Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

About International Paper:

International Paper (NYSE: IP) is a leading global producer of renewable fiber-based packaging and pulp products with manufacturing operations in North America, Latin America, Europe and North Africa. We produce corrugated packaging products that protect and promote goods, and enable world-wide commerce; and cellulose fiber- sustainable, renewable raw material used in a variety of products people depend on every day, including baby diapers, towel and tissue products, feminine care, adult incontinence and other personal hygiene products that promote health and wellness.

We are headquartered in Memphis, Tennessee. In the United States. In the United States, at December 31, 2022, the Company operated 24 pulp and packaging mills, 164 converting and packaging plants, 16 recycling plants and three bag facilities. Production facilities at December 31, 2022 in Canada, Europe, North Africa and Latin America included four pulp and packaging mills, 37 converting and packaging plants, and two recycling plants.

We operate a printing and packaging products distribution business principally through six branches in Asia. All our mills are certified to one or more third-party chain of custody standards.

Unless otherwise indicated, information is from the 2022 calendar year, and data are accurate as of December 31, 2022. For more information about International Paper, our products and sustainability efforts, please visit internationalpaper.com.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Canada
Chile
France
Italy
Mexico
Morocco
Poland
Portugal
Spain
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]

Consumption	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Do not own/manage land

Please explain

We report the details of International Paper's scope 3 emissions in section C6.5. Our scope 3 emissions include those arising from the purchase of wood and recovered fiber. We quantify International Paper's scope 3 emissions (including those from forestry activities undertaken by our fiber suppliers) following the guidance and methodology laid out by the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and partnering with the National Council for Air and Stream Improvement (NCASI), a non-profit research institute focused on environmental and sustainability topics relevant to forest management and the manufacture of forest products.

C-AC0.6f/C-FB0.6f/C-PF0.6f

(C-AC0.6f/C-FB0.6f/C-PF0.6f) Why are emissions from distribution activities within your direct operations not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Outside the direct operations of my organization

Please explain

We report the details of International Paper's scope 3 emissions in section C6.5. Our scope 3 emissions include those arising from distribution activities in our direct operations. We continue to work to further detail and quantify International Paper's scope 3 emissions following the guidance and methodology laid out by the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and partnering with the National Council for Air and Stream Improvement (NCASI), a non-profit research institute focused on environmental and sustainability topics relevant to forest management and the manufacture of forest products.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity

Timber

% of revenue dependent on this agricultural commodity

More than 80%

Produced or sourced

Sourced

Please explain

At International Paper, our entire business depends on the sustainability of forests. We transform renewable resources into fiber based products that people depend on every day. As all of our products are fiber-based, timber is used as the primary component and therefore constitutes contributes to over 80% of our revenue. This figure was calculated by considering all raw materials used in the production and manufacturing of our packaging and pulp products. All of the wood fiber we use is sourced externally.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	4601461035

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	Sustainability is a key element of our corporate governance, promoted by our CEO, Board of Directors and Senior Lead Team. We incorporate sustainability considerations into our everyday processes to ensure that we adequately address risks, operate sustainably and responsibly, and create long-term value. Our Board upholds our company mission and ensures effective organizational planning, focusing on strategy and risk management while monitoring strategic initiatives. Our CEO reports monthly to the Board on material issues, risks and opportunities, including environmental, sustainability, and climate related topics.

	The Board has adopted Corporate Governance Guidelines which require the Board to exercise oversight of the company's strategic, operational, financial, compliance and legal risks. We currently combine the role of Chairman and CEO and believe this is the most effective leadership structure for the Company at this time. Our Senior Vice President (SVP) of Human Resources and Corporate Affairs, the highest-ranking non-board company executive with direct oversight of climate-related issues, reports directly to the CEO. Our Chief Sustainability Officer in turn, reports directly to this SVP.
Board-level committee	Our Board and its committees receive regular reports from senior managers on areas of material risk, including operational, financial, strategic, competitive, reputational, legal and regulatory risks, and how those risks are managed. The Public Policy and Environment (PPE) Committee of the Board has overall responsibility for sustainability/environmental issues, including climate-related issues and major investments in climate-related regulatory compliance. This Committee reviews and assesses environmental sustainability (including climate change), public policy, legal, health and safety and technology issues. It also reviews the Company's policies and procedures for complying with certain of its legal and regulatory obligations, including our internal Code of Conduct, and charitable and political contributions. This committee has its own charter, which is reviewed annually to assure ongoing compliance with applicable law and sound governance practices. Meeting agendas are development by the committee chair in consultation with committee members and senior leaders, who regularly attend the meetings. In 2022 this committee met three times with a 100% attendance rate. Our Chief Sustainability Officer briefs this committee twice annually. The Board's Governance Committee also has oversight of certain public policy and sustainability matters. Internal Performance evaluations of the full Board and its committees are conducted annually.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing and guiding strategy Monitoring progress towards corporate targets	Sustainability is a key element of our corporate governance, promoted by our CEO, Board of Directors and Senior Lead Team, and integrated into governance structures and processes across the enterprise. Our Board of Directors upholds our company mission and ensures effective organizational planning, focusing on strategy and risk management while monitoring strategic initiatives and providing guidance on climate-related material issues. The Public Policy and Environment (PPE) Committee of the Board has overall responsibility for sustainability/environmental issues, including climate-related issues and major investments in climate-related regulatory compliance. The PPE Committee

	Reviewing and guiding the risk management process Other, please specify Monitoring and overseeing progress against goals and targets for addressing climate-related issues	reviews and assesses public policy, legal, health and safety, technology, environment and sustainability issues. It also reviews the Company's policies and procedures for complying with certain of its legal and regulatory obligations, including our internal Code of Conduct, and charitable and political contributions. This committee has its own charter, which is reviewed annually to assure ongoing compliance with applicable law and sound governance practices. Meeting agendas are developed by the committee chair in consultation with committee members and senior leaders, who regularly attend the meetings. In 2022, this committee met three times and had a 100% attendance rate. Our Chief Sustainability Officer briefs this committee twice annually. The Board's Governance Committee also has oversight of certain public policy and sustainability matters. Internal Performance evaluations of the full Board and its committees are conducted annually. The Company spent approximately $30 million in 2022 for capital projects to control environmental releases into the air and water, and to assure environmentally sound management and disposal of waste. We expect to spend approximately $39 million in 2023 for environmental capital projects. Capital expenditures on environmental projects for 2024 and 2025, respectively, are anticipated to be approximately $35 million and $26 million. The Board has a role in vetting large capital projects like these, and the PPE Committee provides oversight of environmental issues as related to strategic company decisions including acquisitions and divestitures.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Our Board and the Governance Committee have assembled a Board comprised of experienced directors who are currently, or have recently been, leaders of major companies and institutions, are independent thinkers, and bring to the boardroom a diverse range of backgrounds, tenures and skills. The Board believes that such diversity enhances the quality of its deliberations and decisions. Our Board believes that its membership should include individuals with a diverse background in the broadest sense, and is particularly interested in maintaining a mix of skills and experience that

		includes the following: Current or Former CEO; Diversity; Environment, Sustainability, Public Policy; Finance, Accounting; International Operations; Manufacturing; Marketing; Strategic planning; Supply Chain; and Technology. The Governance Committee Charter specifically directs the Committee to seek qualified candidates with diverse backgrounds including, but not limited to, such factors as race, gender, and ethnicity. One of our board members and chair of the Public Policy and Environment committee, is a leading climate scientist and former Administrator of the National Oceanic and Atmospheric Administration, who brings experience in natural resource conservation. Another of our board members is a member of our Audit and Finance committee, and has unique knowledge of environmental and sustainability issues globally, combined with experience in a global environmental engineering consulting business. Through the skills and experiences of our board members, we get a valuable perspective on climate-related issues affecting our business.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Half-yearly

Please explain

Our CSO is the company officer responsible for guiding our sustainability strategy and facilitating implementation of that strategy to achieve our Vision 2030 goals. The CSO reports directly to the Senior Vice President (SVP) of Human Resources and Corporate Affairs who reports directly to the CEO. Climate-related issues are the responsibility of the CSO, as climate is one of the two key focus areas under our "Sustainable Operations" strategic pillar and company strategy. The CSO leads our Corporate Affairs team which has day-to-day responsibility for the company's climate strategy including tracking the progress against our Vision 2030 climate goal of reducing scope 1, 2 & 3 emissions by 35%.

The CSO's regular reporting to the Board (twice annually) includes updates and discussion on climate-related issues and our corporate voluntary sustainability goals (i.e., Vision 2030): goal-setting and revision, progress against targets, challenges and opportunities, and partnerships development. To monitor and track our progress across the above-mentioned areas, we annually collect, review and validate company-wide environmental performance data. Board approval is required for large strategic partnerships of $1MM per year. Examples include renewal of our Forestland Stewards Partnership (FSP) with the National Fish and Wildlife Foundation in 2022 for another five-year period, and commitment of $10 million for wildlife and working forestland conservation throughout the Southeastern US, and our global partnership with the World Wildlife Fund to develop science-based targets for forests and demonstrate implementation tactics on the ground in strategic locations like Brazil's Atlantic Forest.

Position or committee

Other C-Suite Officer, please specify

Senior Vice President (SVP), Human Resources & Corporate Affairs

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

As important matters arise

Please explain

Our SVP of Human Resources and Corporate Affairs is the highest-ranking non-board company executive with direct oversight of climate-related issues. This officer chairs our Stewardship Council, which guides the company's sustainability and community engagement strategies and monitors progress, and reports directly to the CEO. Our CSO reports directly to this SVP on climate-related issues.

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Not reported to the board

Please explain

The Council is made up of cross-functional leaders of global business and staff groups, and meets quarterly. The Council is chartered by the Senior Lead Team of the company and chaired by our Senior Vice President (SVP).

Our Stewardship Council guides the company's sustainability strategy, including climate-related topics, and monitors progress. The Council is made up of cross-functional leaders of global business and staff groups, and meets quarterly. The Council is chartered by the Senior Lead Team of the company and chaired by our SVP. The Sustainability department, led by our CSO, has responsibility for developing and executing our sustainability strategy. Our sustainability, human resources and sourcing teams handle the operational management of sustainability in their given areas. Designated staff at the corporate, business and facility levels help identify, prioritize and manage sustainability-related risks and opportunities. Key units such as our pulp and corrugate businesses, fiber supply and global sourcing have embedded sustainability experts to support their operations. The roles of individuals in the Stewardship Council include monitoring of progress made against the Vision 2030 goals (which includes our target of reducing emissions by 35% across scope 1, 2 and 3, and reducing water use intensity by 25%) as well as for planning and managing business-specific sustainability priorities.

Position or committee

Other committee, please specify

Energy and Greenhouse Gas Steering Team (EGST)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Other, please specify

This group is managed by the CSO and the CSO's direct report with climate-related responsibility.

Frequency of reporting to the board on climate-related issues via this reporting line

Not reported to the board

Please explain

The EGST was formed in 2020 to guide the development of a comprehensive GHG and energy strategy and goals/targets. This cross-functional group is made up of global company leaders (Vice Presidents and Directors) who are considered key internal stakeholders on GHG and Energy, either from a technical or business standpoint. The EGST is chaired by one Senior Vice President, and its members serve as advocates for our GHG strategy within their functional

groups (e.g. Manufacturing, EHS, Corporate Technology, Corporate Affairs, and Procurement). Several members also serve on Councils which report up to the Senior Leader Team, including the Stewardship Council and EHS Council. This group meets several times per year, and its members are engaged on specific aspects of the work. This group is managed by the CSO and the CSO's direct report with climate-related responsibility.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Our ESG performance impacts our executive compensation as: A factor in measuring individual performance for modifying Short-Term Incentives payouts and, a driver of long-term shareowner value which is measured by TSR performance in our Long-Term Incentives plan.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Bonus – set figure

Performance indicator(s)

Other (please specify)

We consider the following ESG metrics when determining individual payout of the Senior Lead Team under MIP: Health & Safety, Environment & Sustainability, Human Capital & Culture, Governance, Diversity & Inclusion

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

International Paper’s short-term incentive plan is referred to as the Management Incentive Plan (MIP). The MIP award is paid to an individual based on company financial performance and is modified for individual performance by their direct manager

We are committed to being leaders in environmental, social and governance ("ESG") performance. As such, ESG performance is considered when applying the individual performance modifier. We consider the following ESG metrics for members of our Senior Lead Team when determining their individual payout under the Management Incentive Plan (MIP):

• Health & Safety
• Environment & Sustainability
• Human Capital & Culture
• Governance
• Diversity & Inclusion

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Since ESG performance objectives are linked to compensation, it enables implementation of processes required to accelerate our progress and mobilize people and other resources required to achieve our Vision 2030 goals.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Climate-related risks and opportunities may be material to our business, and therefore are integrated into enterprise risk discussions. The Audit & Finance committee coordinates the risk oversight role exercised by the board's standing committees and management and receives updates on the enterprise risk management (ERM) processes twice per year. Short-term, medium-term, and long-term risks are discussed.
Medium-term	5	10	Climate-related risks and opportunities may be material to our business, and therefore are integrated into enterprise risk discussions. The Audit & Finance committee coordinates the risk oversight role exercised by the board's standing committees and management and receives updates on the enterprise risk management (ERM) processes twice per year. Short-term, medium-term, and long-term risks are discussed.
Long-term	10		Climate-related risks and opportunities may be material to our business, and therefore are integrated into enterprise risk discussions. The Audit & Finance committee coordinates the risk oversight role exercised by the board's

			standing committees and management and receives updates on the enterprise risk management (ERM) processes twice per year. Short-term, medium-term, and long-term risks are discussed.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

For the purposes of this report we define substantive or strategic impact as something with the potential to affect our revenue by 1% or more in any given year. For example, a major natural disaster (successive hurricanes, storms, etc.) across the Southeast US, that were to cut off the supply of fiber or require us to source fiber from forests in a different geographical region at several of our large mills simultaneously for an extended period (i.e., more than one month) could have a substantive impact. Note that this is an extreme hypothetical, and is not something we've experienced or anticipate. Risk identification and assessment of forest-related risks are evaluated in all of the areas in which we operate. Climate-related risks and opportunities are therefore integrated into enterprise risk discussions and evaluated when considered material.

Senior management, who have responsibility for environment, health and safety, sustainability, manufacturing, legal and government relations, identify and evaluate the risks and opportunities relevant to International Paper (IP). At an operational (asset) level, IP management is responsible for managing the day-to-day operations including the identification, understanding and mitigation of risks. If the likelihood and potential impact are significant enough to meet the company's enterprise criteria as determined by Enterprise Risk Management (ERM), plans are created to ensure that IP can mitigate such risks. The higher the likelihood and potential impact, the higher the priority to mitigate.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Our company faces risks – including climate-related risk - in the normal course of business and through global, regional, and local events that could have an adverse impact on its reputation, operations, and financial performance. The Board of Directors (Board) exercises oversight of the company's enterprise risk management (ERM) program, which includes strategic, operational and financial matters, as well as compliance and legal risks. The Audit and Finance Committee coordinates the risk oversight role exercised by the Board's standing committees and management, and it receives updates on the risk management processes twice per year.

We have an integrated board and executive-level governance structure to oversee sustainability and Environmental, Social, and Governance (ESG) topics, including climate change. The board is responsible for ensuring long-term resiliency and climate-related risks and opportunities are built into our corporate strategy and reflected in our approach.

Currently, the Public Policy and Environment (PPE) Committee of our Board has overall responsibility for overseeing and assessing environmental and sustainability (including climate change), public policy, legal, health and safety, and technology issues and risks. Our Board's Governance Committee also has oversight of certain public policy and sustainability matters. Our Board — including our Chief Executive Officer (CEO) — receives regular updates regarding environmental, social and governance (ESG) issues, risks and opportunities from multiple Board committees, our Chief Sustainability Officer (CSO) and members of management.

We consistently engage with a group of cross-functional internal experts to provide input on our anticipated climate-related risk and opportunity areas; this group includes company leaders representing our businesses, operations, supply chain (including fiber supply) and key support functions such as government relations and environment, health and safety. Quantitative climate impact modeling from our S&P Global informs these discussions and our strategy and public disclosures. Our sustainability team performs ongoing research and risk identification as climate issues evolve, and we leverage expertise and best practice guidance from trusted consultants and forest sector focused groups including the National Council on Air and Stream Improvement (NCASI) and the World Business Council for Sustainable Development (WBCSD).

We use a robust internal environmental management system to track and report our GHG emissions. In 2022, we began developing a system that automates Scope 1 and Scope 2 GHG emissions data collection with built-in quality checks and consolidates enterprise emissions with strengthened control protocols. Our cross-functional teams stay informed about developments concerning climate-related policies, regulations and emissions standards. We regularly assess whether such developments may have a material effect on our operations or businesses, and incorporate any related disclosures as appropriate. International Paper's senior management with responsibility for environment, health and safety, sustainability, manufacturing, legal and government relations identify and evaluate risks and opportunities that are relevant to IP. If the likelihood and potential impact are significant enough to meet IP's "enterprise" criteria per our ERM charter, then actions are taken to ensure that IP is able to mitigate those risks. The higher the likelihood and potential impact, the higher the priority to mitigate. At the facility level, company management is responsible for managing day-to-day identification, understanding and mitigation of all risks.

Climate-related risks and opportunities are material to our business, and we are working to formally integrate these into our ERM process. Our ERM council adopted the Committee of Sponsoring Organizations (COSO) framework for risk management. Our ERM Council has responsibility of identifying, categorizing and creating climate risk management plans. The ERM Council is made up of Senior Vice Presidents and Vice Presidents representing each IP business and certain major staff functions. The Council is chaired by our Chief Financial Officer and coordinated by our Vice President of Audit. The Council meets on a regular basis to evaluate enterprise risks and to ensure proper understanding, ownership and mitigation of risks. The ERM council considers climate as a subset of overall risk management.

We evaluate downstream and upstream risks considering potential impact and likelihood of occurrence within our strategic planning period of four years. With regard to procedures for managing risks and opportunities related to climate change, we evaluate risk and opportunities considering potential impact and likelihood of occurrence within our strategic planning period of 4 years. Beyond 4 years, we use quantitative and qualitative scenario analysis to understand the impacts of climate change on our costs and business opportunities. Given the longer-term risks that climate change may present, we are working to incorporate an extended time horizon into our ERM process. Enterprise risks are periodically reviewed with the company Board of Directors and Audit and Finance Committee.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulations are relevant and always included in climate-related risk assessments. Our operations are subject to regulation under a wide variety of U.S. federal and state and non- U.S. laws, regulations and other government requirements – including those relating to the environment, health and safety, labor and employment, data privacy, tax, trade and health care, among others. There can be no assurance that laws, regulations and government requirements will not be changed, applied or interpreted in ways that will require us to modify our operations and objectives or affect our returns on investments by restricting existing activities and products, subjecting them to escalating costs. For example, we have incurred, and expect that we will continue to incur, significant capital, operating and other expenditures complying with applicable environmental laws and regulations. Our environmental expenditures include, among other areas, those related to air and water quality, waste disposal and the clean-up of contaminated soil and groundwater, including situations where we have been identified as a potentially responsible party. Moreover, we may be directly impacted by, and are working to manage, the risks and costs to us, our customers and our vendors of the effects of climate change, greenhouse

		gases, and the availability of energy and water resources. These risks include the potentially adverse impact on forestlands, which are a key resource in the production of our products, increased product costs and a change in the types of products that customers purchase. We also face risks arising from the increased public focus, including by governmental and nongovernmental organizations, on these and other environmental sustainability matters, such as packaging and waste, deforestation, and land use. These risks also include the increased pressure to make commitments, set targets, or establish additional goals and take actions to meet them. These risks could expose us to market, operational, and execution costs or risks. There can be no assurance that future remediation requirements and compliance with existing and new laws and requirements will not require significant expenditures, or that existing reserves for specific matters will be adequate to cover future costs.
Emerging regulation	Relevant, always included	Emerging regulations are relevant and always included in climate-related risk assessments. Our operations are subject to regulation under a wide variety of U.S. federal and state and non- U.S. laws, regulations and other government requirements – including, among others, those relating to the environment, health and safety, labor and employment, data privacy, tax, trade and health care. There can be no assurance that laws, regulations and government requirements will not be changed, applied or interpreted in ways that will require us to modify our operations and objectives or affect our returns on investments by restricting existing activities and products, subjecting them to escalating costs. For example, we have incurred, and expect that we will continue to incur, significant capital, operating and other expenditures complying with applicable environmental laws and regulations. Our environmental expenditures include, among other areas, those related to air and water quality, waste disposal and the clean-up of contaminated soil and groundwater, including situations where we have been identified as a potentially responsible party. Moreover, we may be directly impacted by, and are working to manage, the risks and costs to us, our customers and our vendors of the effects of climate change, greenhouse gases, and the availability of energy and water resources. These risks include the potentially adverse impact on forestlands, which are a key resource in the production of our products, increased product costs and a change in the types of products that customers purchase. We also face risks arising from the increased public focus, including by governmental and nongovernmental organizations, on these and other environmental sustainability matters, such as packaging and waste, deforestation, and land use. These risks also include the increased pressure to make commitments, set targets, or establish additional goals and take actions to meet them. These risks could expose us to market, operational, and execution costs or risks. There can be no assurance that future remediation requirements and compliance with existing and new laws and requirements will not require significant expenditures, or

		that existing reserves for specific matters will be adequate to cover future costs.
Technology	Relevant, sometimes included	Technology risks are relevant and sometimes included in climate-related risk assessments. We are subject to information technology risks related to breaches of security pertaining to sensitive company, customer, employee and vendor information as well as breaches in the technology used to manage operations and other business processes. Our business operations rely upon secure information technology systems for data capture, processing, storage and reporting. Despite careful security and controls design, implementation, updating and independent third party verification, our information technology systems, and those of our third party providers or joint venture partners, could become subject to employee error or malfeasance, cyber-attacks by common hackers, criminal groups or nation-state organizations or social activist (hacktivist) organizations, geopolitical events, natural disasters, failures or impairments of telecommunications networks or other catastrophic events. Network, system, application and data breaches could result in operational disruptions or information misappropriation including, but not limited to, interruption to systems availability, denial of access to and misuse of applications required by our customers to conduct business with International Paper. Access to applications required to plan our operations, source materials, manufacture and ship finished goods and account for orders could be denied or misused. Theft of intellectual property or trade secrets, and inappropriate disclosure of confidential company, employee, customer or vendor information, could stem from such incidents. Any of these operational disruptions and/or misappropriation of information could result in lost sales, business delays, negative publicity and could have a material effect on our business.
Legal	Relevant, always included	Legal risks are relevant and always included in climate-related risk assessments. We are subject to a wide variety of laws, regulations and other government requirements that may change in significant ways, and the cost of compliance with such requirements could impact our business and results of operations. Our operations are subject to regulation under a wide variety of U.S. federal and state and non- U.S. laws, regulations and other government requirements -- including, among others, those relating to the environment, health and safety, labor and employment, data privacy, tax, trade and health care. There can be no assurance that laws, regulations and government requirements will not be changed, applied or interpreted in ways that will require us to modify our operations and objectives or affect our returns on investments by restricting existing activities and products, subjecting them to escalating costs.

		For example, we have incurred, and expect that we will continue to incur, significant capital, operating and other expenditures complying with applicable environmental laws and regulations. Our environmental expenditures include, among other areas, those related to air and water quality, waste disposal and the clean-up of contaminated soil and groundwater, including situations where we have been identified as a potentially responsible party.
Market	Relevant, always included	Market risks are relevant and always included in climate-related risk assessments. For example, we have incurred, and expect that we will continue to incur, significant capital, operating and other expenditures complying with applicable environmental laws and regulations. Our environmental expenditures include, among other areas, those related to air and water quality, waste disposal and the clean-up of contaminated soil and groundwater, including situations where we have been identified as a potentially responsible party. Moreover, we may be directly impacted by, and are working to manage, the risks and costs to us, our customers and our vendors of the effects of climate change, greenhouse gases, and the availability of energy and water resources. These risks include the potentially adverse impact on forestlands, which are a key resource in the production of our products, increased product costs and a change in the types of products that customers purchase. We also face risks arising from the increased public focus, including by governmental and nongovernmental organizations, on these and other environmental sustainability matters, such as packaging and waste, deforestation, and land use. These risks also include the increased pressure to make commitments, set targets, or establish additional goals and take actions to meet them. These risks could expose us to market, operational, and execution costs or risks. There can be no assurance that future remediation requirements and compliance with existing and new laws and requirements will not require significant expenditures, or that existing reserves for specific matters will be adequate to cover future costs. We could also incur substantial fines or sanctions, enforcement actions (including orders limiting our operations or requiring corrective measures), natural resource damages claims, clean up and closure costs, and third-party claims for property damage and personal injury as a result of violations of, or liabilities under, environmental laws, regulations, codes and common law. The amount and timing of environmental expenditures is difficult to predict, and, in some cases, liability may be imposed without regard to contribution or to whether we knew of, or caused, the release of hazardous substances.
Reputation	Relevant, always included	Market risks are relevant and always included in climate-related risk assessments. For example, we have incurred, and expect that we will continue to incur, significant capital, operating and other expenditures complying with applicable environmental laws and regulations. Our environmental expenditures include,

		among other areas, those related to air and water quality, waste disposal and the clean-up of contaminated soil and groundwater, including situations where we have been identified as a potentially responsible party. Moreover, we may be directly impacted by, and are working to manage, the risks and costs to us, our customers and our vendors of the effects of climate change, greenhouse gases, and the availability of energy and water resources. These risks include the potentially adverse impact on forestlands, which are a key resource in the production of our products, increased product costs and a change in the types of products that customers purchase. We also face risks arising from the increased public focus, including by governmental and nongovernmental organizations, on these and other environmental sustainability matters, such as packaging and waste, deforestation, and land use. These risks also include the increased pressure to make commitments, set targets, or establish additional goals and take actions to meet them. These risks could expose us to market, operational, and execution costs or risks. There can be no assurance that future remediation requirements and compliance with existing and new laws and requirements will not require significant expenditures, or that existing reserves for specific matters will be adequate to cover future costs. We could also incur substantial fines or sanctions, enforcement actions (including orders limiting our operations or requiring corrective measures), natural resource damages claims, clean up and closure costs, and third-party claims for property damage and personal injury as a result of violations of, or liabilities under, environmental laws, regulations, codes and common law. The amount and timing of environmental expenditures is difficult to predict, and, in some cases, liability may be imposed without regard to contribution or to whether we knew of, or caused, the release of hazardous substances.
Acute physical	Relevant, always included	Acute physical risks are relevant and always included in climate-related risk assessments. We operate our facilities in compliance with applicable rules and regulations and take measures to minimize the risks of disruption at our facilities. A material disruption at our corporate headquarters or one of our manufacturing facilities could prevent us from meeting customer demand, reduce our sales and/or negatively impact our financial condition. Any of our manufacturing facilities, or any of our machines within an otherwise operational facility, could cease operations unexpectedly due to a number of events, including: • fires, floods, earthquakes, hurricanes or other catastrophes; • the effect of a drought or reduced rainfall on its water supply; • the effect of other severe weather conditions on equipment and facilities; • disruption in the supply of raw materials or other manufacturing inputs; • terrorism or threats of terrorism; • information system disruptions or failures due to any number of causes, including cyber-attacks; • domestic and international laws and regulations applicable to our Company

		and our business partners, including joint venture partners, around the world; • unscheduled maintenance outages; • prolonged power failures; • an equipment failure; • a chemical spill or release; • explosion of a boiler or other equipment; • damage or disruptions caused by third parties operating on or adjacent to one of our manufacturing facilities; • disruptions in the transportation infrastructure, including roads, bridges, railroad tracks and tunnels; • a widespread outbreak of an illness or any other communicable disease, such as the recent outbreak of the COVID-19 virus in China, or any other public health crisis; • failure of our third party service providers and business partners to satisfactorily fulfill their commitments and responsibilities in a timely manner and in accordance with agreed upon terms; • labor difficulties; and • other operational problems. Any such downtime or facility damage could prevent us from meeting customer demand for our products and/ or require us to make unplanned expenditures. If one of these machines or facilities were to incur significant downtime, our ability to meet our production targets and satisfy customer requirements could be impaired, resulting in lower sales and having a negative effect on our business and financial results.
Chronic physical	Relevant, always included	Chronic physical risks are relevant and always included in climate-related risk assessments. We operate our facilities in compliance with applicable rules and regulations and take measures to minimize the risks of disruption at our facilities. A material disruption at our corporate headquarters or one of our manufacturing facilities could prevent us from meeting customer demand, reduce our sales and/or negatively impact our financial condition. Any of our manufacturing facilities, or any of our machines within an otherwise operational facility, could cease operations unexpectedly due to a number of events, including: • fires, floods, earthquakes, hurricanes or other catastrophes; • the effect of a drought or reduced rainfall on its water supply; • the effect of other severe weather conditions on equipment and facilities; • disruption in the supply of raw materials or other manufacturing inputs; • terrorism or threats of terrorism; • information system disruptions or failures due to any number of causes, including cyber-attacks; • domestic and international laws and regulations applicable to our Company and our business partners, including joint venture partners, around the world; • unscheduled maintenance outages;

		• prolonged power failures; • an equipment failure; • a chemical spill or release; • explosion of a boiler or other equipment; • damage or disruptions caused by third parties operating on or adjacent to one of our manufacturing facilities; • disruptions in the transportation infrastructure, including roads, bridges, railroad tracks and tunnels; • a widespread outbreak of an illness or any other communicable disease, such as the recent outbreak of the COVID-19 virus in China, or any other public health crisis; • failure of our third party service providers and business partners to satisfactorily fulfil their commitments and responsibilities in a timely manner and in accordance with agreed upon terms; • labor difficulties; and • other operational problems. Any such downtime or facility damage could prevent us from meeting customer demand for our products and/ or require us to make unplanned expenditures. If one of these machines or facilities were to incur significant downtime, our ability to meet our production targets and satisfy customer requirements could be impaired, resulting in lower sales and having a negative effect on our business and financial results.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Company-specific description

We recognize that managing climate-related risks is critical throughout our value chain to advance a low-carbon economy and to maintain a healthy society and ecosystems. Regulation of GHGs continues to evolve and emerge in various countries in which we do business. While it is likely that there will be increased governmental action regarding GHGs and climate change in the future, it is unclear when and in what manner such actions will occur. For the purposes of this response we provide a range of estimates demonstrating the potential magnitude of complying with such regulations (a theoretical tax on carbon), based on best available data. In addition to possible direct impacts, future legislation and regulation could have indirect impacts on IP such as higher prices for transportation, energy and other inputs, as well as more protracted air permitting processes, causing delays and higher costs to implement capital projects. IP has controls and procedures in place to stay informed about developments concerning possible climate change legislation and regulation in the U.S. and in other countries where we operate. We regularly assess whether such legislation or regulation may have a material effect on our operations or financial condition, and whether we have any related disclosure obligations. We operate one facility directly subject to the European Union's Emissions Trading System (EU ETS) regulation, while other sites that we operate in the EU experience indirect impacts of the EU ETS through purchased power pricing. We operate another facility that is directly subject to the Alberta, Canada TIER – ETS. Several U.S. states, including states in which we operate facilities, have enacted or are considering legal measures to require the reduction of emissions of GHGs by companies and public utilities. California, New York and Virginia have already enacted such programs, although these regulations have not had, and are not expected to have a material impact on the Company. We monitor proposed programs in other states as well; however, it is unclear what impacts, if any, future state-level GHG rules will have on the Company's operations. Neither the direct nor indirect impacts of these carbon trading schemes have been material to the Company, but they could be material to the Company in the future depending on how the Paris Agreement's non-binding commitments or allocation of and market prices for GHG credits under existing rules evolve over the coming years.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

290,000

Potential financial impact figure – maximum (currency)

490,000

Explanation of financial impact figure

We use as an illustrative example the case of our Madrid, Spain recycled containerboard mill, which is our only facility directly subject to the European Union's Emissions Trading System (EU ETS) regulation. We purchased 5,052 EU Allowances (EUAs, also known as climate credits or carbon credits) in 2022, and here we apply a range of EUR 58 - 98 to reflect the fluctuations in EUA pricing throughout the year.

For the purposes of this response we define "substantive financial or strategic impact" as something with the potential to affect our revenues by 1% or more in any given year, a threshold which here we refer to as "high" magnitude of impact, with the magnitude of impact for each risk or event scaled accordingly from that starting point. Similarly, here we define short (0-5 years), medium (5-10 years), long (10+ years) term horizons for risks and opportunities.

Cost of response to risk

2,360,000

Description of response and explanation of cost calculation

International Paper recognizes the impacts of climate change on people and our planet. In order to manage climate-related risks, we are taking actions within our own operations and throughout our value chain to advance a low-carbon economy. We have invested significant resources over more than a decade to reduce our Scope 1 and 2 GHG emissions by over 20%, with over $428 million invested in energy efficiency improvements and fuel diversity. The figure provided here is the amount we invested in 2021 on such projects, which support our SBTi-approved target of a 35% absolute GHG reduction from 2019-2030 across Scopes 1, 2 and 3. As an example, in 2021 we converted one of our last-remaining coal-fired power boilers to cleaner-burning natural gas. As a result, the mill has demonstrated a 39% reduction in total Scope 1 and Scope 2 GHG emissions since the baseline year of 2019. This $2.36 million project is just one example of the strategic, sustainable investments we are making on the road to 2030. Furthermore, across our manufacturing system we use biomass and manufacturing residuals (rather than fossil fuels) to generate over 70% of the manufacturing energy at our mills.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Increased direct costs

Company-specific description

Extreme weather events worsened by climate change are already impacting our operations, particularly in certain coastal areas. A significant disruption at our corporate headquarters or one of our manufacturing facilities could prevent us from meeting customer demand for our products and/or require us to make unplanned expenditures. If one of these machines or facilities were to incur significant downtime, our ability to meet our production targets and satisfy customer requirements could be impaired, resulting in lower sales and having a negative effect on our business and financial results. Any of our manufacturing facilities, or any of our machines within an otherwise operational facility, could cease operations unexpectedly due to a number of events, including: fires, floods, earthquakes, hurricanes or other catastrophes (including adverse weather conditions which may be intensified by climate change); the effect of a drought or reduced rainfall on its water supply; the effect of other severe weather conditions on equipment and facilities; disruption in the supply of raw materials or other manufacturing inputs. We are continually evaluating such risks, disclosing material financial impacts via our annual voluntary and legally required reporting and incorporating mitigation measures into our operational planning and landscape-level environmental resilience efforts.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

29,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

In 2021 several of our mills and converting facilities experienced weather-related impacts including damage, repair costs, and lost production value. The deep freeze during the 2020-2021 winter was the most impactful event, temporarily curtailing or shutting down multiple facilities. The total financial impact was approximately $29 million. This figure includes costs related to storm damage, lost production and other impacts, less insurance claims in excess of our deductibles which had been paid out through 2022. For the purposes of this response we define “substantive financial or strategic impact” as something with the potential to affect our revenues by 1% or more in any given year, a threshold which here we refer to as “high” magnitude of impact, with the magnitude of impact for each risk or event scaled accordingly

from that starting point. Similarly, here we define short (0-5 years), medium (5-10 years), long (10+ years) term horizons for risks and opportunities.

Cost of response to risk

10,000,000

Description of response and explanation of cost calculation

We engage in business continuity planning to minimize the risk of disruption at our facilities and are undertaking quantitative and qualitative scenario analysis to understand the impacts of climate change on our costs and business opportunities. All facilities are required to have severe weather plans in place to prepare for and mange through a severe weather event such as an earthquake, hurricane, tornado, freezing weather, drought or other similar regional weather event. Here we consider our enterprise insurance deductible for property damage and business interruption events as a quantifiable proxy for the cost of our response to these extreme weather impacts on our facilities.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased direct costs

Company-specific description

In April 2022 the US Securities and Exchange Commission (SEC) issued proposed rules which would create a wide range of new disclosure obligations for US public companies, including climate metrics and climate risks. If passed as proposed, public companies would be required to: disclose Scope 1, 2 and, if considered material or already measured, Scope 3 GHG emissions if considered material; analyze the impact of climate-related risks to financial statement line items (e.g., revenues, assets, cash flow), if climate-related risks affect 1% or more of the value of the relevant line item; and report information related to announced climate goals, including the baseline, metrics, and how the company plans to meet its goals. The proposed rules would also require new annual disclosures related to board and management oversight of climate-related risks. If a final rule were to be released, it is likely that International Paper would be subject to any such rules applicable to large public filers.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

500,000

Potential financial impact figure – maximum (currency)

1,000,000

Explanation of financial impact figure

The SEC has estimated compliance amounts of $640,000 per year in the first year for large public companies, and $530,000 per year in subsequent years. These figures are likely to be underestimated, as they appear to be based on various example disclosures (e.g., voluntary TCFD reports) that are less extensive than many of the new mandates in the proposed rule. For the purposes of this response we define “substantive financial or strategic impact” as something with the potential to affect our revenues by 1% or more in any given year, a threshold which here we refer to as “high” magnitude of impact, with the magnitude of impact for each risk or event scaled accordingly from that starting point. Similarly, here we define short (0-5 years), medium (5-10 years), long (10+ years) term horizons for risks and opportunities.

Cost of response to risk

30,000

Description of response and explanation of cost calculation

As part of our current regulatory and voluntary reporting, we annually collect, review and validate company-wide environmental performance data within our Environmental Management System. Environmental teams at our facilities, global financial services and subject-matter experts enter this data and other key indicators into our global environmental data collection system. Corporate EHS and Sustainability teams validate the data to ensure accuracy. We have invested in a sustainability data management system from a third-party provider, Enablon. Maintenance of this data management system is less than $30k per year, or similar.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Participation in carbon market

Primary potential financial impact

Other, please specify

Reduction in purchased energy, Potential revenue from renewable energy generation

Company-specific description

We generate approximately 70% of our own mills' energy needs from carbon-neutral biomass residuals, and some of our facilities sell either green power and/or Renewable Energy Certificates (RECs) associated with this generation to third parties. Our Scope 2 GHG emissions reporting account for our participation in renewable energy markets including sales of these RECs.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

450,000

Potential financial impact figure – maximum (currency)

6,000,000

Explanation of financial impact figure

We generate thermal energy and electrical power from biomass combined heat and power systems. Some of our facilities sell Renewable Energy Certificates (RECs) associated with this generation to third parties that are trying to fulfil their renewable electricity standard obligations or goals. We continue to sell RECs and are also evaluating options that may present further opportunities. The range of potential financial impact provided here is based off of the historical REC prices which have fluctuated significantly over time.

For the purposes of this response we define “substantive financial or strategic impact” as something with the potential to affect our revenues by 1% or more in any given year, a threshold which here we refer to as “high” magnitude of impact, with the magnitude of impact for each risk or event scaled accordingly from that starting point. Similarly, here we define short (0-5 years), medium (5-10 years), long (10+ years) term horizons for risks and opportunities.

Cost to realize opportunity

10,000

Strategy to realize opportunity and explanation of cost calculation

We anticipate minimal consulting fees that may be required in order to develop our strategy in this space in the next one to two years.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

International Paper plays a significant role in responding to the climate change challenge. We transform renewable resources into recyclable products that people depend on every day. This cycle begins with sourcing renewable fiber from responsibly managed forests, and at the end of use our products are recycled into new products at a higher rate than any other base material. We are designing circular solutions through innovative products that are easily recovered, recycled, reused or composted. In our manufacturing processes, we combine new fiber that comes from responsibly managed forests with recycled fiber that we collect through household and industrial recycling programs. Together, this combination of new and recovered fiber

creates an infinitely repeatable closed-loop system that become the products our customers can depend on for the long-term.

Customers are increasingly concerned with the environmental footprint of their products. Suppliers that are able to provide compelling environmental improvements will have an advantage in the marketplace, while suppliers unable to provide such results will face decreased demand for their products. Improving our carbon footprint could lead to increased sales and/or increased margins on products marketed in a way that reflects these improvements in our operations. We anticipate shifting consumer preference to more sustainable and low-carbon products, as our marketing teams identify opportunities to meet increasing demand for renewable fiber-based products. Our Renewable Solutions strategy challenges us to advance circularity across our value chain to help lead the transition to a circular, low-carbon economy. Our Vision 2030 Renewable Solutions goal is to Advance circular solutions throughout our value chain and create innovative products that are 100% reusable, recyclable or compostable.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

83,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

It is difficult to accurately estimate what the financial impacts are at this time, but we anticipate that as consumers seek low-carbon circular products, we will see a sales and revenue impact. As our reputation as an efficient, sustainable global manufacture grows, we believe we will be able to continue satisfying customer demands for sustainable paper packaging and pulp.

The figure provided as financial impact is the cost of acquisition of two modernized converting facilities located in Spain, which we completed in 2021. Most of the containerboard inputs for these box plants are supplied by our state-of-the-art Madrid recycled containerboard mill, which is one of the largest users of recycled corrugate in the region. In this way, the environmental benefits from our resource-efficient recycled containerboard operation are passed on to our customers in the life cycle of the corrugated boxes produced in our converting plants.

For the purposes of this response we define “substantive financial or strategic impact” as something with the potential to affect our revenues by 1% or more in any given year, a threshold which here we refer to as “high” magnitude of impact, with the magnitude of impact for each risk or event scaled accordingly from that starting point. Similarly, here we define short (0-5 years), medium (5-10 years), long (10+ years) term horizons for risks and opportunities.

Cost to realize opportunity

448,000,000

Strategy to realize opportunity and explanation of cost calculation

We recognize the impacts of climate change on people and our planet. In order to manage climate-related risks, we are taking actions throughout our value chain to advance a low-carbon economy. We transform renewable resources into recyclable products that people depend on every day. This cycle begins with sourcing renewable fiber from responsibly managed forests, and at the end of use, our low-carbon products are recycled into new products at a higher rate than any other base material. We work to advance the shift to a low-carbon, circular economy by designing products that are 100% reusable, recyclable or compostable. We make products from renewable carbon neutral biomass. This combined with our continuous environmental footprint reduction and voluntary reporting will give us the ability to continue satisfying customer demand. We have a sustainability program that supplies our customers with relevant data on our continuous improvement efforts for energy efficiency and carbon emission reductions.

Rigorous research and development are the key to creating innovative, renewable products. We design products and services while considering recyclability, sustainability, weight, materials and more. We work with our customers to provide solutions that meet their specific needs, such as recyclable boxes with water-resistant coatings for shipping chicken, seafood and other raw food products. Our innovative designs can reduce transportation costs and emissions by creating innovative, lightweight packaging solutions that protect goods and enable worldwide commerce. We also teach customers how to pack boxes optimally to maximize weight, reduce shipping costs and lower emissions.

We have several research and product development facilities around the world. Our Innovation Center in Federal Way, Washington, for example, has in-house testing laboratories and pilot facilities with a world- class team of scientists, researchers and engineers. Our experts design and test innovations to help our customers differentiate and improve their everyday products. Our costs for realizing this opportunity are associated with our research and development activities. Costs associated with our research and development activities carried out in 2022 were approximately $448 million.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Our SBTi-approved target implies a 35% absolute GHG emission reduction across scopes 1, 2, and 3 from 2019-2030, consistent with a decarbonization pathway to keep warming to "well-below 2°C." This makes us one of the first North American organizations in the paper and packaging industry with SBTi-approved targets. Additionally, as part of our efforts to contribute to a low-carbon economy we have a goal of creating circular products that are 100% reusable, recyclable or compostable. We also consistently assess climate-related risks and opportunities in our strategic and financial planning when their impacts on our business are assessed to be substantive (as outlined in our 2022 TCFD report).

Our efforts to achieve our Vision 2030 target will contribute meaningfully to a low-carbon future. As a thermal energy producer, we rely on both renewable biomass and fossil fuels to power our operations; within this context we are continually evaluating opportunities to decarbonize our operations in alignment with a 1.5°C pathway. We believe our current 2030 pathway is directionally aligned with the scale of decarbonization required for a 1.5°C future, and sets us up well to evaluate further reduction potential. Furthermore, in order to maintain SBTi approval companies must re-submit their updated GHG emissions reduction pathways for validation within five years; our understanding is the new SBTi net-zero standard would require updated targets based on a 1.5C pathway in order to maintain our validation within the next four years. We are currently evaluating the potential implications of a steeper reduction pathway through 2030, in anticipation of this process.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative, but we plan to add quantitative in the next two years

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 4.5	Company-wide		We are continually evaluating such risks, disclosing financial impacts via our annual voluntary and legally required reporting and incorporating mitigation measures into our operational planning and landscape-level environmental resilience efforts. Beginning in 2020 we convened cross-functional internal experts to provide input on our anticipated climate-related risk and opportunity areas; this group includes company leaders representing our businesses, operations, supply chain (including fiber supply) and key support functions such as government relations and environment, health and safety. Quantitative climate impact modeling from our partner S&P Global, has informed these discussions and our strategy and public disclosures. Our sustainability team performs ongoing research and risk identification as climate issues evolve, and we leverage expertise and best practice guidance from trusted consultants and forest sector-focused groups such as the National Council on Air and Stream Improvement and the World Business Council for Sustainable Development. We perform ongoing climate-related scenario analysis using S&P Global quantitative modeling and qualitative input from internal and external industry experts. We are using 3 commonly-cited scenarios based on the latest climate research: Paris Ambition-RCP2.6; Stabilization-RCP4.5; and Business as Usual-RCP8.5. Our scenario analysis incorporates data based on the CMIP5 model, developed in support of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). Our scenarios consider short (0-5 years), medium (5-10 years), long (10+ years) term risks & opportunities, as well as continued risks & opportunities through 2100; for climate impacts we use a discount rate based on our corporate weighted average cost of capital. Our initial analysis is focused on potential impacts to our operations, supply chains and businesses through 2030. Our mills make up nearly 90% of our Scope 1 and 2 GHG footprint, thus we have focused our modeling on our 28 mills operating across 5 countries and associated supply chains, with the United States as the primary country of operations. In our 2022 TCFD report we outline our potentially material climate-related risks and opportunities,

			along with corresponding mitigation and adaptation strategies. We have focused especially on the short and medium term scenario outputs to help inform our implementation approach under our Vision 2030 goals.
Physical climate scenarios RCP 2.6	Company-wide		We are continually evaluating such risks, disclosing financial impacts via our annual voluntary and legally required reporting and incorporating mitigation measures into our operational planning and landscape-level environmental resilience efforts. Beginning in 2020 we convened cross-functional internal experts to provide input on our anticipated climate-related risk and opportunity areas; this group includes company leaders representing our businesses, operations, supply chain (including fiber supply) and key support functions such as government relations and environment, health and safety. Quantitative climate impact modeling from our partner S&P Global, has informed these discussions and our strategy and public disclosures. Our sustainability team performs ongoing research and risk identification as climate issues evolve, and we leverage expertise and best practice guidance from trusted consultants and forest sector-focused groups such as the National Council on Air and Stream Improvement and the World Business Council for Sustainable Development. We perform ongoing climate-related scenario analysis using S&P Global quantitative modeling and qualitative input from internal and external industry experts. We are using 3 commonly-cited scenarios based on the latest climate research: Paris Ambition-RCP2.6; Stabilization-RCP4.5; and Business as Usual-RCP8.5. Our scenario analysis incorporates data based on the CMIP5 model, developed in support of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). Our scenarios consider short (0-5 years), medium (5-10 years), long (10+ years) term risks & opportunities, as well as continued risks & opportunities through 2100; for climate impacts we use a discount rate based on our corporate weighted average cost of capital. Our initial analysis is focused on potential impacts to our operations, supply chains and businesses through 2030. Our mills make up nearly 90% of our Scope 1 and 2 GHG footprint, thus we have focused our modeling on our 28 mills operating across 5 countries and associated supply chains, with the United States as the primary country of operations. In our 2022 TCFD report we outline our

			potentially material climate-related risks and opportunities, along with corresponding mitigation and adaptation strategies. We have focused especially on the short and medium term scenario outputs to help inform our implementation approach under our Vision 2030 goals.
Physical climate scenarios RCP 8.5	Company-wide		We are continually evaluating such risks, disclosing financial impacts via our annual voluntary and legally required reporting and incorporating mitigation measures into our operational planning and landscape-level environmental resilience efforts. Beginning in 2020 we convened cross-functional internal experts to provide input on our anticipated climate-related risk and opportunity areas; this group includes company leaders representing our businesses, operations, supply chain (including fiber supply) and key support functions such as government relations and environment, health and safety. Quantitative climate impact modeling from our partner S&P Global, has informed these discussions and our strategy and public disclosures. Our sustainability team performs ongoing research and risk identification as climate issues evolve, and we leverage expertise and best practice guidance from trusted consultants and forest sector-focused groups such as the National Council on Air and Stream Improvement and the World Business Council for Sustainable Development. We perform ongoing climate-related scenario analysis using S&P Global quantitative modeling and qualitative input from internal and external industry experts. We are using 3 commonly-cited scenarios based on the latest climate research: Paris Ambition-RCP2.6; Stabilization-RCP4.5; and Business as Usual-RCP8.5. Our scenario analysis incorporates data based on the CMIP5 model, developed in support of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). Our scenarios consider short (0-5 years), medium (5-10 years), long (10+ years) term risks & opportunities, as well as continued risks & opportunities through 2100; for climate impacts we use a discount rate based on our corporate weighted average cost of capital. Our initial analysis is focused on potential impacts to our operations, supply chains and businesses through 2030. Our mills make up nearly 90% of our Scope 1 and 2 GHG footprint, thus we have focused our modeling on our 28 mills operating across 5 countries and associated supply chains, with the United States as the primary country of

			operations. In our 2022 TCFD report we outline our potentially material climate-related risks and opportunities, along with corresponding mitigation and adaptation strategies. We have focused especially on the short and medium term scenario outputs to help inform our implementation approach under our Vision 2030 goals.
Transition scenarios Customized publicly available transition scenario	Company-wide	1.6ºC – 2ºC	We are continually evaluating such risks, disclosing financial impacts via our annual voluntary and legally required reporting and incorporating mitigation measures into our operational planning and landscape-level environmental resilience efforts. Beginning in 2020 we convened cross-functional internal experts to provide input on our anticipated climate-related risk and opportunity areas; this group includes company leaders representing our businesses, operations, supply chain (including fiber supply) and key support functions such as government relations and environment, health and safety. Quantitative climate impact modeling from our partner S&P Global, has informed these discussions and our strategy and public disclosures. Our sustainability team performs ongoing research and risk identification as climate issues evolve, and we leverage expertise and best practice guidance from trusted consultants and forest sector-focused groups such as the National Council on Air and Stream Improvement and the World Business Council for Sustainable Development. We perform ongoing climate-related scenario analysis using S&P Global quantitative modeling and qualitative input from internal and external industry experts. We are using 3 commonly-cited scenarios based on the latest climate research: Paris Ambition-RCP2.6; Stabilization-RCP4.5; and Business as Usual-RCP8.5. Our scenario analysis incorporates data based on the CMIP5 model, developed in support of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). Our scenarios consider short (0-5 years), medium (5-10 years), long (10+ years) term risks & opportunities, as well as continued risks & opportunities through 2100; for climate impacts we use a discount rate based on our corporate weighted average cost of capital. Our initial analysis is focused on potential impacts to our operations, supply chains and businesses through 2030. Our mills make up nearly 90% of our Scope 1 and 2 GHG footprint, thus we have focused our modeling on our 28 mills operating across 5 countries and associated supply chains, with the United States as the primary country of

			operations. In our 2022 TCFD report we outline our potentially material climate-related risks and opportunities, along with corresponding mitigation and adaptation strategies. We have focused especially on the short and medium term scenario outputs to help inform our implementation approach under our Vision 2030 goals.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

The topics we seek to explore through our ongoing climate scenario analysis are: understanding the major climate-related risks and opportunities that may impact our company, their magnitude and likelihood under various climate scenarios, and how we as a responsible business can best respond through mitigation and adaptive measures to build resilience in the face of those risks. We are also evaluating strategies which may help us materialize business opportunities arising from climate change.

Results of the climate-related scenario analysis with respect to the focal questions

In our 2022 TCFD report, we outline potentially material climate-related risks and opportunities, along with corresponding mitigation and adaptation strategies, which we believe may apply under any climate scenario, with differing emphasis and level of investment needed depending on the scenario. We have identified the following broad areas of potential climate-related risk: impact of extreme temperature and extreme weather on our facilities (physical risks); supply chain impacts including supply disruptions or increased cost of inputs for fiber and other key inputs (physical/transition risks); regulatory impacts including carbon pricing and cost of compliance with related climate regulations (transition risk); market competitiveness and financing impacts depending on our positioning within the low-carbon circular economy (transition risk/opportunity); and renewable energy participation including revenue from generation of renewable energy certificates (transition opportunity).

Over the short-to-medium timescale, we believe that transition risks and opportunities are more likely to impact our company than physical risks, and that physical risks are more likely to be acute rather than chronic during this decade. Longer-term, all risks and opportunities are expected to grow in likelihood and impact, though in differing ways depending on various possible climate scenarios. In general, we assume that physical risks are likely to lead to greater potential impacts over time under higher-emission scenarios, while transition risks are likely to have greater potential impacts over time under lower-emission scenarios. Climate-related business opportunities are more difficult to quantitatively model, but we believe that we are well-positioned to meet growing demand for sustainable packaging and pulp products as part of the low-carbon, circular economy. We are performing climate scenario analyses to help plan for these possible futures, and will continue to refine these analyses in the coming years in order to

plan effectively and communicate transparently to our stakeholders. We intend to disclose further quantitative detail of our climate scenario analysis in the coming years in accordance with applicable reporting rules and stakeholder requirements.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We recognize the need to transition to a low-carbon economy as an opportunity to advance circularity across our value chain. Our Renewable Solutions strategy challenges us to advance circularity across our value chain to help lead the transition to a circular, low-carbon economy. We anticipate shifting consumer preference to more sustainable and low-carbon products, as our marketing teams identify opportunities to meet increasing demand for renewable fiber-based products. Our Vision 2030 Renewable Solutions goal is to Advance circular solutions throughout our value chain and create innovative products that are 100% reusable, recyclable or compostable. This strategy includes measures to both mitigate and adapt to climate impact, and centers on creating innovative products that contribute to a more sustainable, low-carbon future and help our customers achieve their circularity and decarbonization objectives. We do this by: Creating innovative, 100% reusable, recyclable or compostable products that help our customers achieve their objectives; Sourcing sustainably by investing in circular raw materials, sustainable forestry and in renewable and recycled fiber; Using circular manufacturing processes to maximize resources and minimize impacts through the reuse of recovered fiber and all materials and residuals; and Collaborating with customers, suppliers and circular economy leaders on solutions to contribute to a low carbon economy at every stage of our value chain. We have various product development and innovation processes in place under our Renewable Solutions strategy. Renewable Solutions task teams developed Renewable Solutions roadmaps with goals and specific focus areas for each of our business groups, identifying opportunities to advance circular systems across our value chain in our containerboard, corrugated, recycling, and pulp businesses. One example of our impact in 2021: our Pomezia, Italy team collaborated with a key customer to create a

		closed loop packaging system that reduces GHG emissions with a simple shift to a regional waste-processing vendor linked by a network contract. Our Pomezia plant shipped 5,000 tons of corrugated packaging to the customer, who in turn recycled 874 tons of packaging. Our waste-processing vendor transforms recycled waste into material for new cardboard and packaging, which is shipped back to Pomezia.
Supply chain and/or value chain	Yes	As a result of our climate-related scenario analysis, we are identifying potential risks and opportunities related to both mitigating and adapting to climate impacts within our supply chain, both upstream and downstream. We are collaborating with our suppliers and customers to understand their GHG emissions footprint and decarbonization plans in order to develop our Scope 3 GHG reduction plan as part of our SBTi-approved 2030 goal (36% absolute reduction in Scope 3 from 2019-2030). In 2021, we developed a supply chain GHG emissions calculator tailored to our industry, in partnership with the National Council for Air and Stream Improvement, to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. In parallel, we began gathering supplier-specific GHG emissions and climate strategy data by participating in CDP's Supply Chain program, which we intend to expand in coming years. We collaborate on solutions with customers, our supply chain and thought leaders to generate value through innovative, circular product solutions to meet customer needs; partner with others to ensure final products enjoy multiple lives through repeated cycles of reuse, recovery and recycling. Price of certain raw material that we rely heavily upon, various energy sources, and virgin wood fiber is impacted by trade policies between countries, individual governments' legislation and regulations, as well as changes in the global economy. Our profitability has been, and will continue to be, affected by changes in the costs and availability of such raw materials, energy sources and transportation sources. Climate change may accelerate or otherwise change some of these impacts on our supply chain. Possible adaptive measures against such climate-driven impacts, as outlined in our 2022 TCFD report, may include: Improving supply chain monitoring, supplier diversification and resilience planning; Leveraging our high % of energy self-generation; Supporting research, policies and landowner efforts on forest management, restoration and afforestation; and Extending fiber procurement ranges as

		necessary. We also engage with trusted consultants and forest sector-focused groups including NCASI and the World Business Council for Sustainable Development (WBCSD) for best practice guidance which informs our strategies to create impact along the value chain.
Investment in R&D	Yes	We operate several research centers and product development facilities, including a primary technology center in Federal Way, Washington. We direct research and development (R&D) activities to technical assistance needs of customers and operating divisions, and to process, equipment and product innovations. Activities include product development within the operating divisions; studies on improvement of chemical recovery, converting and coating processes; packaging design; mechanical packaging systems, environmentally sensitive printing inks and reduction of environmental discharges; recycling of consumer and packaging paper products; energy conservation; applications of computer controls to manufacturing operations; improvement of products; and development of various new products. Our development efforts specifically address product safety, as well as the minimization of solid waste. We have various product development and innovation processes in place under our Renewable Solutions strategy. Costs associated with our research and development activities carried out in 2022 were approximately $448 million. We own numerous patents, trademarks, trade secrets and other intellectual property rights relating to our products and to the processes for their production. We also license intellectual property rights to and from others where advantageous. Many of the manufacturing processes are among our trade secrets and we derive a competitive advantage by protecting them. Some of our products are covered by U.S. and non-U.S. patents and are sold under well-known trademarks. In 2021 our Global Cellulose Fiber team led a two-part event to introduce the concepts of a circular economy, align them with our cellulose fiber business and brainstorm to discover more ways to contribute to the circular economy and provide renewable solutions for our customers. We engaged more than 100 employees from our innovation, technology, marketing, Customer Technical Service and sustainability teams, surfacing 100+ innovative concepts that we are testing for feasibility and that focus on replacing plastic and petroleum-based materials for absorbent and specialty product groups; reducing lifecycle impacts including GHG emissions, waste and water use; Improving end of life solutions, through compostability and recyclability; and allowing for less raw material consumption overall.

Operations	Yes	Through our climate-related scenario analysis, we are identifying potential risks and opportunities related to both mitigating and adapting to climate impacts within our operations. The following measures both help us mitigate additional climate impacts, as well as build our company's resilience against climate-related transition risks: Reduce our absolute greenhouse gas (GHG) emissions by 35% by 2030 across Scopes 1, 2 and 3 and make necessary investments required; invest in energy efficiency and fuel-switching initiatives for lower-carbon power generation in our operations, expand our use of renewable energy and to engage with our value chain for GHG emissions reductions, continue to identify operational efficiency opportunities at facilities. Since 2010, we have invested more than $428 million in energy efficiency improvements and fuel diversity. We are also exploring participation opportunities in renewable power development. A MATERIAL DISRUPTION AT OUR CORPORATE HEADQUARTERS OR ONE OF OUR MANUFACTURING FACILITIES could reduce our sales and/or negatively impact our financial condition. Through our climate-related scenario analysis, we have been able to identify potential risks that could hamper our businesses, such as floods, earthquakes, hurricanes or other catastrophes; drought or reduced rainfall, the effect of rising temperatures on employees working at facilities. Possible adaptive measures against such climate-driven impacts, are outlined in our 2022 TCFD report, may include increasing operational cooling capacity in manufacturing facilities where appropriate, and investing in natural and built infrastructure improvements at our highest-risk facilities. Another example of how climate-related risks have impacted our operational strategy is our water conservation efficiency measures and our goal of reducing water use intensity by 25% by 2030, through which we will mitigate and adapt to potential risks from climate-driven fluctuations in water availability, and minimize the risks of disruption at our facilities. We have analyzed water use and risk at each of our facilities to reduce the amount of water we withdraw, maintain regulatory compliance and improve the long-term sustainability of the water resources we share.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures	We have voluntarily provided disclosure and established targets and goals with respect to various ESG matters, including climate change. For example, we have made public commitments regarding our intended reduction of carbon emissions, including our Vision 2030 Goal of reducing Scope 1, 2 and 3 GHG emissions by 35% and establishing science-based targets to reduce those emissions. Meeting these and other ESG targets and goals, have increased and may continue to increase our capital and operational costs. Further, there can be no assurance regarding the extent to which our climate and other ESG targets will be achieved, and the achievement of these targets is subject to various risks and uncertainties, some of which are outside our control. Moreover, there is no assurance that investments made in furtherance of achieving such targets and goals will meet investor expectations or any binding or non-binding legal standards regarding sustainability performance. If we are unable to meet these climate and other ESG targets and goals, this failure could adversely impact our reputation as well as investor, customer and other stakeholder relationships, which could adversely impact our business and results of operations. Moreover, not all of our competitors may seek to establish climate or other ESG targets and goals at a comparable level to ours, which could result in lower supply chain or operating costs for competitors. Furthermore, new environmental laws or regulations impacting our facilities around the world are routinely passed or proposed. Our continuing objectives include controlling emissions and discharges from our facilities to avoid adverse impacts on the environment, and maintaining compliance with applicable laws and regulations. For example, The Company spent approximately $30 million in 2022 for capital projects to control environmental releases into the air and water, and to assure environmentally sound management and disposal of waste. We expect to spend approximately $39 million in 2023 for environmental capital projects and the same or more per year for the foreseeable future. Climate-related risks and opportunities are material to our business, and we are working to formally integrate these into our Enterprise Risk Management (ERM) process. Our ERM Council has responsibility for ensuring that the people and processes are in place to identify, assess and mitigate risk. The Council is made up of senior company leaders representing our businesses and major staff functions. We evaluate downside and upside risks considering potential impact and likelihood of occurrence within our strategic planning period of four years. Given the longer-term risks that climate change may present, we are working to incorporate an extended time horizon into our ERM process. Enterprise risks are periodically reviewed with the company Board of Directors and Audit and Finance Committee. By anticipating and responding to changes in policy and regulation, our cross-

		functional Energy and GHG Steering Team seeks to maximize capital deployment as it relates to our decarbonization plan. Since 2010 we have invested over $428 million of capital into energy efficiency improvement projects as a result of the integration of climate and energy-related issues in our operational management. As an example, in 2021 we converted one of our last-remaining coal-fired power boilers to cleaner-burning natural gas; this investment demonstrated a 39% reduction in total Scope 1 and Scope 2 GHG emissions since the baseline year of 2019. This $2.36 million project is just one example of the strategic, sustainable investments we are making on the road to 2030. Our energy efficiency improvements and reduction in GHG emissions have created significant financial value for our stakeholders and shows our business strategy has been successful. We plan to continue this strategy by stretching to achieve our existing goals and when appropriate to expand them. We are currently working to integrate carbon cost sensitivities into our capital allocation process in order to align our investments with our decarbonization goals. We have various product development and innovation processes in place under our Renewable Solutions strategy; costs associated with our research and development activities carried out in 2022 were approximately $448 million.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with a sustainable finance taxonomy	At the company level only

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

Other, please specify

Research and Development spend

Type of alignment being reported for this financial metric

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

448,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

100

Percentage share of selected financial metric planned to align in 2025 (%)

100

Percentage share of selected financial metric planned to align in 2030 (%)

100

Describe the methodology used to identify spending/revenue that is aligned

Our products are our primary contribution to a low-carbon, circular economy. We think about the entire life cycle of the product and how changes in product design impact decisions along its value chain. The result is products that are ▪ made efficiently and sustainably, from sourcing to production to transportation ▪ designed with end-of-life in mind ▪ easily recovered, recycled, reused or composted. Rigorous research and development are the key to creating these sustainable products. We consider recyclability, sustainability, weight, materials, transportation costs and more while designing products and services. Our innovative designs can reduce transportation costs and emissions through lightweight packaging solutions. Therefore, we report our spend on research and development (R&D) activity as that aligned with our organization's climate transition.

The spend amount reported here is our spend on R&D activities in 2022 reporting year. It includes the spend on resources required for R&D activities focused on product innovation as well as efficiency and improving the costs of manufacturing. Product innovation activities include studies on improvement of chemical recovery, converting and coating processes; packaging design; environmentally sensitive printing inks and reduction of environmental discharges; recycling of consumer and packaging paper products; and energy conservation. Since all of our sustainable products contribute to a low-carbon economy, we have reported all of our research and development spend as aligned with climate transition.

In line with our renewable solutions target to create innovative products that 100% reusable, recyclable or compostable, we estimate that 100% of our R&D spend would ultimately be focused on enhancing sustainability of our products as we transition to a low-carbon economy. Therefore, we estimate that 100% of our R&D spend will be aligned with our organization's climate transition in 2025 and 2030.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2
Scope 3

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 9: Downstream transportation and distribution
Category 10: Processing of sold products
Category 12: End-of-life treatment of sold products

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

6,287,507

Base year Scope 2 emissions covered by target (metric tons CO2e)

4,708,777

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

7,973,336

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

2,164,058

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

793,696

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

389,791

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

510,628

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

3,940,638

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

7,330,984

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

23,103,131

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

34,099,414

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

100

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

35

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

22,164,619.1

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

6,261,399

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

5,688,595

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

7,565,833

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

2,369,696

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

724,282

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

426,652

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

362,338

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

3,701,569

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

6,284,737

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

21,435,106

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

33,385,099

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

5.9851468415

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Our goal of reducing our absolute GHG emissions by 35% by the end of 2030 includes Scope 1, Scope 2, and scope 3 emissions. Scope 1 emissions are direct emissions resulting from our own operations, including on-site fossil fuel usage non-combustion emissions from on-site landfills, mobile sources and wastewater treatment systems. Our Scope 2 emissions are indirect emissions resulting from the offsite utility generation of the steam and electricity we purchase. Scope 3 emissions are all our indirect emissions that occur in our value chain, including both upstream and downstream emissions.

Directed by a high-level, cross-functional steering team, we are investing in energy efficiency and fuel-switching initiatives in our operations. Our aim is to expand our use of renewable energy and to engage with our value chain in pursuit of ambitious GHG emissions reductions. Our GHG goal includes all facilities owned and operated by International Paper. We operate 28 pulp and paper mills, and over 200 converting and recycling locations. Our GHG emissions accounting and reporting methods are aligned with the GHG Protocol for Corporate Accounting and Reporting Standards. Our emissions calculations for our current goal are global, and do not include joint ventures with non-operational control, biogenic CO2 (considered outside the

scopes per GHG Protocol), or any acquisitions or divestitures that occurred during the reporting year. Baseline emission data recalculations are made annually to incorporate acquired facilities and take out divested facilities, which accounts for year-to-year corrections in emissions data.

Plan for achieving target, and progress made to the end of the reporting year

We are committed to making the capital investments necessary to substantially reduce Scope 1 GHG emissions in our facilities over the next decade. We are evaluating and pursuing investments in energy efficiency and fuel-switching for lower-carbon thermal energy sources in our operations. For instance, we are investing $103 million to build and operate two natural gas power boilers to generate steam for its containerboard mill in Cedar Rapids, Iowa. The Cedar River mill's GHG emissions will be directly reduced by 25% as a result of the replacement of coal-based steam generators in the project. We are also exploring to reduce our scope 2 emissions through mechanisms such as virtual power purchase agreements, which support renewable energy suppliers and the "greening" of the electricity grid.

We have seen little net change (2% reduction) in our combined Scope 1, Scope 2 and scope 3 emissions from 2019 to 2022. While we made progress in reducing our Scope 1 emissions at several mills, those reductions were offset by increases in fossil fuel used at other facilities due to reduced biomass fuel. We are proud of the emissions reductions we achieved at our containerboard mill in Rome, Georgia- the result of a capital project that was included in our decarbonization plan. For Scope 2 emissions, we saw reductions associated with grid greening and an overall increase due to the sale of renewable energy certificates (RECs). This does not amount to a change in actual emissions, but rather, sales of environmental attributes from our renewable power generation. REC sales will continue in the short term, but will eventually be retired in support of our Vision 2030 target.

As a partner in the US Department of Energy's (DOE) Better Climate Challenge, International Paper is one of more than 80 organizations across the US economy collaborating to drive real-world action toward a low-carbon future. As we pursue our ambitious GHG targets, we will count on DOE and participating industrial companies for technical assistance, peer-to-peer learning opportunities and a platform to demonstrate our commitment to being part of the solution to climate change.

We are also engaging across our value chain to reduce our Scope 3 emissions. We are gathering supplier-specific GHG emissions and climate strategy data by participating in CDP's Supply Chain program to identify areas of impact, and engage our suppliers and customers to reduce emissions.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	25	46,000
To be implemented*	0	0
Implementation commenced*	27	20,000
Implemented*	12	27,000
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1,716

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

464,000

Investment required (unit currency – as specified in C0.4)

967,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Combined heat and power (cogeneration)

Estimated annual CO2e savings (metric tonnes CO2e)

8,320

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

1,364,300

Investment required (unit currency – as specified in C0.4)

2,190,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)

15,947

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

632,600

Investment required (unit currency – as specified in C0.4)

1,681,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Reuse of water

Estimated annual CO2e savings (metric tonnes CO2e)

668

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

174,000

Investment required (unit currency – as specified in C0.4)

250,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Process Electricity Conservation

Estimated annual CO2e savings (metric tonnes CO2e)

268

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

109,000

Investment required (unit currency – as specified in C0.4)

335,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	We seek to improve our energy performance, thus reducing both greenhouse gas and other air emissions and the amount of energy consumed. International Paper increases energy efficiency through the efforts of an internal energy audit team which regularly reviews facilities' practices and equipment to identify projects that will improve energy efficiency. The team's responsibilities include: conduct energy audits, identify gaps, and allocate funds to close gaps. The team focuses on optimizing processes, equipment and procedures. Some of these projects include: • Boiler efficiency improvements • Electricity conservation • Increased renewable fuel capability • Machine energy efficiency • Water reuse Through financial optimization calculations for each of the emission reductions and energy efficiency measures, we determine the most strategic initiatives to invest in. We also consider compliance with regulatory requirements and standards too while assessing strategic initiatives. These measures are supported by our dedicated budget for cost reduction investments. For certain capital project analyses, we use a carbon price sensitivity tool. Since 2010, we have invested over $428 million in energy efficiency improvements and fuel diversity. We review energy consumption benchmarking across our pulp and paper production facilities to identify gaps and focus resources.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Paper packaging and pulp made from renewable fiber sources: sustainably grown wood fiber and recovered fiber

Type of product(s) or service(s)

Pulp and paper

Other, please specify

Paper packaging and pulp made from renewable fiber sources: sustainably grown wood fiber and recovered fiber

Description of product(s) or service(s)

Circularity wraps around everything we do at International Paper. Our products are made from a renewable raw material procured from suppliers who practice responsible forest stewardship, and recovered fiber which begins its life as wood fiber — this promotes the safekeeping of forests so that they can continue to sequester carbon long into the future. Productive forests that are managed to make products that store carbon and replace fossil fuels can have greater long-term carbon benefits than forests left unmanaged.

International Paper is among a growing group of companies embracing the concept of the circular economy. This means that we are always looking to evolve the design of our products so that they can enjoy multiple lives through repeated cycles of recovery and reuse. One of our Vision 2030 goals is to create innovative products that are 100% reusable, recyclable or compostable. To achieve this target, we invest in various research and development activities that focus on product development and innovation, use of environmentally sensitive printing inks and reduction of environmental discharges; re-use of raw materials in manufacturing processes; recycling of consumer and packaging paper products; energy conservation; applications of computer controls to manufacturing operations; innovations and improvement of products; and development of various new products.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

100

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?

Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

6,287,507

Comment

In the United States, we follow the requirements for the Environmental Protection Agency's Mandatory Reporting Rule of Greenhouse Gases (MRR-GHG) to calculate emissions. Methodologies include use of default factors (2006 International Panel on Climate Change [IPCC] guidelines), fuel tests and CO2 Continuous Emission Monitoring Systems (CEMS) devices on certain units. Outside the United States, sites follow the 2006 IPCC guidelines. All facilities owned and operated by International Paper were included.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

3,621,980

Comment

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

4,708,777

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

7,973,336

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

We include capital goods in our Scope 3 - Category 1 inventory

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

2,164,058

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

793,696

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

389,791

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

510,628

Comment

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

3,940,638

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

7,330,984

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
US EPA Mandatory Greenhouse Gas Reporting Rule
US EPA Emissions & Generation Resource Integrated Database (eGRID)
Other, please specify
IPCC Guidelines for National Greenhouse Gas Inventories, 2007, The GHG Protocol: The Corporate Value Chain (Scope 3) Accounting and Reporting Standard

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

6,261,399

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

3,305,085

Scope 2, market-based (if applicable)

5,688,595

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,565,833

Emissions calculation methodology

Average data method
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure), combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

We include capital goods in our Scope 3 - Category 1 inventory

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,369,696

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric)

and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

724,282

Emissions calculation methodology

Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

426,652

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The

calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Business travel

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3 emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Employee commuting

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3 emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3 emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

362,338

Emissions calculation methodology

Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,701,569

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3

emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

6,284,737

Emissions calculation methodology

Average data method
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have partnered with the National Council for Air and Stream Improvement (NCASI) to develop a detailed supply chain GHG emissions calculator tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. The calculator uses internal company data regarding annual consumption (as the preferred metric) and spend on materials and services (as the secondary metric where consumption is unavailable or inappropriate as a measure) , combined with publicly available emission factors for each input. Scope 3 emissions should be understood as a detailed estimate; we will continually refine our calculation methods year-over-year.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3 emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3

emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

We have evaluated all 15 Scope 3 categories per the GHG Protocol and determined that certain categories collectively comprise a negligible portion (approximately 5%) of our total scope 3 emissions. Therefore, the following categories are not the focus of our reduction strategy or reporting: employee travel and commuting, use of sold products, leased assets, investments and franchise.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Yes

C-AC6.8a/C-FB6.8a/C-PF6.8a

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)

24,459,281

Methodology

Default emissions factors

Please explain

All IP mills report CO2 equivalents (CO2e) emitted from burning biogenic fuels such as bark, other biomass fuels, and black liquor solids. Internal environmental monitoring and reporting applications collect and generate emissions reports using source activity level data, applying correct emissions factors for applicable activities and individual facility. Some US mills are required to report under 40 CFR Part 98 and use the required methodology to calculate CO2 emissions resulting from biogenic fuel combustion activities on site from both pulp and paper manufacturing processes and stationary combustion.

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities

Timber

Do you collect or calculate GHG emissions for this commodity?

Yes

Reporting emissions by

Total

Emissions (metric tons CO2e)

993,776

Denominator: unit of production

Change from last reporting year

About the same

Please explain

We do not own or directly manage the forestland that we source from. Our Scope 3 calculator captures GHG emissions related to forest management and harvesting activities within our supply chain. This does not currently account for any forest-level carbon storage. We are engaged in the development process for the forthcoming GHG Protocol land use guidance, which may impact the methods we use for this calculation.

For the purposes of this response we consider 0-5% change "about the same," 5-25% change "higher" or "lower," and greater than 25% change "much higher" or "much lower."

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00056

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

11,949,994

Metric denominator

unit total revenue

Metric denominator: Unit total

21,161,000,000

Scope 2 figure used

Market-based

% change from previous year

1

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

We implemented several emission reduction initiatives, including the energy efficiency and fuel-switching initiatives in our operations reported in C4.3b of this questionnaire.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	5,214,234	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	986,947	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	91,832	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
North America	5,955,466
Europe, Middle East and Africa (EMEA)	297,024
South America	8,909

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Global Cellulose Fiber	1,403,320
Industrial Packaging	4,525,719
IP - EMEA	183,439
OTHER	148,920

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity

Processing/Manufacturing

Emissions (metric tons CO2e)

6,261,399

Methodology

Default emissions factor

Please explain

As a global produced of renewable, fiber-based packaging, pulp and paper products, almost all of our relevant Scope 1 emissions come from the processing and manufacturing of our products. To calculate our Scope 1 emissions, in the United States, we follow the requirements for the Environmental Protection Agency's Mandatory Reporting Rule of Greenhouse Gases (MRR-GHG). Methodologies include use of default factors (2007 International Panel on Climate Change [IPCC] guidelines), fuel tests and CO2 Continuous Emission Monitoring Systems (CEMS) devices on certain units. Outside the United States, sites follow the 2007 IPCC guidelines. All facilities owned and operated by International Paper were included.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
North America	3,101,768	5,575,483
Europe, Middle East and Africa (EMEA)	200,010	109,805
South America	3,307	3,307

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Global Cellulose Fibers	184,965	1,553,100
Industrial Packaging	3,025,110	4,040,485
IP - EMEA	94,760	94,760

Other	251	251

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				

Unidentified				
Other	898,698	Increased	8	In 2022, we faced significant challenges in our facilities with respect to operational decarbonization. While we made progress in reducing our Scope 1 emissions at several mills, those reductions were offset by increases in fossil fuel used at other facilities due to reduced biomass fuel. For Scope 2 emissions, we saw reductions associated with grid greening and an overall increase due to the sale of renewable energy certificates (RECs). This does not amount to a change in actual emissions, but rather, sales of environmental attributes from our renewable power generation.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes

Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	75,251,198	30,035,940	105,287,137
Consumption of purchased or acquired electricity				4,871,043
Consumption of purchased or acquired steam		0	1,803,273	1,803,273
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption				111,961,453

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

75,251,198

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

We do not break down our energy consumption by fuel source, due to our use of combined heat and power (CHP) energy systems at most of our mills. We use renewable biomass and manufacturing residuals (rather than fossil fuels) to generate approximately 70% of manufacturing energy at our mills. Residual biomass is leftover material originally purchased as wood fiber, such as tree limbs and bark, and black liquor generated during the production process that is beneficially reused as a carbon-neutral energy source. Aligned with the GHG Protocol, our reported Scope 1 GHG emissions and associated targets do not include these biogenic GHG emissions. All the wood fiber we source is in compliance with the FSC Controlled Wood standard and SFI Fiber Sourcing Standard at a minimum. These standards require that due diligence is performed and risk is mitigated specifically on conversion of forest to non-forest use. In 2022 79% of material sourced was 2nd or 3rd party verified as coming from a conversion-free source by either staff verifying through our GIS platform that the forest would remain intact, or the forest being 3rd party certified to a forest management standard.

Other biomass

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

44,357

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

We do not break down our energy consumption by fuel source, due to our use of combined heat and power (CHP) energy systems at most of our mills.

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

2,228,365

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

We do not break down our energy consumption by fuel source, due to our use of combined heat and power (CHP) energy systems at most of our mills.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

25,586,139

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

We do not break down our energy consumption by fuel source, due to our use of combined heat and power (CHP) energy systems at most of our mills.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

2,177,079

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

This includes consumption of various fuels including, LPG, rubber tire, gasoline, pet coke, and other fossil fuels. We do not break down our energy consumption by fuel source, due to our use of combined heat and power (CHP) energy systems at most of our mills.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

105,287,137

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self- cogeneration or self-trigeneration

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)

Electricity	8,725,392	8,052,401	6,501,000	6,143,000
Heat				
Steam				
Cooling				

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

United States of America

Sourcing method

None (no active purchases of low-carbon electricity, heat, steam or cooling)

Energy carrier

Low-carbon technology type

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

Tracking instrument used

Country/area of origin (generation) of the low-carbon energy or energy attribute

Are you able to report the commissioning or re-powering year of the energy generation facility?

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Canada

Consumption of purchased electricity (MWh)

4,317,514

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

Chile

Consumption of purchased electricity (MWh)

20,702

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

France

Consumption of purchased electricity (MWh)

70,027

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

Italy

Consumption of purchased electricity (MWh)

88,996

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

Mexico

Consumption of purchased electricity (MWh)

1,650,629

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Morocco

Consumption of purchased electricity (MWh)
234,938

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Poland

Consumption of purchased electricity (MWh)
82,406

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Portugal

Consumption of purchased electricity (MWh)

12,242

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

Spain

Consumption of purchased electricity (MWh)

2,241,233

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area

United States of America

Consumption of purchased electricity (MWh)

103,242,760

Consumption of self-generated electricity (MWh)

Consumption of purchased heat, steam, and cooling (MWh)

Consumption of self-generated heat, steam, and cooling (MWh)

Total non-fuel energy consumption (MWh) [Auto-calculated]

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Alberta TIER - ETS

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS

3

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

250,329

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

156,717

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

When our emissions are less than the allowances for that year, we sell those additional credits.

EU ETS

% of Scope 1 emissions covered by the ETS

1

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

83,154

Allowances purchased

5,052

Verified Scope 1 emissions in metric tons CO2e

88,206

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Presently, regulation of GHGs have not materially impacted International Paper, but such efforts may have a material impact on the Company in the future. Regulation of GHGs continues to evolve in various countries in which we do business. While it is likely that there will be increased governmental action regarding GHGs and climate change in the future, it is unclear when such actions will occur and at this time it is not reasonably possible to estimate the Company's costs of compliance with rules that have not yet been adopted or implemented and may not be adopted or implemented in the future. In addition to possible direct impacts, future legislation and regulation could have indirect impacts on the Company, such as higher prices for transportation, energy and other inputs, as well as more protracted air permitting processes, causing delays and higher costs to implement capital projects.

The Company has controls and procedures in place to stay informed about developments concerning possible climate change legislation and regulation in the U.S. and in other countries where we operate. We regularly assess whether such legislation or regulation may have a material effect on the Company, its operations or financial condition, and whether we have any related disclosure obligations. Our Enterprise Risk Management Council has responsibility for ensuring that the people and processes are in place to identify, understand and mitigate risk. We are prepared to buy and sell credits as necessary. In the past, we have purchased credits opportunistically for risk mitigation reasons. Our intent is to minimize allowances purchased over the long term.

We are committed to making the capital investments necessary to substantially reduce Scope 1 GHG emissions in our facilities over the next decade. We are evaluating and pursuing investments in energy efficiency and fuel-switching for lower-carbon power generation in our operations. As an example, in 2021 we converted our power boiler from primarily coal to natural gas as a fuel source at one of our containerboard mill. This switch has demonstrated a 39% reduction in total Scope 1 and Scope 2 GHG emissions since the baseline year of 2019. This $2.36 million project is just one example of the strategic, sustainable investments we are making on the road to 2030. Additionally, our manufacturing technology experts continue to identify operational efficiency opportunities at facilities across our

business and regions. These initiatives often result in both cost savings and GHG emission reductions by optimizing processes, upgrading equipment and advancing energy conservation measures. Furthermore, we continue to use carbon-neutral biomass and manufacturing residuals (rather than fossil fuels) to generate approximately 70% of manufacturing energy at our mills.

Additionally, we believe the sustainable management, conservation and restoration of forestland is an important lever for mitigating climate change through carbon storage in forests. The sustainability of forestland is vital to the long-term prosperity of our company, our communities and our planet. We will continue to lead the world in responsible forest stewardship to ensure healthy and productive forest ecosystems for generations to come. Our efforts to advance sustainable forest management and restore forest landscapes are an important lever for mitigating climate change through carbon storage in forests.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Social cost of carbon

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Identify and seize low-carbon opportunities
Navigate GHG regulations

Scope(s) covered

Scope 1
Scope 2
Scope 3 (upstream)

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Static

Indicate how you expect the price to change over time

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

25

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

75

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Approximately 70% of the energy requirement of our mill operations is fulfilled by energy generated from carbon-neutral biomass which helps us reduce our fossil-based emissions. We have a science-based target to reduce our GHG emissions by 35% across all three scopes by 2030. Our Energy and GHG Steering Team, a high-level, cross-functional internal group, along with other company experts and consultants work to identify and pursue our best opportunities to reduce our GHG emissions in line with the best-available climate science and our 2030 target. We use carbon price sensitivity tool for certain capital project analyses to plan for transition risk in our capital approval process, using a range of $25 to $75 per metric ton of CO2e. This range centers on the Biden Administration's widely-cited social cost of carbon of $51/ton, while the lower and upper ranges are based on a reasonable buffer around that figure.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Other, please specify

Compliance and onboarding

Details of engagement

Other, please specify

A supplier's compliance with our Third Party Code of Conduct (TPCOC) or with its own code of conduct, if it contains similar ethical principles — is an essential factor in our decision to enter into or extend an existing business relationship.

% of suppliers by number

80

% total procurement spend (direct and indirect)

86

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

At International Paper, our global sourcing organization plays a critical role in delivering on our vision and commitment to sustainability. Our sourcing teams are deeply engaged in efforts around supply chain transparency, supplier compliance, risk management and collaboration opportunities. With a complex, global supply chain, our sourcing operations face a number of potential supplier risks. These risks could include: corruption and ethical violations, safety concerns, environmental irresponsibility, natural disasters, geopolitical challenges and labor/contractor hiring and wage practices. These human, economic and natural risks can be challenging for a company operating around the world, where legal codes, cultures, languages and business practices can vary. Majority of our suppliers are based in North America and the rest are based in Asia, Europe, Latin America, North Africa and Russia. The majority of our suppliers fall into one of three categories: manufacturers, contractors or distributors. International Paper's Third Party Code of Conduct (TPCOC) outlines our expectations regarding workplace standards and business practices of our suppliers, along with their affiliates and others who are within their supply chain. We expect our business partners to share the values and principles outlined in our TPCOC. The TPCOC outlines our expectations around: Health, Safety and the Environment; Workplace; Labor and Human Rights; Business Conduct and Ethics; Accountability and Compliance.

Impact of engagement, including measures of success

Risk management begins with our TPCOC. Essential to maintaining our business relationships, our TPCOC is part of our standard supplier contracts and our purchase order terms. This is why we strive to engage with 100% of our contracted suppliers to comply with our TPCOC. We evolved our supplier code of conduct in 2019 to the TPCOC to include all third parties across our supply chain and expanded risk monitoring processes. Approximately 85% of our contracted spend is covered with written agreements containing a commitment to comply with our TPCOC or with their own code of conduct if it has substantially similar principles. We continue to embed this requirement in new and renewed contracts. A supplier's compliance with the TPCOC — or with its own code of conduct, if it contains similar ethical principles — is an essential factor in our decision to enter into or extend an existing business relationship. Each supplier subject to our TPCOC is responsible for ensuring that its employees, representatives and subcontractors also

understand and comply with the principles of the TPCOC. If a supplier or other third party fails to comply with the law or does not address contractual non-compliance in a timely manner, we reserve our contractual rights to terminate the relationship. Our requirement of suppliers to promote the principles of our TPCOC to their own suppliers, contractors and laborers, helps ensure responsible business practices throughout our supply chain. All sourcing employees are required to complete a training module and some global regions have provided direct training to our suppliers on the principles of our TPCOC. Our supplier engagement strategy would be considered successful when 100% of our contracted suppliers comply with the TPCOC principles. Our detailed global sourcing process also includes screening third parties for a wide variety of risks, including corruption risks. We seriously consider the results of those assessments and manage corruption risks appropriately.

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers
Collect targets information at least annually from suppliers
Collect other climate related information at least annually from suppliers

% of suppliers by number

0.7

% total procurement spend (direct and indirect)

23

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

We actively engage with our most critical suppliers through CDP's Supply Chain program for monitoring and assessing their performance, policies, commitment, targets and implementation plans related to GHG emissions. We engaged with our key suppliers representing approximately 23% of our annual spend on GHG reduction targets - which we intend to expand to more suppliers in coming years as we build and execute our Scope 3 GHG strategy. Such engagement provides us with critical data as we work to deliver on our SBTi-approved 2030 target of a 35% reduction in GHG emissions across all three scopes.

Impact of engagement, including measures of success

We continue to seek improvements in greenhouse gas emissions data collection and monitoring by our suppliers. Our initial CDP Supply Chain data set has proven useful in developing our Scope 3 approach and has led to supplier discussions on key details such as emission factor assumptions and calculations.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

50

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

We create innovative, sustainable and recyclable products that help our customers achieve their objectives. The sustainability, health and transportation needs of our customers, as well as their evolving demands, drive our commitment to innovation. We strive to meet customer demands by using research, ingenuity and creative thinking to transform renewable resources into recyclable fiber-based products that people depend on every day. We meet with customers in person on a regular basis, often take customers on tours of both our manufacturing facilities and forestland, and are regularly asked to engage at their offices to present our business and sustainability materials.

We employ a variety of engagement methods to help us understand how well we are fulfilling our responsibility as a valuable partner for our customers. Details of the importance of our customer engagement strategy, how we engage, and key topics covered are outlined below: Importance: • Without our customers, we would not exist • Customer expectations and needs influence our product and service innovation • Changing technology and consumer demands present an opportunity for renewable, recyclable products to provide sustainable solutions How we engage: • Sales relationships • Regular site visits • Meetings • Surveys • Special events • Online communications • Onsite/forestry tours. The engagement is focused on the key topics such as, GHG emissions, Certified fiber content, Climate change, Life cycle impact, Operational efficiency, Recovered fiber content, Waste reduction. PLEASE NOTE: We have approximately 21,000 customers in 150 countries. We estimated that we engage directly with about 50% of our customers on product stewardship, certifications, and other sustainability topics, but given the scope and global nature of our business this is an estimation.

Impact of engagement, including measures of success

We create innovative, sustainable and recyclable products that help our customers achieve their objectives. The needs of our customers and the evolving demands of consumers drive product innovation. Because our products are made from these renewable resources, they enable our customers to reduce their carbon footprint, meet their sustainability goals and promote a low-carbon, circular economy. We work to engage directly with customers by doing the following: •

Creating useful, sustainable and recyclable products that help customers achieve their objectives • Working with customers to meet sustainability objectives through technology and innovation collaborations • Having our subject-matter experts meet regularly to discuss product and service innovation • Measuring progress against our targets related to efficiency and energy consumption, greenhouse gas emissions, water stewardship, fiber loss, waste and workplace safety • Establishing goals to purchase and use more third-party certified wood fiber and increase the recovery of corrugated packaging and paper, to improve our watersheds and to grow our community involvement • Ensuring that our Vision 2030 Goals affect all areas of our value chain • Mapping our alignment and progress against UN SDGs • Actively engage and respond to surveys and questionnaires regarding our environmental impacts and GHG emissions We strive to meet those demands by using research, ingenuity and creative thinking to transform renewable resources into recyclable fiber-based products that people depend on every day. The impact of our customer engagement success can be measured through the development of strong customer relationships, collaborative efforts and product innovation. We would consider this engagement strategy successful when we have engaged with 100% of our customers on product stewardship and other sustainability topics.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Our ambitious SBTi-approved target to reduce our GHG emissions by 35% across all scopes compels us to engage with value chain partners including public sector agencies, NGOs, and research organizations.

As a partner in the US Department of Energy's (DOE) Better Climate Challenge, International Paper is one of more than 100 organizations across the US economy collaborating to drive real-world action toward a low-carbon future. As we pursue our ambitious GHG targets, we will count on DOE and participating industrial companies for technical assistance, peer-to-peer learning opportunities and a platform to demonstrate our commitment to being part of the solution to climate change.

As we monitor our emissions across our value chain, we partner with the National Council for Air and Stream Improvement (NCASI), a non-profit research institute focused on environmental and sustainability topics relevant to forest management and the manufacture of forest products. We have partnered with NCASI to develop a detailed supply chain GHG emissions calculator, aligned with GHG Protocol guidance and tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. This tool includes those categories that have the greatest potential effect on Scope 3 emissions for forest product companies. We will continue to evaluate and refine our scope 3 emissions calculations through best available information for our sector.

In 2022, International Paper was an active member of the Review Group for the GHG Protocol Land Sector and Removals Guidance development. We also initiated a pilot implementation of the Guidance — which will be finalized in 2023 — and we actively provided feedback to the revision process through our participation in the WBCSD Forest Solutions Group. We further engaged with the World Wildlife Fund in the development of the SBTi Forest, Land and Agriculture (FLAG) target-setting guidance. This guidance provides the world's first standard method for companies in land-intensive sectors to set science-based targets that include land-based emission reductions and removals. The GHG Protocol

Land Sector and Removals Guidance will underpin the forest sector's FLAG target-setting methodology.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number

MP1

Management practice

Biodiversity considerations

Description of management practice

All the wood fiber we source is in compliance with the FSC Controlled Wood standard and SFI Fiber Sourcing Standard at a minimum. These standards require that due diligence is performed and risk is mitigated specifically on conversion of forest to non-forest use. In 2022 79% of material sourced was 2nd or 3rd party verified as coming from a conversion-free source by either staff verifying through our GIS platform that the forest would remain intact, or the forest being 3rd party certified to a forest management standard. To guide our responsible fiber procurement on uncertified forestlands, International Paper built ForSite™, a proprietary GIS-based mapping and due diligence system. The unique technology lets us assess a tract of forestland prior to harvest to identify ecological attributes — such as Our spatial data includes an array of environmental attributes including: ■ Rare, threatened and endangered species ■ Priority forest types and landscapes ■ Soil types, topography and hydrology ■ Satellite imagery updated weekly and ■ optimized delivery location. Armed with this information, we can better ensure that we maintain or enhance the forests where we are sourcing fiber. We share this information with landowners to prevent and mitigate risks to biodiversity. Using ForSite™ technology, we have identified more than 23 million acres where we can apply due diligence prior to harvest to ensure that the fiber we purchase is sourced responsibly and our actions

make a positive impact on nature. We also conduct due diligence on purchases that are identified as being at risk of non-compliance with our Global Fiber Procurement policy.

Your role in the implementation

Knowledge sharing
Operational
Procurement

Explanation of how you encourage implementation

ForSite™ - our industry-leading platform that exemplifies transparency, risk mitigation and targeted collaboration. It provides us with important biodiversity related information — such as rare or endangered species, priority forest types, or areas of significant biodiversity or landscape connectivity. Our fiber buyers use this information to make informed decisions on individual forest tracts. We also share this information with our landowners to educate them and increase their awareness about the Company's expectations in terms of sustainable fiber sourcing for mutual benefit. After we make recommendation based on ForSite™ data, we also conduct due diligence on purchases that are identified as being at risk of non-compliance with our Global Fiber Procurement policy. Thus, the platform enables us to know where our wood is coming from and ensure that the right resources and decisions are made before the fiber enters our mill system. Because of our extensive fiber supply network and ForSite™, we can connect our forest conservation partners with private forest landowners to help make a positive on-the-ground difference in the areas that matter most.

Our South Carolina fiber purchasing team worked with IP fiber suppliers to create wildlife corridors — five-mile lengths of unharvested forest that connect larger forest areas together — to maintain the ecosystems that are home to white-tailed deer, wild turkey and numerous species of birds, reptiles and amphibians. Also in the U.S. South, where millions of acres of privately owned forestlands are habitats for hundreds of species of birds, our Tombigbee Forest Bird Partnership assembles partners to help preserve at-risk species such as the Northern Bobwhite, Kentucky Warbler and Red-headed Woodpecker. Since the inception of ForSite™, we have also declined to purchase fiber where we felt the sourcing risk was either too high, or could not be properly mitigated.

Climate change related benefit

Increasing resilience to climate change (adaptation)
Other, please specify
Improved water quality and mitigation of risks to critical forests and landscapes from biodiversity perspective

Comment

Our fiber sourcing decisions are informed by information related to hydrology, soil type, priority forest types along with rare, threatened and endangered species, collected by ForSite™. Hence, we are able to mitigate risks against priority forests and improve the water quality through streamside buffers where applicable.

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

We believe that public policy has a significant impact on creating the conditions for our success. We advocate and engage on a range of issues including energy efficiency, climate, recycling, supply chain efficiencies, combatting illegal logging, economic and environmental benefits of working forests, safety and others. We have a government relations team in Washington, D.C., various state capitals across the U.S. and in other countries where we operate. We regularly meet with public officials and policymakers and engage trade and business associations, customers, suppliers, employees, communities and labor and environmental groups on issues of mutual concern. Our policy positions are generally consistent with the trade associations, coalitions and other organizations in which we participate. IP consistently advocates our views on issues within organizations recognizing others may hold different policy priorities or solutions. While we may not agree with every position taken by these groups on every issue overall, we believe membership and engagement with trade associations, coalitions and other groups is critical for sharing industry best practices, research and data analysis which drives collaborative action and process improvements across a range of issues.

Our Climate Change statement outlines our climate change strategy and has been approved by our Sustainability, Legal and Government Relations departments. All relevant activities are managed centrally by these departments. The statement is revised and updated timely to

ensure its relevance. It covers the key objectives of our climate approach, and our commitment for deliberate and determined efforts to meet our GHG reduction commitments through 2030 and beyond.

The statement can be found on our corporate website: internationalpaper.com.

We also publish a voluntary report of political contributions on a semi-annual basis, on our corporate website.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We support policies that promote energy diversity and economic development, consistent with our principles of responsible, efficient and sustainable use of natural resources. We advocate – directly and through our trade associations - at all levels of government, including with policymakers and legislators, to inform and influence legislative and regulatory issues.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Renewable energy generation

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Neutral

Description of engagement with policy makers

We advocate – directly and through our trade associations - at all levels of government, including policymakers and legislators, to inform and influence legislative and regulatory issues.

An effective national energy policy should strive to value the reliable supply of affordable electricity, as well as the efficient use of resources. Policy that encourages a well balanced mix of domestic energy sources will help maintain national energy security vital to U.S. manufacturers like International Paper. To encourage fuel diversity and economic progress, International Paper supports market-driven solutions for a broad mix of renewable and traditional energy sources as long as grid reliability is maintained. International Paper is a global leader in energy efficiency and efficient combined heat and power. Since 2010, International

Paper has invested roughly $428 million globally on improving operational efficiency and fuel flexibility in our electric generation fleet to reduce the amount of fuel used in creating our products, resulting in fewer emissions. Efficiency improvements to our manufacturing process are good both for business operations and for reducing our environmental footprint. International Paper is a leader in the use of renewable energy. We generate approximately 70% of the energy used in our mills from carbon-neutral biomass residuals, which minimizes the use of fossil fuels. The sustainable use of forest products manufacturing residuals by the forest products industry to produce energy provides enormous greenhouse gas benefits by avoiding GHG emission. By procuring wood from suppliers who practice responsible forest stewardship and ensure the long-term sustainability of working forests, International Paper participates in a successful, market-based system of fiber sourcing and residual biomass use that provides positive carbon benefits and co-benefits including: -Efficient use of biomass residuals through combined heat-and-power energy systems -Robust recycling of paper fiber to reuse valuable biomass resources -Reduction of coal and fuel oil use by over 80% globally since 2010.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We are a strong proponent of global efforts to suppress illegal logging and trade of illegally sourced wood and wood products. We support and encourage the full implementation of the forest sustainability language included in United States-Mexico-Canada Agreement (USMCA) and will work to ensure the inclusion of similar language in future trade agreements.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Traceability requirements

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Neutral

Description of engagement with policy makers

We advocate – directly and through our trade associations - at all levels of government, including policymakers and legislators, to inform and influence legislative and regulatory issues.

International Paper is a leader and proponent of domestic and international efforts to combat illegal logging. IP will continue to play a constructive role ensuring that the 2008 Lacey Act is fully funded in order to be fully implemented to ensure a sustainable global fiber supply. In the same vein, International Paper supports government-backed programs, such as the Forest Inventory Analysis which is the backbone of our knowledge about U.S. forests and is a vital technical resource that allows the assessment of the sustainability, health and availability of the forest resource.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Specify the policy, law, or regulation on which your organization is engaging with policy makers

As one of the world's largest recyclers of paper and corrugated packaging, we support investment in programs and technologies that bring more clean residential and commercial material into the system, without distorting the existing robust recycling marketplace for paper-based materials. IP is engaged in advocacy on a variety of recycling legislation - this includes dual stream collection, clean Materials Recovery Facilities, and expanded access for commercial and multi-family dwellings. We support efforts to collect data on existing recycling collection infrastructure to demonstrate where investments are needed to increase collection and to increase access to recycling services through pilot programs for underserved areas. This also includes consumer education to grow the understanding of what can and cannot be recycling to drive more clean material into the recovery stream.

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Recovered fiber markets are complex, efficient, dynamic and market-driven. We support the free and fair trade of both products and materials. Market forces should guide paper recycling systems to ensure that recovered fiber goes to its highest value end use. We oppose recycling

mandates or incentives that ignore market driven dynamics. Paper-based products have robust end markets due to significant private sector investments over several decades. International Paper educates policymakers at the state and federal level about the excellent recovery rate of Old Corrugated Containers (OCC), which was 91.4% in 2021 and has exceeded 82% since 2009. More than 68% of all papers were recovered in 2021.

According to the U.S. EPA, more than three times as much paper is recovered by weight compared to aluminum, steel, glass and plastic combined. Because of our leadership in recovery, we demonstrate for lawmakers how paper-based products should be treated differently when legislation is developed to increase recovery for other products that have not made the same investments as our industry. For example, we believe that Extended Producer Responsibility regimes that tax packaging should include off-ramps for products that have achieved 65% recovery rates. Due to private investment and strong market dynamics, paper and paper-based packaging's recovery rates are part of the solution.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

We believe market-based approaches like state, federal and local investments in recycling and grant programs in infrastructure and education are the more effective way to drive increased recovery without distorting existing markets. We oppose content requirements, bans or fees on paper products because of the robust recovery system in place for paper recycling. We oppose proposals funded by fees on product manufacturers that do not consider existing recovery rates and prior investment, essentially penalizing our industry to subsidize others.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Specify the policy, law, or regulation on which your organization is engaging with policy makers

In April 2022 the US Securities and Exchange Commission (SEC) issued proposed rules which would create a wide range of new disclosure obligations for US public companies, including climate metrics and climate risks. Public companies would be required to: disclose Scope 1, 2 and 3 GHG emissions if considered material; analyze the impact of climate-related risks to financial statement line items (e.g., revenues, assets, cash flow), if climate-related risks affect 1% or more of the value of the relevant line item; and report information related to announced climate goals, including the baseline, metrics, and how the company plans to meet its goals. The proposed rules would also require new annual disclosures related to board and management oversight of climate-related risks. If a final rule were to be released, it is likely that International Paper would be subject to any such rules applicable to large public filers.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related reporting

Verification and audits

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Neutral

Description of engagement with policy makers

We have provided comments via our trade associations

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Carbon neutrality of manufacturing biomass residuals

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Renewable energy generation

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

We advocate – directly and through our trade associations - at all levels of government, including policymakers and legislators, to inform and influence legislative and regulatory issues. We support policies that seek to level the playing field for U.S. forest manufacturers with the rest of the world, and that recognize our use of manufacturing biomass residuals as carbon-neutral. Sustainable forest management practices help to further reduce carbon dioxide emissions through carbon storage in forests and products as well as replacing the use of fossil fuels with biomass energy. We generate approximately 70% of the energy used in our mills from the

efficient use of carbon neutral biomass residuals through combined heat-and-power energy systems. This highly efficient process minimizes the use of fossil fuels. The company generates significant volumes of bio-energy and procures our fiber from sustainably managed forests to ensure they remain healthy and productive for future generations.

As the U.S. Environmental Protection Agency considers how to regulate biogenic CO2 emissions, we urge Congress and the Agency to recognize our use of manufacturing biomass residuals as carbon-neutral. The sustainable use of manufacturing residuals in the forest products manufacturing process to produce energy provides enormous greenhouse gas benefits. In fact, the forest products industry as a whole avoided the emission of approximately 181 million metric tons annually of CO2 equivalent, which is the same as emissions of about 35 million cars. By procuring wood from suppliers who practice responsible forest stewardship and ensuring the long-term sustainability of working forests, International Paper participates in a successful, market-based system of fiber sourcing and residual biomass use that provides positive carbon benefits and co-benefits.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

We strongly support efforts to recognize our use of manufacturing biomass residuals as carbon-neutral; this support does not necessarily extend to claims of carbon-neutrality made by others regarding other uses of forest biomass for energy generation.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Other, please specify (American Forest & Paper Association (AF&PA): National trade association of the forest products industry that advances public policies that promote a strong and sustainable U.S. forest products industry.

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We believe membership and engagement with trade associations is critical for sharing industry best practices, research and data analysis which drives collaborative action and process improvements across a range of issues, though we may not agree with every position taken by various trade association we engage with.

AF&PA is the national trade association of the forest products industry that advances public policies that promote a strong and sustainable U.S. forest products industry. The forest products industry is the leading producer and user of renewable biomass energy. On average, about two-thirds of the energy used at AF&PA member pulp and paper mills and 70 percent of the energy from members' wood products facilities is generated from carbon-neutral biomass. The carbon neutrality of biomass combustion, particularly from forest products manufacturing residuals, is a widely-accepted carbon accounting convention and fundamental to the development of biomass-based renewable energy. International Paper participates on AF&PA's Energy Resource Committee, Environmental Resource committee, Biomass Task Force, Climate Task Force and Government Affairs Committee which supports this policy position. We have supported the development of AF&PA's 2030 sustainability goals, and also engage with AF&PA on topical issues like responding to the SEC's proposed GHG reporting rules which would create a wide range of new disclosure obligations for US public companies, including climate metrics and climate risks. We publish our funding to this organization on our website as a Voluntary Report of Political Contributions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Business Roundtable

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We believe membership and engagement with trade associations is critical for sharing industry best practices, research and data analysis which drives collaborative action and process improvements across a range of issues, though we may not agree with every position taken by various trade association we engage with.

Business Roundtable Statement on Climate Change: Because the consequences of global warming for society and ecosystems are potentially serious and far-reaching, steps to address the risks of such warming are prudent even now, while the science continues to evolve. The Business Roundtable supports collective actions that will lead to the reduction of greenhouse gas (GHG) emissions on a global basis with the goal of slowing increases in GHG concentrations in the atmosphere and ultimately stabilizing them at levels that will address the risks of climate change. These actions need to be coordinated with efforts to address other urgent world priorities, such as reducing poverty, improving public health, reducing environmental degradation and raising living standards. Reliable and affordable world supplies of energy are essential for meeting these challenges.

International Paper participates on the Energy and Environment Committee for this organization and follows other committees to ensure our position is represented. We publish our funding to this organization on our website as a Voluntary Report of Political Contributions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Confederation of European Paper Industries

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

CEPI Statement on Climate Change: The European paper industry has already delivered a successful decoupling of carbon emissions from economic growth while reducing carbon emissions by 29% from 2005 to 2021, having product volumes increased and proved the climate friendliness of its products thanks to certified raw materials and a world class performance in recycling. Our objective is to be the most competitive, innovative and sustainable provider of net-zero carbon solutions in 2050, namely by strengthening the role of wood and wood-based products in our daily lives, substituting critical or CO2-intensive raw materials and fossil energy and closing material loops by boosting collection and recycling. We wish to play a central role in

satisfying the daily needs of Europeans and offering solutions that contribute to a sustainable lifestyle.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

National Association of Manufacturers

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We believe membership and engagement with trade associations is critical for sharing industry best practices, research and data analysis which drives collaborative action and process improvements across a range of issues, though we may not agree with every position taken by various trade association we engage with.

NAM Statement on Climate Change: (NAM) recommends negotiating and ratifying a binding international climate action treaty that is both fair and enforceable, a position the NAM has long held. This will ensure that the United States does not suffer a competitive disadvantage and can lead the way in developing job-creating technologies and products.

A roadmap for results: The plan also offers guidelines for a national approach to climate change, adhering to three core principles that have always guided the NAM's climate strategy: One unified policy: Instead of the patchwork of federal, state and local climate change regulations that manufacturers currently face, the industry needs a clear federal policy that offers predictability, consistency and certainty while meeting science-based targets. Businesses should be able to plan for the future—and shouldn't have to worry that the policies of today will be different tomorrow. A level playing field: Any national policy to address emissions should be economy-wide and apply to all emitters. Congress should develop plans that don't unduly burden one sector over another, and manufacturers shouldn't be expected to shoulder the already-high cost of new regulations alone.

Consumer choice and competitiveness: This policy approach shouldn't automatically involve a

mandated phaseout of any manufactured product. Instead, policymakers should lead with the tools and strategies manufacturers need to improve products, preserving consumer choice and supporting the innovation that manufacturing provides.

We publish our funding to this organization on our website as a Voluntary Report of Political Contributions.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Research organization

State the organization or individual to which you provided funding

We partner with the National Council for Air and Stream Improvement (NCASI), a non-profit research institute focused on environmental and sustainability topics relevant to forest management and the manufacturer of forest products.

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

2,410,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

We partner with the National Council for Air and Stream Improvement (NCASI), a non-profit research institute focused on environmental and sustainability topics relevant to forest management and the manufacturer of forest products. NCASI provides unbiased, scientific research and technical information necessary to achieve the industry's environmental and sustainability goals. NCASI's mission is to help members cost-effectively meet their environmental and sustainability goals through basic and applied research, technical support, and education. NCASI provides essential support to forest products industry members in their efforts to ensure the availability of a sustainably managed fiber supply, characterize and help improve the effectiveness of pollution control measures at manufacturing facilities and provide

valuable insights and assistance to members in the manufacture of sustainable forest products. Since 2021, we have partnered with NCASI to develop a detailed supply chain GHG emissions calculator, aligned with GHG Protocol guidance and tailored to our industry, in order to establish a detailed Scope 3 GHG emissions baseline and to track progress over time. This tool includes those categories that have the greatest potential effect on Scope 3 emissions for forest product companies.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Complete

Attach the document

TCFD Report 2022.pdf

2022 Sustainability Report.pdf

Page/Section reference

Responsible Governance: pg. 14
Healthy and Abundant Forests: pg. 20
Renewable Solutions: pg. 31
Sustainable Operations: pg. 46
Task Force on Climate-Related Financial Disclosures (TCFD) report: pg. 1-11

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Science Based Targets Network (SBTN) Task Force on Nature-related Financial Disclosures (TNFD) World Business Council for Sustainable Development (WBCSD) Other, please specify Corporate Eco Forum, Aqueduct Alliance	TNFD: We are a participant in their consultations and have engaged and provided feedback. We expect to perform a scoping assessment our sourcing and nature related risks in calendar year 2024 using the TNFD methodology when it is released. WBCSD: As a member International Paper supports the objectives and work plan of WBCSD, including but is not limited to, engaging and helping create scalable action to accelerate the transition to a sustainable world. Through our membership in the World Business Council for Sustainable Development's Forest Solutions Group, we've joined global efforts to support the United Nations Decade on Ecosystem Restoration. Our support champions the critical role of healthy forest ecosystems in water quality, clean air, biodiversity and mitigating climate change. SBTi Forest, Land and Agriculture: We engaged with the World Wildlife Fund in the development of the SBTi Forest, Land and Agriculture (FLAG) target-setting guidance. This guidance provides the world's first standard method for companies in land-intensive sectors to set science-based targets that include land-based emission reductions and removals. The GHG Protocol Land Sector and Removals Guidance will underpin the forest sector's FLAG target-setting methodology. Corporate Eco Forum (CEF): As a member of CEF, we exchange best-practice insights with the leaders in business community by participating in peer-to-peer learning and collaborate to develop strategies to achieve our stewardship goals. Aqueduct Alliance: As a member of Aqueduct Alliance, we engage WRI to drive innovation in water stewardship strategies; Water-related data, indicators, and tools. By being members, we pursue Aqueduct Alliance's mission and goal to achieve a water-secure future by mapping, measuring, and mitigating global water risks.

C13. Other land management impacts

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

No

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, board-level oversight	Sustainability is a key element of our corporate governance, promoted by our CEO, Board of Directors and Senior Lead Team, and integrated into governance structures and processes across the enterprise. Our Board of Directors upholds our company mission and ensures effective organizational planning, focusing on strategy and risk management while monitoring strategic initiatives and providing guidance on climate-related material issues. The Public Policy and Environment (PPE) Committee of the Board has overall responsibility for sustainability/environmental issues, including forestry-related issues, such as biodiversity considerations. The PPE Committee reviews and assesses public policy, legal, health and safety, technology, environment and sustainability issues. It also reviews the Company's policies and procedures for complying with certain of its legal and regulatory obligations, including our internal Code of Conduct, and charitable and political contributions. This committee has its own charter, which is reviewed annually to assure ongoing compliance with applicable law and sound governance practices. Meeting agendas are development by the committee chair in consultation with committee members and senior leaders, who regularly attend the meetings. In 2022 this committee met 3 times and had a 100% attendance rate. Our Chief Sustainability Officer briefs this committee twice annually. The Board's Governance Committee also has oversight of certain public policy and sustainability

		matters. Internal Performance evaluations of the full Board and its committees are conducted annually.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas Commitment to no trade of CITES listed species	CITES

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

United States of America

Name of the biodiversity-sensitive area

FSC US Southeast Critical Biodiversity Areas

Proximity

Up to 70 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Sourcing from suppliers of forest based material occurs in some instances from CBA's (Critical Biodiversity Areas) as named within the FSCUS Controlled Wood National Risk Assessment. This is monitored and will only be allowed as a source to International Paper so long as prescribed mitigation measures are followed by suppliers.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Site selection
Project design
Scheduling
Physical controls
Operational controls

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

International Paper sourcing in the United States South-eastern forests may include sourcing that is from Critical Biodiversity Areas (CBAs) as named within the FSCUS Controlled Wood National Risk Assessment in select instances. These areas and their characteristics are defined in the FSUS-CWNRA public document along with what management techniques at the forest level which can be used to minimize impacts to key biodiversity attributes. International paper works with suppliers actively in any sensitive area including CBA's and performs 1st party validation via field visits to harvesting operations of suppliers to document conformance of suppliers in implementing management techniques which minimize harm to key biodiversity attributes.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Biodiversity strategy Other, please specify We use ForSite™, a GIS-based mapping system to assess the forestlands prior to harvest to identify ecological attributes including rare/endangered species and priority forest types, so we can use this information in our decision-making process	Comprehensive information is in the Forestry section of our 2022 Sustainability Report. Pg. 20-30 [1]

[1] 2022 Sustainability Report.pdf