area of forestland with protected conservation status	117-118
RR-FM-160a.3	Area of forestland in endangered species habitat	118
RR-FM-160a.4	Description of approach to optimizing opportunities from ecosystem services provided by forestlands	56-57
RIGHTS OF INDIGENOUS PEOPLES		
RR-FM-210a.2	Description of engagement processes and due diligence practices with respect to human rights, indigenous rights and the local community	21, 38-40
CLIMATE CHANGE ADAPTATION		
RR-FM-450a.1	Description of strategy to manage opportunities for and risks to forest management and timber production presented by climate change	76-84
FORESTRY MANAGEMENT ACTIVITY METRICS		
RR-FM-000.A	Area of forestland owned, leased and/or managed by the entity	6, 117
RR-FM-000.B	Aggregate standing timber inventory	117
RR-FM-000.C	Timber harvest volume	117

APPENDIX

Independent Practitioners' Limited Assurance Report



J.D. Irving, Limited
Limited Assurance Report
July 28, 2023

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INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT

To the management of J.D. Irving, Limited (the "Entity")

We have undertaken a limited assurance engagement on certain subject matter information of the Entity, included in the accompanying 2022 J.D. Irving, Limited Forest Supply Chain Environment, Social and Governance Report (the "Report"), as at and for the year ended December 31, 2022 as described in the table below.

Subject Matter Information	Reported amount and units	Page number in the Report	Applicable criteria and basis of presentation
Net Forest Products Value Chain Emissions / (Removals)	(1,216,000) Tonnes CO _{2e}	Page 89	<ul style="list-style-type: none"> The World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol - Corporate Accounting and Reporting Standard Revised Edition; GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard; The Corporate Value Chain (Scope 3) Accounting and Reporting Standard as applicable to Scope 3 emission categories 1-9; and, Internally developed criteria. <p>Presented as:</p> <ul style="list-style-type: none"> Manufacturing and Supply Chain Emissions for the year ended December 31, 2022 (Scope 1, 2 and 3); Harvested Wood Product (HWP) Transfer plus Net Forest Growth (removal) for the year ended December 31, 2022; and, Net Forest Products Value Chain Emissions/(Removals) for the year ended December 31, 2022.
Lands under Irving management	2,377,640 hectares	Page 45	<p>Internally developed criteria.</p> <p>Presented as the sum of freehold land and Crown land, managed by the Entity as at December 31, 2022.</p>
Percentage of forested landbase harvested	1.4%	Page 47	<p>Internally developed criteria.</p> <p>Presented as the area harvested during 2022 as a percentage of total forested lands under management by the Entity as at December 31, 2022.</p>

Subject Matter Information	Reported amount and units	Page number in the Report	Applicable criteria and basis of presentation
Conservation area on lands under Irving management	529,252 hectares	Page 62	<p>Internally developed criteria.</p> <p>Presented as the area of freehold land and Crown land managed by the Entity which is maintained for the primary purpose of conservation as at December 31, 2022.</p>
Percentage of conservation forest	22%	Page 62	<p>Internally developed criteria.</p> <p>Presented as the conservation forest area as a percentage of total lands under management by the Entity as at December 31, 2022.</p>
Recordable incident rate	2.0 per 200,000 hours	Page 32	<p>Internally developed criteria.</p> <p>Presented as the total number of employee recordable injuries during 2022 multiplied by 200,000 and divided by total hours worked.</p>
Lost time injury rate	0.7 per 200,000 hours	Page 33	<p>Internally developed criteria.</p> <p>Presented as the total number of employee lost time injuries during 2022 multiplied by 200,000 and divided by total hours worked.</p>
Critical injury rate	0.10 per 200,000 hours	Page 33	<p>Internally developed criteria.</p> <p>Presented as the total number of employee critical injuries during 2022 multiplied by 200,000 and divided by total hours worked.</p>
Percentage of new employees who have signed off on the Business Code of Conduct Policy	88%	Page 29	<p>Internally developed criteria.</p> <p>Presented as the total number of new employees in 2022, within the forest supply chain, who have signed the Code of Conduct divided by the number of new employees hired in 2022.</p>
Community engagement (spend \$)	\$1,7 million in charitable donations in 2022 \$147,442 in scholarships granted in 2022	Page 38 Page 39	<p>Internally developed criteria.</p> <p>Presented as the total Entity spend (\$) on scholarships and donations for the year ended December 31, 2022.</p>

Other than as described in the preceding table, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.



Management's Responsibility

Management is responsible for the preparation and presentation of the subject matter information in accordance with the applicable criteria.

The Subject Matter Information, contained within the Report, has been determined by management on the basis of the Entity's assessment of the material issues contributing to Environmental, Social and Governance (ESG) performance and that most impact and influence its stakeholders

There are no mandatory requirements for the preparation, publication or presentation of the subject matter information. As such, the Entity applies the criteria described under the applicable criteria and basis of presentation in the table above in calculating the reported amounts including their own internal reporting guidelines and definitions which can be found in the Report (collectively the "applicable criteria").

Management is responsible for determining the appropriateness of the use of the applicable criteria.

Management is also responsible for determining the Entity's objectives in respect of ESG performance and reporting, including the identification of stakeholders and material issues.

Management is also responsible for such internal control as management determines necessary to enable the preparation and presentation of the subject matter information that is free from material misstatement, whether due to fraud or error.

Practitioner's Responsibilities

Our responsibility is to express a limited assurance conclusion on the subject matter information based on evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standards on Assurance Engagements (ISAE) 3000 (Revised) *Assurance Engagements other than Audits or Reviews of Historical Financial Information* and ISAE 3410 *Assurance Engagements on Greenhouse Gas Statements*. These standards require that we plan and perform our engagement to obtain limited assurance about whether based on the procedures performed and evidence obtained, any matter(s) has come to our attention to cause us to believe that the subject matter information is materially misstated.

The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, it is not a guarantee that a limited assurance engagement conducted in accordance with this standard will always detect a matter that causes the practitioner to believe that the subject matter information is materially misstated.

Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the decisions of users of our report.

The nature, timing and extent of procedures performed depends on our professional judgment, including an assessment of the risks of material misstatement, whether due to fraud or error, and involves obtaining evidence about the subject matter information.



Our engagement included: assessing the appropriateness of the subject matter information, the suitability of the criteria used by the Entity in preparing the subject matter information in the circumstances of the engagement and evaluating the appropriateness of the methods, policies and procedures, and models used in the preparation of the subject matter information, and the reasonableness of estimates made by the Entity.

Our engagement included, amongst others, the following procedures:

- Inquiries with relevant staff at the corporate and site 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, performing walkthroughs to test the design of internal controls relating to data collection and reporting of the subject matter information;
- Comparing the reported data for the subject matter information to underlying data sources on a sample basis;
- Inquiries regarding key assumptions, estimates and the appropriateness of the associated models, methods, policies and procedures;
- The re-performance of calculations on a sample basis; and,
- Reviewing the presentation of the subject matter information in the Report to determine whether the information presented is consistent with our overall knowledge of, and experience with, the ESG performance of the Entity.

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

Practitioner's Independence and Quality Management

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 Canadian Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements* which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Significant Inherent Limitations

Historical non-financial information, such as that contained in the Report, is subject to more inherent limitations than historical financial information, given the characteristics of the underlying subject matter and methods used for determining this information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable evaluation techniques, which can result in materially different measurements and can impact comparability. The nature and methods used to determine such information, as described in the applicable criteria, may change over time, and it is important to read the Entity's reporting methodology within the Report.

Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. Based on the procedures performed and evidence obtained, no matters have come to our attention to cause us to believe that the subject matter information as described above and disclosed in the Entity's Report as at and for the year ended December 31, 2022, has not been prepared and presented, in all material respects, in accordance with the applicable criteria as at the date of our report.

Chartered Professional Accountants
 July 28, 2023
 Vancouver, Canada

DATA TABLES

Data	Measurement	2020	2021	2022	Footnote
ENVIRONMENT					
GREENHOUSE GAS EMISSIONS					
Scope 1 Emissions, Total	t CO₂e	390,851	453,067	553,157	
<i>by division</i>					
Woodlands and Sawmills	t CO ₂ e	31,616	47,634	79,918	a
Woodlands	t CO ₂ e	6,588	9,932	11,532	a
Sawmills	t CO ₂ e	25,028	37,702	68,387	b
Pulp and paper	t CO ₂ e	165,710	171,776	208,862	
Irving Pulp & Paper, Limited	t CO ₂ e	62,747	66,769	77,768	
Irving Paper Limited	t CO ₂ e	82,075	84,647	105,807	
Lake Utopia Paper Limited	t CO ₂ e	20,888	20,360	25,287	
Irving Personal Care	t CO ₂ e	67	76	77	c
Irving Tissue	t CO ₂ e	192,989	233,581	264,300	d
Scope 2 Emissions (location-based), Total	t CO₂e	509,797	585,656	662,719	
<i>by division</i>					
Woodlands and Sawmills	t CO ₂ e	52,852	61,926	65,501	a
Woodlands	t CO ₂ e	453	979	1,187	a
Sawmills	t CO ₂ e	52,399	60,946	64,315	b
Pulp and paper	t CO ₂ e	323,093	379,049	406,649	
Irving Pulp & Paper, Limited	t CO ₂ e	3,799	18,088	20,984	
Irving Paper Limited	t CO ₂ e	287,399	322,883	344,043	
Lake Utopia Paper Limited	t CO ₂ e	31,895	38,078	41,622	
Irving Personal Care	t CO ₂ e	5,020	5,653	4,788	c
Irving Tissue	t CO ₂ e	128,556	139,028	185,781	d
Scope 3 Emissions, Total	t CO₂e	908,572	998,229	908,838	
<i>by division</i>					
Woodlands	t CO ₂ e	135,917	150,753	139,110	
Sawmills	t CO ₂ e	122,730	140,292	132,913	
Pulp and paper	t CO ₂ e	283,920	242,926	223,571	
Irving Pulp & Paper, Limited	t CO ₂ e	0	79,216	71,901	e
Irving Paper Limited	t CO ₂ e	0	127,917	117,663	e
Lake Utopia Paper Limited	t CO ₂ e	0	35,318	33,424	e
Irving Personal Care	t CO ₂ e	89,714	101,029	61,781	c
Irving Tissue	t CO ₂ e	276,291	363,228	351,462	d
Scope 1, 2 and 3 Emissions, Total	t CO₂e	1,809,220	2,036,952	2,124,715	
<i>by division</i>					
Woodlands and Sawmills	t CO ₂ e	343,115	400,605	417,444	a
Woodlands	t CO ₂ e	142,958	161,664	151,829	a
Sawmills	t CO ₂ e	200,157	238,941	265,615	b

Data	Measurement	2020	2021	2022	Footnote
Pulp and paper	t CO ₂ e	772,723	793,752	839,082	
Irving Pulp & Paper, Limited	t CO ₂ e	0	164,073	170,654	
Irving Paper Limited	t CO ₂ e	0	535,447	567,513	
Lake Utopia Paper Limited	t CO ₂ e	0	93,756	100,333	
Irving Personal Care	t CO ₂ e	94,801	106,758	66,646	c
Irving Tissue	t CO ₂ e	597,836	735,837	801,543	d
Scope 1 and 2 Emissions, Total	t CO₂e	900,648	1,038,723	1,215,877	
<i>by division</i>	t CO ₂ e				
Woodlands and Sawmills	t CO ₂ e	84,468	109,560	145,420	a
Woodlands	t CO ₂ e	7,041	10,911	12,719	a
Sawmills	t CO ₂ e	77,427	98,649	132,701	b
Pulp and paper	t CO ₂ e	488,803	550,825	615,511	
Irving Pulp & Paper, Limited	t CO ₂ e	66,546	84,857	98,752	
Irving Paper Limited	t CO ₂ e	369,474	407,530	449,850	
Lake Utopia Paper Limited	t CO ₂ e	52,783	58,438	66,909	
Irving Personal Care	t CO ₂ e	5,087	5,729	4,865	c
Irving Tissue	t CO ₂ e	321,545	372,609	450,081	d
(REMOVAL) / EMISSION FROM HARVESTED WOOD PRODUCTS					
(Removal)/Emission from Lumber	t CO ₂ e	(891,246)	(929,423)	(883,750)	s
(Removal)/Emission from Paper	t CO ₂ e	224	(15,751)	13,006	
(Removal)/Emission from Pulp	t CO ₂ e	23,510	(12,846)	35,367	
(Removal)/Emission from Tissue	t CO ₂ e	(154,464)	(105,020)	(144,119)	
(Removal)/Emission from Corrugating Medium	t CO ₂ e	(14,827)	15,436	3,138	
FOREST CARBON EMISSIONS AND (REMOVAL)					
(Removal)/Emission from Freehold	t CO ₂ e	(2,335,282)	(2,476,710)	(2,364,100)	f
(Removal)/Emission from Crown License 7	t CO ₂ e	(2,448,668)	(1,556,092)	(2,547,400)	
NET CARBON FOOTPRINT					
Net Carbon Footprint	t CO ₂ e	(1,562,865)	(1,488,292)	(1,215,743)	f, s
BIOGENIC CO₂ EMISSIONS					
Biogenic CO₂ Emissions, Total		1,551,518	1,340,174	1,244,178	
<i>by division</i>	t CO ₂				
Woodlands	t CO ₂	0	0	0	
Sawmills	t CO ₂	436,937	237,911	209,736	
Pulp and paper	t CO ₂	1,114,581	1,102,263	1,034,442	
Irving Pulp & Paper, Limited	t CO ₂	1,035,198	1,018,250	954,805	
Irving Paper Limited	t CO ₂	0	0	0	
Lake Utopia Paper Limited	t CO ₂	79,383	84,013	79,636	
Irving Personal Care	t CO ₂	0	0	0	
Irving Tissue	t CO ₂	0	0	0	

Data	Measurement	2020	2021	2022	Footnote
GREENHOUSE GAS EMISSIONS INTENSITY					
Scope 1 emissions intensity, Total	kg CO₂e / t product	30.3	35.9	48.1	r
<i>by division</i>					
Woodlands and Sawmills	kg CO ₂ e / t product	2.7	4.2	7.8	
Woodlands	kg CO ₂ e / t product	0.9	1.5	2.1	
Sawmills	kg CO ₂ e / t product	5.6	7.9	14.8	
Pulp and paper	kg CO ₂ e / t product	181.1	191.4	234.0	
Irving Personal Care	kg CO ₂ e / t product	3.0	3.7	5.5	
Irving Tissue	kg CO ₂ e / t product	566.1	715.8	723.2	
Scope 2 emissions intensity, Total	kg CO₂e / t product	39.6	46.4	57.6	r
<i>by division</i>					
Woodlands and Sawmills	kg CO ₂ e / t product	4.6	5.4	6.4	
Woodlands	kg CO ₂ e / t product	0.1	0.1	0.2	
Sawmills	kg CO ₂ e / t product	11.7	12.7	13.9	
Pulp and paper	kg CO ₂ e / t product	353.2	422.4	455.6	
Irving Personal Care	kg CO ₂ e / t product	223.5	272.7	342.2	
Irving Tissue	kg CO ₂ e / t product	377.1	426.0	508.4	
Scope 3 emissions intensity, Total	kg CO₂e / t product	70.5	79.1	79.0	r
<i>by division</i>					
Woodlands And Sawmills	kg CO ₂ e / t product	22.3	25.6	26.6	
Woodlands	kg CO ₂ e / t product	19.1	23.0	24.8	
Sawmills	kg CO ₂ e / t product	27.4	29.2	28.8	
Pulp and Paper	kg CO ₂ e / t product	310.4	270.7	250.5	
Irving Personal Care	kg CO ₂ e / t product	3,993.7	4,828.1	4,415.3	
Irving Tissue	kg CO ₂ e / t product	810.5	1,113.1	961.8	
Scope 1 and 2 Emissions intensity, Total	kg CO₂e / t product	69.9	82.4	105.7	r
<i>by division</i>					
Woodlands and Sawmills	kg CO ₂ e / t product	7.3	9.6	14.2	
Woodlands	kg CO ₂ e / t product	1.0	1.7	2.3	
Sawmills	kg CO ₂ e / t product	17.3	20.6	28.7	
Pulp and paper	kg CO ₂ e / t product	534.3	613.8	689.7	
Irving Personal Care	kg CO ₂ e / t product	226.5	276.3	347.7	
Irving Tissue	kg CO ₂ e / t product	943.2	1,141.8	1,231.6	
Scope 1, 2 and 3 Emissions intensity, Total	kg CO₂e / t product	140.4	161.5	184.7	r
<i>by division</i>					
Woodlands and Sawmills	kg CO ₂ e / t product	29.6	35.3	40.8	
Woodlands	kg CO ₂ e / t product	20.0	24.6	27.0	
Sawmills	kg CO ₂ e / t product	44.7	49.8	57.5	
Pulp and paper	kg CO ₂ e / t product	844.7	884.5	940.2	
Irving Personal Care	kg CO ₂ e / t product	4,220.1	5,104.5	4,762.9	
Irving Tissue	kg CO ₂ e / t product	1,753.7	2,254.9	2,193.4	

Data	Measurement	2020	2021	2022	Footnote
OTHER AIR EMISSIONS					
Nitrous oxide (NOx), Total	Tonnes	1,773	1,774	1,779	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	255	300	288	
Pulp and paper	Tonnes	1,372	1,292	1,283	
Irving Pulp & Paper, Limited	Tonnes	1,034	963	927	
Irving Paper Limited	Tonnes	181	180	200	
Lake Utopia Paper Limited	Tonnes	158	149	157	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	145	182	208	
Sulphur dioxide (SO x), Total	Tonnes	1,130	1,259	1,623	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	75	247	457	
Pulp and paper	Tonnes	1,054	1,011	1,165	
Irving Pulp & Paper, Limited	Tonnes	575	465	491	
Irving Paper Limited	Tonnes	7	23	53	
Lake Utopia Paper Limited	Tonnes	472	523	620	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	1	1	1	
Particulate matter (PM), Total	Tonnes	1,963	2,145	1,928	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	1,795	1,923	1,786	
Pulp and paper	Tonnes	157	209	126	
Irving Pulp & Paper, Limited	Tonnes	131	184	99	
Irving Paper Limited	Tonnes	5	6	7	
Lake Utopia Paper Limited	Tonnes	21	20	20	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	11	13	16	
Volatile Organic Compounds (VOCs), Total	Tonnes	796	1,033	1,074	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	496	546	549	
Pulp and paper	Tonnes	299	310	301	
Irving Pulp & Paper, Limited	Tonnes	214	209	200	
Irving Paper Limited	Tonnes	44	45	46	
Lake Utopia Paper Limited	Tonnes	41	55	55	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	1	178	224	

Data	Measurement	2020	2021	2022	Footnote
ENVIRONMENTAL COMPLIANCE					
Odour Complaints, Total	#	19	22	7	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	19	22	7	
Irving Pulp & Paper, Limited	#	5	5	3	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	14	17	4	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	
Environmental Fines/Convictions, Total	#	0	0	0	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	0	0	0	
Irving Pulp & Paper, Limited	#	0	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	0	0	0	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	
BOD non-compliances, Total	#	0	0	0	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	0	0	0	
Irving Pulp & Paper, Limited	#	0	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	0	0	0	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	
TSS non-compliances, Total	#	0	0	0	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	0	0	0	
Irving Pulp & Paper, Limited	#	0	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	0	0	0	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	

Data	Measurement	2020	2021	2022	Footnote
Trout toxicity Failures, Total	#	4	2	1	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	4	2	1	
Irving Pulp & Paper, Limited	#	2	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	2	2	1	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	
Water Discharge non-compliances, Total	#	4	2	1	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	4	2	1	
Irving Pulp & Paper, Limited	#	2	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	2	2	1	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	

ENERGY					
Direct & Indirect Energy Consumption, Total	Gigajoules	29,672,145	30,366,345	32,295,364	
<i>by division</i>					
Woodlands	Gigajoules	0	158,630	184,518	a
Sawmills	Gigajoules	3,519,995	4,035,983	4,169,588	
Pulp And Paper	Gigajoules	19,260,219	19,011,666	19,791,999	
Irving Pulp & Paper, Limited	Gigajoules	11,750,122	11,508,674	11,878,895	
Irving Paper Limited	Gigajoules	5,582,466	5,638,266	5,957,346	
Lake Utopia Paper Limited	Gigajoules	1,927,631	1,864,726	1,955,758	
Irving Personal Care	Gigajoules	0	71,740	57,164	c
Irving Tissue	Gigajoules	6,891,931	7,088,325	8,092,094	
Direct Energy Consumption, Total	Gigajoules	22,404,948	23,154,783	24,579,882	
<i>by division</i>					
Woodlands	Gigajoules	0	146,435	170,689	a, q
Sawmills	Gigajoules	2,910,345	3,354,040	3,472,730	
Pulp and paper	Gigajoules	14,786,960	14,322,296	15,069,944	
Irving Pulp & Paper, Limited	Gigajoules	11,697,525	11,284,131	11,635,215	
Irving Paper Limited	Gigajoules	1,603,420	1,630,380	1,962,325	
Lake Utopia Paper Limited	Gigajoules	1,486,014	1,407,785	1,472,404	
Irving Personal Care	Gigajoules	0	1,565	1,562	c
Irving Tissue	Gigajoules	4,707,643	5,330,447	5,864,957	d, q

Data	Measurement	2020	2021	2022	Footnote
Indirect Energy Consumption, Total	Gigajoules	7,267,197	7,211,562	7,715,482	
<i>by division</i>					
Woodlands	Gigajoules	0	12,195	13,829	a
Sawmills	Gigajoules	609,650	681,944	696,858	
Pulp and paper	Gigajoules	4,473,259	4,689,370	4,722,055	
Irving Pulp & Paper, Limited	Gigajoules	52,596	224,543	243,680	
Irving Paper Limited	Gigajoules	3,979,046	4,007,886	3,995,021	
Lake Utopia Paper Limited	Gigajoules	441,617	456,941	483,354	
Irving Personal Care	Gigajoules	0	70,175	55,603	c
Irving Tissue	Gigajoules	2,184,288	1,757,878	2,227,137	
Electrical Energy Produced on Site, Total	Gigajoules	946,970	1,192,200	1,151,868	
<i>by division</i>					
Woodlands	Gigajoules	0	0	0	
Sawmills	Gigajoules	11,737	26,560	9,025	
Pulp and paper	Gigajoules	927,684	735,359	739,218	
Irving Pulp & Paper, Limited	Gigajoules	927,684	735,359	739,218	
Irving Paper Limited	Gigajoules	0	0	0	
Lake Utopia Paper Limited	Gigajoules	0	0	0	
Irving Personal Care	Gigajoules	0	0	0	c
Irving Tissue	Gigajoules	7,549	430,281	403,625	

ENERGY					
Percentage of Energy from Electric grid, Total	%	24.5	23.7	23.9	
<i>by division</i>					
Woodlands	%	0.0	7.7	7.5	
Sawmills	%	17.3	16.9	16.7	
Pulp and paper	%	23.2	24.7	23.9	
Irving Pulp & Paper, Limited	%	0.4	2.0	2.1	
Irving Paper Limited	%	71.3	71.1	67.1	
Lake Utopia Paper Limited	%	22.9	24.5	24.7	
Irving Personal Care	%	0.0	97.8	97.3	c
Irving Tissue	%	31.7	24.8	27.5	
Percentage of Energy from Renewable Sources, Total	%	57.3	54.8	55.8	a, q
<i>by division</i>					
Woodlands	%	0.0	2.0	2.3	
Sawmills	%	80.6	76.9	67.9	
Pulp and paper	%	67.2	65.7	64.9	
Irving Pulp & Paper, Limited	%	91.0	89.2	88.0	
Irving Paper Limited	%	18.5	19.0	20.1	
Lake Utopia Paper Limited	%	63.4	62.0	61.0	d, q
Irving Personal Care	%	0.0	25.2	29.5	c
Irving Tissue Saint John Mill	%	54.0	54.7	50.8	

Data	Measurement	2020	2021	2022	Footnote
Percentage of Energy from Own Electrical Generation, Total	%	3.2	3.9	3.6	
<i>by division</i>					
Woodlands	%	0.0	0.0	0.0	
Sawmills	%	0.3	0.7	0.2	
Pulp and paper	%	4.8	3.9	3.7	
Irving Pulp & Paper, Limited	%	7.9	6.4	6.2	
Irving Paper Limited	%	0.0	0.0	0.0	
Lake Utopia Paper Limited	%	0.0	0.0	0.0	
Irving Personal Care	%	0.0	0.0	0.0	c
Irving Tissue Saint John Mill	%	0.0	0.0	0.0	
ENERGY INTENSITY					
Direct energy consumption intensity					
<i>by division</i>					
Woodlands	Gigajoules / t product	0.0	0.0	0.0	
Sawmills	Gigajoules / t product	0.7	0.7	0.8	
Pulp and paper	Gigajoules / t product	16.2	16.0	16.9	c
Irving Personal Care	Gigajoules / t product	0.0	0.1	0.1	
Irving Tissue	Gigajoules / t product	15.6	18.1	16.8	
Indirect energy consumption intensity					
<i>by division</i>					
Woodlands	Gigajoules / t product	0.0	0.0	0.0	
Sawmills	Gigajoules / t product	0.1	0.1	0.2	
Pulp and paper	Gigajoules / t product	4.9	5.2	5.3	
Irving Personal Care	Gigajoules / t product	0.0	3.4	4.0	c
Irving Tissue	Gigajoules / t product	7.3	6.0	6.4	
Direct and indirect energy consumption intensity					
<i>by division</i>					
Woodlands	Gigajoules / t product	0.0	0.0	0.0	
Sawmills	Gigajoules / t product	0.8	0.8	0.9	
Pulp and paper	Gigajoules / t product	21.1	21.2	22.2	
Irving Personal Care	Gigajoules / t product	0.0	3.5	4.1	c
Irving Tissue	Gigajoules / t product	22.9	24.1	23.1	

Data	Measurement	2020	2021	2022	Footnote
WASTE					
Total weight of waste generated, Total	Tonnes	243,973	253,505	279,831	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	120,336	125,246	132,154	
Pulp and paper	Tonnes	103,872	107,887	119,104	
Irving Pulp & Paper, Limited	Tonnes	24,449	22,276	25,369	
Irving Paper Limited	Tonnes	52,764	52,656	55,626	
Lake Utopia Paper Limited	Tonnes	26,659	32,954	38,109	
Irving Personal Care	Tonnes	0	1,153	791	c, q
Irving Tissue	Tonnes	19,765	19,219	27,782	d
Total hazardous waste generated, Total	Tonnes	618	474	821	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	35	49	59	
Pulp and paper	Tonnes	10	1	161	
Irving Pulp & Paper, Limited	Tonnes	10	1	161	
Irving Paper Limited	Tonnes	0	0	0	
Lake Utopia Paper Limited	Tonnes	0	0	0	
Irving Personal Care	Tonnes	0	0	0	c
Irving Tissue	Tonnes	563	421	439	
Total non-hazardous waste generated, Total	Tonnes	243,365	253,033	279,172	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	120,301	125,197	132,095	
Pulp and paper	Tonnes	103,862	107,885	118,942	
Irving Pulp & Paper, Limited	Tonnes	24,439	22,275	25,207	
Irving Paper Limited	Tonnes	52,764	52,656	55,626	
Lake Utopia Paper Limited	Tonnes	26,659	32,954	38,109	
Irving Personal Care	Tonnes	0	1,153	791	c
Irving Tissue	Tonnes	19,202	18,798	27,344	d
Total weight of waste sent to landfill, Total	Tonnes	114,137	104,266	104,239	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	95,388	90,805	93,773	
Pulp and paper	Tonnes	3,640	3,785	4,056	
Irving Pulp & Paper, Limited	Tonnes	503	1,001	1,041	
Irving Paper Limited	Tonnes	476	279	427	
Lake Utopia Paper Limited	Tonnes	2,661	2,506	2,587	
Irving Personal Care	Tonnes	0	841	545	c
Irving Tissue	Tonnes	15,108	8,834	5,866	

Data	Measurement	2020	2021	2022	Footnote
Total weight of waste diverted from disposal, Total	Tonnes	129,228	148,767	174,933	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	24,913	34,391	38,322	q
Pulp and paper	Tonnes	100,222	104,099	114,887	q
Irving Pulp & Paper, Limited	Tonnes	23,936	21,274	24,166	q
Irving Paper Limited	Tonnes	52,288	52,377	55,199	
Lake Utopia Paper Limited	Tonnes	23,998	30,448	35,522	
Irving Personal Care	Tonnes	0	312	246	c
Irving Tissue	Tonnes	4,094	9,964	21,478	d
Percentage of non-hazardous sent to landfill, Total	%	46.90	41.21	37.34	
<i>by division</i>					
Woodlands	%	0.0	0.0	0.0	
Sawmills	%	79.3	72.5	71.0	
Pulp and paper	%	3.5	3.5	3.4	
Irving Pulp & Paper, Limited	%	2.1	4.5	4.1	
Irving Paper Limited	%	0.9	0.5	0.8	
Lake Utopia Paper Limited	%	10.0	7.6	6.8	
Irving Personal Care	%	0.0	72.9	68.8	c
Irving Tissue	%	78.7	47.0	21.5	d
Percentage of non-hazardous waste diverted from disposal, Total	%	53.1	58.8	62.7	
<i>by division</i>					
Woodlands	%	0.0	0.0	0.0	
Sawmills	%	20.7	27.5	29.0	
Pulp and paper	%	96.5	96.5	96.6	
Irving Pulp & Paper, Limited	%	97.9	95.5	95.9	
Irving Paper Limited	%	99.1	99.5	99.2	
Lake Utopia Paper Limited	%	90.0	92.4	93.2	
Irving Personal Care	%	0.0	27.1	31.2	c
Irving Tissue	%	21.3	53.0	78.5	d
WASTE INTENSITY					
Total waste weight intensity					
<i>by division</i>					
Woodlands and Sawmills	kgs / t product	10.4	11.0	12.9	
Woodlands	kgs / t product	0.0	0.0	0.0	
Sawmills	kgs / t product	26.9	26.1	28.6	
Pulp and paper	kgs / t product	113.5	120.2	133.5	
Irving Personal Care	kgs / t product	0.0	55.6	56.5	c
Irving Tissue	kgs / t product	65.6	65.2	79.5	d

Data	Measurement	2020	2021	2022	Footnote
WATER					
Water withdrawn, surface water, Total	Thousand cubic meters (m³)	62,203	64,468	65,610	
Water consumption, Total	Thousand cubic meters (m³)	62,203	64,468	65,610	
<i>by division</i>					
Woodlands	Thousand cubic meters (m³)	0	0	0	
Sawmills	Thousand cubic meters (m³)	0	0	0	
Pulp and paper	Thousand cubic meters (m³)	51,486	53,523	53,074	
Irving Pulp & Paper, Limited	Thousand cubic meters (m³)	33,470	35,005	33,748	
Irving Paper Limited	Thousand cubic meters (m³)	12,135	12,302	12,402	
Lake Utopia Paper Limited	Thousand cubic meters (m³)	5,880	6,217	6,924	
Irving Personal Care	Thousand cubic meters (m³)	0	0	0	c
Irving Tissue	Thousand cubic meters (m³)	10,718	10,944	12,536	
Water discharge, Total	Thousand cubic meters (m³)	64,243	66,920	69,369	
<i>by division</i>					
Woodlands	Thousand cubic meters (m³)	0	0	0	
Sawmills	Thousand cubic meters (m³)	0	0	0	
Pulp and paper	Thousand cubic meters (m³)	54,017	56,718	57,675	
Irving Pulp & Paper, Limited	Thousand cubic meters (m³)	36,237	38,332	38,453	
Irving Paper Limited	Thousand cubic meters (m³)	11,655	11,910	12,010	
Lake Utopia Paper Limited	Thousand cubic meters (m³)	6,125	6,476	7,213	
Irving Personal Care	Thousand cubic meters (m³)	0	0	0	c
Irving Tissue	Thousand cubic meters (m³)	10,226	10,202	11,694	d
Percent of product that is elemental chlorine-free	%	100%	100%	100%	
<i>by division</i>					
Woodlands	%	-	-	-	
Sawmills	%	-	-	-	
Pulp and paper	%	100%	100%	100%	
Irving Personal Care	%	-	-	-	
Irving Tissue	%	100%	100%	100%	
Water discharges BOD, Total	Tonnes	3,372	3,421	3,856	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	0	0	0	
Pulp and paper	Tonnes	2,777	2,848	2,942	
Irving Pulp & Paper, Limited	Tonnes	1,796	1,850	1,959	
Irving Paper Limited	Tonnes	670	675	689	
Lake Utopia Paper Limited	Tonnes	311	323	295	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	595	572	914	

Data	Measurement	2020	2021	2022	Footnote
Water discharges COD, Total	Tonnes	20,843	20,851	22,806	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	0	0	0	
Pulp and paper	Tonnes	19,839	19,385	21,747	
Irving Pulp & Paper, Limited	Tonnes	8,563	8,344	8,774	
Irving Paper Limited	Tonnes	2,441	1,865	2,338	
Lake Utopia Paper Limited	Tonnes	8,835	9,176	10,635	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	1,003	1,466	1,058	
Water discharges TSS, Total	Tonnes	7,442	7,132	7,312	
<i>by division</i>					
Woodlands	Tonnes	0	0	0	
Sawmills	Tonnes	0	0	0	
Pulp and paper	Tonnes	5,878	5,932	5,804	
Irving Pulp & Paper, Limited	Tonnes	2,133	2,186	2,175	
Irving Paper Limited	Tonnes	3,333	3,350	3,251	
Lake Utopia Paper Limited	Tonnes	412	395	378	
Irving Personal Care	Tonnes	0	0	0	
Irving Tissue	Tonnes	1,564	1,200	1,508	
AOX emissions, Total	Kg	81,207	56,601	53,880	
<i>by division</i>					
Woodlands	Kg	0	0	0	
Sawmills	Kg	0	0	0	
Pulp and paper	Kg	81,207	56,601	53,880	
Irving Pulp & Paper, Limited	Kg	81,207	56,601	53,880	
Irving Paper Limited	Kg	0	0	0	
Lake Utopia Paper Limited	Kg	0	0	0	
Irving Personal Care	Kg	0	0	0	
Irving Tissue	Kg	0	0	0	
Significant spills, Total	#	0	0	0	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	0	0	0	
Irving Pulp & Paper, Limited	#	0	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	0	0	0	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	0	0	0	

Data	Measurement	2020	2021	2022	Footnote
WATER INTENSITY					
Water consumption intensity					
<i>by division</i>					
Woodlands	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Sawmills	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Pulp and paper	Cubic meters (m ³)/t product	56.3	59.6	59.5	
Irving Pulp & Paper, Limited	Cubic meters (m ³)/t product	96.6	103.5	105.4	
Irving Paper Limited	Cubic meters (m ³)/t product	31.8	31.6	31.3	
Lake Utopia Paper Limited	Cubic meters (m ³)/t product	31.5	36.5	39.4	
Irving Personal Care	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Irving Tissue	Cubic meters (m ³)/t product	35.6	37.1	35.9	
Water discharge intensity					
<i>by division</i>					
Woodlands	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Sawmills	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Pulp and paper	Cubic meters (m ³)/t product	59.0	63.2	64.6	
Irving Pulp & Paper, Limited	Cubic meters (m ³)/t product	104.5	113.3	120.0	
Irving Paper Limited	Cubic meters (m ³)/t product	30.6	30.6	30.3	
Lake Utopia Paper Limited	Cubic meters (m ³)/t product	32.8	38.0	41.1	
Irving Personal Care	Cubic meters (m ³)/t product	0.0	0.0	0.0	
Irving Tissue	Cubic meters (m ³)/t product	33.9	34.6	33.5	
Water discharges BOD intensity					
<i>by division</i>					
Woodlands	kg/t product	0.0	0.0	0.0	
Sawmills	kg/t product	0.0	0.0	0.0	
Pulp and paper	kg/t product	3.0	3.2	3.3	
Irving Pulp & Paper, Limited	kg/t product	5.2	5.5	6.1	
Irving Paper Limited	kg/t product	1.8	1.7	1.7	
Lake Utopia Paper Limited	kg/t product	1.7	1.9	1.7	
Irving Personal Care	kg/t product	0.0	0.0	0.0	
Irving Tissue	kg/t product	2.0	1.9	2.6	
Water discharges COD intensity					
<i>by division</i>					
Woodlands	kg/t product	0.0	0.0	0.0	
Sawmills	kg/t product	0.0	0.0	0.0	
Pulp and paper	kg/t product	21.7	21.6	24.4	
Irving Pulp & Paper, Limited	kg/t product	24.7	24.7	27.4	
Irving Paper Limited	kg/t product	6.4	4.8	5.9	
Lake Utopia Paper Limited	kg/t product	47.3	53.9	60.6	
Irving Personal Care	kg/t product	0.0	0.0	0.0	
Irving Tissue	kg/t product	3.3	5.0	3.0	

Data	Measurement	2020	2021	2022	Footnote
Water discharges TSS intensity					
<i>by division</i>					
Woodlands	kg/t product	0.0	0.0	0.0	
Sawmills	kg/t product	0.0	0.0	0.0	
Pulp and paper	kg/t product	6.4	6.6	6.5	
Irving Pulp & Paper, Limited	kg/t product	6.2	6.5	6.8	
Irving Paper Limited	kg/t product	8.7	8.6	8.2	
Lake Utopia Paper Limited	kg/t product	2.2	2.3	2.2	
Irving Personal Care	kg/t product	0.0	0.0	0.0	
Irving Tissue	kg/t product	5.2	4.1	4.3	
AOX emissions intensity					
<i>by division</i>					
Woodlands	g/t product	0.0	0.0	0.0	
Sawmills	g/t product	0.0	0.0	0.0	
Pulp and paper	g/t product	88.8	63.1	60.4	
Irving Pulp & Paper, Limited	g/t product	234.3	167.4	168.2	
Irving Paper Limited	g/t product	0.0	0.0	0.0	
Lake Utopia Paper Limited	g/t product	0.0	0.0	0.0	
Irving Personal Care	g/t product	0.0	0.0	0.0	
Irving Tissue	g/t product	0.0	0.0	0.0	
MATERIAL					
Volume of input materials, Total	tonnes	6,413,710	6,542,883	6,471,238	
<i>by division</i>					
Woodlands	tonnes	0	0	0	
Sawmills	tonnes	4,551,880	4,732,064	4,623,411	
Pulp and paper	tonnes	1,443,464	1,394,676	1,377,436	
Irving Pulp & Paper, Limited	tonnes	783,528	758,480	715,734	
Irving Paper Limited	tonnes	436,759	437,182	455,170	
Lake Utopia Paper Limited	tonnes	223,176	199,014	206,532	
Irving Personal Care	tonnes	0	20,732	13,993	
Irving Tissue	tonnes	418,366	395,411	456,398	
Volume of input materials intensity, Total	tonnes materials/tonne product	0.5	0.5	0.6	
<i>by division</i>					
Woodlands	tonnes materials/tonne product	0.0	0.0	0.0	
Sawmills	tonnes materials/tonne product	1.0	1.0	1.0	
Pulp and paper	tonnes materials/tonne product	1.6	1.6	1.5	
Irving Pulp & Paper, Limited	tonnes materials/tonne product	2.3	2.2	2.2	
Irving Paper Limited	tonnes materials/tonne product	1.1	1.1	1.1	
Lake Utopia Paper Limited	tonnes materials/tonne product	1.2	1.2	1.2	
Irving Personal Care	tonnes materials/tonne product	0.0	1.0	1.0	
Irving Tissue	tonnes materials/tonne product	1.2	1.2	1.2	

Data	Measurement	2020	2021	2022	Footnote
Volume of recycled input materials, Total	tonnes	55,567	49,648	51,735	
<i>by division</i>					
Woodlands	tonnes	0	0	0	
Sawmills	tonnes	0	0	0	
Pulp and paper	tonnes	55,567	49,648	51,735	
Irving Pulp & Paper, Limited	tonnes	0	0	0	
Irving Paper Limited	tonnes	0	0	0	
Lake Utopia Paper Limited	tonnes	55,567	49,648	51,735	
Irving Personal Care	tonnes	0	0	0	
Irving Tissue	tonnes	0	0	0	
Product with at least 25% post-consumer recycled content					
<i>by division</i>					
Woodlands	%	0.0	0.0	0.0	
Sawmills	%	0.0	0.0	0.0	
Pulp and paper	%	0.0	0.0	0.0	
Irving Pulp & Paper, Limited	%	0.0	0.0	0.0	
Irving Paper Limited	%	0.0	0.0	0.0	
Lake Utopia Paper Limited	%	69.0	67.5	64.0	
Irving Personal Care	%	0.0	0.0	0.0	
Irving Tissue	%	0.0	0.0	0.0	
Wood fiber sourced and harvested					
Total wood fiber harvested and procured	Tonnes	7,133,188	6,566,093	5,612,930	
Trees planted	# of Seedlings	12,334,779	14,898,021	18,754,777	
Recycled input materials/fibre procured	tonnes	55,567	49,648	51,735	
LAND CERTIFICATIONS					
Percentage of resource holdings SFI certified	%	100	100	100	
Percentage of resource holdings ISO14001 certified	%	100	100	100	
Percentage of resource holdings FSC certified	%	20	20	20	
BIODIVERSITY CONSERVATION					
Land under Irving Management	Hectares	2,389,974	2,377,048	2,377,640	
Area of freehold land, Total	Hectares	1,327,503	1,314,577	1,315,303	
Area of JDI freehold land CAN	Hectares	801,723	796,321	796,095	
Area of JDI freehold land US	Hectares	525,780	518,256	519,208	
Area of crown land, Total	Hectares	1,062,471	1,062,471	1,062,337	
Area of crown land managed, CAN	Hectares	1,062,471	1,062,471	1,062,337	
Conservation areas on JDI land	Hectares	253,894	242,643	247,913	
Conservation areas on JDI land	%	19	18	19	
Conservation areas on Crown land	Hectares	318,600	314,680	281,339	h

Data	Measurement	2020	2021	2022	Footnote
Conservation areas on Crown land	%	30	30	26	h
Total conservation area managed	Hectares	572,494	557,323	529,252	
Total conservation area managed	%	24	23	22	
Total unique areas managed	# of unique areas	1,739	1,894	2,001	
Number of species at risk within operational areas	#	44	35	36	
SILVICULTURE AND OTHER FORESTRY METRICS					
Average Harvest Opening Size Freehold	Hectares	17	19	16	
Average Harvest Opening Size Crown	Hectares	23	29	20	
Actual Harvest Level Freehold	m3/ha	2.3	2.2	2.2	
Actual Harvest Level Crown	m3/ha	1.7	1.6	1.6	
Sustainable Harvest Level Freehold	m3/ha	2.5	2.4	2.4	
Sustainable Harvest Level Crown	m3/ha	1.9	2.0	2.1	
Area Deforested Per Year	%/yr	0.01%	0.01%	0.01%	
Number of regulatory watercourse crossing violations	#	0	0	0	
Internal non-conformances (less safety and public complaints)	#	364	318	261	
DNR non-conformances	#	0	0	0	
FSC non-conformances	#	0	0	0	
SFI non-conformances	#	0	0	0	
SOCIAL					
EMPLOYMENT					
Full-time equivalent employees, Total	FTE	4,455	4,631	4,849	i
<i>by division</i>					
Woodlands	FTE	540	447	554	
Sawmills	FTE	1,522	1,578	1,657	
Pulp and paper	FTE	920	916	924	
Irving Personal Care	FTE	0	173	155	
Irving Tissue	FTE	1,473	1,517	1,559	
Permanent employees by gender, Total	#	4,057	4,574	4,781	
Total number of female permanent employees, Total	#	475	612	659	
Total number of male permanent employees, Total	#	3,519	3,859	3,968	
Total number of permanent employees with an unspecified gender, Total	#	63	103	154	
Temporary employees by gender, Total	#	28	37	30	
Temporary employees, Female	#	3	9	4	
Temporary employees, Male	#	21	26	25	
Temporary employees, Gender unspecified	#	4	2	1	
<i>by region</i>					
Permanent employees, CAN	#	3,095	3,478	3,614	

Data	Measurement	2020	2021	2022	Footnote
Temporary employees, CAN	#	23	33	28	
Permanent employees , US	#	962	1,095	1,166	
Temporary employees, US	#	3	4	2	
Full-time employees by gender, Total	#	4,034	4,561	4,767	
Total number of female full-time employees, Total	#	466	610	656	
Total number of male full-time employees, Total	#	3,501	3,847	3,957	
Total number of full-time employees with an unspecified gender, Total	#	67	104	154	
Part-time employees by gender, Total	#	51	50	44	
Total number of female part-time employees, Total	#	12	11	7	
Total number of male part-time employees, Total	#	39	38	36	
Total number of part-time employees with an unspecified gender, Total	#	0	1	1	
Employee Engagement, Total	%	82	80	80	
<i>by division</i>					
Woodlands	%	90	88	86	
Sawmills	%	79	78	80	
Pulp and paper	%	77	78	75	
Irving Pulp & Paper, Limited	%	63	73	68	
Irving Paper Limited	%	83	83	78	
Lake Utopia Paper Limited	%	81	72	75	
Irving Forest Services	%	0	87	89	
Irving Personal Care	%	0	82	83	
Irving Tissue	%	86	81	82	
Total number of new employee hires	#	491	1,124	1,252	
Total rate of new employee hires	%	10	24	26	
Total employee turnover number	#	457	850	943	
Total employee turnover rate	%	10	18	20	
OCCUPATIONAL HEALTH & SAFETY					
Number of fatalities that occurred in a location, Totals	#	0	0	0	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	0	0	0	
Pulp and paper	#	0	0	0	
Irving Pulp & Paper, Limited	#	0	0	0	
Irving Paper Limited	#	0	0	0	
Lake Utopia Paper Limited	#	0	0	0	
Irving Forest Services	#	0	0	0	
Irving Personal Care	#	0	0	0	

Data	Measurement	2020	2021	2022	Footnote
Irving Tissue	#	0	0	0	
Head office	#	0	0	0	
Plant Sites	#	0	0	0	
Number of critical injuries that occurred in a location, Totals	#	9	7	5	
<i>by division</i>					
Woodlands	#	0	1	0	
Sawmills	#	6	3	3	
Pulp and paper	#	2	1	0	
Irving Pulp & Paper, Limited	#	0	1	0	
Irving Paper Limited	#	1	0	0	
Lake Utopia Paper Limited	#	1	0	0	
Irving Forest Services	#	0	0	0	
Irving Personal Care	#	0	0	0	
Irving Tissue	#	1	2	2	
Head office	#	0	0	0	
Plant Sites	#	1	2	2	
Rate of critical injuries that occurred in a location, Totals	Rate	0.18	0.13	0.10	
<i>by division</i>					
Woodlands	Rate	0.00	0.15	0.00	
Sawmills	Rate	0.34	0.17	0.16	
Pulp and paper	Rate	0.22	0.10	0.00	
Irving Pulp & Paper, Limited	Rate	0.00	0.26	0.00	
Irving Paper Limited	Rate	0.32	0.00	0.00	
Lake Utopia Paper Limited	Rate	0.66	0.00	0.00	
Irving Forest Services	Rate	0.00	0.00	0.00	
Irving Personal Care	Rate	0.00	0.00	0.00	
Irving Tissue	Rate	0.07	0.13	0.13	
Head office	Rate	0.00	0.00	0.00	
Plant Sites	Rate	0.08	0.14	0.14	
Number of Recordable injuries that occurred in a location, Totals	#	114	109	107	j
<i>by division</i>					
Woodlands	#	9	7	9	
Sawmills	#	63	67	59	
Pulp and paper	#	20	11	12	
Irving Pulp & Paper, Limited	#	3	3	4	
Irving Paper Limited	#	8	5	7	
Lake Utopia Paper Limited	#	8	3	1	
Irving Forest Services	#	1	0	0	
Irving Personal Care	#	1	3	1	
Irving Tissue	#	21	21	26	

Data	Measurement	2020	2021	2022	Footnote
Head office	#	0	0	1	
Plant Sites	#	21	21	25	
Rate of Recordable injuries that occurred in a location, Totals	Rate	2.3	2.1	2.0	j
<i>by division</i>					
Woodlands	Rate	1.5	1.1	1.2	
Sawmills	Rate	3.6	3.7	3.2	
Pulp and paper	Rate	2.2	1.2	1.2	
Irving Pulp & Paper, Limited	Rate	0.8	0.8	1.0	
Irving Paper Limited	Rate	2.6	1.6	2.2	
Lake Utopia Paper Limited	Rate	5.3	1.9	0.7	
Irving Forest Services	Rate	1.0	0.0	0.0	
Irving Personal Care	Rate	0.6	1.6	0.6	
Irving Tissue	Rate	1.4	1.3	1.6	
Head office	Rate	0.0	0.0	0.5	
Plant Sites	Rate	1.6	1.5	1.8	
Number of Lost Time injuries that occurred in a location (students are included), Totals	#	54	42	36	j
<i>by division</i>					
Woodlands	#	3	2	3	
Sawmills	#	30	24	26	
Pulp and paper	#	10	7	4	
Irving Pulp & Paper, Limited	#	2	1	2	
Irving Paper Limited	#	5	3	2	
Lake Utopia Paper Limited	#	3	3	0	
Irving Forest Services	#	0	0	0	
Irving Personal Care	#	1	0	1	
Irving Tissue	#	10	9	2	
Head office	#	0	0	1	
Plant Sites	#	10	9	1	
Rate of Lost-Time injuries that occurred in a location (students are included), Totals	Rate	1.1	0.8	0.7	j
<i>by division</i>					
Woodlands	Rate	0.5	0.3	0.4	
Sawmills	Rate	1.7	1.3	1.4	
Pulp and paper	Rate	1.1	0.7	0.4	
Irving Pulp & Paper, Limited	Rate	0.6	0.3	0.5	
Irving Paper Limited	Rate	1.6	1.0	0.6	
Lake Utopia Paper Limited	Rate	2.0	1.9	0.0	
Irving Forest Services	Rate	0.0	0.0	0.0	
Irving Personal Care	Rate	0.6	0.0	0.6	

Data	Measurement	2020	2021	2022	Footnote
Irving Tissue	Rate	0.7	0.6	0.1	
Head office	Rate	0.0	0.0	0.5	
Plant Sites	Rate	0.8	0.6	0.0	
Average of % of Employees Reporting a Hazard ID in a Financial Period, Totals	Rate	31.4	44.5	54.9	
<i>by division</i>					
Woodlands	Rate	35.5	76.9	93.3	
Sawmills	Rate	61.0	85.1	100.0	
Pulp and paper	Rate	1.6	4.3	6.9	
Irving Pulp & Paper, Limited	Rate	0.0	2.5	6.5	
Irving Paper Limited	Rate	0.0	1.2	1.5	
Lake Utopia Paper Limited	Rate	0.0	17.0	17.9	
Irving Forest Services	Rate	0.0	2.8	8.5	
Irving Personal Care	Rate	0.0	16.7	21.8	
Irving Tissue	Rate	18.0	20.0	25.1	
Head office	Rate	0.0	0.1	0.0	
Plant Sites	Rate	0.0	23.6	29.7	
TRAINING AND EDUCATION					
Number of employees participating in the Leadership Development Training	#	428	944	789	
Hours of Leadership Development Training	hours	3,388	4,949	6,681	
Spend on Leadership Development Training	\$ CAD	45,825	188,293	328,200	
DIVERSITY & INCLUSION					
<i>by gender</i>					
Percentage of women in executive positions	%	4.8	7.3	11.6	
Proportion of female employees, Total	%	13.3	13.0	13.8	
Proportion of male employees, Total	%	85.0	84.0	83.0	
Proportion of employees with an unspecified gender, Total	%	1.7	2.0	3.2	
<i>by age group</i>					
Proportion of employees that are less than 30 years old, Total	%	18.2	19.0	18.5	
Proportion of employees that are 30-50 years old, Total	%	49.1	32.0	50.8	
Proportion of employees that are over 50 years old, Total	%	32.7	49.0	30.7	
ECONOMIC					
PRODUCTION					
Production, Total	tonnes	12,888,018	12,607,832	11,505,905	
<i>by division</i>					
Woodlands	tonnes	7,133,188	6,566,093	5,612,930	
Woodlands harvested	tonnes	4,966,807	4,815,992	4,329,590	

Data	Measurement	2020	2021	2022	Footnote
Woodlands purchased	tonnes	2,166,381	1,750,101	1,283,340	
Sawmills	tonnes	4,476,666	4,797,260	4,621,070	
Sawmills, Lumber	tonnes	1,493,039	1,488,878	1,388,040	
Sawmills, Lumber	MFBM	1,139,636	1,068,477	1,064,677	
Sawmills, Residuals	tonnes	2,867,092	3,156,864	3,072,946	
Sawmills, Pellets	tonnes	102,483	130,201	138,850	k
Sawmills, Peat moss and soils production	tonnes	14,053	21,316	21,234	k
Pulp and paper	tonnes	914,809	897,420	892,478	
Irving Pulp & Paper, Limited	tonnes	346,611	338,210	320,328	
Irving Paper Limited	tonnes	381,266	388,974	396,564	
Lake Utopia Paper	tonnes	186,932	170,236	175,586	
Irving Personal Care	tonnes	22,464	20,732	13,993	c
Irving Tissue - Converted	tonnes	340,891	326,327	365,435	
Irving Tissue - Paper	tonnes	301,239	294,667	349,579	
ECONOMIC PERFORMANCE					
Capital Investment, USD, Total	\$ millions USD	478	501	270	
<i>by division</i>					
Woodlands	\$ millions USD	16	25	41	
Sawmills	\$ millions USD	49	66	80	
Pulp and Paper	\$ millions USD	116	149	121	
Irving Tissue & Irving Personal Care	\$ millions USD	296	259	24	
Head Office	\$ millions USD	1	2	2	
Spend on local suppliers, USD, Total	\$ millions USD	1,215	1,532	1,667	
<i>by division</i>					
Woodlands	\$ millions USD	325	394	389	
Sawmills	\$ millions USD	216	280	342	
Pulp and Paper	\$ millions USD	324	422	424	
Irving Tissue & Irving Personal Care	\$ millions USD	309	392	481	
Head Office	\$ millions USD	41	44	32	
WAGES AND EMPLOYEE BENEFIT					
Total spend on employee wages and benefits	\$ millions USD	308	345	362	l
Direct, Indirect and Induced jobs	FTE	16,479	17,814	18,005	
Employment Income from Direct, indirect and Induced jobs, Including impact of payments to Forestry contractors	\$ millions USD	879	969	1,025	
Median total compensation for female employees, CAN	CAD/year	56,000	60,000	60,881	l,o
Median total compensation for male employees, CAN	CAD/year	70,674	74,420	75,422	l,o
Median total compensation for employees with an unspecified gender, CAN	CAD/year	69,482	65,000	66,421	l,o
Median total compensation for female employees, US	USD/year	48,959	49,887	57,013	l,o

Data	Measurement	2020	2021	2022	Footnote
Median total compensation for male employees, US	USD/year	56,805	58,793	62,686	l,o
Median total compensation for employees with an unspecified gender, US	USD/year	42,916	0	64,740	l,o
Ratio of median salary women to men, CAN	-	0.79	0.81	0.81	
Ratio of median salary women to men, US	-	0.86	0.85	0.91	
Defined contribution plan percentage of compensation contributed by employee, Total	%	5.1	5.1	5.1	
<i>by division</i>					
Woodlands	%	5.0	5.0	5.0	
Sawmills	%	5.0	5.0	5.0	
Pulp and paper	%	5.5	5.5	5.5	
Irving Personal Care	%	0.0	5.0	5.0	
Irving Tissue	%	5.0	5.0	5.0	
Defined contribution plan percentage of compensation contributed by employer, Total	%	5.1	5.1	5.1	
<i>by division</i>					
Woodlands	%	5.0	5.0	5.0	
Sawmills	%	5.0	5.0	5.0	
Pulp and paper	%	5.5	5.5	5.5	
Irving Personal Care	%	0.0	5.0	5.0	
Irving Tissue	%	5.0	5.0	5.0	
Median entry level wage ratio for female employees, Total, CAN	-	1.6	1.7	1.5	l,o
Median entry level wage ratio for male employees, Total, CAN	-	1.6	1.7	1.5	l,o
Median entry level wage ratio for employees with an unspecified gender, Total, CAN	-	2.1	2.1	1.6	l,o
Median entry level wage ratio for female employees, Total, US	-	1.6	2.5	3.1	l,o
Median entry level wage ratio for male employees, Total, US	-	1.7	2.5	2.8	l,o
Median entry level wage ratio for employees with an unspecified gender, Total, US	-	2.3	0.0	2.0	l,o
GOVERNANCE					
Number of countries	#	2	2	2	
Number of facilities, Total	#	22	23	23	
<i>by division</i>					
Woodlands	#	0	0	0	
Sawmills	#	12	12	12	
Pulp and paper	#	3	3	3	

Data	Measurement	2020	2021	2022	Footnote
Irving Personal Care	#	0	1	1	c
Irving Tissue	#	5	5	5	
Corporate administration	#	2	2	2	
Percentage of total employees covered by collective bargaining agreements	%	43	40	37	
Substantiated complaints from outside parties regarding breach of customer privacy and loss of customer data	#	0	0	0	
Complaints from regulatory bodies regarding breach of customer privacy and loss of customer data	#	0	0	0	
Total number of identified leaks, thefts, or losses of customer data.	#	0	0	0	
Corporate directors that received communication on the organization's anti-corruption policies and procedures, Total	%	100	100	100	
Number of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation or corruption in which the organization has been identified as a participant.	#	0	0	0	
OTHER					
University and college partnerships	#	21	21	19	
Community based partnerships	#	119	119	136	
Outdoor associations	#	13	12	12	
Motorized Recreation	#	2	3	4	
Stakeholder based group Partnerships	#	53	55	54	
Non Government Organizations	#	13	13	13	
Government organizations	#	5	5	5	
Fishing and Hunting Clubs	#	9	9	9	
Industry Associations	#	26	26	27	
# of Partner meetings	#	411	520	365	
New Partners	#	4	5	4	
Scholarships	CAD/year	0	95,250	147,442	m
Stakeholder/Social media presence	# of followers	67,198	16,000	35,850	n
Stakeholder/Social media engagement	# of Posts	2,267	576	657	n
Stakeholder/Social media engagement	# of Engagements	348,854	66,870	51,497	n
Charitable Donations	CAD/year	3,045,286	3,047,821	1,683,558	p

ENDNOTES

and 2022 Restatements

- a. Woodlands is reporting GHG emissions independently in 2021 and 2022. A portion of Woodlands GHG emissions were reported under the Sawmills Division in previous years. Woodlands/Sawmills emissions will be reported for year over year comparison purposes in addition to the new independent Woodlands and Sawmills disclosure.
- b. Chipman bark boiler offline for repair for 2022, used oil boiler in its place. Expect significant Scope 1 and 2 emissions reductions for this site in future years.
- c. Irving Personal Care (IPC) added to scope of Forest Supply Chain in 2021. Was not considered part of supply chain in 2020.
- d. Second tissue machine in Macon, GA had first full year of operations in 2022.
- e. Scope 3 detail by mill not available in 2020.
- f. Net carbon footprint includes Freehold land removal only.
- g. Volatile Organic Compound reporting was added in 2021 to align to SASB reporting requirements.
- h. Total conservation forest area was overstated in past years due to inclusion of draft conservation forest areas in reporting. Only areas with that have been formally established included this year.
- i. Full Time Equivalent (FTE) employees was calculated using a new standard definition in 2021. Human Resources has developed standard definitions for all metrics and workflows to calculate metrics to improve consistency in future years.
- j. Safety metrics restated for 2020 and 2021. See page 34 for detailed explanation. No assurance received on 2020 or 2021 re-stated figure.
- k. Production was used to calculate intensity metrics in 2021 and 2022. 2020 for comparison only.
- l. Standardized definitions and workflows were defined in 2021 to calculate payroll related metrics to improve consistency and reproduceable results.
- m. Standardized definitions and workflows were defined in 2021 to calculate donations and scholarships to improve consistency and reproduceable results. Donations and scholarships from the JDI Forest Supply Chain only.
- n. All JDI reported in 2020. Only Woodlands reported in 2021 and 2022.
- o. Median wage information is an aggregate of multiple factors including gender and job type. This metrics is not intended for inference of wages paid to different genders in the same job type.
- p. A spending shift due to the Covid-19 pandemic meant more funds allocated to charitable donations instead of event sponsorship in 2020 and 2021.
- q. Conversion or methodology error corrected from 2021.
- r. Methodology, conversion or correction from 2020.
- s. See page 89 for explanation of Restatement of Transfers to Harvested Wood Products