Empresas CMPC - Climate Change 2021

C0. Introduction

C0.1

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

CMPC is a Chilean-based global leader in the Forestry, Pulp & Paper industry with more than 100 years of history. The company's strategic commitment to sustainability is embodied in its Corporate Policy & Value Creation Model, based on the use of renewable resources to develop essential products for people, which can not only be recycled and reused, but also contribute to the environment through carbon capture. It strives to create shared value for all of its stakeholders, while protecting the environment and local communities.

CMPC's forest assets span 1,287 thousand hectares across Argentina, Brazil & Chile, and it operates 45 production facilities in 8 Latin American countries: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru & Uruguay. Its high quality products are sold to more than 19,000 customers in over 45 countries around the world, reaching MM USD 5,287 in sales in 2020. Across the 8 countries in which CMPC operates, it has 19,641 direct collaborators, 28,540 indirect collaborators from service companies and works with 24,333 suppliers.

The company operations are divided into two business areas: CMPC Celulosa & CMPC Biopackaging, and one subsidiary: Softys. The first one with 44% of the sales is CMPC Celulosa, dedicated to sustainably managing the forest operations (90.1% FSC & PEFC certified) and manufacturing and distributing timber, solid wood products and pulp. Softys, accounting for 39% of sales, is the second largest tissue paper and personal care products producer in Latin America. Finally, CMPC Biopackaging elaborates innovative packaging solutions from recycled paper and sustainably sourced virgin fibers as well as other paper products, such as boxboard, molded pulp trays, and paper sacks, among others. Its sales represents 17% of the whole company's.

Sustainability is part of CMPC's strategy, both in terms of our impacts, risks and opportunities. Our business model pays close attention to internal circular flows and we strive towards the circular bioeconomy as the optimal use of renewable resources is essential for CMPC in terms of both its products, processes, operations, and supply chain, where 95% of our raw material input is certified. Also, black liquor, biomass and other byproducts of pulp and paper production are used for renewable energy generation, which accounts for 81.13% of total energy consumption. We also value the protection and conservation of biodiversity and ecosystem services and that is why 385,726 hectares of our forest assets are dedicated to that, equal to a 29.9% of the total forest assets.

In 2019, we developed and announced concrete sustainability goals focusing on reducing greenhouse gas emissions and industrial water use, the elimination of waste to landfill, and the conservation and protection of forests, as well as announcing in 2020 our innovation, and diversity and inclusion targets. All these are aligned to the Sustainable Development Goals of the 2030 Agenda for Sustainable Development by the United Nations.

CMPC boasts a robust governance structure to carry out our operations, business transactions and potential risk exposure in accordance with the best international practices, strictly complying with the laws and regulations of each country where we are present, always respecting the people, their dignity and rights, as well as the environment. Our day to day activities are guided by our corporate purpose and values, as well as corporate policies such as the Integrity Policy - Anti-corruption and Fair Competition, Diversity and Inclusion Policy, Environmental Policy, Climate Change Policy and the Code of Ethics, among others. The Board of Directors comprises nine members with expertise and multiple years of experience in the industry. They are responsible for overseeing the creation of the business strategy and its implementation through a number of committees, including the Sustainability Committee, the Ethics and Compliance Committee and the Strategic Risks Committee, to name a few.

Our operations are in close proximity to local and indigenous communities and for us, it is of the most importance to exercise mutual respect with them and to get to know them in order to contribute to local development. It is our goal to promote diversity and inclusion in the workplace and build mutually beneficial networks with our contractors and suppliers. We aspire to serve our customers by constantly innovating to provide the best solutions for their daily lives.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Argentina
Brazil
Chile
Colombia
Ecuador
Mexico
Peru
Uruguay

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.
Operational 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	Own land only [Agriculture/Forestry only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	No

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

(C-AC0.6g/C-FB0.6g/C-PF0.6g) Why are emissions from the consumption of your products not relevant to your current CDP climate change disclosure?

Row 1

Primary reason
Evaluated but judged to be unimportant

Please explain
Consumption of our products by final consumers do not generate relevant emissions because our products do not require fuel or electricity to be used. We sell products such as tissue paper, packaging, paper and boards and wood to final consumers which do not generate emissions in their use phase.

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
Both

Please explain
CMPC's has forest plantations in Chile, Argentina and Brazil which cover 652,166 hectares as of 2020. These are managed by CMPC Celulosa, one of our three business units and are used to provide timber for our operations to produce pulp, wood, tissue paper and packaging products, among others. At the same time, there is a small percentage of wood supplied by third parties to our operations. Most of our revenue is dependant directly or indirectly of our forestry operations and the timber supply they generate, because it is the beginning of our complex interconnected supply chain. The timber we produce is used in our pulp and wood and timber facilities; a great amount of the pulp produced is then used to provide our tissue and packaging facilities, and the sub-products of biomass generated in timber facilities are used to generate renewable energy for our operations. That is why our timber production determines both directly and indirectly most of our revenue.

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(s)	Please explain
Board-level committee	The highest level of direct responsibility for climate change is the Sustainability Committee, which is a Board-level committee. The main purpose of it is directly supervising the implementation of the Company's sustainability strategy in its economic, social and environmental dimensions, as well as verifying the effective fulfillment of the objectives and goals set in this regard, and can also review and propose the application of best practices to reinforce CMPC's long-term commitment to sustainable development. Such as the implementation of our 4 sustainability goals: reducing 50% of scope 1 and 2 emissions by 2030, reduce in 25% water use per tonne of product by 2025, be a zero waste to landfill company by the year 2025 and restore, protect and conserve 100,000 more hectares by 2030, all related to climate change mitigation or adaptation (considering 2018 as baseline for all targets). One concrete example of the board committee's climate related decision made during 2020 was setting and approving the annual objectives for our corporate environmental sustainability goals mentioned before. This committee is composed by the CEO, Chief Sustainability Officer, Chief Corporate Affairs Officer, Chief Environmental Officer, the Chairman of the board and 2 other board directors. Also, in each session one of the Chief Operating Officers of each business unit present about climate related-issues in their business unit and the progress and road-maps towards the sustainability goals. This committee sessions every 2 months.

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	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The sustainability committee in every meeting reviews progress towards the company's climate related goals, reviews and guides the business strategy and major plans of action towards climate risks and suggests best practices when necessary, especially focus on our 4 sustainability goals related to GHG emissions, water, waste and conservation and protection of ecosystems and biodiversity, mentioned in C1.1a. Every meeting the CSO presents the progress towards our sustainability goals and focuses on and specific contingent sustainability or climate related topic that needs to be reviewed and incorporated to our business strategy, being material issues for the company. At the same time, every meeting a Chief Operating Officer of one of our business units, presents it's business major plans of action and strategy towards corporate goals and main sustainability issues; giving the board a major oversight of where we stand in our progress towards sustainability goals and main issues, which need to be revised, and which are the major plans of actions. Specific actions supervised and completed by the board during 2020 was determining the annual performance objective for our 4 Corporate environmental sustainability goals mentioned above, supervising each session the business units progress towards them and summoning each business unit manager when deviations to the annual objectives were seen.

C1.2

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly
Chief Risks Officer (CRO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

CSO: The CSO is part of the Corporate Affairs Department and is the highest management level position responsible for addressing all climate-related issues. Climate change is one of the main material issues for our company related to sustainability, so the CSO is responsible for the implementation and development of the climate change strategy and the supervision of progress and implementation of measures towards our commitments with sustainable development; such as our sustainability goals established in september 2019: reducing 50% of scope 1 and 2 emissions by 2030, reduce in 25% water use per tonne of product by 2025, be a zero waste to landfill company by the year 2025 and restore, protect and conserve 100,000 more hectares by 2030. Every two months, the CSO presents to the sustainability board committee the status of this 4 targets to date, in comparison to our baseline year 2018, reporting scope 1+2 emissions to date, water use per tonne of product, new hectares conserved or protected, total amount of waste sent to landfill. At the same time, he presents the roadmap and new projects towards achieving them in accordance with each business unit manager, as well as focusing in other key elements to address climate-related issues such as the development of internal policies, such as the climate change policy.

CRO: The CRO is the highest management level position responsible for addressing climate related risks and opportunities and it is installed inside the Corporate Legal Department, depending on the Chief Legal Officer which reports to the CEO. The CRO supervises the assessment and management of company-wide risk strategy considering all risks, including climate change. During 2019, he developed a new risk management program which was used to obtained a list of the 20 main risks for the company. Of the 20 main risks identified, various are related to climate change such as: Water availability for industrial operations, wildfires, fiber scarcity, positioning of the forestry industry, product innovation for the market, natural disasters, Changes in environmental Regulations.

This list of prioritized risks was approved by the board of directors. The CRO reports the progress of the management and assessment of these risks to the Audit Board Committee, which supervises and coordinates activities designed to identify, inform about and prevent risks inherent to the business and reviews the risk matrix. At the same time, there is an executive Strategic Risks Committee, lead by the CRO , where all the first line executive managers participate and all Main risks are assessed, including all climate related risks. During 2020, each of the prioritized risks were assigned a risk "owner" which are different Officers from the company and their departments, which are in charge of reporting the KPIs associated to each risk determined by the CRO, which then revises them and presents them in the risk committee, supervising the risk exposure. Related to climate change risks monitored KPI's include: water withdrawals, CO2e emissions, waste sent to landfill, among others, and their progress towards our annual targets is part of the risk monitoring process.

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	Yes, we provide incentives towards climate change issues performance and we plan to deepen this in the next few years in the incentive plans of executives.

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	Type of incentive	Activity inventivized	Comment
Chief Sustainability Officer (CSO)	Monetary reward	Emissions reduction project Emissions reduction target	The career development plan of every employee at CMPC, considers the setting of annual objectives which fulfillment determines the annual bonus. By Annual Bonus, it is understood the following: gross variable amount accrued and paid to the worker once a year. The amount of the Annual Bonus will be determined based on the weight of the business result (40%) and the individual performance evaluation (60%) which includes de fulfilment of annual objectives. Among the objectives set for the CSO are the Support and progress of the implementation of the corporate sustainability goals: GHG emissions reduction, water intensity reduction, becoming zero waste to landfill and adding new hectares for conservation and protection; specifically setting internal annual goals for these targets so business units can develop investments plans towards their fulfillment and reporting progress to the sustainability board committee.
All employees	Monetary reward	Behavior change related indicator	The career development plans of our employees aims to generate competences, among which sustainable and efficient management stand out. The annual bonus considers these competences, in addition to performance of individual objectives, which are monitored by specifics processes and compliance indicators. By Annual Bonus, it is understood the following: gross variable amount accrued and paid to the worker once a year. The amount of the Annual Bonus will be determined based on the weight of the business result (40%) and the individual performance evaluation (60%), this last one involves sustainable development among the 5 competences evaluated.
All employees	Non-monetary reward	Efficiency project	The President and the CEO of CMPC, representing the board of the company, at its annual ceremony, recognizes the most relevant and innovative projects and initiatives developed during the year, and that are aligned with CMPC's strategy and do a specially contribution to the sustainable development of the enterprise. In the past year the collaborators involved in initiatives such as the issuance of Green Bonds, Salmon Ecobox, Project Best, Eucahydro, among others, were recognized in front of the entire audience, composed by members of CMPC, subsidiaries from Santiago and the south of Chile, as well as representatives of foreign subsidiaries. All of them, aimed to celebrate the achievements made by the company during the year and publicize the main objectives of next cycle.

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	Risk assessments include the likelihood, which goes from Almost Certain, within a year or less, until remote, more than 20 year. <1 year to 5 years is considered the probable scenario for a risk from occurring in the short-term.
Medium-term	5	10	Risk assessments include the likelihood, which goes from Almost Certain, within a year or less, until remote, more than 20 year. <5 to 10 years is considered the possible scenario for a risk from occurring in the medium-term.
Long-term	10	20	Risk assessments include the likelihood, which goes from Almost Certain, within a year or less, until remote, more than 20 year. 10 to 20 year is the not very likely to unlikely time range of a risk from occurring soon, so it is considered the long-term time-horizon.

C2.1b

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

Since 2019, CMPC has a Risk Management Program, based on COSO ERM, ISO 31000 standards, and international best practices. The Program includes environmental, social and governance (ESG) risks that may impact sustainability and are associated with the Company's material issues. Also, this model has a corporate risk policy and procedure, both applicable to all business units and their subsidiaries.

It is comprised of two pillars: risk governance via a Corporate Risk Policy and methodology described in the Corporate Risk Management Manual. With this new model, CMPC developed a new critical risks prioritization, where the 20 Main Risks were identified. These are the high level risks that could materially have substantive impact on the strategy and business objectives. These risks can be strategic, operational, financial or legal in nature. Then, Main Risks are assessed in different business units and areas within the company, with the purpose to identify Specific Risks (or Potential Risk Events) that could have a severity **rate "High", "Very High" or "Catastrophic" (inherent risk assessment based on severity tables).** These risks are then analysed, usually by doing a cause-consequence analysis, having as output: maximum foreseeable loss scenario, critical controls, residual risk rating (severity and likelihood) and risk management responses to improve risk profile. Severity tables include different types of consequences: financial and operational, safety, community and human rights, environment, reputational and legal & compliance. Severity tables have six thresholds, that goes from "Very Low" until Catastrophic. In the case of the financial consequence, severity thresholds go from very low <USD 100 thousand until catastrophic > USD 150 million, being these the ranges of financial impact. Likelihood thresholds go from Almost Certain (within a year) until Remote (beyond 20 years). CMPC's governance and risk methodology applies to the entire company, as critical issues to address are identified, there is no area out of scope.

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
Since 2019, CMPC has a Risk Management Program, based on COSO ERM, ISO 31000 standards, and international best practices. The Program includes environmental, social and governance (ESG) risks that may impact sustainability and are associated with the Company's material issues. Also, this model has a corporate risk policy and procedure, both applicable to all business units and their subsidiaries. CMPC's Risk Management Program keeps the business strategy and objectives at the core and has two fundamental pillars: governance and methodology. The governance pillar involves specific roles and responsibilities, a clear process for reporting risks, and a mechanism for the oversight of the program and its components. To strengthen risk governance, there is a Strategic Risk Committee that leads efforts on these issues and report directly to the Board for its supervision. The risk management program identifies 4 clear steps for identifying, assessing and responding to risks: 1. Identification, assessment and prioritization: A study of the industry and market environment as well as internal company data including specific information on CMPC business areas led to the identification of the most important risks that could affect the company strategy and meeting its objectives. The identified risks were then assessed using the Program's methodology in order to prioritize the relevant ones and thus be able to focus on the most critical ones in the following steps of the cycle. Risk identification is carried out at two levels: a) Main risk level or macro-risk, which can be assimilated to a risk category and has the objective of prioritizing the main risks. b) Specific risk level or risk event, for which a maximum loss scenario is established and has the objective of determining the residual risk level, the result of which is relevant information to determine treatment and response measures. 2. Detailed analysis: The in-depth analysis of the main risks makes it possible to identify specific risks. These are analyzed in detail, including their causes and consequences, to identify critical controls and measures - both preventive and mitigating - and the modeling of a maximum loss scenario, which is evaluated according to severity and probability levels. With this, the residual risk exposure is obtained, which gives a position on the heat map and becomes a key input in determining treatment and response measures. 3. Monitoring and reporting: Monitoring consists mainly of following up on indicators associated with risk management, which must be made visible at least to those accountable for and the owners. 4. Treatment and response: Treatment and response measures are applied to reduce the level of residual risk, using a prioritization scheme, and should consider risk and return criteria, together with risk appetite (amount of risk the Company is willing to assume to achieve its strategic goals). Based on the process described above, in 2019 CMPC carried out the first step in the process: an identification of the main risks for the company, which involved an analysis of the industry and market environment complemented by one-on one interviews with company executives in a top-down order starting with the Chairman of the Board. This exercise produced a consolidated list of risks, which was then assessed by the new executive Strategic Risk Committee, headed by the CEO, reducing it to a list of the 20 top priority Main risks. This list was then reviewed and approved by the Board. To move towards better governance, during 2020, owners were identified for each of the top 20 risks and the corporate risk procedure was updated, which establishes the program methodology for the entire Company. Also, work was done on a document that establishes the Company's risk appetite and incorporates qualitative statements, together with performance indicators and metrics, to be monitored regarding tolerance thresholds. Also, an in-depth analysis of 12 of the 20 main risks was carried out, identifying a series of specific associated risks. Of the 20 main risks identified, there are various related to climate change such as: Water availability for industrial processes, Wildfires, Fiber availability, Positioning of the forestry industry, Product innovation for the market, Natural disasters and Pandemics, Environmental Incidents and Environmental Regulatory Changes, In parallel to the new risk management model and in order to deepen the identified risks, CMPC's Risk, Finance and Sustainability departments took the first steps towards a better understanding of the TCFD recommendations and an alignment of the areas in this regard. To do this, representatives from the three areas carried out a work plan where the progress in CMPC's new risk management model was presented and a deeper analysis of the risks and opportunities related to climate change identified through this model was made, and they were classified into physical and transitional risks and opportunities were identified and classified into the corresponding categories. At the same time, their potential financial impact was described, and during 2020 a first quantitative analysis of potential financial impact figures were estimated. An example of the application of the risk management model into transitional risks, includes the risk of changes in laws and regulations such as the possibility of an increase in carbon taxes paid by CMPC. We are currently subject to the Chilean Carbon Tax and it is feasible to expect Chile to expand this taxation to more emission sources, which is currently discussed in the Tributary Reform and potentially other countries where CMPC operates can introduce taxes on GHG emissions, which will impact CMPC given the high level of energy required for the operation of pulp and paper plants. That is why we track our emissions in all our operations and we have established a 50% scope 1 and 2 GHG emissions reduction goal by 2030. To achieve this, we are currently evaluating different projects, and during 2020 PPA's that assure the provision of 100% NCRE to all our industrial facilities in Chile were established for the 2020-2027 period. In the case of physical chronic risks, we have identified a continued decrease in water availability in the locations where we operate, reducing water accessibility for industrial operations, which is essential in the pulp and paper production. The shortage of water for production processes could lead to the need to incur on expenses on water from other sources or in technologies that reduce the use of water in our industrial processes. That is why we track the water use of all our facilities and we currently have in place a water reduction target of 25% per tonne of product by 2025. To achieve this, each facility is exploring and implementing water efficiency plans such as recycling and reuse opportunities.

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 regulation related to environment and climate change that we are subject to are considered in our risks assessments, especially focused in the possible changes that may occur in them. In the list of our top priority critical risks, product of our risk assessment this risk was identified as "Environmental regulatory changes". CMPC operations are regulated by the environmental laws in the countries where it is present. Climate change as well as any future changes in these environmental regulations or their interpretation, could have an impact on the company operations. It should be noted that non-compliance with these and other environmental regulations could incur costs that would affect the business' profitability. to manage this risk, CMPC has been adopting best practices for sustainable development of its businesses, which has meant the voluntary adoption of and compliance with standards stricter than required by local regulations. This has enabled the company to adapt to modifications in environmental legislation and meet the new requirements. All regulatory developments including environmental permits are considered by the Board when making investment decisions. For example, payments under the Chilean carbon tax are monitored. Chile has an actual carbon tax for 5 USD for every tonne of CO2, this applies for power sources generating over 50MWt. CMPC during 2020 payed the sum of 2,938,947 USD under this regulation. The price of the Chilean carbon tax might raise, that is why the emissions generated by boilers or turbines in our operations are monitored constantly. At the same time, we have established an emissions reduction target of 50% of our scope 1 and 2 emissions by 2030, and the actions that will be taken are prioritized in plants that pay high carbon taxes, by the evaluation of projects such as the replacement of fossil fuels into other biofuels.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Current and emerging regulations related to environment and climate change that the Company is or might be subject to are considered in our risks assessments. In the list of our top priority critical risks, product of our risk assessment this risk was identified as "Environmental regulatory changes", were the possibility of new environmental regulations and their compliance is considered a critical risk. This is important, because CMPC operations are regulated by the environmental laws in the countries where it is present, and Climate change as well as any future new environmental regulations could have an impact on the company's operations. It should be noted that non-compliance with these and other environmental regulations could incur costs that would affect the business' profitability. To manage this risk, CMPC has been adopting best practices for sustainable development of its businesses, which has meant the voluntary adoption of and compliance with standards stricter than required by local regulations. This has enabled the company to adapt to modifications in environmental legislation and meet the new requirements of emerging regulations. CMPC considers emerging environmental regulations a risk for its operations, that is why emerging regulations and possible changes in current ones are constantly being monitored by our legal team, and how it might affect our current operations is foreseen. For example, there are 2 emerging laws in Chile related to environmental issues. First there is the Climate Change law which purpose is to transform Chile's development into low carbon and to increase resilience to the effects of climate change. Considering this, CMPCs operations in Chile might be affected, because we might be obliged to decrease the emissions generated in our operations and invest in more efficient technology. That is why we have set a voluntary emission reduction target of 50% of our scope 1 and 2 emissions by 2030, providing mitigation efforts, before this new regulation is established. Another emerging regulations is the "extended producer responsibility law" which establishes recovery targets for all the containers and packaging a producer puts in the local market. This law is going to make as recollect 5% of the packaging CMPC puts in the market. For this, CMPC has Fibras its own paper collecting subsidiary, which might increase its collecting potencial in the future.
Technology	Relevant, always included	Technology risks are included in our risk assessment as "critical equipment failure". Critical equipment failure can be caused, among other things, by increase occurrence of extreme weather events or natural disaster due to climate change, such as floods or increase in days with extremely high temperatures in summer, just to mention a few. Should this risk materialize, it could have a significant impact on the continuity of operations, causing stoppages and affecting production goals and the ability to meet the needs of clients. It could also force unforeseen disbursements for asset maintenance and recovery, all of which may adversely affect CMPC's financial results. Additionally, the materialization of this risk can have significant consequences on the occupational health and safety of workers, the environment, communities and the reputation of the company. CMPC has planned maintenance standards and goals to avoid equipment obsolescence to manage the risk of failure. Additionally, the management of this risk considers the implementation of operational continuity plans to mitigate the impact if the risk materializes, whether due to endogenous or exogenous causes. The company has contracted insurance coverage through which a substantial part of its industrial risk is transferred. At the same time, CMPC has programmed industrial equipment and facilities maintenance schedules with the manufacturers of our key components and only these suppliers are allowed to intervene critical equipment. Also, the Company constantly invests in new technological equipment such as boilers, effluent treatment plants, among other critical components, being ahead of this risk. For example, during 2020 a improvement of the Laja pulp mill water treatment plant was financed. This new water treatment plant allows water use reduction and better effluent treatment, reducing the concentration of pollutants discharged to water sources.
Legal	Relevant, always included	Legal risks especially related to environmental accidents or incidents, are included in our prioritized risks as "Environmental Incidents". The operation of industrial plants could produce an environmental incident if the operating parameters go out of the established ranges. The potential occurrence of environmental incidents or accidents can affect people and the environment, as well as implying possible sanctions, the shutdown of operations, and damage to the company's reputation. CMPC continuously manages people, processes, and facilities to prevent the occurrence of environmental incidents and identify improvement opportunities. In turn, it has methods that, in case of the occurrence of an event, make it possible to deal with an emergency situation in a timely and effective manner, and with processes to track the causes to their origin and implement corrective actions to minimize the impact. Also, CMPC's guidelines are aimed at ensuring the proper use and care of renewable natural resources: water, air, soil, and other components to prevent environmental impacts resulting from the operation. That is why compliance with local regulations and laws is constantly monitor. For example, Air emission including NOx, SOx and particulate material are monitored in CMPC plants which are subject to emissions limitations by local regulations and reported to the authorities. Also, water quality discharge parameters are monitored by internal laboratories and in many cases more ambitious internal KPI for this parameters than the ones required by the law are established, focusing in avoiding non-compliances. For this same purpose, during 2020 a new Corporate Environmental Department was created.
Market	Relevant, always included	Market risks are considered in our assessment process and the main risk identified related to market is related to products, named as "product innovation for the market". CMPC identifies as critical the risks associated with not being able to innovate in step with the competition, not anticipating in a timely manner the needs of the market, or the emergence of substitutes and alternatives which would cause our products to lose value. The company is working on and will continue to be committed to a number of projects in order to increase its capacity and culture of innovation, as well as being market and consumer oriented. A large proportion of our production is for export to international clients, so changing demands in the market-place including increasing demands for environmentally friendly products are an important element of our risk assessment process. In addition to being perceived as sustainable, the products derived from natural and renewable fibers that represent more than 90% of CMPC's sales today, have the potential to directly replace in some cases fossil fuel-based products, such as retail bags., and in others - through innovations such as frozen salmon boxes or nanocellulose. In this aspect we perceive as a market risk not being able to satisfy the consumers new demands for our products on time. That is why we focus on innovation for the development of new products. For example, during 2020 a new paper bag for the pet food industry was created, which replaces plastic food bags from mixed plastics that are common in this industry and very hard to recycle. This new pet food paper bag is resistant, has a smart dispenser, is 100% recyclable and conserves the food in perfect conditions.
Reputation	Relevant, always included	Reputational risks, especially focus on the perception stakeholders have of our industry and operations and our relationship with them, are very relevant and are considered in our risk assessment. The two main reputational risks identified are "Community engagement and social license to operate "and "Positioning of the Forestry Industry". Regarding the first risk, CMPC runs forestry and industrial operations in different geographical locations. It is important for the company to be on good terms with these communities, as it could be considered a risk if these relationships worsen for our operational continuity, which can mean an interruption in production, leading to be unable to meet customers demands. That is why CMPC has a Community Engagement Policy, which aims to contribute to the environmental and social sustainability of all these communities, generating programs for employment, education and the furthering of productive development, including support for micro-entrepreneurship initiatives by families that live in these areas, among other initiatives. It should be noted that in Chile, such initiatives take place in more than 380 mapuche communities. At the same time, specially related to climate change, we have identified the risk of not managing to position forests, the use of biofuels and the creation of bioproducts as important in society. There are significant opportunities in positioning the forestry industry as one that plays a crucial role in capturing carbon and similarly for the wood industry. In addition, bioproducts have an enormous potential to be positioned as a renewable alternative to substitute fossil-based non-renewable products. For example, as prohibitions on plastic bags and other plastic products have risen, CMPC has expanded its paper bags production and sales during 2020. Depending on the handling of this issue by CMPC and its communication to internal or external stakeholders, the company has the opportunity to position itself among the best prepared to face and mitigate climate change especially through it's products or, otherwise, without this positioning and positive reputation, it would be a risk for the company's sales. That is why CMPC promotes the use of wood, paper and its products in various instance. For example, we have built our main Headquarters in Los Angeles, entirely of wood, being the biggest building made of wood in Latin America, certified as FSC and as LEED energy efficient.
Acute physical	Relevant, always included	Acute physical risks are included in our assessment as Strategic and operational risks. One of the main strategic risk related to acute physical climate changes is the increase of Wildfires. In recent years, conditions aiding the start and spread of wildfires have become more common, this conditions include: the increase of extremely high temperatures in summer, changes in wind conditions and decrease in precipitations which aid the propagation of forest fires and difficult their control, causing serious economic losses for our surrounding communities and our operation. This directly impacts our forest plantations, which could in turn suffer losses resulting in fiber scarcity. That is why the company has developed a program for the prevention of fires as well as systems for fire control in order to minimize their impact. The company allocates funds in its annual budget for the prevention and control of fire, as well as for training its workers and the local community in the 3 countries where we have forestry plantations, Argentina, Brazil and Chile. During 2019 CMPC allocated 6.5 million USD to fire prevention efforts and around USD 29.9 million to combating wildfires within our operations and outside of them specially focusing on fires that could spread to urban areas. At the same time, in our operational risks we identified the increase in the severity and occurrence of natural disasters, among the risks that could affect operational continuity. Should these risks materialize, they could have a significant impact on the continuity of operations, causing stoppages and affecting production goals and the ability to meet the needs of clients. They could also force unforeseen disbursements for asset maintenance and recovery, all of which may adversely affect CMPC's financial results. Different natural disaster might happen depending the location of our operations. For example, unexpected intense rain periods can affect access roads to forestry operations in Chile during winter or Brazil during summer, so we invest constantly in road construction and maintenance, to secure access to our forestry operations and avoid stoppages.
Chronic physical	Relevant, always included	Chronic physical risks are included in our risk assessment as strategic risks. One of the main strategic risks identified related to chronic climate changes is water availability for industrial operations and fiber scarcity due to changes in environmental conditions, specially focused both in water scarcity. Water is an indispensable and strategic resource for the company's industrial operations. Climate change could have an impact on the availability of water due to long-lasting decrease in precipitations and therefore, less accumulation of mountain water in the watersheds, which could lead to a chronic drought. That is why CMPC is examining new technology and processes for the reduction of its industrial water use, and has established the goal to reduce by 25% it's industrial water use by tonne of product considering all it's industrial operations in the 8 countries were we operate. In addition, we currently dispose of permits for the extraction of enough water to feed our operations. Regarding fiber scarcity, precipitations play a fundamental role in the growth and yield of plantations in the three countries were we have forestry operations (Argentina, Brazil and Chile). CMPC plantations are not irrigated and depend only on rain water for their growth. In Chile and in the Northern areas of Brazil rain is predicted to decrease, which could affect timber production. Also, there are other chronic risks which could affect the availability of fiber, such as an increase in pests affecting forest plantations due to enhancing climate conditions for their propagation. Should these events occur, it would result in the loss of forest assets, which could in turn impact the availability of timber for company operations or sale. To manage these risks, CMPC makes important investments in genetic improvements for it's plantations such as the eucahydro project which select eucalyptus phenotypes with increased yield, that decrease water consumption and selects specific phenotypes that can be settled successfully in regions with different future climate conditions, so we can secure the provision of fiber in future climate change scenarios. Regarding water for industrial operations, we are evaluating constantly new water recycling and reuse opportunities in our facilities, specially focus in the regions where water is predicted to be more scarce such as Chile's central-south regions were the majority of our paper and pulp operations are located.

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

Current regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Since 2017 the company is affecting the payment of the Chile Carbon Tax, that taxes GHG emissions and other atmospheric emissions (MP, SO2, NOx and CO2) according to the law 20,780, which affects fixed sources that individually or as a whole add up, a thermal power greater than or equal to 50 MWt (thermal megawatts) in each facility. During 2020 CMPC paid 2,938,947 USD under this regulation, with a current value of 5 USD for each ton of CO2. Many of CMPC Chile's facilities are subject to this tax such as Pacífico, Laja and Santa Fe pulp mills; Cartulinas Maule, Softys Talagante and Corrugados Cordillera. The identified risk is a potential increase of the operational costs due to a raise on the value of the chilean carbon tax or the facilities that can be subject to this tax, such as an incorporation of carbon taxes in other countries where we operate. Other possibilities in Chile currently include the changes that are being discussed for the Tributary Reform, where it's been suggested that all air emissions should be tax and not only the ones coming from fix sources that individually or as a whole add up, a thermal power greater than or equal to 50 MWt, which could increase the payment of this taxes by the Company.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2938947

Potential financial impact figure – maximum (currency)
6465683

Explanation of financial impact figure
The financial impact range was estimated with a carbon tax value of 10 dollars/tCO2 which would mean the Chilean Carbon Tax would double its price for the same 2020 emissions and 16 dollars/tCO2 which is the average value for the European Union, being future possible scenarios of carbon prices. The amount (metric tons) of emissions considered for the calculations were the same amount emitted during 2019 that were officially subject to this tax. If the carbon price doubled from 5 USD/tCO2 to the value of 10 USD/tCO2, and we maintained the same level of emissions it would meen paying 2*2,938,947 = 5,877,894 USD, So the lower range of financial impact would be 5,877,894 - 2,938,947 = 2,938,947 USD, being considered the increase in what we are currently paying, the potential financial impact. The same is done to calculate the maximum potential financial impact, but with a 16 USD/tCO2 where an increase from 5 USD to 16 USD would mean an increase of 3.2 times the payment for the same level of 2019 emissions, so 2,938,947*3.2= 9,404,630 de difference being the maximum financial impact range: 9,404,630 - 2,938,947= 6,465,683 USD.

Cost of response to risk
14851846

Description of response and explanation of cost calculation
CMPC's Boxboard Valdivia facility, is a paper board production facility and one of the biggest in Latin America. This facility requires energy for its paper production, which has increased during the years due to customers demands, increasing the demand for energy supply, that is why, the facility was in need of a new boiler. When the new boiler project was designed it was important to consider the possibility that increasing thermal power could lead to the facility becoming subject to the carbon tax. In this line, various boilers were replaced for a new energy efficient biomass boiler, which started operating during 2019, and was refinanced by our 2019-2020 green finance issuance. The 14,851,846 USD include all the capital expenditures for this boiler: purchase of the equipment, costs of engineering, studies and cost of installation of the new boiler at the plant. The new boiler replaces 2 older less efficient biomass boilers and 1 fuel oil boiler, and it is designed to not surpass the installed thermal power of the plant that makes you subject to the chilean carbon tax, that would have happened if this action was not taken, so it implicates a real response to possible increases in the payment of carbon taxes. At the same time, this action reduces particulate matter emissions among other air quality parameters improvements, which are also subject to the chilean carbon tax, and has positive impacts on the surrounding population's air quality, among other social benefits.

Comment
The costs of management includes all the cost related to the purchase of the boiler and it's installation in the plant.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Increased likelihood and severity of wildfires

Primary potential financial impact
Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
One of the main strategic risk related to acute physical climate changes for our Company is the increase severity and propagation of Wildfires. In recent years, conditions aiding the start and spread of wildfires have become more common, this conditions include: the increase of extremely high temperatures in summer, changes in wind conditions and decrease in precipitations which aid the propagation of forest fires and difficult their control, causing serious economic losses for our surrounding communities and our operations. This directly impacts our forest plantations, which could in turn suffer losses resulting in fiber scarcity. That is why the company has developed a program for the prevention of fires as well as systems for fire control in order to minimize their impact. The company allocates funds in its annual budget for the prevention and control of fire, as well as for training its workers and the local community in the 3 countries where we have forestry plantations, Chile, Argentina and Brazil. Fire outbreaks occur in the countries we have forestry operations mainly during spring-summer seasons. During the 2019-2020 season 1,605 outbreaks were registered in our forest assets and 4,261 ha were affected. That is why, CMPC takes various preventive measures and invests in fire control.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
16600000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The 16.6 MMUSD are estimated considered the following variables: - C: estimated annual increase in fire combat and control costs = 10 MMUSD - D: fire insurance deductible = 20 MMUSD - F: frequency of occurrence of extreme fire events = 3 years Formula: C + D/F = 10 + 20/3 = 16.6 MMUSD CMPC hires every year fire insurance for its forest assets, which in case of extreme fire events have a deductible to be payed of 20 MMUSD. At the same time, CMPC invests in fire prevention, but in case no prevention efforts were made there could be an increase in fire combating costs, for the increase of damaged caused by wildfires, of around 10 MMUSD. At the same time, some years have worst fire events and in the case of our operations during the 2016-2017 season it was the worst fire season so we estimate a 3 year period for an extreme fire event to occur. So the financial impact figure is estimated considering these factors and reflects the costs it would have for the company in case an extreme fire event occured an no preventive measures had been taken ahead.

Cost of response to risk
41000000

Description of response and explanation of cost calculation
Considering the increasing occurrence and severity of wildfires due to aiding climate conditions, CMPC increases each year the amount allocated to fire prevention and control, so it can protect its forests assets as well as the communities surrounding them. During 2020 CMPC allocated 5.5 million USD to fire prevention efforts and around USD 35.5 million to combating wildfires, so the cost of response represents the total amount of money spent by CMPC during 2020 in Fire Prevention and Control, which equals to 41,000,000 USD. - The 5.5 million USD were spent in the following preventive actions: preventive forest management, which is understood as the alteration, clearing or elimination of green or dry vegetation and plant waste to avoid starting a fire or to slow down its spread and mitigate any damage should a fire start; year-round training to its workers and community groups such as neighborhood associations, schools, municipalities, local authorities and fire departments, and assisting them in forming neighborhood prevention committees; firefighter trainings, fire prevention campaigns, among others. - The 35.5 million USD dedicated to combating wildfires were spent in the following: more than 27 aircrafts and 41 ground vehicles, 48 brigades, 100 detection and monitoring towers, establishment and management of personnel support, additional variable support brigades with 25 units of 1,300 people, 8 detection cameras and other operational expenses, such as protection equipment and tools. Thanks to these investments in prevention and control, 1,605 fire sources were controlled during the 2019-2020 and only 4,261 hectares were damaged, which is a lot less than the worst fire season were over 19,000 hectares were damaged.

Comment
The cost of response includes all the preventive and control of forest fires investments made by CMPC during 2020.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
One of the main strategic risks identified related to chronic climate changes is water availability for industrial operations. Water is an indispensable and strategic resource for the company's industrial operations, because paper and pulp production can not be achieved without it. Climate change could have an impact on the availability of water due to long-lasting decrease in precipitations and therefore, less accumulation of mountain water in the watersheds, which could lead to a chronic drought. That is why CMPC is examining new technology and processes for the reduction of its industrial water use, and has established the goal to reduce by 25% it's industrial water use by tonne of product by 2025, considering all it's industrial operations in the 8 countries where we operate. Lately, Chile especially it's central/southern regions, have experienced annual decreases in precipitations in the last few years, and here is where we have the majority of our operations. According to our analysis using local data bases and the WRI aqueduct tool, 10 of our 43 productive facilities are located in areas which have high probabilities of facing water related risks, associated to a decrease in water availability and water stress. At the same time, during 2020 Chilean authorities declared various regions in state of Water Scarcity, including Maule, Buin, Til Til, Talagante and Puente Alto, where 7 facilities of CMPC Chile are located: Corrugados pulpa moldeada, Corrugados planta Cordillera, Corrugados Buin, Corrugados Til Til, Softys Puente Alto, Softys Talagante and Boxboard Maule, and all this facilities need water for their industrial processes. At the same time, our Sackraft plant in Mexico is also at water risk and could present future water scarcity scenarios, however they have not been declared so by local authorities.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
30770892

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact figure was estimated considering the following variables: - W: total water withdrawals for CMPC during 2020: 207,976,206 m3 - T: total water withdrawals provided during 2020 by third parties: 2,836,926 m3 - P: average water price charged by water utilities: 1.5 USD/m3 - E: Estimated percentage of additional water that would have to be supplied by third parties in case of water scarcity: 10% Financial Impact formula: (W-T)*E*P = (207,976,206-2,836,926)* 0.10 * 1.5 = 30,770,892 USD Due to decrease in water availability and increase in water demand, and if we did not take reduction actions in our water withdrawals, the company estimates that approximately a 10% of its withdrawals would have to be provided by third parties, meaning securing a new water supply in case of scarcity. That is why we estimate the potential impact figure as an increase of the water provision by third parties from new water sources, multiplied by the average cost of water utilities today, considering that withdrawals would stay the same as 2020, with no further reduction activities.

Cost of response to risk
10792302

Description of response and explanation of cost calculation
Considering the risk of water availability for industrial operations, CMPC is constantly investing in improving water treatments and in opportunities to reduce water consumption in its operations. During 2019, CMPC issued its third green bond and first green loan with expenses for 2 years. During 2020, 21% of its investment, equivalent to 10.7 million USD, was assigned to the sustainable management of water and liquid effluents, being this the total cost of response we consider. This amount considers projects such as the reduction of water consumption in industrial processes, systems for recycling and reuse of wastewater and the development of installation with better technologies and systems that improve the quality of treated water, reducing organic content and volume of effluent. The 2020 investments of 10,792,302USD are allocated in 4 projects: 1) System for the Recirculation and Recovery of Water at the Softys Zarate facility in Argentina for an amount of 429,570 USD. This project will reduce the total water consumption of the Zarate tissue paper mill. This includes improvements in the wastewater treatment plant, and new infrastructure that allows recirculation of wastewater reducing fresh water use. 2) Effluent treatment plant improvement at Softys Caieiras facility in Brazil for an amount of 3,230,935 USD: This Improvement of the effluents treatment plant at the Caieiras tissue paper mill will improve the quality of discharge in the river well below the new requirements of the National Environmental Agency. 3) Effluent Treatment Plant Improvement Project at the Pulp Laja mill in Chile for 6,510,545 USD. This project will allow the improvement of the operational efficiency of the water treatment plant at the Laja pulp mill and of the quality of its effluent, as well as reduce water consumption. The amount will be spent in new infrastructure as well as operational improvements. 4) New Effluent Treatment Plant at the Maderas Clear Los Angeles plant in Chile for $621,252 USD. This treatment plant will replace the existing plant and will improve the quality of effluent of the Los Angeles remanufactured wood plant. The total amount is the necessary for the construction of the plant including engineering.

Comment
Total cost includes all projects financed during 2020, all projects have not been yet implemented, but will be in the next 2 years.

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
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
CMPC Biopackaging business unit, offers great amount of paper and packaging products which are made from recycled paper recollected by our own paper collecting subsidiary Fibras and of virgin fibers produced in our pulp mills, coming from timber from our renewable, FSC certified plantations. Lately, an increasing demand for sustainable recyclable paper packaging products has been seen due to new laws and regulations and changes in consumer preferences. For example, during 2018 plastic bags in retail and commerce were prohibited in Chile, making retail companies look into new packaging solutions for their customers, seeing paper bags as a possible solution to replace them. This incremented paper bags sales, and our Sackraft Chile subsidiary which makes paper sacks invested in new machines that make paper retail bags to satisfy the increasing demand for new recyclable packaging options from renewable origin which have less embedded emissions. This new machine started working during 2019, and we foresee to install 2 more machines in other subsidiaries such as Edipac during 2020 and increase paper bags sales, among other of our low emissions goods such as wood, packaging and paper. And, at the same time, continue investing in product development and innovation, and in the expansion of our business, purchasing new facilities that produce these products.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
3000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The financial impact figure corresponds to the income from sales of the paper bags produced in Sackraft Chillán during 2020 we sold approximately 12,400,000 paper bags. If we hadn't realized this opportunity we would have lost the chance to earn the USD 3,000,000 corresponding to the earnings of the sales of these bags, so we consider this the potential financial impact. The financial impact figures was estimated as: the sales of 12,400,000 paper bags, times an average price of 0,242 USD per bag, which equals earnings for 3 million USD approximately.

Cost to realize opportunity
3649667

Strategy to realize opportunity and explanation of cost calculation
CMPC is constantly innovating and investing in new facilities and machines to create new products that provide sustainable solutions for clients, such as alternatives to plastic bags and other fuel fossil derived packaging options, whose consumption is expected to decrease in the short term in sectors such as: supermarkets, department stores, among others. In Chile during 2019 a new law prohibited the use of plastic bags in supermarkets and retail stores, which lead CMPC to be able to provide paper bags as an alternative to these clients. That is why during 2019-2020 CMPC invested in 3 new paper bags machines that were installed in Sack Kraft Chillan and in the Edipac Facilities. The cost to realize the opportunity corresponds to the funds allocated to the 3 new paper bags machine purchased and installed by CMPC during 2019-2020. The total cost of the project was USD 3,649,667 which were spent in: acquisition of the 3 machines for the production of paper bags with a flexible handle and the production capacity of 36 million bags per year; a new printing machine with a capacity of 600 mts/min; and the costs of their installation in the Sackraft Chillan and Edipac facilities.

Comment
This costs includes the cost of the machines plus all the cost of implementations and installations. during 2019-2020.

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Other, please specify (Increased yields in forestry plantations leading to resource efficiency (timber))

Primary potential financial impact
Increased revenues resulting from increased production capacity

Company-specific description
CMPC has forestry operations in 3 countries, Chile, Brazil and Argentina. Our plantations are mainly eucalyptus and pine trees, which provide most of the timber for our pulp and paper operations and cover 652,166 hectares considering the 3 countries as of 2020. Our three business units: Celulosa, Biopackaging and Softys, depend directly or indirectly of these forestry plantations and the timber they provide, specifically because timber is used in the Celulosa business unit for the production of pulp and wood products, and then the pulp produced is in part used in Biopackaging and Softys for the production of paper, packaging and tissue products, being all part of an integrated company. Considering this, constant innovations in eucalyptus and pine phenotypes with increased yields and that can tolerate future climate scenarios such as increase in temperatures and future water scarcity, are extremely important for the future of our business, and can help us improve the efficiency of our plantations.

Eucalyptus that can grow in Chile's areas which are predicted to have less water availability are being developed, among other continuous innovations developed by our Technology and Planification area. We have found the opportunity that through biotechnology we can select pine and eucalyptus phenotypes which have increase yields and at the same time are resilient to changing conditions, being better adapted to future climate conditions in each of the countries where we operate. By increase yields we mean, we can maximize the tons of fiber we can obtain by hectare of plantation, being able to increase production of fiber without the need to use additional land.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
60378000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
CMPC carries out different trials and studies analysing, under different climatic conditions, the changes in growth of different phenotypes of pine and eucalyptus. In this aspect it has been determined that despite the future higher temperatures and less water availability through the use of biotechnology and the use of genetics, better adapted phenotypes can be selected and an increase in yields can be achieved. If this increase in yields of 12.5% that trials and studies have shown are achieved, and we keep the same hectares of plantations in Chile, we predict to have a 60.37 MMUSD increase in earning according to the following formula: H: Hectares of plantations in Chile 447,526 y: increase in yield: 12.5% fm: m3 of fibers obtained by hectare: 456 ft: m3 of fiber needed for a ton of pulp: 4.2 P: Average pulp price per ton: 169 USD a: Average growth years for harvest: 17 Formula: H * y * (fm / ft) * P/ a = 447,526* 0.125 * (456/4.2) * 169/17 = 60.378 MMUSD approximately.

Cost to realize opportunity
358708347

Strategy to realize opportunity and explanation of cost calculation
Over the last few years, important innovations have been incorporated into the various stages of the forest cycle, including mechanization of plant production, land and plantation clearance, harvesting and forestry logistics. In the case of improving our plantations yields, over the last years new hybrid clones have been incorporated into commercial plantations at CMPC mainly in Chile. These phenotypes maximize the production of timber (m3 per hectare) and have better resistance to frosts and improved tolerance to defoliation caused by pests and new climatic conditions. On 31 December 2017, CMPC designated the sum of US$ 358,708,347 to finance eligible green projects for the next 10 years. This included $5,719,719 USD spent in: research and development of new phenotypes for our plantations: 40% approx was spent in the development of eucalyptus hybrids with better yield as an alternative to Eucalyptus Globulus, and the other 60% approx in genetic improvement strategy for better yields in Radiata pine and Eucalyptus Nitens. So, the total cost of this research and development $5,719,719 USD for improvement in species yields, is considered the total cost to realize the opportunity. It is important to state that CMPC does not use genetically modified organisms.

Comment
This costs represent the money spent during 2017-18, disclosed in our green bond, in the development of hybrids.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

Primary potential financial impact
Increased diversification of financial assets

Company-specific description
Related to its commitment to sustainability, CMPC has explored and continuous to explore new green finance opportunities in the markets of the main countries where we operate and worldwide. CMPC became the first Chilean company to issue a green bond in 2017 for the amount of USD 500,000,000 with a 10-year term. This led to CMPC receiving recognition in the New Countries Taking Green Bonds Global category of the Green Bond Pioneer Awards by the Climate Bond Initiative in May 2018. This was followed by the first green bond to be issued in the Peruvian market in 2018 by the CMPC subsidiary Softys Peru (legal name: Productos Tissue del Perú S.A.C.) for the amount of approximately USD 30 million. Funds from the 2017 and 2018 bonds were fully allocated by the end of 2018. Finally, in 2019 CMPC announced two new green financing instruments: a green bond in the Chilean market in July for CLF 2.5 million (approximately USD 93 million) and a green loan syndicated by Japanese banks for USD 100 million in September, making it the first company to access this new form of financing in Japan. These two instruments were united under the umbrella of the Empresas CMPC S.A. May 2019 Green Finance Framework. Their funds were dedicated to financing or refinancing, partly or completely, new and/or existing eligible projects with environmental benefits. The use of proceeds and environmental benefits for these instruments were published during 2020 in the CMPC Green Finance Report. This is yet another pioneering milestone for CMPC, further reinforcing its commitment to sustainable development. It complies with the standards established in the International Capital Market Association (ICMA) Green Bond Principles 2018 and the Loan Market Association (LMA) and Asia Pacific Loan Market Association (APLMA) Green Loan Principles 2018 that promote market integrity in the market for green finance through directives that recommend transparency, disclosure and accountability. During 2020 CMPC took yet another step on this direction and signed a Credit Line related to sustainability (SLL) for USD 100 million for a 2-year term. This SLL interest rate is determined by CMPC's progress towards the achievement of its 4 Corporate Environmental sustainability goals: reducing 50% of its scope 1+2 emissions and adding 100,000 hectares by 2030; and becoming a zero waste to landfill Company and reducing water use per tonne of product in 25% both by 2025.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
518033773

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
518,033,773 USD corresponds to the maximum sum we have issued a green bond for until now, so we consider it the maximum potential financial impact figure for the moment, if we hadn't realized this opportunity of issuing a green bond, we would had not obtained this financing. The 518,033,773 USD were allocated in the following green projects: -Sustainable Forest Management $460,144,032 USD which include planting and replanting of eucalyptus and pines, development of hybrids and genetic improvements. -Polluting Prevention and Control: $ 38,822,726 USD which include: Gas capture and incineration at Pacífico mill, Gas capture and incineration TRS fiber lines at Laja mill + Effluent reduction at Laja mill + Modification of gas system at Pacífico/Reduction of PM CaO Boiler. - Sustainable Water Resource Management $ 2,333,827 USD spent in a fiber recovery system in Boxboard Valdivia plant. - Preservation of Biodiversity and Restoration of Forest $ 1,738,561 USD: spent in Categorization, description and conservation of native forests and native forest restoration. - Energy Efficiency $ 14,994,627 USD spent in energy efficient projects and barges for the transport of wood in the Guaiba pulp mill.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
To realize this opportunity CMPC has continue expanding its green finance opportunities, having already issued 3 green bonds, a green loan syndicated by Japanese banks and an SLL. For the 2019-2020 green finance mechanisms a cumulative total of USD 254,350,679 as of December 31, 2020 were allocated through a Green Bond issued on the Chilean Market and the Samurai Loan. During 2020 USD 91,450,773 were spent of that total. These USD 254,350,679 were allocated to eligible green projects in the following categories: ● 57% was allocated to Sustainable Forest Management spent in planting and replanting of eucalyptus and pines. ● 1% was allocated to Preservation of Biodiversity and Restoration of Forest: spent in Categorization, description and conservation of native forests and native forest restoration. ● 6% was allocated to Pollution Prevention and Control: spent mainly in the new Cartulinas Valdivia biomass boiler. ● 5% was allocated to Energy Efficiency: The project considers a reduction in steam consumption and fiber loss at the main paper machine in Puente Alto cardboard mill. It involves the replacement of trays, water receptacles, scrapers and coating of the press rollers, among others. ● 15% was allocated to Sustainable Water and Wastewater Management: spent in the modernization and building of 4 Effluent treatment plants. ● 3% was allocated to Eco-Efficiency and/or Circular Economy Adapted Products: spent in the new retail paper bag machines in Sackraft Chile and Edipac. The project involves the acquisition of a machine for the production of paper bags with a flexible handle, the production capacity of 36 million bags per year, and a new printing machine with a capacity of 600 mts./min. ● 13% was allocated to Green Buildings: CMPC built its new corporate headquarters in the city of Los Angeles, Chile with more than 5000 m2 of office space and a capacity of 470 employees. It was built using the highest efficiency standards prioritizing the use of wood in its structure and infrastructure in order to take advantage of natural light.

Comment
The cost to realized opportunities is the total amount of funds allocated during the 2019-2020 Green finance issuances.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	We are still working to develop our net zero plan, so when we have a completely defined plan, we will introduce it in our AGM.

C3.2

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

C3.2a

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

Climate-related scenarios and models applied	Details
RCP 4.5 RCP 8.5	Due to the consequences of climate change, droughts, increase in average temperature, variations in rainfall, among others, CMPC's activities could be affected, both negatively and positively in its production processes and supply chain, specially related to fiber availability for its operations. CMPC is currently working on two lines of adaptation to climate change in its forest operations: 1) Genetic Focus on the development of genetic materials with greater capacity to adapt to the most likely climatic conditions for the regions where CMPC operates, for example, with greater resistance to frost, drought and even greater resistance to attack by insects and fungi that may proliferate due to changing environmental conditions 2) Silvicultural development: Revise silvicultural establishment and management prescriptions to respond to changes in environmental conditions. To do this, since 2019 CMPC's Forestry Technology and Planification Department has been conducting quantitative scenario analysis about the climate sensitivity of temperature and precipitation variables considering the RCP 8.5 and RCP 4.5 scenarios for our forestry assets in Chile, corresponding to 65% of our total forestry plantations. We considered this scenario of "business as usual" and extreme warming because we expect this to be the worst scenario where we would have to operate in the future and a more positive scenario the RCP 4.5, to see the differences in the effects depending on the changes in conditions for our plantations. Our Forestry assets are inherently vulnerable to physical climatic changes and events, specially to high temperatures and decrease in precipitations, because our plantations depend only on rain water for their growth (we do not irrigate our plantations), being changes in precipitation patterns especially critical and temperatures increases affecting evapotranspiration are also very relevant. The studies are long-term and consider the 2021-2070 period which comprises 2 plantations rotations, because trees take and average of 24 years to be ready for harvest, being a relevant time period for our operations. The idea of the study is to know the effect of this future precipitation and temperature scenarios on the growth of plantations, this will help us make the best decisions regarding the species to plant and variations or management schemes (initial densities, pruning schemes, final densities, better planting locations) among other important parameters to be prepared to continue operating in future climate change scenarios. Data inputs include historical data of our operational inventories in Chile, at first, but now we are finishing work based on trials and permanent plots, having empirical past and also future data from our operations and locations. The study comprises 7 lines of work: Wildfires, Water Availability, Phytosanitary Scenarios, Site Productivity, Site Vulnerability, Genetics and Economic effects. The study is still ongoing, but the first results show that forestry productivity, as changes in trees growth, will be significant in the central zones of Chile, were growth, measured as tree height, will be reduced and as we go south there will be growth gains, due to the changes in climatic conditions, but they will not be enough to compensate the losses. These results, influence our business strategy, which through it's Beyond project which gathers innovative ideas for CMPC's next 100 years, has determined 7 Innovation Focuses, which one is "Future Management of Forest Assets" and has a dedicated line of work called "Plantations for the future climate" which concentrates in eucalyptus and pines genetic material development, that determine phenotypes for the future climate conditions to secure CMPC's operational continuity.

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	Due to the particular characteristics of our business CMPC sees the development and expansion of low emissions goods and services as a key opportunity for our business and as an opportunity to increase sales, that can have positive financial impacts on our company. Our strategy involves generating new investment plans to increase the offer of sustainable renewable origin products such as the above mention, expanding our share in the market. Our strategy in the short-term (next two years) include the purchase of new paper packaging production facilities and the installation of 2 new machines for paper retail bags. CMPC offers great amount of paper and packaging products which are made from recycled paper collected by our own paper collecting subsidiary Fibras and of virgin fibers produced in our pulp mills, coming from timber from our renewable, FSC and PEFC certified plantations. Lately, an increasing demand for sustainable recyclable paper packaging products has been seen due to new laws and regulations and changes in consumer preferences. For example, during 2018 plastic bags in retail and commerce were prohibited in Chile, making retail companies look into new packaging solutions for their customers, seeing paper bags as a possible solution to replace them. This incremented paper bags sales and our Sackraft Chillán subsidiary which makes paper sacks invested in new machines that make paper retail bag to satisfy the increasing demand for new recyclable packaging options from renewable origin which have less embedded emissions. This new machine started working during 2019 and 2 more machines were installed during 2020, increasing paper bags sales, among other of our low emissions goods such as wood, packaging and paper. Other products include "natural kraft" which is a development of our Boxboard division. This is a product that maintains the characteristics of conventional cardboard, while eliminating the final stucco. When the stucco is eliminated, the use of chemicals in the process also decreases, generating a decrease in the product's carbon footprint. Lastly, during 2020 CMPC bought a new sack kraft paper facility in Mexico, to increase share in that market and exports to the United States of Packaging paper sacks.
Supply chain and/or value chain	Yes	One of the main acute physical risk identified that can affect our value and supply chain is the increase propagation and severity of wildfires. In recent years, conditions aiding the start and spread of wildfires have been enhanced such as the increase of extremely high temperatures in summer, changes in wind conditions and decrease in precipitations which aid the propagation of forest fires and difficult their control, causing serious economic losses for our surrounding communities and our operation. In the short-term, and on a yearly basis, CMPC has enhanced its fire prevention and control plans and programs in all three countries with forestry operations, Argentina, Brazil and Chile, in order to better safeguard persons and company owned and third-party forest assets, being the company's commitment the protection of human life and the ecosystem. The most strategic decision for the Company in this aspect has been allocating funds in its annual budget for the prevention and control of fire, as well as for training its workers and the local community in the 3 countries. These funds were more than 41 millions USD during 2020, 5 million more than the previous year. The funds are concentrated in 3 main focus areas of our strategy: prevent, educate and combat wildfires. Specific actions taken include for prevention: Fire prevention training for Community Prevention Network, committees and support for neighborhood watch committees. Financial support to 17 fire companies for the purchase of equipment and educational campaigns in schools. Combat actions include: more than 27 aircrafts and 41 ground vehicles, 48 brigades, detection and monitoring towers, and other operational expenses, such as protection equipment and tools. In the long-term (12-24 years) we are working into the development of eucalyptus and pine phenotypes which tree bark is more resistant to fires, diminishing losses in our plantations due to wildfires. Ass well as using constantly new technology for modeling fire spread scenarios when they occur.
Investment in R&D	Yes	Investments in R&D are essential for realizing two of the main opportunities identified in 2.4. This is why CMPC during 2019 created a Corporate Innovation Department. This department, thinking about the Company's next 100 years, as CMPC has 101 years of history, during 2020 CMPC took the strategic decision of creating "Beyond". CMPC Beyond was created in August 2020, with the support of the Board of Directors and Senior Executives, through the Encuesta de Oportunidades de Futuro (Future Opportunities Survey), an online tool in which more than 2,039 collaborators participated, who were asked about the main lessons learned after Covid-19 and the opportunities they identified for the future in this context. With this background, and considering the moment of its centenary, the Company creates CMPC Beyond, a transformational initiative developed internally with the support of Kairos Future, a Swedish company specialized in future analysis. As an initial milestone, the results of the survey were presented by CMPC's CEO. The next step was to form the Futuro Innovación (Future is Innovation) Team (EFI, for its acronym in Spanish), a driving force that is made up of more than 60 committed professionals from all areas and countries of the Company. They worked on trends that will affect the sustainable consumer in the year 2050, with time horizons for the next 3 months, 3 years, 10 years, 30 years, and 100 years. Thanks to this work, more than 140 trends were identified and prioritized to build the CMPC Trends Map, of which 27 were selected, grouped into four macro-trends: "Consumer and Lifestyle Expressions," "Climate Change," "Economic Power" and "Intelligent Technological Revolution." Through workshops and expert support, EFI selected innovation focuses and designed the first portfolio of initiatives that will help build the company of the future, 10 of which are already under development. From the 7 innovation focuses established many are directed to creating initiatives directly related to climate change adaptation and mitigation, such as future management of forest assets, Sustainable and smart packaging and water an essential element for everyone. Also, the Future and Innovation Committee (CFI) was formed, made up of the Chief Executive Officer and senior executives, to constantly supervise the implementation of this initiative.
Operations	Yes	As described in 2.3 there are several risks related to climate change that could affect our operations such as increased carbon tax and decrease water availability for industrial operations due to chronic decrease in precipitations, just to mention a few. So, contributing to climate change mitigation such as emissions reduction initiatives and promoting carbon capture and storage through our forest assets is essential. Also, water is an indispensable and strategic resource for the company's industrial operations, because paper and pulp production can not be achieved without it. Climate change could have an impact on the availability of water due to long-lasting decrease in precipitations and therefore, less accumulation of mountain water in the watersheds, which could lead to a chronic drought. That is why adapting to water scarcity situations is essential for the Company. Considering this, in line with its sustainability strategy, CMPC has taken the strategic decision of establishing 4 corporate environmental goals related to climate change adaptation and mitigation which cover all its operations in the 8 countries; Specifically the targets are: being a zero waste to landfill company and reducing water use per ton of product by 25%, both by 2025; adding 100,000 hectares for conservation and/or protection and reducing by 50% its scope 1+2 emissions considering all its facilities, both by 2030. It is important to say that the emission reduction target was modelled considering the 1.5°C scenario using the SBTi tool. Considering these targets, CMPC is examining new technology and processes for the reduction of its industrial water use. The investments that are being evaluated for water reduction focus on the facilities which have higher water use such as the pulp facilities and considering the geographical locations where water is predicted to be more scarce, like Chile. In the case of emissions different investments are being evaluated and during 2020 CMPC acquired PPA's that secure the provision of 100% renewable energy for 2020 to 2027, reducing 250,000 tCO2e. In the case of conservation CMPC is developing a new conservation strategy and related to waste important progress has been made using by-products and recovering waste streams.

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	Capital expenditures Capital allocation Access to capital	CMPC climate-related risks and opportunities identified influence it's financial planning in different aspects: Capital allocations: Fire prevention and control. CMPC allocates funds in it's annual budget especially dedicated to fire prevention and control due to the increase acute risk of severity and likelihood of wildfires . As mentioned previously, in 2.3 CMPC allocated during 2020 over 40 million USD to fire prevention and control activities. The funds are allocated each year before the fire seasons and are estimated considering the severity of previous years fires and the damaged caused, as well as considering the needs foreseen to improve and maintain the already existing infrastructure for fire prevention and control. Capital expenditures: Related to the opportunity of expansion of low emissions goods, as mention of 2.4, CMPC has invested and plans to invest in new paper bag machines in the next 2 years. During 2018 plastic bags in retail and commerce were prohibited, making retail companies look into new packaging solutions for their customers, seeing paper bags as a possible solution to replace them. This incremented paper bags sales and our Sackraft Chillán subsidiary which makes paper sacks invested in new machines that make paper retail bag to satisfy the increasing demand for new recyclable packaging options from renewable origin which have less embedded emissions. This new machine started working during 2019 and during 2020 2 more machines were installed, increasing production capacity. Access to capital: CMPC due to the nature of it's operations, has explored and continuous to explore new green finance opportunities in the markets of the main countries where we operate and worldwide to diversify the financial assets the company has access to. CMPC became the first Chilean company to issue a green bond in 2017 for the amount of USD 500,000,000 with a 10-year term. This led to CMPC receiving recognition in the New Countries Taking Green Bonds Global category of the Green Bond Pioneer Awards by the Climate Bond Initiative in May 2018. This was followed by the first green bond to be issued in the Peruvian market in 2018 for a 6 year term, by the CMPC subsidiary Softys Peru for the amount of approximately USD 30 million. Funds from the 2017 and 2018 bonds were fully allocated by the end of 2018. In 2019 CMPC announced two new green financing instruments: a green bond in the Chilean market in July for CLF 2.5 million (approximately USD 93 million) and a 10 year term; and a green loan syndicated by Japanese banks for USD 100 million and a 5 year term in September, making it the first company to access this new form of financing in Japan. These two instruments were united under the umbrella of the Empresas CMPC S.A. May 2019 Green Finance Framework. Their funds were dedicated to financing or refinancing, partly or completely, new and/or existing eligible projects with environmental benefits for the next 2 years. Lastly, during 2020 CMPC commited a Sustainability Linked Loan (SLL) for 100 million USD for a 2 year-term. The loan's interest rate is linked to the performance of our 4 corporate environmental sustainability goals related to emissions and water reduction, zero waste and increasing conservation and protection areas.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

No further information.

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

Year target was set
2019

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (market-based)

CMPC Chile's scope 2 emissions are market-based and the other 7 countries in which we operate scope 2 emissions are location based. We have the majority of our operations in Chile, so we consider market base, which covers the majority of our scope 2 emissions.

Base year
2018

Covered emissions in base year (metric tons CO2e)
2396435

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
50

Covered emissions in target year (metric tons CO2e) [auto-calculated]
1198217.5

Covered emissions in reporting year (metric tons CO2e)
2142060

% of target achieved [auto-calculated]
21.2294512473737

Target status in reporting year
Underway

Is this a science-based target?
Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition
1.5°C aligned

Please explain (including target coverage)
On september 2019 CMPC publicly established it's tangible commitments towards sustainable development, related to emissions reductions, waste disposal, conservation and water use. About the emission reduction target, CMPC set a company-wide target to reduce by 50% all it's scope 1+2 emissions by 2030, considering 2018 as baseline, including all it's facilities where it has operational control in the 8 countries in Latin America where we operate. This emission reduction target was estimated using the SBTi-tool by an absolute contraction approach and considering the 1.5°C scenario, so we consider it a science-based reduction initiative. We have not yet submitted our target to the SBTi because we are still setting our scope 3 emission reduction target, but we plan to pledge in the next 2 years. It is important to mention that the target covers all of CMPC's operations so recalculation of the baseline was made during 2020, as recommended by best practices, because during 2020 CMPC acquired 2 new facilities, one in Brazil (Sepac) and one in Peru (Panam) which are now incorporated in the goal. With this goal, CMPC is contributing to target 13.3 of the Sustainable Development Goal (SDG) “Climate Action”, which dictates: “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”.

C4.2

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

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Waste management	metric tons of waste diverted from landfill

Target denominator (intensity targets only)
<Not Applicable>

Base year
2018

Figure or percentage in base year
68.97

Target year
2025

Figure or percentage in target year
100

Figure or percentage in reporting year
78.8

% of target achieved [auto-calculated]
31.6790203029326

Target status in reporting year
Underway

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
On september 2019 CMPC publicly established it's tangible commitments towards sustainable development, related to emissions reductions, waste disposal, conservation and water use. In terms of waste management, CMPC determined that it is going to be a zero waste to landfill company in all it's industrial operations in the 8 countries in which we operate, considering 2018 as baseline. In this terms, we do not measure our targets like requested in CDP as waste diverted from landfill, we measure it as percentage of waste sent to landfill in the current reporting year, compare to the total amount of waste sent to landfill during the baseline year. Considering this, we have made 28.6% of progress because during 2018 we disposed 714,299 tonnes of waste and during 2020 we disposed509,843 tonnes, so the percentage is calculated as: ((waste to landfill 2018 - waste to landfill 2020)/ waste to landfill 2018))*100. The baseline of this target was also recalculated including CMPC's new facilities acquired during 2020. For this reporting purpose the percentages in base year and percentage in reporting year indicate the percentage of waste recovered, recycled or reused during those year from the total amount of waste generated. With this goal, CMPC is contributing to target 12.5 of Sustainable Development Goal (SDG) “Sustainable consumption and production”, which states: “By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.”

Target reference number
Oth 2

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Land use change	hectares restored

Target denominator (intensity targets only)
<Not Applicable>

Base year
2018

Figure or percentage in base year
321529

Target year
2030

Figure or percentage in target year
421529

Figure or percentage in reporting year
385726

% of target achieved [auto-calculated]
64.197

Target status in reporting year
Underway

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
On september 2019 CMPC publicly established it's tangible commitments towards sustainable development, related to emissions reductions, waste disposal, conservation and water use. Related to our conservation efforts, CMPC committed to add 100 thousand hectares of land for conservation, protection and/or restoration by 2030 to CMPC's already existing more than 320 thousand hectares of such land in Argentina, Brazil and Chile (as of 2018). CMPC has forestry operations in Argentina, Brazil and Chile, and from it's more than 1,287,115 hectares of forests assets as of 2020, 325,995 ha correspond to conservation, protection or restoration efforts, were natural ecosystems, flora, fauna, water courses, among other important natural assets are maintained and improved. Considering the 321,529 ha of the 2018 baseline, CMPC has added 64,197 ha as of 2020, making progress towards its goal. With these activities, CMPC contributes to target 15.1 of the Sustainable Development Goal (SDG) 15 "life on land" that states: "By 2030, ensure the conservation, restoration and sustainable use of terrestrial inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements."

Target reference number
Oth 3

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Resource consumption or efficiency	Other, please specify (Industrial water use in cubic meters (m3))

Target denominator (intensity targets only)
metric ton of product

Base year
2018

Figure or percentage in base year
30.84

Target year
2025

Figure or percentage in target year
23.13

Figure or percentage in reporting year
30

% of target achieved [auto-calculated]
10.8949416342412

Target status in reporting year
Underway

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
On september 2019 CMPC publicly established it's tangible commitments towards sustainable development, related to emissions reductions, waste disposal, conservation

and water use. Related to industrial water use, CMPC committed to reduce its industrial use of water per metric ton of product by 25% by the year 2025 (using 2018 as baseline). This goal covers all of our production facilities that use water in their processes across the eight Latin American countries where we operate. The baseline of this target was also re-calculated including CMPC's new facilities acquired during 2020. The progress achieved during 2020 is mainly to water reduction activities implemented in the Softys business unit facilities, which has established an ambitious water reduction plan in all its tissue production facilites, especially through recirculation processes and other activities to avoid water loss. Through this goal, CMPC contributes to target 6.4 of Sustainable Development Goal (SDG) "Clean Water and Sanitation", which states: "By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity."

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	0	0
To be implemented*	1	400000
Implementation commenced*	3	54000
Implemented*	1	250000
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

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
250000

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
110601

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
During 2020 CMPC acquired PPA's that secure the provision of a 100% non-conventional renewable energy for all the electricity purchased by its facilities in Chile for the years 2020-2027. Which implies the annual savings of 250,00 tCO2e annually considering a market-based scope 2 approach.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	We drive our investment in emissions reduction activities to comply with the law and regulations which restrict GHG emissions or make firms pay carbon taxes. In 2017, Chile introduced a carbon tax, meaning that CMPC must make payments based on our GHG emissions and other air quality parameters in several plants, such as Cartulinas Maule, Corrugados Cordillera, Santa Fe, Laja, Pacífico, among others. During 2019-2020 a new boiler in Cartulinas Valdivia, started operating, This investment of USD$ 15,060,000 was driven so we could reduce our GHG emissions and other air quality parameters such as particulate matter, that if otherwise would have made this facility subject to the carbon tax. The new efficient boiler, replaces 1 Fuel Oil No. 6, and 2 other smaller less efficient biomass boilers, not surpassing the install power generating capacity that makes you subject to carbon tax in Chile and reducing GHG emissions and other air quality parameters.
Dedicated budget for energy efficiency	CMPC has been implementing Energy Management Systems (EnMS) since 2013. An EnMS is a series of procedures that allow a more efficient use of energy by optimizing its consumption at industrial facilities, which leads to significant savings in cost. This process involves the assessment and standardization of energy management practices at all industrial facilities, accounting for the various types of fuel and energy sources they use. The company aims to implement and sustain EnMS at its production facilities as a way to improve the energy performance of its processes by systemically assessing it and setting indicators to track and control. Since the beginning of this project, 19 plants' Energy Management Systems have been certified to the ISO 50001 standard, while others are currently in the process of assessment, design, implementation and verification of their systems.

C-AC4.4/C-FB4.4/C-PF4.4

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement agriculture or forest management practices on your own land with a climate change mitigation and/or adaption benefit?

Yes

C-AC4.4a/C-FB4.4a/C-PF4.4a

(C-AC4.4a/C-FB4.4a/C-PF4.4a) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Management practice reference number
MP1

Management practice
Afforestation

Description of management practice
CMPC as a forestry industry plants/replants eucalyptus and pines, and during 2020 45,375 ha were planted in Chile and Brazil. The objective of reforestation is to replant areas that used to be covered by forest plantations which have been harvested or which have lost their forest cover due to fire or previous agricultural practices that left the land degraded before the company's ownership. Planting is usually carried out during the winter season between May and September each year. We replant every year and will continue doing so and each time we harvest those hectares are re-planted leaving a permanent forest cover. It is important to highlight that we use eucalyptus and pine which are non-native species to the countries where we operate, so we do not harvest native forests.

Primary climate change-related benefit
Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e)
393171

Please explain
The estimated CO2e saving correspond to the total carbon storage provided by 25,789 ha planted in Chile during 2020.

Management practice reference number
MP2

Management practice
Replacing fossil fuels by renewable energy sources

Description of management practice
Energy from biomass, methanol and black liquor which are Non-Conventional Renewable Energy source (NCRE), represented 81% of CMPC's total energy consumption during 2020. CMPC reduces the consumption of energy coming from fossil fuels such as electricity purchased from non-renewable origins and other primary fossil sources, by generating heat, steam and electricity in it's own facilities with biomass, black liquor and methanol.

Primary climate change-related benefit
Reduced demand for fossil fuel (adaptation)

Estimated CO2e savings (metric tons CO2e)
807919

Please explain
For the calculation of the avoided emissions, the total renewable electricity generated by CMPC pulp mills (3 in Chile and 1 in Brazil) were considered. The emissions are obtained as: self-generated electricity in KWh / year multiplied by the respective emission factor of the electricity matrix of each country which is in kgCO2e/kWh. The emissions generated are avoided by the self-generation of electric energy, since plants do not buy this electricity from the grid mix, but use renewable energy generated by biomass combustion and black liquor instead, avoiding this purchase from the matrix.

Management practice reference number
MP3

Management practice
Biodiversity considerations

Description of management practice
CMPC conserves, protects and restores areas of important ecosystems and biodiversity adjacent to it's forestry plantations, reaching 385,725 hectares in this category as of december 2020 considering all the countries where we have forestry operations: Argentina, Brazil and Chile. Restoration activities include planting of native tree species that are produced in our tree nurseries, that also help maintain permanent land cover and increase carbon capture, as well as restoring river basins and other important ecosystemic services. CMPC to continue contributing to this, has committed to protect and conserve 100 thousand additional new hectares by 2030, considering 2018 as baseline.

Primary climate change-related benefit
Increasing resilience to climate change (adaptation)

Estimated CO2e savings (metric tons CO2e)
2722081

Please explain
This figure corresponds to the carbon sequestration estimated for all our conservation and protection areas in Chile and Brazil during 2020.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Company-wide

Description of product/Group of products
CMPC is committed to developing and offering products that do not have undue impacts on the environment. To identify products that provide efficiency benefits to customers we consider five criteria: use of renewable energy; FSC / PEFC certification; chain of custody certification; use of recycled raw materials; waste recovery. Benefits include reduction of waste to landfill, decreased virgin or primary raw material use, smaller environmental footprint and less embedded emissions for customers. Other aspects of our product design and characteristics that offer benefits include that, in virtually all cases, our products are compostable and/or recyclable (other than sanitary products that may be of mixed plastic composition). Our wood products offer a carbon sequestration benefit that persists during the use phase, in the construction sector generate 30% less waste than concrete, pollute less water and consume less energy in their production compared to steel and concrete. Benefits can be evaluated both compared with forestry industry peers as well as alternative technologies; in many cases, our products substitute for non-renewable alternatives, like plastics.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Internal criteria such as proportions of recycled material incorporated, fiber from renewable plantations and energy use.)

% revenue from low carbon product(s) in the reporting year
80

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
CMPC continues increasing it's investments to provide new sustainable solutions for customers and businesses. We are constantly investing in new machines such as paper bags machines and new production facilities that can increase our provision of sustainable paper and packaging products to customers in the 8 countries where we operate. Our products are 100% recyclable, and we recycle them in our own production facilities. This allows customers to avoid emissions from waste treatment and disposal in their scope 3 emissions, At the same time, our products such as wood, timber and pulp contribute to carbon storage.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
1954348

Comment
In 2017, CMPC started a meticulous process to measure its GHG emissions in all its subsidiaries in Chile, including its productive operations and the administrative and management activities carried out at the main offices and headquarters. The calculations were done using data for 2016, as this was the information available at the start of the almost year-long measurement process. From 2018 on, the carbon footprint of the entire company began to be measured including all its operations in the 8 countries where we have productive facilities. During 2019, the Company measured 2017 and 2018 carbon footprints obtaining two year of company-wide calculations, considering all the activities in which we have operational control in the 8 latin american countries were we operate. Having done this complete process and being sure we were leaving no operations out of scope, we decided the 2018 inventory was a great reflex of our emissions status and at the same time, 2018 had record productions for CMPC in it's 100 years of history, being a good reflex of our operations at their maximum capacity. That is why, we consider this our baseline and we used it to set our scope 1 + 2, 50% emissions reduction target by 2030. This baseline was re-calculated including the new facilities acquired by CMPC during 2020.

Scope 2 (location-based)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
492054

Comment
In 2018, CMPC started a meticulous process to measure its GHG emissions in all its subsidiaries in Chile, including its productive operations and the administrative and management activities carried out at the main offices and headquarters. The calculations were done using data for 2016, as this was the information available at the start of the almost year-long measurement process. From 2018 on, the carbon footprint of the entire company began to be measured including all its operations in the 8 countries where we have productive facilities. During 2019, the Company measured 2017 and 2018 carbon footprints obtaining two year of company-wide calculations, considering all the activities in which we have operational control in the 8 latin american countries were we operate. Having done this complete process and being sure we were leaving no operations out of scope, we decided the 2018 inventory was a great reflex of our emissions status and at the same time, 2018 had record productions for CMPC in it's 100 years of history, being a good reflex of our operations at their maximum capacity. That is why, we consider this our baseline and we used it to set our scope 1 + 2, 50% emissions reduction target by 2030. it is important to say that our target considers Market-based emissions. Location base emission factors are always considered for: Argentina, Brazil, Ecuador, Colombia, Uruguay, Mexico and Peru. This baseline was re-calculated including the new facilities acquired by CMPC during 2020.

Scope 2 (market-based)

Base year start
January 1 2018

Base year end
December 31 2018

Base year emissions (metric tons CO2e)
442087

Comment
Only for the Chile operations we are able to calculate market-based emissions, which represent over 50% of our subsidiaries which have especial electricity PPA contracts with our energy providers. All the other countries where we operate have location based scope 2 calculations, because we do not have PPA's currently in place.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
Brazil GHG Protocol Programme
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other, please specify (ISO 14067:2012)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The methodology used to quantify GHG emissions for our 2019 company-wide footprint follows the guidelines set out in GHG Protocol and we expect to continue doing so in accordance to this guidance.

Previously, (2017-2018) the calculations for production plants were based both on the standardized ISO 14067:2012 and GHG Protocol methodologies that defined the conditions for developing a product carbon footprint. Although this study analyzed the production of each plant, strictly speaking, this is not the carbon footprint of the product, but rather, more of a general revision of the GHG emissions associated with the global production of each processing plant.

The primary data used were mainly from our internal systems such as SAP or invoices from suppliers. The data used include: fuel consumption in mobile sources, fuel consumption in stationary sources, electricity and steam purchases, procurement of raw materials and inputs such as chemicals, fuel, containers and packaging, and the average distance to their transport to the production facility from suppliers; shipments to warehouses and domestic customers, exports, waste generation and transportation; considering the amounts and average distance to clients and treatment site; business trips, data provided by the travel agencies and employee commuting data obtained from polls to our employees.

The Guaiba mill belonging to the CMPC subsidiary Celulosa has been measuring its carbon footprint since 2003 using the GHG Protocol methodology, and since 2015 using the GHG Brazil Protocol, which they use to report to the local initiative, but we also include them in our Corporate Carbon Footprint.

It is important to consider that in the measurements 2017-2018 all plants were reported in ISO 14067 and then transformed to the GHG protocol, and headquarters were reported using ISO 14064. Since 2019 we are only using GHG Protocol.

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)
1964814

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
This includes all our industrial facilities and forestry operations in the 8 countries where we operate.

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
The emission factors used vary by country and are extracted from global databases for Peru, Argentina, Uruguay, Brazil, Mexico, Ecuador and Colombia operations, being location-based. In the case of Chile, a zero factor was used becaused CMPC acquired PPA's that secure a 100% provision of renewable energy for all its industrial operations in Chile. This includes all our industrial facilities and forestry operations in the 8 countries where we operate.

C6.3

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

Reporting year

Scope 2, location-based
582769

Scope 2, market-based (if applicable)
177247

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Market-based emissions are much lower because CMPC acquired PPA's that secure provision of 100% NCRE for the electricity purchased by all it's industrial facilities in Chile, for the 2020-2027 period.

C6.4

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

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Headquarters

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
These emissions compared to our industrial facilities emissions represent 0.08% of the Company's total scope 1+2 emissions for the reporting period. CMPC calculates these emissions every year, but they have never been relevant compared to the industrial facilities emissions, so we do not focus our GHG emissions reduction initiatives in this area. We still publicly disclose our headquarters emissions in our Integrated Report and Sustainability Report every year, separated from our industrial facilities emissions.

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

Metric tonnes CO2e
1451000

Emissions calculation methodology
The methodology used was GHG Protocol. This corresponds to the emissions associated with the production of all the main chemicals, packaging goods and raw materials used in our production facilities, which are mainly recycled fiber, pulp, plastics for packaging such as films, adhesives and other chemicals. All this calculations are made considering the amount purchased of each good and mainly Ecoinvent emissions factors, through our sustainability software SoFi.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Quantities of the procurement of each good are obtained from internal systems (SAP), so the data is delivered by the supply and logistics departments of each facility.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
287000

Emissions calculation methodology
This category was calculated using the GHG Protocol methodology. Input data include the money spent in the purchase of every capital good during the reporting year, which includes new facilities, machinery, land, among other capital good. The estimations are done using the money spent in each capital good classified into the type of good and considering Defra´s library table 15 for emissions factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
It considers all main capitals goods purchased by CMPC during 2020, which include new forestry assets, machinery, among other. All the information from investments in capital is internal, does not relate to supplies.

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
393000

Emissions calculation methodology
The emissions associated to the fabrication of purchased fuels are calculated using the GHG protocol methodology using Ecoinvent emission factors, this is the main sources of emissions in this category representing more than 98% of the emissions. All this calculations are made through our sustainability software SoFi. For scope 2 energy related emissions, for losses in electricity distribution we consider a 5% loss.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
2

Please explain
We use internal systems information about the amount of fuels purchased and burnt in our operations. The data of electricity purchased is obtained from the suppliers electricity bills, being a primary data source.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1291000

Emissions calculation methodology
The methodology used was GHG Protocol. Considers transport of goods such as chemicals, raw materials, packaging and fuels from the suppliers to our facilities. We consider transport from port of origin in the case of imported goods to our production facilities and from the supplier to the plant in the case of local suppliers. Emissions are calculated with GHG protocol/IEA 2019 emissions factors, considering the corresponding mean of transport and tkm (tonnes per kilometer) for each good. All this calculations are made through our sustainability software SoFi.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Quantities of the procurement of each good are obtained from internal systems (SAP), so the data is delivered by the supply and logistics departments of each facility. Distances are obtained from google maps or Searates in the case of transoceanic transport.

Waste generated in operations

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
57000

Emissions calculation methodology
The emissions calculation methodology is GHG Protocol. We consider the emissions for the transport of waste to the disposal site or the treatment facility in tonnes per km, using GHG protocol/IEA 2019 emissions factors, and the emissions for treatment of waste according to the treatments each of our wastes are sent to such as: recycling, reuse, landfill, energy recovery, among others. For this we use Defra 2019 emissions factor for waste treatment. This emissions are considered not relevant because they represent less than 1% of our total scope 3 emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
They are calculated using internal information of waste generation and the treatment they receive.

Business travel

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
531

Emissions calculation methodology
The methodology used was GHG protocol. All International and national flights in economic and executive classes were considered. We use the kilometers traveled by each of CMPC's collaborators, obtaining passenger-kilometer information and using Defra emissions factors for business and economy flights. All this process is done through our sustainability platform SoFi. This emissions are not relevant because they represent 0.01% of our scope 3 emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
The emissions are calculated using the data provided by the travel agencies that purchased and manage business travel for our company. They provide the passenger, facility, class, flight route, and kilometers flown for our emissions calculations.

Employee commuting

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
18000

Emissions calculation methodology
The methodology used was GHG protocol. The means of transport considered were Bus, Bicycle, Car, Metro, Walking, among others, in addition to considering the total employees of the company and the average distance travelled by each one of them from home to the corresponding working facility and back. Using this information we obtain person-kilometer data for all employees in each means of transport and use Defra emissions factors for each mean. This emissions are not relevant because they represent less than 0.2% of our scope 3 emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We use internal information from polls made to our employees as to what mean of transport they use and the average distance they travel everyday.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This emissions were estimated using the Quantis scope 3 evaluator. We provided the square meters of the facilities we rent which usually correspond to storage facilities. This emissions are not relevant because they represent less than 1% por our scope 3 emissions. CMPC only leases a small amount of facilities and due to their size they are not relevant for the company's overall scope 3 emissions. Also, the letting of assets is not part of CMPC's business model.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1299000

Emissions calculation methodology
The methodology used was GHG Protocol. National distribution and exports to all countries are considered for each subsidiary. We calculate emissions in terms of tkm (tonnes per kilometer) for all our products distribution. We consider the total amount in tonnes of product dispatched and the average distance to storage, national clients and the port of destination in the case of international sales, obtaining tkm. Then, we use Defra emissions factors for each means of transport.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We used internal information coming from our logistics departments.

Processing of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
2104000

Emissions calculation methodology
We use the GHG Protocol for this calculations. We consider the total amount of products we sell to third parties that require further processing such as pulp, board, container board and timber. It is important to note that a great amount of the products sold that need further processing are sold to our own facilities, so we account for the emissions of this processing within the boundaries of our inventory in scope 1 and 2. The products we sell to third-parties we know which is the further processing they will require, because we have information, for instance, of how much pulp goes to clients that produce tissue, board, cardboard, etc. Using this information and our internal emission factors of our own productive facilities, because we produce most of the final products that can be made with the raw materials we sell, such estimation can be made considering our own processing facilities emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We use internal emissions factors and our sales department information to determine what the further processing of our intermediate sold products is.

Use of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not a relevant category. According to GHG protocol category 11: Use of sold products; A reporting company's scope 3 emissions from use of sold products include the scope 1 and scope 2 emissions of end users. Our products sold to final consumers do not generate emissions at the use stage and no energy or fuel consumption is needed for their use. We sell tissue paper, personal care products, wood and other paper products to final customers. So the emissions related to this category are 0.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1808000

Emissions calculation methodology
We use GHG protocol for this calculations. The end of life treatment of products sold to end users are estimated using de amounts sold for each product and Defra emissions factors for end of life treatment considering the most likely destination they will have after they've been used: landfill, recycling, etc, for each product.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We use internal information about sales.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
According to GHG Protocol Accounting and Reporting Standard as described in the 13th category downstream leased assets: this accounts for emissions of assets that the company acts as lessor, not included in scope 1 and 2. CMPC only acts as lessor of 2 small facilities and emissions were estimated using Quantis scope 3 evaluator and they represent less than 0.04% of our scope 3 emissions.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
According to GHG Protocol Accounting and Reporting Standard as described in the 14th category: Franchises, this only applies to franchises or franchisors, so it would not apply to CMPC since we are not a franchise or franchisor company.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
According to GHG Protocol, category 15 Investments applies to companies that provide financial services and have financial interests in other companies.. CMPC, is not a company that provides financial services and does not have financial interests in other companies, so this category does not apply to its business model.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no other relevant upstream emissions not already considered in the scope 3 categories above.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are no other relevant downstream emissions not already considered in the scope 3 categories above.

C-AC6.6/C-FB6.6/C-PF6.6

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area?
Yes

C-AC6.6a/C-FB6.6a/C-PF6.6a

(C-AC6.6a/C-FB6.6a/C-PF6.6a) Disclose your Scope 3 emissions for each of your relevant business activity areas.

Activity
Processing/Manufacturing

Scope 3 category
Purchased goods and services

Emissions (metric tons CO2e)
1433000

Please explain
We considered the emissions for purchased goods and services for the production of the Celulosa, Softys, and Biopackaging business units, for all the 46 facilities we have operational control, since each one has a processing and/or manufacturing activity in their operation.

Activity
Distribution

Scope 3 category
Upstream transportation and distribution

Emissions (metric tons CO2e)
1291000

Please explain
We considered all the upstream distribution of raw materials and goods purchased and transported to CMPC operations of the Celulosa, Softys, and Biopackaging business units, for all the 46 facilities and 3 forestry operations of which CMPC has operational control, since each one has distributions activities in their operation.

Activity
Distribution

Scope 3 category
Downstream transportation and distribution

Emissions (metric tons CO2e)
1299000

Please explain
We considered all the downstream emissions generated for transport of products to national and international clients and warehouses by all CMPC operations of the Celulosa, Softys, and Biopackaging business units, for all the 46 facilities and 3 forestry operations of which CMPC has operational control, since each one has distributions activities in their operation.

Activity
Processing/Manufacturing

Scope 3 category
Processing of sold products

Emissions (metric tons CO2e)
2104000

Please explain
Further processing of sold products include the emissions to process all the intermediate products sold by CMPC such as timber, pulp, container board and boxboard which might end up in national o international clients and they use it to produce final products such as tissue, cardboard, paper boxes, among others.

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 land use management

Emissions (metric tons CO2)
180960

Methodology
Empirical models

Please explain
CMPC developed its own model to calculate biogenic emissions from it's forestry operations in Chile. This model include the use of field data of the growth of our plantations and native forest and the forest covers as well as changes in it. It depends on field data of growth of our plantations according to age of trees, species and the type of soil where they have been planted. As well as the use of average emission factors for carbon content by species. In the case of emissions from land use management, we consider emissions from the change in land cover from 2018 to the end of 2019, considering the hectares that were harvest that year. The emissions correspond to the carbon content of the trees that were harvest during the year.

CO2 removals from land use management

Emissions (metric tons CO2)
116170444

Methodology
Empirical models

Please explain
CMPC developed its own model to calculate biogenic removals from it's forestry operations in Chile. This model include the use of field data of the growth of our plantations and native forest and the forest covers as well as changes in it. It depends on field data of growth of our plantations according to age of trees, species and the type of soil where they have been planted, and average data in the case of native forest. As well as the use of average emission removal factors by species type. The figure reported above corresponds to the total carbon stock in our forestry assets in Chile, considering forestry plantation cover as well as conservation and protection areas covered with native forests, by the end of the year 2019. The total hectares with forest cover considered for this calculations is the total forest assets in Chile by the end of 2019, which adds up to 635,910 ha.

Sequestration during land use change

Emissions (metric tons CO2)
2158587

Methodology
Empirical models

Please explain
CMPC developed its own model to calculate biogenic removals from it's forestry operations in Chile. This model include the use of field data of the growth of our plantations and native forest and the forest covers as well as changes in it. It depends on field data of growth of our plantations according to age of trees, species and the type of soil where they have been planted, and average data in the case of native forest. As well as the use of average emission removal factors by species type. The sequestration figure includes the changes in carbon balance in our forestry assets in Chile from the end of to 2018 to the end of 2019. The carbon sequestration of 2,158,587 tCO2e during 2019 is reached, considering emissions from land use change (changes is forest cover of plantations), sequestration from the growth of native forest and carbon stored in the forestry products harvested, as well as emissions from forest fires. Considering this 4 fluxes we arrive to the result of a positive increase in carbon sequestration for the year 2019.

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)
0

Methodology
Empirical models

Please explain
We do not have biofuel emissions from land machinery in our operations.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)
10500577

Methodology
Empirical models

Please explain
For this calculation, the existing biogenic carbon emissions are generated from the burning of biomass and black liquor in some of the company's productive plants which use it to produce energy. The plants that use biomass are Softys Ipusa, Softys Caieiras, Boxboard Valdivia, Laja, Pacífico and Santa Fe pulp mills; Mulchén and Nacimiento Sawmills. Black liquor is generated in the pulp production process, so it is burned in Santa Fe, Pacífico, Laja and Guaiba, only. The methodology is proposed by the company, based on the GHG protocol, were biogenic emissions are reported separately from fossil carbon emissions. The methodology is based on the calculation of biogenic emissions using the amount of dry biomass and black liquor burnt, from which the carbon content is calculated according to the species (Eucalyptus or Pine) considering empirical values for each of the species. Then, assuming that the reaction has an efficiency of 100% and making a mass balance between the carbon content in the biomass and black liquor, and the CO2 generated in the reaction, the respective emission factors are obtained. Finally, depending on the biofuel, the amount of biomass burnt or black liquor is multiplied by its respective emission factor.

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)
0

Methodology
Empirical models

Please explain
We do not have other relevant biofuel combustion emissions.

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

Please explain
For CMPC, timber is the main raw material, since it is the beginning of the supply chain for the manufacturing of all final products. That is why we have over 700,000 hectares of renewable plantations and we account emissions for all our forestry operations in the three countries where they are present: Argentina, Brazil and Chile.

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

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Timber

Reporting emissions by
Unit of production

Emissions (metric tons CO2e)
0.022

Denominator: unit of production
Metric tons

Change from last reporting year
About the same

Please explain
This calculations are made using the GHG Protocol and considers all scope 1 + scope 2 + scope 3 relevant emissions from all the forestry operations of CMPC (Chile, Brazil and Argentina) . In 2019 the total emissions per metric ton of timber produced were very similar, 0.0213. There are no relevant exclusions in these calculations.

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
0.000405

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
2142060

Metric denominator
unit total revenue

Metric denominator: Unit total
5287000000

Scope 2 figure used
Market-based

% change from previous year
6

Direction of change
Decreased

Reason for change
The reason for the decrease of 6% in the emission intensity figure is due to the fact that CMPC reduced approximately 300,000 tCO2e during 2020 compared to 2019 mainly because the Company acquired PPA's that secure 100% provision of Non-Conventional Renewable Energy for all the electricity purchased by it's industrial facilities in Chile, being able to account for a zero scope 2 factor for those operations considering market-based emissions.

Intensity figure
0.2197

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
2142060

Metric denominator
metric ton of product

Metric denominator: Unit total
9748235

Scope 2 figure used
Market-based

% change from previous year
22

Direction of change
Decreased

Reason for change
During 2020 CMPC acquired PPA's that secure the provision of 100% NCRE for all the electricity purchased in it's productive facilities in Chile, this considerably reduced CMPC's scope 2 emissions considering a market-based approach.

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	1863815	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	12935	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	76630	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Chile	863295
Brazil	849258
Argentina	50926
Colombia	14523
Ecuador	72.6
Uruguay	4006
Peru	57880
Mexico	124853

C7.3

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

By business division
By facility
By activity

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Celulosa	1377083
Biopackaging	192069
Softys	395662

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Santa Fe Pulp Mill	247963	-37.515833	-72.653333
Laja Pulp Mill	91187	-37.289485	-72.711933
Pacífico Pulp Mill	103399	-37.789641	-72.48491
Guaiba Pulp Mill	654829	-30.134444	-51.317222
Mulchen Sawmill	4770	-37.702107	-72.260584
Nacimiento Sawmill	2450	-37.518278	-72.659447
Bucalemu Sawmill	1018	-37.170492	-72.407664
Los Angeles Remanufacturing Plant	1027	-37.339706	-72.378583
Coronel Remanufacturing Plant	552	-36.965774	-73.163955
Plywood Plant	4503	-37.796907	-72.4802
Bosques del Plata	4202	-27.43637	-55.929391
Forestal Mininco	103749	-37.468634	-72.334722
Florestal Brasil	157433	-30.134444	-51.317222
Softys Puente Alto	7718	-33.704855	-70.936737
Softys Talagante	104315	-33.610976	-70.568379
Softys Altamira	124315	22.408602	-97.891303
Softys Santa Catarina	168	25.698482	-100.469606
Softys García	4.66	25.638598	-100.318166
Softys Ganchancipá	14518	5.014807	-73.86198
Softys Cali	5.55	3.028839	-76.48923
Softys Pando	4006	-34.732792	-55.947698
Softys Cañete	14878	-13.135899	-76.367786
Softys Rosales (Santa Anita)	302	-12.044874	-76.960983
Softys Santa Rosa (Santa Anita)	37902	-12.045387	-76.962866
Sorepa Perú (Santa Anita)	201	-12.017844	-77.10386
Softys Guayaquil	72.6	-2.003709	-79.967786
Softys Guaiba	9.98	-30.119193	-51.384295
Softys Mogi	10873	-23.5421	-46.27054
Softys Caieiras	22071	-23.368251	-46.762776
Softys Recife	44.4	-34.941479	-8.166819
Softys Naschel	357	-32.921488	-65.376542
Softys Zarate	46076	-34.057975	-59.090945
Softys Tortuguitas	14.9	-34.616178	-58.449984
Corrugados Pulpa Moldeada	12134	-33.606313	-70.558611
Corrugados Planta Cordillera	93427	-33.610558	-70.564614
Boxboard Maule	56934	-35.605255	-71.586895
Boxboard Valdivia	16621	-39.789722	-73.186666
Edipac	95.4	-33.346388	-70.716388
Fibras	648	-33.482496	-70.635787
Sack Kraft Chile	502	-36.580555	-72.103611
Sack Kraft Argentina	276	-36.864722	-60.163888
Sack Kraft México	365	-10.327027	20.499166
Sack Kraft Perú	785	-11.971666	-77.061944
Corrugados Impresos Buin	5698	-33.733055	-70.726666
Corrugados Impresos Tiltil	2982	-33.134444	-70.814166
Corrugados Impresos Osorno	1601	-40.704444	-73.003055
Softys Sepac	3998	-2.586663	5.081113
Softys Panam	3811	1.641919	7.155126

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Industrial Operations	1699429
Forestry Operations	265385

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

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions.
Total emissions

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
Agriculture/Forestry

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
265385

Methodology
Default emissions factor

Please explain
CMPC considers the emissions for all our forestry operations in the Celulosa business unit, we have operations in Chile, Brazil and Argentina.

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Chile	417591	12069	1680732	1057700
Brazil	41463	41463	411744	0
Argentina	50744	50744	157590	0
Colombia	7425	7425	46261	0
Ecuador	602.3	602.3	3036	0
Uruguay	638	638	28344	0
Peru	34684	34684	171620	0
Mexico	29622	29622	64918	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.
By business division
By facility
By activity

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)
Celulosa	98384	5144
Biopackaging	293736	11723
Softys	190072	159804
Forestal	577	577

C7.6b

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

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
3 forestry operations in 3 countries	577	577
Santa Fe Pulp Mill	26969	0
Pacifico Pulp Mill	2431	0
Laja Pulp Mill	6917	0
Guaiba Pulp Mill	2649	2649
Mulchen Sawmill	9750	0
Nacimiento Sawmill	6225	0
Bucalemu Sawmill	7272	2495
Clear Remanufacturing Plant	4530	0
Coronel Remanufacturing Plant	4427	0
Plywood Plant	27216	0
Boxboard Maule	181027	9122
Boxboard Valdivia	22906	0
Sack Kraft Chile	1470	0
Sack Kraft Perú	776	776
Sack Kraft México	1580	1580
Sack Kraft Argentina	244	244
EDIPAC	220	0
Fibras	495	0
Corrugados Pulpa Moldeada	6752	0
Corrugados Planta Cordillera	70529	0
Corrugados Buin	3858	0
Softys Puente Alto	27001	0
Corrugados Tiltil	2586	0
Corrugados Osorno	1240	0
Softys Talagante	3267	0
Softys Naschel	5830	5830
Softys Zárate	44371	44371
Softys Tortuguitas/Wilde	239	239
Softys Guayaquil	602	602
Softys Pando	638	638
Softys Ganchancipá	6754	6754
Softys Cali	671	671
Softys García	6241	6241
Softys Altamira	18954	18954
Softys Santa Catarina	2847	2847
Softys Caieiras	18422	18422
Softys Recife	141	141
Softys Mogi	2879	2879
Softys Guaiba	118	118
Softys Cañete	9914	9914
Softys Santa Rosa (Santa Anita)	20117	20117
Softys Rosales (Santa Anita)	1509	1509
Sorepa Perú	56	56
Sepac	17189	17189
Panam	2312	2312

C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Industrial Operations	582192	176670
Forestry operations	577	577

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?

Decreased

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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	307645	Decreased	12.6	2019 scope 1+2 emissions for all CMPC's operations were 2,449,706 tCO2e during 2019 and 2,142,060 during 2020. So, the change in emissions is calculated as (2,449,706 - 2,142,060)= 307,645 tCO2e emission reduction. Then, the percentage of reduction is estimated as the total reduction over the gross scope 1+2 2019 emissions: 307,645/2,449,706 = 12,6% CMPC during 2020 acquired PPa's that secure the provision of a 100% Non conventional renewable energy for all it's industrial operation in Chile which explain the decrease in the total scope 1 and 2 emissions, as considering market-based emissions the scope 2 emissions in Chile were accounted as a zero factor.
Other emissions reduction activities	0	No change	0	There were no changes due to other reduction activities in the reporting year.
Divestment	0	Please select	0	There were no divestments during 2020.
Acquisitions	0	Please select	0	There were acquisitions during 2020, but previous years scope 1 and 2 emissions were adjusted with this acquisitions, so no changes are seen from one year to another attributable to these new facilities.
Mergers	0	Please select	0	There were no mergers during 2020.
Change in output	0	No change	0	There were no relevant changes in emissions due to changes in outputs during 2020.
Change in methodology	0	No change	0	There were no changes in the scope 1 and 2 methodology during 2020.
Change in boundary	0	No change	0	There were no changes in boundaries during 2020.
Change in physical operating conditions	0	No change	0	There were no changes in physical operating conditions that affected scope 1 and 2 emissions during 2020.
Unidentified	0	No change	0	There were no unidentified changes in emissions during 2020.
Other	0	No change	0	There were no other changes in emissions during 2020.

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 20% but less than or equal to 25%

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)	LHV (lower heating value)	27743000	5979000	33722000
Consumption of purchased or acquired electricity	<Not Applicable>	1059000	864000	1922000
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	955000	0	955000
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	29757000	6843000	36600000

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.

Fuels (excluding feedstocks)
Black Liquor

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
22378073

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
22378073

Emission factor
0.66

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, Pulping liquors, IPCC 2006.

Comment
We use black liquor in all of our pulp mills.

Fuels (excluding feedstocks)
Solid Biomass Waste

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
5179591

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
492000

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
4687591

Emission factor
1.49

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, wood and waste wood

Comment
We use biomass in stationary sources only.

Fuels (excluding feedstocks)
Other, please specify (methanol)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
185000

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
185000

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
0.03

Unit
metric tons CO2e per GJ

Emissions factor source
Defra 2018 Bioethanol (energy)

Comment
We use Methanol only in the Pacifico pulp mill.

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
72000

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
28800

MWh fuel consumed for self-generation of steam
43200

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
64.31

Unit
metric tons CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, LPG. Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Volume 2 Energy, Chapter 2 Stationary Combustion

Comment
We use LPG in our mobile sources mainly and in some stationary sources.

Fuels (excluding feedstocks)
Liquefied Natural Gas (LNG)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
2632000

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
248500

MWh fuel consumed for self-generation of steam
2236500

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
147000

Emission factor
56.25

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol/IEA 2019, Emission Factors are from Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Natural gas (direct) in stationary combustion.

Comment
We use NGL in stationary sources only.

Fuels (excluding feedstocks)
Fuel Oil Number 6

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1584000

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
1584000

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
77.47

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, Residual fuel oil. Emission Factors are from Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Volume 2 Energy, Chapter 2 Stationary Combustion, Residual fuel oil, lime kilns

Comment
We use Fuel oil in stationary sources.

Fuels (excluding feedstocks)
Coal

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1064064

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
1064064

Emission factor
95.04

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, Bituminous coal - pulverized wet bottom, Stationary sources except lime kilns and calciners.

Comment
We use coal only in the Guaiba pulp mill.

Fuels (excluding feedstocks)
Diesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
47000

MWh fuel consumed for self-generation of electricity
18800

MWh fuel consumed for self-generation of heat
28200

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
74.22

Unit
kg CO2e per GJ

Emissions factor source
GHG Protocol, Stationary combustion sources spreadsheet, diesel, Stationary sources except lime kilns and calciners.

Comment
We use diesel in stationary and mobile sources, so a small variation might be seen according to the emission factor used for each source.

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	3711951	3281195	3417689	3003760
Heat	2231300	2231300	185000	185000
Steam	51578955	51578955	24140664	24140664
Cooling	0	0	0	0

C8.2e

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

Sourcing method
Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type
Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling
Chile

MWh consumed accounted for at a zero emission factor
1059000

Comment
During 2020 CMPC secured PPA's with different renewable energy generating companies which include wind, solar, hydropower and biomass generation to cover 100% of the electricity purchased by it's industrial facilities in Chile.

C9. Additional metrics

C9.1

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

Description
Land use

Metric value
385725.6

Metric numerator
Hectares conserved, protected and/or restored.

Metric denominator (intensity metric only)
N/A

% change from previous year
19.7

Direction of change
Increased

Please explain
CMPC conserves and protects important species of flora, fauna, river basin and critical ecosystems and their services. Approximately 1/3 of our forest assets correspond to protection and conservation areas. During 2019 we committed to continue increasing the conservation and protection areas in our forestry patrimony, committing to add 100,000 ha to the already existing ones in Argentina, Brazil and Chile, considering the 2018 baseline of 321,529 ha. By 2020 we reached 385,726 ha of conservation and protection, having a 19.7% progress towards our target.

Description
Waste

Metric value
509843

Metric numerator
metric tons of waste sent to landfill.

Metric denominator (intensity metric only)
N/A

% change from previous year
28.6

Direction of change
Decreased

Please explain
CMPC has committed to be a zero waste to landfill company by 2025 considering 2018 as baseline. During 2018 we sent 714,299 metric tons of waste to landfill and during 2020 we sent 509,843 metric tons, having progressed in the amount of waste diverted from landfills, which has decreased in 28.6%, being a positive progress towards our target.

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
1
Carta de verificación_CMPC_inglés.pdf

Page/ section reference
whole document.

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
1
Carta de verificación_CMPC_inglés.pdf

Page/ section reference
All document.

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
1
Carta de verificación_CMPC_inglés.pdf

Page/ section reference
all document.

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3 (upstream & downstream)

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
1
Carta de verificación_CMPC_inglés.pdf

Page/section reference
all document

Relevant standard
ISAE 3410

Proportion of reported emissions verified (%)
100

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?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Other, please specify ((The 3 other climate related targets reported in C4.2 are verified: waste diverted from landfill, industrial water use intensity, and hectares reserved, protected and restored.)	KPMG conducted a limited review of the content and data related to the GRI indicators 303-3 and 306-2, and CMPC indicator CMPC1. The review was conducted in accordance with attestation engagement standards established by the Colegio de Contadores de Chile A.G. Contents and data related to the "indicators to be reviewed" disclosed in the 2020 Integrated Report of Empresas CMPC were also reviewed considering the criteria established in the Global Reporting Initiative (GRI) Integrated Reporting Standard as well as Empresas CMPC's internal guidelines.	Integrated Report page 161 of the PDF contains the assurance letter of KPMG the external auditing firm. CMPC has chosen to verify the selected data related to the targets disclosed in question 4.2b, in accordance with the standard underneath it was created, to assure its full compliance. This verification occurs annually, conducted by a third party, and the results are publicly disclosed in our Integrated Report. The verification is a limited review, where the third party selects a random sample of facilities which provide all the information required, and it's analyzed and revised by an expert team provided by the third party. Integrated_Report_2020.pdf

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.
Chile carbon tax

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Chile carbon tax

Period start date
January 1 2020

Period end date
December 31 2020

% of total Scope 1 emissions covered by tax
35

Total cost of tax paid
2938947

Comment
This tax applies only to the some of the company's facilities in Chile, such as: Corrugados Cordillera, Maule, Santa Fe, Pacífico, Laja and Softys Talagante. The tax, taxes emissions of particulate matter (PM), nitrogen oxide (NOx), sulfur dioxide (SO_2) and carbon dioxide (CO_2), produced by establishments whose stationary sources, made up of boilers or turbines, individually or together add up to a generation power greater than or equal to 50 [MWt]. It is important to consider that it taxes the emissions as a whole and considers biogenic emissions of CO_2, not considered in scope 1 and reported separately, and particulate matter air emissions that are not Green House Gasses, also not consider in scope 1. That is why reporting the percentage of scope 1 emissions covered is not accurate, though and estimation is presented, as the total amount of scope 1 emissions from stationary sources of the facilities subject to this tax from the total scope 1 of CMPC.

C11.1d

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

In 2017, Chile introduced a carbon tax, meaning that CMPC must make payments based on our GHG emissions and other air emissions such as particulate matter. These regulations may become more restrictive over time, having a potential impact on our operational costs. That is why in 2016, CMPC started a meticulous process to measure its GHG emissions in all its subsidiaries in Chile, including its productive operations and the administrative and management activities carried out at the main offices and headquarters. Since 2017 CMPC measure its carbon footprint considering all its operations in 8 Latin American countries. During September 2019, to be ahead of future restrictions on emissions, CMPC established the long-term commitment to reduce by 50% it's scope 1+2 emissions by 2030, considering it's company-wide operations. Currently we are developing our roadmap to achieve this goal considering emissions reduction investments where they are most cost efficient, and where they have the biggest impact, that includes our operations in Chile which are subject to carbon taxes such as our pulp mills: Santa Fe,Pacifico and Laja and our Boxboard facility Maule; focusing our investments in emissions reductions in the facilities with higher emissions and that are subject to taxes. Investments have already been made to reduce emissions and avoid paying taxes in some facilities. For example during 2019 and 2020, a new first class biomass boiler was installed in Cartulinas Valdivias, replacing 2 older biomass boilers and one fuel oil boiler. This new boiler allows the facility to generate enough power to supply the facility with enough energy for future increases in the plant's production capacity, without surpassing the 50MWt generation power that makes you subject to the chilean carbon tax and at the same time, reduces scope 1 emissions from the less efficient biomass boilers and the fuel oil one it replaces.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

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

No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

0.21

% total procurement spend (direct and indirect)

10

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

5.5

Rationale for the coverage of your engagement

During 2020 CMPC was part of the CDP Supply Chain program and invited suppliers to respond to the 3 questionnaires: Climate Change, Water Security and Forests. 51 suppliers were invited to respond the Climate Change questionnaire. The invited suppliers were chosen by the supply chain departments of each of CMPC's business units Celulosa, Softys and Biopackaging, considering critical suppliers criteria such as percentage of spend, volume of goods provided, capacity to replace them, among others. The list of 51 suppliers was then determined giving the same amount of suppliers to each business unit. All suppliers were personally invited to respond to the CDP questionnaire by the main contact of the supply chain department.

Impact of engagement, including measures of success

This was for CMPC a first instance of supplier engagement considering specific climate change criterias so it gave as a first glimpse of how these critical suppliers that were chosen are handling climate change issues. As a first year of engagement the success metric considered was number of responding suppliers. Of the 51 suppliers invited to respond to the climate change questionnaire, 39 responded, having a 75% response rate, which is very high for the first year of the program. For us having of 50% of responding suppliers was a successful result.

Comment

The percentage of emissions was estimated considering the 10% spend this suppliers represent and the total scope 3 emissions from the categories that this suppliers contribute to, such as upstream and downstream transportation, purchased goods and services, capital goods and fuel and energy related activities.

C12.1b

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

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
24

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
CMPC is constantly engaging with it's customers and educating them about our Climate Change strategy, performance and initiatives. We always include contents of sustainability in all main presentations to customers and clients, and have presented this in important events such as Pulp week, pulp summit and in particular presentations for all our subsidiaries. In this presentations, we include subjects as our climate change policy and progress towards our 4 long-term sustainability targets: GHG emissions reductions targets toward 2030, and what are we going to do to achieve it, Water use reduction initiatives of 25% by 2025, How we plan to be a zero waste to landfill company by 2025 and adding 100 thousand new hectares for conservation and protection by 2030. At the same time, our Celulosa subsidiary through it's marketing division, send newsletters about the company's main events and always include news related to sustainability such as questionnaires results, new green finance mechanisms, commitments, among others. We also have available a sustainability brochure in our sustainability webpage, were main sustainability performance including climate change issues are reported, and printed versions of it are handed out in customers and clients visits and events, so we consider 100% of our customers have access to be educated in our climate change performance and initiatives.

Impact of engagement, including measures of success
We consider that 100% of our clients and customers have been presented or have access to our sustainability agenda including commitments towards mitigating and adapting to climate change. The positive impacts we have seen include the increasing requests of customers to have presentations of our Corporate Sustainability Department on this subjects, and increasing requests in knowing more about our sustainability commitments and future steps. This has also led to an increase in sustainability content in all the company's communications due to appreciation of customers and investors towards being inform of the positive and negative impacts we have, such as carbon emissions, reduction targets, new green finance mechanisms, sustainability questionnaires results, among others.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?
Direct engagement with policy makers
Trade associations
Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	The Company requires both electrical and thermal energy for its industrial operations. Given the nature of pulp and paper industry, CMPC has its own energy grid that generates a significant quantity of non-conventional renewable energy, 70% of which is from biomass, black liquor or methanol. This means that the cost and volume of emissions of greenhouse gases from energy generation are a significant issue for the Company; that is why we focus in energy efficient measures and engage with local authorities to improve our energy performance, share good practices and continue increasing our share of renewable energy. CMPC engages in this issue directly with Chilean Ministry of Energy and the Energy Efficiency Agency for the implementation of energy efficiency measures at its facilities. More specifically, the CMPC Pulp mills: Santa Fe, Pacifico and Laja, as well as the Sack Kraft plant in Chillan received the Gold Seal for Energy Efficiency, the highest level of recognition. CMPC also received five Silver Seals for its Softys plants in Talagante and Puente Alto and CMPC Maderas facilities in Bucalemu, Mulchen and Coronel. Additionally, the Biopackaging Sack Kraft in Chillan was chosen to receive the “Distinguished Measures in Energy Efficiency” award among all participating companies for its project “Eliminating Compressed Air Systems Loss”. Finally, CMPC Celulosa received the international Clean Energy Ministerial Energy Management Leadership Award for its leadership in energy management. At the same time, we are implementing this practices in all our 43 productive facilities in the 8 countries where we operate. Since the beginning of this project, 19 plants’ Energy Management Systems have been certified to the ISO 50001 standard, while 29 others are currently in the process of assessment, design, implementation and/or verification of their systems. Thus, in 2020, CMPC became the company in Chile with the largest number of plants certified in SGEn ISO 50001, reaching 15 plants in the country, which advances it to the fulfillment of Law 21.305 of energy efficiency.	We support clean energy generation from non-conventional renewable energy sources such as biomass and black liquor; and the continuous implementation of energy efficiency measures by the public sector and other companies, procuring to share good practices from our experience and the continuous improvement of our energy performance. That is why CMPC has supported the development of the Energy Efficiency law in Chile and is a pioneer in its implementation.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?
Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
CORMA

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The Chilean Timber and Wood Corporation, CORMA, is a chilean trade association that brings together 190 actors from the private forestry sector and represents more than 55% of the planted hectares of the country and 85% of forest exports. Founded in 1952, its objective is to promote the development of the forestry sector, the most important renewable resource-based industry in the country. It encourages stopping climate change, mainly by reforestation, recovering eroded soil, protecting and recovering water basins, maintaining and increasing biodiversity and fomenting Clean Production Agreements. CORMA is committed to sustainable development and promotes among its partners various actions aimed at fostering a modern, innovative productive activity in harmony with the environment, caring for the environment and good practices with the community and its workers.

How have you influenced, or are you attempting to influence their position?
We influence their position through our knowledge of the forestry sector, contribution to mitigating and adapting to climate change, through its carbon capture and the benefits of the use of wood. We support them with studies and sharing our experiences so that we can learn from others and help them learn from us. The studies include different firms so we can have bigger data and therefore be able to have better and deeper analysis of climate change effects in our business and our business' impacts on climate change. At the same time, we constantly participate in all of Cormas's relevant initiatives and work groups.

Trade association
WBCSD

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. They help make their member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies. Their member companies come from all business sectors and all major economies, representing a combined revenue of more than USD $8.5 trillion and with 19 million employees. Their Global Network of almost 70 national business councils gives their members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver high-impact business solutions to the most challenging sustainability issues. Also, Combating climate change and transforming the energy system, prioritization of renewable energy, climate policy; GHG Management and Resilience, among others.

How have you influenced, or are you attempting to influence their position?
Yes, we have influence their position, CMPC actively participates in the WBCSD Forest Solutions Group (FSG), as part of one of the 11 companies sharing our experiences, perspective, and data about: renewable energy use, energy efficiency, reducing water usage, conservation and sustainable forest management among other important key KPI for our sector. During 2019, this group launched the Forestry sector SDG Roadmap. The Roadmap was launched at the "Lead, Transform, Succeed: Chief Sustainability Officers for SDGs" event co-hosted by WBCSD as part of the United Nations High-Level Political Forum in New York, where Francisco Ruiz-Tagle CEO of CMPC presented the roadmap in the name of all the companies involved.

Trade association
Chilean Association of All Trades (Sofofa)

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
The purpose of SOFOFA is to validate companies and business as a reliable and relevant actors in the project of making Chile a more developed, modern and inclusive country. They draw on the experiences of companies and unions throughout the country and from different sectors of the economy. Considering this more demanding and critical society as an opportunity, and not as a threat. Looking to the future to move forward from our history, with perseverance, innovation and the ability to evolve, just as we do in our companies, promoting an integral and transparent act, putting people and their development at the center.

How have you influenced, or are you attempting to influence their position?
CMPC influences it's position by co-funding studies for climate change adaptation and mitigation and different instance were climate change is at the center of the discussion.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
Yes

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

To ensure that our policy engagement objectives are aligned with our overall climate change policy and strategy, engagements with trade associations and donations associated with policy influence are supervised by the Corporate Affairs Area, in which also is inserted the Corporate sustainability area. All the most important associations that are likely to take a position in Climate Change or can influence policy as mentioned above such as Corma, WBCSD, among others, have direct participation in there work groups or committees of CMPC Corporate Sustainability Director, which is the highest management position incharge of guiding the company's climate change strategy, base on our climate change policy. His participation in this main instances or the participation of an expert of the company designated by him according to expertise, assures that the activities we are participating align with our corporate view and policies. Specifically for climate change issues we are guided by our Climate Change Policy which establishes:

CMPC recognizes its responsibility for climate action in line with its mission, values, and corporate purpose. We rely on scientific data which indicates that human activity has been accelerating global warming. We also understand that deteriorating environmental conditions could in turn have an adverse effect on humanity.

That is why we are committed to:

1 Striving towards a low-carbon economy based on renewable natural resources and a circular business model.

2 Following applicable international climate change related conventions and principles, while complying with local legislature and existing regulations on the subject matter in the countries where we operate.

3 Working with our people, communities, providers, clients and other stakeholders on building awareness about climate change and its impacts in order to inspire action and develop a shared response.

4 Promoting the carbon capture and storage potential of our forest plantations and products.

5 Measuring and reporting our greenhouse gas emissions on an annual basis, as well as publicly disclosing our climate performance.

6 Setting quantitative science-based targets for the reduction of our carbon footprint.

7 Integrating climate issues into our corporate risk assessment, the design of effective adaptation measures and the search for new business opportunities

The company always consider all of these before engaging in studies, working with peers and making donations to trade association or research, among other similar activities that relate to climate change. CMPC makes yearly donations to several social, cultural and academic institutions that contribute to national scientific, cultural, social, educational and economic development, specially focus in sustainable forest management and innovation. These donations benefit institutions functioning in the areas where CMPC operates and according its policies. During 2020 CMPC donated USD 4,834,267 to industry associations, memberships, educational institutions, other tax exempt groups and think tanks.

The full list of the company participation with trade associations and other donations can be found in the 2020 Integrated Report (pages 150-151).

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 mainstream reports

Status
Complete

Attach the document
1
Integrated_Report_2020.pdf

Page/Section reference
CMPC publishes every year its Integrated Report. In the 2020 version this are some important references: GHG targets: p.85 of the PDF, p.165 of the document. Climate Change management: p. 85-86 of the PDF, p.169-171 of the document. GHG emissions: p. 95-96 of the PDF, p. 188-190 of the document. Risk Management: p. 106-110 of the PDF, p. 178-187 of the document. Strategy and Governance: page 32 of the PDF, 211-219 of the document.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
Since 2016 CMPC's mainstream report is and integrated report that follows the Integrated Reporting principle and discloses its financial performance together with its performance in the main sustainability topics.

Publication
In voluntary sustainability report

Status
Complete

Attach the document
1
Sustainability_Report_2020.pdf

Page/Section reference
2020 Sustainability Report: p. 7 Governance and strategy p.10 all targets and metrics including emissions

Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment
Since 2018 CMPC develops a voluntary sustainability report, where we report on the main annual sustainability milestones and performance on our material issue KPIs.

C13. Other land management impacts

C-AC13.1/C-FB13.1/C-PF13.1

(C-AC13.1/C-FB13.1/C-PF13.1) Do you know if any of the management practices implemented on your own land disclosed in C-AC4.4a/C-FB4.4a/C-PF4.4a have other impacts besides climate change mitigation/adaptation?
Yes

C-AC13.1a/C-FB13.1a/C-PF13.1a

(C-AC13.1a/C-FB13.1a/C-PF13.1a) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Management practice reference number
MP1

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Water

Description of impact
As of 2020, CMPC conserves and protects 385,726 ha that include areas of important biodiversity, flora, fauna, water catchments and of important socio-cultural value. The conservation and in some cases restoration of these areas, provide important ecosystem services for our company and value chain. Related to positive impacts, these areas provide habitats for native species, that sometimes are endangered, such as the Huemul in Chile in our conservation area Rucamanqui, increasing their habitat and populations, having a positive impact on biodiversity. At the same time, protecting water catchments and the forest cover around them, help maintain water flows and provide clean water to many of the local communities near our forestry operations. Lastly, soil is protected is this area due to the permanent forest cover of native species that help prevent soil degradation and improve their quality when we restore land that has been degraded.

Have you implemented any response(s) to these impacts?
Yes

Description of the response(s)
All impacts related to this activity are positive, and to continue enhancing these positive impacts, during 2019, CMPC committed to protect and conserve 100,000 additional hectares by 2030, adding to the over 320 thousand hectares CMPC already has of such land in Argentina, Brazil and Chile. By 2020, 64.2% of progress towards this target has been achieved.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

There is no additional information we think is relevant that we haven't already disclosed.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Several key actors can be found within the company's supply chain. For CMPC, the opinion of our clients is very important, which is why we strive to improve the communication and sustainability information disclose to them. CMPC has over 19,360 clients in over 45 countries around the world, so reaching them all directly is not always possible, then we make an effort in making the best possible public information available and are always open to responding any specific requests directly.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	5287000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?
Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	CL	0000001314

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
Arcos Dorados

Scope of emissions
Scope 1

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Arcos Dorados purchases tissues products from in Brazil, which is Softys Mogi. Emissions are a proportion of the facility's scope 1 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
461

Uncertainty (±%)
0

Major sources of emissions
Major sources of emissions are the burning of liquified natural gas (LNG) in paper machines for the production of steam and the use of LPG (Liquified Petroleum gas) in mobile sources in the plant, this last one, in a much smaller proportion.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All stationary and mobile combustion sources and the fuels burnt in them, inside the Mogi facility are considered in our scope 1 calculations, there are no exclusions. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Banco Bradesco S/A

Scope of emissions
Scope 1

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Banco Bradesco purchases tissues products from in Brazil, which is Softys Mogi. Emissions are a proportion of the facility's scope 1 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
114

Uncertainty (±%)
0

Major sources of emissions
Major sources of emissions are the burning of liquified natural gas (LNG) in paper machines for the production of steam and the use of LPG (Liquified Petroleum gas) in mobile sources in the plant, this last one, in a much smaller proportion.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All stationary and mobile combustion sources and the fuels burnt in them, inside the Mogi facility are considered in our scope 1 calculations, there are no exclusions. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental

Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Suzano Papel & Celulose

Scope of emissions
Scope 1

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Suzano purchases BCTMP pulp from in Brazil, which is Softys Caieiras. Emissions are a proportion of the facility's scope 1 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
5073

Uncertainty (±%)
0

Major sources of emissions
Major sources of emissions are the burning of liquified natural gas (LNG) in paper machines for the production of steam and the use of LPG (Liquified Petroleum gas) in mobile sources in the plant, this last one, in a much smaller proportion.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All stationary and mobile combustion sources and the fuels burnt in them, inside the Caieiras facility are considered in our scope 1 calculations, there are no exclusions. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Wal Mart de Mexico

Scope of emissions
Scope 1

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility from which Walmart Mexico purchases tissues products from in Mexico, which is Softys Altamira. Emissions are a proportion of the facility's scope 1 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
51828

Uncertainty (±%)
0

Major sources of emissions
Major sources of emissions are the burning of liquified natural gas (LNG) for the cogeneration plant in Altamira, which is used to generate electricity and steam for paper production; and the use of LPG (Liquified Petroleum gas) in mobile sources in the plant, this last one, in a much smaller proportion.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All stationary and mobile combustion sources and the fuels burnt in them, inside the Altamira facility are considered in our scope 1 calculations, there are no exclusions. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Arcos Dorados

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Arcos Dorados purchases tissue products from in Brazil which is Softys Mogi. Emissions are a proportion of the facility's scope 2 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
122

Uncertainty (±%)
0

Major sources of emissions
Major scope 2 sources of emissions for Softys Mogi include the purchase of electricity from the grid for the paper production process and the purchase of steam generated from biomass for paper machines.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All scope 2 emissions are considered in the Softys Mogi facility's calculations, there are no exclusions. The only scope 2 emissions are the ones pertaining to the purchase of electricity and steam. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Banco Bradesco S/A

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Banco Bradesco purchases tissue products from in Brazil which is Softys Mogi. Emissions are a proportion of the facility's scope 2 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
30

Uncertainty (±%)
0

Major sources of emissions
Major scope 2 sources of emissions for Softys Mogi include the purchase of electricity from the grid for the paper production process and the purchase of steam generated from biomass for paper machines.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All scope 2 emissions are considered in the Softys Mogi facility's calculations, there are no exclusions. The only scope 2 emissions are the ones pertaining to the purchase of electricity and steam. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Suzano Papel & Celulose

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Suzano purchases BCTMP pulp from in Brazil, which is Softys Caieiras. Emissions are a proportion of the facility's scope 2 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
4235

Uncertainty (±%)
0

Major sources of emissions
Major scope 2 sources of emissions for Softys Caieiras include the purchase of electricity from the grid for the pulp and paper production.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All scope 2 emissions are considered in the Softys Caieiras facility's calculations, there are no exclusions. The only scope 2 emissions are the ones pertaining to the purchase of electricity. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Wal Mart de Mexico

Scope of emissions
Scope 2

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility from which Walmart Mexico purchases tissues products from in Mexico which is Softys Altamira. Emissions are a proportion of the facility's scope 2 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
7902

Uncertainty (±%)
0

Major sources of emissions
The major source of scope 2 emissions for the Altamira facility is the purchase of electricity from the grid.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
All scope 2 emissions are considered in the Softys Altamira facility's calculations, there are no exclusions. The only scope 2 emissions are the ones pertaining to the purchase of electricity for paper production. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Arcos Dorados

Scope of emissions
Scope 3

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Arcos Dorados purchases tissues products from in Brazil which is Softys Mogi. Emissions are a proportion of the facility's scope 3 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
1268

Uncertainty (±%)
0

Major sources of emissions
Major scope 3 emissions sources for Mogi facility are purchase of goods and services (71% of emissions), upstream transportation and distribution (11%), and fuel and energy related activities (10%). All other emissions categories are a small proportion of scope 3.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The scope 3 emissions categories considered in the Softys Mogi facility's calculations are: Purchase of goods and services, Business air travel, Employee commuting, upstream transportation and distribution, downstream transportation and distribution, fuel and energy related activities and waste generated in operations, being the relevant scope 3 categories for this facility. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered and by consulting with the relevant areas such as, logistics and procurement departments. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Banco Bradesco S/A

Scope of emissions
Scope 3

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Banco Bradesco purchases tissues products from in Brazil which is Softys Mogi. Emissions are a proportion of the facility's scope 3 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
314

Uncertainty (±%)

0

Major sources of emissions
Major scope 3 emissions sources for Mogi facility are purchase of goods and services (71% of emissions), upstream transportation and distribution (11%), and fuel and energy related activities (10%). All other emissions categories are a small proportion of scope 3.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The scope 3 emissions categories considered in the Softys Mogi facility's calculations are: Purchase of goods and services, Business air travel, Employee commuting, upstream transportation and distribution, downstream transportation and distribution, fuel and energy related activities and waste generated in operations, being the relevant scope 3 categories for this facility. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered and by consulting with the relevant areas such as, logistics and procurement departments. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Suzano Papel & Celulose

Scope of emissions
Scope 3

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Suzano purchases BCTMP pulp from in Brazil which is Softys Caieiras. Emissions are a proportion of the facility's scope 3 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
49118

Uncertainty (±%)
0

Major sources of emissions
Major scope 3 emissions sources for Caieiras facility are: purchase of goods and services, upstream transportation and distribution, and downstream transportation and distribution. All other emissions categories are a small proportion of scope 3.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The scope 3 emissions categories considered in the Softys Caieiras facility's calculations are: Purchase of goods and services, Business air travel, Employee commuting, upstream transportation and distribution, downstream transportation and distribution, fuel and energy related activities and waste generated in operations, being the relevant scope 3 categories for this facility. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered and by consulting with the relevant areas such as, logistics and procurement departments. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

Requesting member
Wal Mart de Mexico

Scope of emissions
Scope 3

Allocation level
Facility

Allocation level detail
We allocate emissions from the specific facility that Walmart Mexico purchases tissues products from in Mexico which is Softys Altamira. Emissions are a proportion of the facility's scope 3 as of the metric tons of products purchased by them from the facility's total production.

Emissions in metric tonnes of CO2e
58672

Uncertainty (±%)
0

Major sources of emissions
Major scope 3 emissions sources for Altamira are purchase of goods and services (30% of emissions), upstream transportation and distribution (16%), and fuel and energy related activities (29%) and upstream transportation and distribution (23%). All other emissions categories are a small proportion of scope 3.

Verified
No

Allocation method
Allocation based on mass of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The scope 3 emissions categories considered in the Softys Altamira facility's calculations are: Purchase of goods and services, Business air travel, Employee commuting,

upstream transportation and distribution, downstream transportation and distribution, fuel and energy related activities and waste generated in operations, being the relevant scope 3 categories for this facility. In our GHG inventory we consider the boundary of operational control. Emissions sources are identified through a field assessment of the facility by the plants Environmental Engineer, making sure there are no emissions sources not considered and consulting with the relevant areas such as logistics and procurement departments. It is important to note that our GHG inventory for scope 1, 2 and 3 for this facility are third-party verified, but not the allocation of emissions to customers.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

We publicly disclose scope 1, 2 and 3 emissions for all our facilities in our Integrated Report. Specific information of the emissions and verification process can be found in p.138 of our integrated report on p.161-162: https://www.cmpc.com/pdf/Integrated_Report_2020.pdf

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	CMPC has many products (wood, pulp, packaging paper, boxes, cardboard, tissue paper, sanitary products, among others) and over 19,360 clients for these products. This makes it and enormous challenge to address them all and we are beginning by addressing the biggest ones. Considering the vast amount of products and operations of CMPC in 8 countries, we can estimate the emission for an specific customer, if customers provide us the amount and type of product purchased, and the country were it was purchased, so we can know which facilities are the ones producing these products and allocate the emissions at a facility level. For example, in the case of Arcos Dorados, which is a multinational company, they are requesting information for our Brazil operations. If I consider my internal information only, I would probably have considered all the product sold to them and not the specific Softys products they are requesting information for. At the same time, with Walmart Mexico they request specific information for their purchases in Mexico and we sell products to Walmart in other countries where we operate. So being specific about the products and countries from where the SC members are requesting information, is key to giving them a good response.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

As we continue to make a more accurate calculation of our scope 3 emissions, we plan to be able to give exact allocation of calculations to customers and explore possibilities of how to reduce scope 3 emissions together. We are starting by responding to CDP Supply chain members and will continue to allocate emissions to customers upon request. It is important to consider we have over 19,000 customers, so we plan to address first the biggest ones. At the same time, we plan to explore first the emissions of processing of sold products for our products such as pulp, timber and paper for packaging, which need further processing, being a relevant scope 3 category for us, so we might start requesting information from customers that purchase these products.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member
Arcos Dorados

Group type of project
Reduce Logistics Emissions

Type of project
Route optimization

Emissions targeted
Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized
Other, please specify (Yet to be determined)

Estimated lifetime CO2e savings
85

Estimated payback
Cost/saving neutral

Details of proposal
One of the most relevant scope 3 categories for CMPC is downstream transportation and distribution, which includes all emissions for transport of products to national and

international clients, as well as transport to warehouses. In the next few years we would like to establish a SBT, and as our scope 3 emissions represent more than 40% of our GHG inventory, we would have to set a scope 3 target for at least the categories that make up 66% of our scope 3 emission, so we would have to include downstream transportation and distribution as one of our main scope 3 categories. When this happens, we will have to look into our downstream logistics and see possibilities of changing means of transports, routes and making logistics more efficient. Here we will need collaboration of our clients to rethink our logistics, being an important opportunity for them to reduce their scope 3 emissions for upstream transportation and distribution as well. So, we see an important future collaboration with Arcos Dorados in this aspect, as they are clients who purchase over 1,200 tonnes of tissue products from CMPC, only in Brazil. And if we look to products purchased in other countries where they operate the opportunity might be even bigger.

Requesting member
Banco Bradesco S/A

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Other, please specify (Not emissions, bu sustainability engagement)

Estimated timeframe for carbon reductions to be realized
3-5 years

Estimated lifetime CO2e savings
0

Estimated payback
Cost/saving neutral

Details of proposal
Banco Bradesco does not buy a huge amount of products, but as a financial institution other engagements on sustainability, green finance issuances or others could be an important possibility.

Requesting member
Suzano Papel & Celulose

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized
3-5 years

Estimated lifetime CO2e savings

Estimated payback
Cost/saving neutral

Details of proposal
Suzano as well as CMPC is a Forest, Pulp and Paper Company which both have operations in Latin America with a special influence in Brazil. The relationship is special because we both are suppliers and customers to each other, as well as peers. In this case, the are a lot of opportunities of mutuality beneficial practices that could take place, such as improved and efficient logistics in mutually sold products to each other, sharing of best practices, forest conservation initiatives, among many others.

Requesting member
Wal Mart de Mexico

Group type of project
Reduce Logistics Emissions

Type of project
Consolidated logistics

Emissions targeted
Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized
3-5 years

Estimated lifetime CO2e savings
1775

Estimated payback
Other, please specify (Yet to be determined)

Details of proposal
One of the most relevant scope 3 categories for CMPC is downstream transportation and distribution, which include all emissions for transport of products to national and international clients, as well as transport to warehouses. In the next few years we would like to establish a SBT, and as our scope 3 emissions represent more than 40% of our GHG inventory, we would have to set a scope 3 target for at least the categories that make up 66% of our scope 3 emission, so we would have to include downstream transportation and distribution as one of our main scope 3 categories. When this happens we will have to look into our downstream logistics and see possibilities of changing means of transports, routes and making logistics more efficient. Here we will need collaboration of our clients to rethink our logistics, being an important opportunity for them to reduce their scope 3 emissions for upstream transportation and distribution as well. So, we see an important future collaboration with Walmart in this aspect, as they are clients who purchase over 36,000 tonnes of tissue products from CMPC, only in Mexico. And if we look to products purchased in other countries where they operate the opportunity might be even bigger.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.
20

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Name of good/ service
Tissue paper

Description of good/ service
Our Tissue paper products include: toilet paper, napkins, hand towels, among others, which are final products sold to direct customers or businesses which use them in their facilities, such is the case of Arcos Dorados and WalMart Mexico, requesting CDP Supply Chain members. This products are produced exclusively by our Softys business division, in 8 Latin American countries: Argentina, Chile, Brazil, Colombia, Ecuador, Uruguay, Peru and Mexico.

Type of product
Final

SKU (Stock Keeping Unit)
metric tonnes

Total emissions in kg CO2e per unit
1888

±% change from previous figure supplied
2

Date of previous figure supplied
December 31 2019

Explanation of change
A Change of 2% is not a relevant change, just a regular fluctuation in annual processes due to changes in demand, operational conditions, among others, there is not an specific reason for it.

Methods used to estimate lifecycle emissions
GHG Protocol Product Accounting & Reporting Standard

SC4.2b

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

Name of good/ service
Tissue paper

Please select the scope
Scope 1, 2 & 3

Please select the lifecycle stage
Cradle to gate

Emissions at the lifecycle stage in kg CO2e per unit
2530

Is this stage under your ownership or control?
Yes

Type of data used
Primary and secondary

Data quality
We consider our data of good quality because our calculations are based on our internal data of purchased goods, fuels, electricity, etc, which is constantly accounted for in our internal systems such as SAP, invoices and other. At the same time, data was verified in 2019 by the external audit Deloitte, which revised deeply data sources for all our emissions calculations.

If you are verifying/assuring this product emission data, please tell us how
Yes, this data corresponds to a life cycle assessment of an average tissue product according to ISO 14067 verified by the external audit Deloitte during january 2019 in a limited assurance process. The process involved the revision of documents from where the primary data for calculations of the inventory was extracted; such as internal systems and invoices, as well as visits to the production facilities to verify there where not relevant exclusions in the emissions accounting.

Name of good/ service
BCTMP Pulp

Please select the scope
Scope 1, 2 & 3

Please select the lifecycle stage
Cradle to gate

Emissions at the lifecycle stage in kg CO2e per unit
1163

Is this stage under your ownership or control?
Yes

Type of data used
Primary and secondary

Data quality
We consider our data of good quality because our calculations are based on our internal data of purchased goods, fuels, electricity, etc, which is constantly accounted for in our internal systems such as SAP, invoices and other. At the same time, data was verified in 2019 by the external audit Deloitte, which revised deeply data sources for all our emissions calculations.

If you are verifying/assuring this product emission data, please tell us how
Yes, this data corresponds to a life cycle assessment of an average BCTMP pulp production according to ISO 14067 verified by the external audit Deloitte during january 2019 in a limited assurance process. The process involved the revision of documents from where the primary data for calculations of the inventory was extracted; such as internal systems and invoices, as well as visits to the production facilities to verify there where not relevant exclusions in the emissions accounting.

SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
Tissue products	Initiative 1	During september 2019, CMPC announced it's 4 corporate sustainability goals. In line with GHG emissions, the company committed to reduce by 50% it's absolute scope 1+2 emissions, by 2030, considering 2018 as baseline. This target includes all facilities, as well as Softys, so the reduction activities carried out, will reduce the overall scope 1+2 emissions associated to tissue products fabricated in the company's facilities.	Ongoing	416

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?
No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms