Dexco S.A - Climate Change 2021

C0. Introduction

C0.1

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

Duratex is a publicly traded company with 70 years of history, that has the Value Proposition of offering Solutions for Better Living to customers and consumers. With our business divisions - Wood, Deca and Ceramic tile - we are working to produce and sell products for the furniture and finishings sectors in the civil construction industry. We are part of people's daily lives, working in the segments of wood panels, bathroom fixtures and metals, electric showers and ceramic tiles, through our brands recognized in their segments for their design and quality: Durafloor, Duratex, Deca, Hydra, Ceusa and Portinari. As a member of the Brazilian Association of Publicly-Held Companies (ABRASCA), Duratex maintains its commitment to the ABRASCA Code of Self-Regulation and Good Practices of Publicly-Held Companies, with best market practices and the principles of transparency, equity, accountability, and corporate responsibility.

Nowadays, Duratex has sixteen industrial units located in the South, Southeast and Northeast regions of Brazil and three additional wood panels units in Colombia, Notable among the products in our portfolio are MDP and MDF paneling, fiberboard sheets, wood flooring, sanitary ware, metals, metal fittings and electric showers. Besides serving the Brazilian market, our products reach over 50 countries, with a special presence in South America, Central America, Africa and the USA. In addition to the factories, Duratex is responsible for more than 140 thousand hectares of planted forests and conservation areas in Brazil and Colombia. Duratex ensures the use of the best native area conservation and management practices. On July 1st, 2020, we celebrated the 25th anniversary of our Forest Steward - ship Council® (FSC®) certificate of responsible forest stewardship. We were the 1st Company in the entire southern hemisphere to obtain it and the 5th in the world. Our chain of custody is also certified, ensuring the traceability of the wood used in our production process. In our forest areas in Brazil and Colombia, we produce eucalyptus seedlings in nurseries, planting them at our own farms and at leased farms and using the wood to supply the fiberboard and paneling factories. We also manufacture the resin used to bind the particles and fibers in MDP and MDF panels. Verticalization of operations and the proximity between planted areas and industrial units are some of our main competitive advantages, adding value to our business at a lower cost. We acquired, in 2020, the Viva Decora constructech, an online platform with more than 10 million single sessions per month, and continued to work on the LD Celulose project, a joint venture with Lenzing AG, which will be one of the world's largest pulp plants.

In 2020 we witnessed the outcome of maturity of discussions on climate change in the Company, which will have an even greater impact when we revisit our sustainability strategy, whose new version will be disclosed in 2021. We are now addressing the commitment to reducing and setting GHG emission targets in a strategic way. We will soon complete a science-based study with proposed GHG emission targets in line with Duratex's zero carbon strategy. We calculate our GHG emissions by following the guidelines of The Greenhouse Gas Protocol – the top international benchmark for corporate emission calculation – and its Brazilian counterpart, the Brazilian GHG Protocol Program. Attentive to all opportunities to help fight climate change, we continually seek to replace the use of fossil fuel with renewable alternatives and adopt new and less polluting equipment in our industrial processes. In 2020, over 56.0% of the energy we used came from renewable sources (including Scope 1 and Scope 2 energy), and outstanding were the panel operations with 86.0% of its matrix composed of renewable energy.

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.

Brazil
Colombia

C0.4

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

BRL

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	Both own land and elsewhere in the value chain [Agriculture/Forestry only]
Processing/Manufacturing	Direct operations only [Processing/manufacturing/Distribution only]
Distribution	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Consumption	Yes [Consumption only]

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

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

Row 1

Primary reason

Other, please specify (Outside the scope of my organization)

Please explain

Emissions from distribution activities are calculated in Scope 3. Duratex does not operate the distribution of its own products. Specialized companies are hired for this service. The evolution and the amount of this emissions is evaluated every year.

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

40-60%

Produced or sourced

Both

Please explain

Duratex is the largest producer of wood panels in Brazil. Its planted eucalyptus forests in Brazil guarantee the supply of wood paneling factories. These forests are managed using responsible management practices and conservation of native areas. In 2020, Duratex has completed 25 years of FSC (Forest Stewardship Council) certification for its forest management, as the first company in South America to achieve it. Duratex´s chain of custody is also FSC-certified, ensuring the traceability of all the wood (both certified and from other responsible sources) used in our factories to be traced to its origin. FSC license codes: FSC-C006042 (Brasil) e FSC-C109955 (Colômbia).

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
Director on board	Duratex´s governance structure is composed of the Board of Directors, which establishes the strategic direction of the business, and the Executive Board. The Board of Directors is supported by six Committees that assess and address the most relevant aspects of Duratex´s administration. One of them is the Sustainability Committee. Duratex has a Sustainability Committee with Executives appointed by the Board. This Committee has in its structure an independent member of the Board of Directors as president, as approved in the Company Bylaws. Members and participants of the Committee for Sustainability: President Specialist Consultant An independent member Members of Board Chair, including the Chairmen of the Board of Directors Chief Executive Officer Sustainability Manager Among the agendas, those referring to climate change is addressed and proposed by the chairman of the Committee who is responsible for the negotiations and deliberations, also reporting to the Board of Directors. For climate change, specifically, the Committee's last decision was to support and approve, in conjunction with the Company's Executive Committee, the revisiting of Duratex's greenhouse gas emissions targets, based on science (SBT). The climate change guidelines are periodic, mostly bimonthly, with discussions and decisions supported by market trends and sustainability indexes, evaluation of the possibility of improvements and opportunities for the company in the climate theme and in some meetings, external experts are invited for participation in the Committees. It is worth mentioning that, in 2021, the ESG executive management was created, encompassing the Sustainability and Social Responsibility area. The management became part of the People and ESG Directorate, reinforcing Duratex's commitment to making its business increasingly compliant with the principles of corporate and financial sustainability and aligning solutions for better living with actions aimed at environmental preservation and local development.

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 – some 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 Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Sustainability Committee plays an active role in the definition of the strategic positioning of sustainability in the business units; in the definition of priority themes, including the issue of climate change; in the adjustment of the organizational structure of the area; in the definition of performance measurements; and in the incorporation of sustainability in a transverse manner across the Company's various business areas. Duratex has an ESG executive management, which encompasses the Sustainability and Social Responsibility areas and reports to People and ESG Directorate. This Management is responsible for the development of the integrated strategic plan and for the evaluation of opportunities for improvement at the Company, based on the analysis of external scenarios, materiality and market indicators. In our Sustainability Strategy, Climate Change has specific goals that involve all of our businesses, The Sustainability committee, alongside the president and the sustainability management, accompany and discuss material themes of our strategy, which include climate change issues. Regarding climate change, there are either some meetings dedicated specifically for this theme or the theme is treated during other general meetings of the committee during the year. The main subject of our last dedicated meetings for climate change agenda was low carbon economy transition, carbon management and climate change, external position on climate change, carbon emission and agriculture inventory. See more information about Climate Change Agenda in Duratex Integrated Report 2020 - page 48, 49 (https://www.duratex.com.br/Relatorio-Anual-2020/en/pdf/Duratex_RA_2020_Book_en.pdf)

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 Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Sustainability committee	<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).

Duratex 's ESG Executive Manager is responsible for conducting the discussion regarding climate agenda and forwarding demands, avaliations, projects and tendencies to the Executive Board (lead by Duratex´s CEO) and Duratex Sustainability Committee, for deliberations and approvals. Incorporation of Climate Change theme in the company's guidelines is ensured by the Duratex Sustainability Strategy.

i) Duratex´s Sustainability Committee is appointed by the Board of Directors in our organizational structure. Our Corporate Sustainability Manager reports to the People and ESG Director, wich reports to the CEO and also supports the Sustainability Committee. Our Sustainability Committee advises Duratex on trends, best practices and opportunities for actions and improvements about climate change agenda.

ii) The Board of Directors is supported by six Committees that assess and address the most relevant aspects of our administration. All the committees meet monthly to discuss guidelines directly related to the company's business and help identify long-term trends and opportunities embedded in our strategic planning. Sustainability Committee is the advisory body to the Board of Directors. The Corporate Sustainability Management is responsible for strategic management of environmental and social issues, including consulting processes, analyses of risks and opportunities and consolidation of key indicators, among other duties. Climate change is one of the strategic themes that involves Sustainability agenda. For this subject, the Sustainability area is responsible for developing new studies, analysis of new tendencies and market demands, searching for improvements to organizational performance. The area also leads and executes projects proposed by the Sustainability Committee, directs and presents actions to our Executive Committee.

Projects linked to climate change are approved and communicated in these two instances (i and ii as described above). In order to achieve alignment with the Company's strategy, we have the direction of the Executive Board composed of the top leadership of all Duratex businesses, directing the best form of implementation, making available shared resources and prioritizing climate projects. Projects linked to the climate agenda and the approvals in these instances were: revisiting and improving Duratex's greenhouse gases emission inventories, the company's carbon balance (concluded in 2020) and elaborating targets based on in science (started in 2019 and expected to be implemented in 2021). In 2019, Duratex's adhesion to the São Paulo Agreement, an agreement that aims to encourage companies in São Paulo to make voluntary commitments to reduce greenhouse gas emissions, was approved.

Regarding the Company's risk management, we have the structure below, which also includes climate risks in Duratex's socio-environmental risks.

iii) We manage risks continually and guarantee compliance with the Risk Policy using a structure that includes: Audit and Risk Management, internal audits, internal controls and Risk Committee. This structure is responsible for supervising Internal Auditing work and internal control and risk management. At the executive level, the committee assesses and monitors risks involved in operations and activities, providing accountability every two months to the Audit and Risk Management Committee regarding. The Duratex´s environmental and social risks are reviewed by Risk Management Committee every two years. The risks also include the climate change as a material theme. These risks are reviewed according to new legal requirement tendency, market demand, sustainability index and others aspects, involving Corporate and industrial management. For the mapped risks, action plans are developed to minimize them. Every action plan are accompany montly by Audit Area to check the implementation.

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	In 2020, Duratex established goals linked to ESG aspects for all the company's top leadership. These goals will have a percentage of 10% of variable remuneration. These goals will enter the 2021 performance assessment. These goals will be monitored during the 2021 performance assessment .

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
Executive officer	Monetary reward	Emissions reduction target	The Ceramic Tiles Board has a specific greenhouse gas emission reduction target of 10% reduction compared to 2020. Ceramic Tiles is currently our most carbon intensive segment.

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	Duratex considers an immediate risk/oportunity as a short term risk/oportunity in a horizon from 0 to 5 years. Risks or opportunities that lead to prolonged results (actions tha can start in the present or in the near future and whose impacts can be extended to the short term) are also included.
Medium-term	5	10	For Duratex, medium term horizon ranges from 5 to10 years. Risks or opportunities that lead to prolonged results (actions tha can start in the present or in the future and whose impacts can be extended to the medium term) are also included.
Long-term	10	20	Long-term horizon is considered over 10 years, especially for sustainable forest management. Risks or opportunities that lead to perennial results (actions that can start in the present or in the future and whose impacts can be prolonged to the long term) are also included.

C2.1b

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

To assess the company's general risks, including the analysis of socio-environmental risks, an evaluation is carried out according to their impact and vulnerability. The impact consists of the assessment of risks according to qualitative and quantitative criteria, with weighted variables, taking into account financial impact, scope of operations, damage to the image, operational and legal. These variables are properly weighted. According to the impact, risks are classified as critical, high, medium and low. For the vulnerability, it is evaluated how much the company is exposed or unprotected to risk events, considering the frequency of recurrence of the event, the internal controls adopted and the response time to regularize or treat the risk. Weights are also assigned. As for vulnerability, risks are also classified as critical, high, medium and low. There are monitoring for all risks assessed by Duratex. After analyzing the impact and vulnerability, the resulting risks as critical and high are always classified as considerable risks. For the two classification "critical" and "high", the socio-environmental risks are considered substantive financial or strategic risks. Critical risks are considered to be above 3% of shareholders' equity (which may cause impacts greater than R$ 155,650,920.00). High risks are considered to be less than or equal to 3% and above 2% of shareholders' equity (that is, between R$ 103,767,280.00 and R$ 55,650,920.00).

As a result, mitigation plans are established and risk managers are designated for continual monitoring, with a check by the Audit area and Sustainability Area. The Risk Commission is responsible for providing accountability every semestre for action plans executed to the Audit and Risk Management Committee which advises our Board of Directors.

Edaphoclimatic studies carried out in Duratex areas of operation and our participation in a working group to propose a Corporate NDC (Nationally Determined Contributions) were opportunities related to the company's climate risk studies (physical and transition risks respectively).

In 2019, in partnership with Embrapa (a Brazilian Agricultural Research Corporation), Duratex has carried out a study to assess current and future climate vulnerabilities in the Zona da Mata region (Atlantic Forest), in regions that are important for our forest business. The edaphoclimatic study identified, evaluated and quantified temperatures, water balance, rainfall, water deficiency and temperature evolution in the regions studied, considering the period from 1980 to 2050, with projections and scenarios for the long term for the northeast region.

The following climatic assessments of the regions of interest were carried out:

*For periods of 30 years (1985 to 2015) and 10 years (2006 to 2015), aiming to verify possible recent changes in trends;

*For future periods between 2021 to 2030 and 2031 to 2040, using the Hadgen2-ES global model of climate change, on a monthly scale.

Through this assessment, possible vulnerabilities were mapped over the next four decades in order to anticipate scenarios for planning the operation. As a result, it was found that none of the objective areas of study for Duratex presented risks in the scenarios evaluated for the specific characteristics of our planted forests.

In 2020, we started a working group to propose a Corporate NDC (Nationally Determined Contributions). Alongside two other large Brazilian companies in the private sector, from different sectors, Duratex leads discussions for anticipation of regulatory risks, with the objective of influencing NDC specifications and long-term ambitions. This work will also enable an increasingly engagement with the productive sector in Brazil and the structuring of public-private partnerships in the low-carbon economy. The estimated completion of the project is the end of the year 2021.

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

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Every two years

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Duratex manages risks continually and guarantees compliance with the Risk Policy using a structure that includes: Audit and Risk Management, internal audits, internal controls and Risk Committee. This structure is responsible for internal control and risk management. At the executive level, the committee assesses and monitors risks involved in operations and activities, providing accountability every two months to the Audit and Risk Management Committee. The risk area has daily monitoring of all company's risks and the information is available on a risk management dashboard, updated frequently. The reviewing of Duratex´s environmental and social risks takes place every two years. The risks also include climate change as a material theme, and these risks are reviewed according to new legal requirement tendency, market demand, investors and sustainability index demand, among others aspects, involving Corporate and industrial management. Every action plan is accompanied monthly by Audit Area to check the implementation. The monitoring of established goals and the progress of compliance and deployment of actions is carried out monthly by the audit area in a Duratex´s internal system.
To assess the company's general risks, including the analysis of socio-environmental risks, they are evaluated according to their impact and vulnerability, following Deloit´s methodology. The impact consists of the assessment of risks according to qualitative and quantitative criteria, with weighted variables, taking into account financial impact, scope of operations, damage to the image, operational and legal. These variables are properly weighted. According to the impact, risks are classified as critical, high, medium and low. For the vulnerability, it is evaluated how much the company is exposed or unprotected to risk events, considering the frequency of recurrence of the event, the internal controls adopted and the response time to regularize or treat the risk. Weights are also assigned. As for vulnerability, risks are also classified as critical, high, medium and low. After analyzing the impact and vulnerability, the resulting risks as critical and high are always classified as considerable risks.

As an example of physical risk, it is possible to mention the Edaphoclimatic studies of Duratex areas:
1) Situation: The Company, in view of its strategic growth plan and analyzing the possible risks involved in expansions and divestments, needed to assess and direct its decisions
2) Task:A more in-depth and focused assessment was needed for this strategic analysis
3) Action:Then, to guide decisions, an Edaphoclimatic studies of Duratex's areas was carried out, with climate assessments, water balance and temperature over a period of more than 30 years.
4) Result: None of the areas under study presented climatic risks that could impact the Company's forestry business, guiding decision-making.

As an example of transition risk, it is possible to mention the study and proposal of a Corporate NDC:
Situation: In December 2020, the Brazilian government sent its revised NDC to the Paris Agreement, representing the country's new commitment to combating climate change. The new NDC, among other issues, does not have a corporate approach to concrete actions and recognition of corporate goals.
Task: assessment of potential partners and specialized consultants to assess and support discussions of a Corporate NDC
Action: In a group of three large Brazilian companies (including Duratex) discussions started, led by a specialized consultancy, in order to evaluate and carry out a conceptual proposal for other corporate and government partners of a Corporate NDC.
Result: The study is still ongoing, but it is expected to be completed by the middle of 2022.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Not relevant, included	Duratex leans on a consultancy (Âmbito) that provides services related to the mapping and updating of legislation related to the environment (and to health and work safety), in order to detect at local level, in each productive unit, the pertinent legislation, including water and climate-related regulations. This service includes a digital platform that helps managing legal requirements applicable, and selecting evidence to comply with this legislation. In addition to external consulting support, updates and notifications from the company's Legal Area ("Legal Flash") about new legislation, including environmental issues, are disclosed internally . There are no risks for Duratex arising from current legislation.
Emerging regulation	Relevant, always included	Any updates arising from emerging regulations are identified through the tools mentioned above (legal consultancy and notifications from the legal area of the company). Legislation and regulatory trends are monitored by Duratex's legal, environmental and sustainability areas. The identification of potential changes in water and climate related pricing structure can also occur through participation in meetings of Governmental Councils related to Environment and Working Groups in entities such as IBA - Brazilian Tree Industry, an important entity that leads discussions related to climate change and water, especially in the forestry sector. Every two years the mapping of possible risks is reviewed and criticality degrees of risk are reconsidered. Progress in the implementation of action plans is evaluated by the Audit and Risk Management area. As an example of one of the risks from regulatory trends assessed by Duratex: Public policies and government changes and could lead to changes in processes and requirements, increasing costs and potential emission taxes. Another risk assessed is the implementation of a possible carbon pricing market, without taking into account carbon removals from forests planted in the national territory.
Technology	Not relevant, included	Duratex has invested and implemented clean energy systems during the past few years, especially between 2015 and 2018. In 2017, we began the operation of a new biomass energy generation plant at Agudos (SP, Brazil), to replace natural gas. This investiments in new technology allowed an increase of biomass use in the energy matrix of Duratex. The risk is mapped but not relevant for Duratex, according to all the company efforts on this issue: in 2020, 86% of the energy used in Brazilian panel operations came from renewable sources. Considering all the operations, this percentage was 56 %. The decrease compared to 2019 was due to the incorporation of ceramic coating factories, whose energy matrix is mainly based on coal. Since the acquisition of the factories, Duratex has been studying alternatives to make the energy matrix of production cleaner. One of the risks evalueted by Duratex: Lack of budget planning to further increase the use of clean energy sources.
Legal	Not relevant, included	Duratex leans on a consultancy (Âmbito) that provides services related to the mapping and updating of legislation related to the environment (and to health and work safety), in order to detect at local level, in each productive unit, the pertinent legislation, including water and climate-related regulations. This service includes a digital platform that helps managing legal requirements applicable, and selecting evidence to comply with this legislation. In addition to external consulting support, updates and notifications from the company's Legal Area ("Legal Flash") about new legislation, including environmental issues, are disclosed internally . Legislation and regulatory trends are accompanied by Duratex's legal, environmental, and sustainability areas. Every two years the mapping of possible risks is reviewed and criticality degrees of risk are reconsidered. Action plans are evaluated and developments are monitored by the Audit and Risk Management. Currently, there are no risks for Duratex arising from legal obligation. All units have their obligations mapped.
Market	Not relevant, included	Market and also stakeholders demands are included in Duratex risk analysis. Duratex surveys inputs and assessments using interviews with company executives and external stakeholders (especially investors, customers and opinion-makers), in addition to studies and documents produced by organized civil society organizations. The risks raised are not critical to Duratex. Every two years, the risks are reviewed and the change in the scenario is monitored. Land use and certification of forest management are constantly monitoried by Duratex, in order to prevent risks related to market demands.
Reputation	Relevant, always included	The impacts on reputation and image of each risk mapped by Duratex are evaluated and classified according to their criticality. The legal and compliance areas are directly involved in these assessments and in the risk classifications. One of the risks evalueted by Duratex: Increasing greenhouse gases emissions or implementation of an intensive carbon process can impact company image, and also pose a threat to the company's positive carbon balance (removals).
Acute physical	Relevant, always included	Flood and storm risks are considered for forests units and also for manufacturing units. Physical controls were implemented in units that presented flood risks. For example, in Deca São Paulo this risk is no longer critical. For forest units, the risk of transport blockage (wood transportation, mecanization) and access to forests are considered.
Chronic physical	Relevant, always included	Chronic risk assessed is the occurrence of extreme events affecting Duratex's forest productivity. As it is a risk that directly affects the continuity of our businesses and our production chain, we have a specific area at Duratex that evaluates genetic improvement as a tool to face climate change. Genetic enhancement of eucalyptus seedlings and management of our forests are at the center of our investments for Forestry Business. An important part of our forest production process is the genetic improvement program, which started in the 1960s and has constantly generated more productive genetic materials that are adapted to the different climate conditions. In recent years, different species of eucalyptus have been introduced in regions where we operate as an effort to enrich the genetic basis and allow trees to be generated for commercial planting. In addition to their high productivity, these species are resistant to pests, forest diseases and environmental stresses such as drought, cold and floods.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

In Brazil, there is still no established regulation regarding a carbon taxation system or carbon market. The transition to a greenhouse gas charging scenario could increase Duratex's production costs, especially if there was no opportunity to offset or otherwise negotiate the carbon captured through the company's forests. Possibly, it would be necessary to channel more efforts to adapt the energy matrix of Deca (Ceramics and Metals) and Ceramic Titels Divisions, considering that more than 90% of the energy used in the panel plants in the Brazilian operations of Duratex comes from renewable sources, a factor that allowed an expressive reduction in direct emissions of the company in the last years. This continuous evolution is mainly due to adjustments in energy plants in panel factories, with the replacement of fossil fuels such as GMP oil and natural gas by biomass.

These adaptations have been more strategic for Panels plants, considering that the main raw material used in them is wood, which is also used as biomass. In the case of emissions taxes charging, it would be necessary to diversify the strategy of equipment adjustments and/or replacing fuels in other factories, especially in the case of a

scenario where the company's progress already conquered in reducing emissions was not taken into account.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Low

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
9829468.9

Potential financial impact figure – maximum (currency)
16382447.32

Explanation of financial impact figure
Estimated financial implications of the risk before taking action: range between R$ 9,829,468.9 and R$ 16,382,447.32.
Calculation basis: in order to estimate financial implications for the main regulatory risk, prices from the European and Latin carbon markets have been adopted as projected taxation for each carbon equivalent tonnes emitted by Duratex in 2019. Financial impacts included Scope 1 and 2 emissions (an amount of 316,875.19 tCO2e scope 1 + scope 2 market based). and the adopted carbon taxation ranges between US$ 6.00 (minimum) and US$ 10.00 (maximum considered) . For this scenario, we do not include removals from Duratex. The estimated range corresponds to about 0.17% to 0.28% of the company's net revenue in 2020 (R$ 5.879 billion).

Calculation:
Minimum financial impact = 316,875.19 tCO2e x (US$ 6.00 x 5.17) = R$ 9,829,468.9
Maximum financial impact = 316,875.19 tCO2e x (US$ 10.00 x 5.17) = R$ 16,382,447.32

Adopted value for dollar: 12/31/2020: R$5.17

Only emissions from operations in Brazil were considered in this case, since there is already taxation in Colombia (where Duratex has already raised about US$ 3.9 million from the sale of carbon credits due to the offsetting of the carbon captured by our local forests).

Cost of response to risk
43649920

Description of response and explanation of cost calculation
The most recent investment related to the reduction of direct emissions in Duratex occurred in the panel plant of Agudos (São Paulo) between 2017 and 2018. During this period, the factory´s power plant was adapted to allow the total replacement of natural gas by biomass for the generation of thermal energy. The investment (R$43 million), included project planning, equipment, materials, labor, tests and maintenance, and was divided as follows:
Initial investment: R$ 35,366,920:
- Machines and Equipment: R$ 31 Million – 87% of initial investment
- Civil works: R$ 1.3 Million - 4% of the initial investment
- Assembly and installations: R$ 2.7 million – 8% of the initial investment
- Studies and Projects: R$ 0.366 million – 1% of the initial investment
Complementary investment: R$ 2,283,000 (Improvements of the feeding system, chips and thermal oil heating)
Gas consumption during project implementation: R$ 6,000,000
Totaling R$ 43,649,920 million.
Although the initial investment was high it is estimated that the project´s Return On Investment is 9 times the amount invested, for a 20 year horizon. In addition to bringing a relevant finacial impact, the project alsohad a great result therms of emissions reduction (in 2017, before the furnace adaptation, Scope 1 emissions at Agudos panel unit was 44,542.056 ton CO2e. In 2019, after the complete implementation of the project, Scope 1 emissions at the unit was down to 15,749.406 ton CO2e).
Duratex also manages these risks through: annual GHG inventory to quantify emissions (with external auditing); calculations of the carbon sequestered in forests; monitoring environmental legislation, such as federal and state policies on Climate Change; participation in groups and associations for discussing GHG-emissions-related affairs; setting GHG emissions reduction targets linked to the Sustainability Strategy, and executing projects to reach them; participation in simulations of the Carbon Market System; R&D, such as the Flux Tower (to analyze carbon balances in forests) and others.
In addition, within Duratex's Sustainability Strategy, there is the following target to be achieved by 2025: "Reduce absolute GHG emissions by 25% (scope 1)".
Besides the investment in the adaptation of the furnace, costs with the inventory verification and participation in associations was also considered for cost of management.

Comment
The investments in equipment suitability in Duratex for de-fossilization of the energy matrix are constant, and vary every year; the project developed in Agudos was chosen as a reference because it was the most recent, and of relevant impact to the company.

Identifier
Risk 2

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

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact
Increased indirect (operating) costs

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

Company-specific description

Trend of regulations about emissions-reporting are followed up by Duratex´s Sustainability area. Enhanced emissions-reporting obligations could impact Duratex increasing the costs of the inventory, third part audit, and developing a method to evaluate all supply chain. Duratex's inventory includes emissions of scopes 1, 2 and 3, and has been audited by independent companies since 2011, ensuring the credibility of its historical database and the improvement of its operations. In 2020, GHG emissions report and the Annual Integrated Report itself were audited by KPMG Financial Risk & Actuarial Services Ltda. The operations comprised in Duratex´s scope 3 include predominantly transport of raw materials and products, waste and effluents disposal , as well as air travel. A more stringent regulation of scope 3 would require a strategy to expand this report.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Low

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

Potential financial impact figure (currency)
12300

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

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

Explanation of financial impact figure
Increasing price of inventory verification due to growth of the scope on third party audit. A 10% rise on average price of annual inventory audit was considered. The financial impact figure was established considering the raise in the prices charged by KPMG to perform the auditing of GHG emissions report and the Annual Integrated Report in 2020. The difference between 2019 price and 2020 price (R$12,300.00) was considered as the financial impact figure.

Price in 2019 - R$ 82,500.00
Price in 2020 - R$ 94,800.00
Impact - R$12,300.00

Cost of response to risk
150000

Description of response and explanation of cost calculation
As part of Duratex's Sustainability Strategy, developed in 2016, 45 targets to be achieved by 2025, one of which is as follows: "Increase measurement of Scope 3 emissions by 50%" (considering a baseline of 171 facilities). Efforts have been done for improving our issuance calculation for all reporting scopes. In 2017, an action plan was developed to increase measurement of scope 3. The plan is ongoing with the support of the Supply Chain area. In 2018, there was a 28% increase in scope 3 measurement, in relation to the baseline. Aligned with the new criteria of platinum seal that has been implemented by GHG Protocol, Duratex also has an absolute emission reduction target: "Reduce absolute GHG emissions at Duratex by 25% (Scope 1)", besides relative targets. Monitoring of reductions is being conducted annually and published in our annual report.
Cost of management includes annual cost for external audit (87.7% of the cost of response to risk) and employees dedication (monthly, quarterly and annual dedication - the other 12.3%), totaling R$ 150,000.00.

Comment
For more information on Duratex's Sustainability Strategy targets related to climate and progress in 2020, see pages 48 and 49 of the 2020 Integrated Reporting https://www.duratex.com.br/Relatorio-Anual-2020/en/pdf/Duratex_RA_2020_Book_en.pdf

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Identifier
Risk 3

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

Risk type & Primary climate-related risk driver

Current regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased direct costs

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

Company-specific description
The charge for the use of water resources in Brazil is an instrument of the National Policy of Water Resources established by Law number. 9.433/97, the "water law". This charge is not a tax, but rather a fee for the use of a public good whose price is fixed from a pact between water users, civil society and the government under the Watershed Committees - CBHs, to whom the Brazilian legislation establishes the competence of proposing mechanisms of collection of values for direct withdrawal, consume, and surface water discharges. It is up to the state management bodies to carry out or not the charge for the use of state-owned water. Thus, not all Brazilian states have established collection for the extraction of groundwater or surface water, for example. Between 2014 and 2015, when Brazil experienced a severe water crisis, the pressure for the development of water charging mechanisms increased. These crises have a cyclic character. The state of São Paulo, where Duratex has units, is one of those that already adopt collection mechanisms.
At Duratex, 96% of water in 2020 was withdrawn in Brazil (72% groundwater, 19% surface water and 9% water from public water supply). 46% of discharges took place in surface waters.
In the case of the use of water and the discharge of effluents in public supply/collection systems, the charge for the treatment and distribution is made by the responsible utility company. In Duratex, there is already a charge for these services.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Low

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

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
90179

Potential financial impact figure – maximum (currency)
111361.92

Explanation of financial impact figure
Estimate: based on the water prices practiced in 2020 for PCJ basin (São Paulo) and extrapolated to Brazil. Calculation: weighted average of water volumes withdrawn from surface and groundwater sources at Duratex in 2020, in addition to surface discharges and consumptive use, in relation to the prices for each category currently practiced. Same reasoning used for max and min impact. 4.3%/year inflation for a six-year horizon:
Vol (m^3) X current/future price (R$) of surface water at Duratex Brasil in 2020:(668,795.50 m^3 x 0.0127 R$/$m^3$) and (668,795.50 m^3 x 0.0157 R$/$m^3$)
Vol (m^3) X current/future price (R$) of groundwater at Duratex Brasil in 2020:(2,553,814.80 m^3 x 0.0127 R$/$m^3$) and (2,553,814.80 m^3 x 0.0157 R$/$m^3$)
Vol (m^3) X current/future price (R$) of consumptive use at Duratex Brasil in 2020:(316,315.60 x 0.0255 R$/$m^3$) and (3316,315.60x 0.0315 R$/$m^3$)
Vol (m^3) X current/future price (R$) of surface discharges at Duratex Brasil in 2020:(323,282.00 m^3 x 0.1274 R$/$m^3$) and (3323,282.00 m^3 x 0.1573 R$/$m^3$)

Cost of response to risk
96000

Description of response and explanation of cost calculation
Within Duratex´s Sustainability Strategy, there are the following targets to be achieved by 2025: “Reduce relative water withdrawal by 10% "and" Reduce water consumed by irrigation by 50% per hectare of crops ". Thus, Duratex has been engaged in eco-efficiency actions to reduce water consumption, adaptations in productive lines to increase reuse, and work on R&D to reduce water use in forestry operations.
Water is still a relatively cheap natural resource for the industrial sector in Brazil, and Duratex already withdrawals most of its water (91% in 2020, in Brazil) from underground and surface sources, which are the cheapest among the options available. It reduces dependence on public sources of supply, often under pressure from local population growth. Even so, the risk of increased prices has always been considered by the company in its strategic decisions, and was intensified in 2014, when the country underwent one of its most critical droughts. In additon, Duratex makes part of representative associations engaged with policy makers in discussing matters related to environmental issues and contributes to regulatory discussions, through sector representations. Participating in meetings of Municipal Councils and Groups of the Brazilian Tree Industry (IBA) are examples.
The cost considered here (R$ 96,000.00) was the amount spent in Taquari panels plant in order to implement a closed recirculation water system. By doing so, the unit was able to reduce its need of collecting water and increased its reuso rates. Of the total investment, 60% were related to materials and equipment and 40% related to services. Duratex is constantly looking for alternatives that can turn its productive systems into more sustainable ones, and that includes the initiatives aimed at reducing water consumption. This reduction also has an financial impact, considering that our units are subjected to the fees aplied to the use of water.

Comment
Based on Calculation based on COLLECTION FOR THE USE OF WATER RESOURCES IN PCJ BASINS - 2021
http://www.agencia.baciaspcj.org.br/docs/cobranca/folder-cobranca-2021.pdf

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
Markets

Primary climate-related opportunity driver
Other, please specify (Carbon market)

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Considering that Duratex acts strongly in the forestry sector, there is an opportunity to operate in the carbon market and increase revenue due to carbon credit negotiation, especially in places where there is already an established regulation, such as in Colombia. In 2020, Duratex had about 140 thousand hectares of planted forests and conservation areas, in Brasil and Colombia, which the eucaliptus plantation area consist of fostered forests, specifically for the purpose of supplying our wood panel production facilities.

Time horizon

Medium-term

Likelihood
More likely than not

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)
0

Potential financial impact figure – maximum (currency)
3761004.52

Explanation of financial impact figure
The minimum financial impact was considered zero because in 2020 the quantification of carbon credits was not updated in Duratex Colombia. The maximum value was estimated based on a projected scenario, where there was also in Brazil a regulation that would allow emissions compensation through the removals provided by our forests. Thus, the maximum financial impact to 2020 was estimated by adopting the potential gain from the 293,446.03 tCO2 eq removed by Duratex´s Brazilian forests in 2020,multiplied by an average offset carbon price in Latin America (U$S 4/tCO2e). Subtracting from this multiplication a potential taxation value for Duratex Scope 1 and Scope 2 emissions from operations in Brazil in 2020 (316,875.19 tCO2e multiplied by U$S 6/tCO2e) it would result in the figure R$-3.761.004,52, which means that we would had a financial loss in 2020, considering that our emissions surpassed our removals this year.
Dollar quoted on 12/31/2020: R$5,17.

Cost to realize opportunity
105000

Strategy to realize opportunity and explanation of cost calculation
In Colombia, where Duratex operates with 3 panel plants and 10,690 hectares of forests, there is already an established regulation in line with the reduction targets derived from the Paris Agreement. In 2016, the Colombian government created a carbon tax, which imposes charges on carbon emissions, and in 2017 it developed a mechanism that allows companies to offset emissions through projects such as "Carvida Duratex", as the local program. Between 2010 and 2017, Duratex Colombia captured 956,000 tons of CO2e, certified in 2018 by ICONTEC (Colombian Institute of Technical Standards). This fact allowed the collection of COP 11,997,087,600 (around US $ 3.9 million) in 2018, with the sale of "bonuses" referring to 937,503 tCO2e. This amount represented 3.3% of Duratex's income from Colombian operations in 2018. In 2020, the quantification of carbon credits was not updated, however, by 2021 they will be quantified again and the company expects to have an income of more than 550,000 USD. For brazilian operations, discussion and financial analyses are in course, and consulting studies are being conducted to improve the accounting for carbon capture and stock through forests in order to improve our carbon balance methodology, so that the company is prepared for when there is regulation or a market formation in the country. Duratex also actively participated in forums of the IBA (Brazilian Tree Industry), the main entity in Brazil leading the discussions related to the carbon market.
Cost to realize the opportunity: costs to allow the gains in Colombia (70%) + the costs with consultancies to improve the methodologies of calculation of carbon balance (30%).

Comment
This opportunity was classified as "medium-term" since it has the potential to increase its coverage in Brazilian operations, even though it was already materialized in Colombia.

Identifier
Opp2

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

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
Total renewable energy consumption in Duratex was 56 % in 2020. The main contributor to this figure is the use of biomass as fuel for generation of thermal energy in panel plants. The decrease compared to 2019 was due to the incorporation of ceramic coating factories (Portinari), whose energy matrix is mainly based on coal. Since the acquisition of the factories, Duratex has been studying alternatives to make the energy matrix of RC1 an RC2 (Portinari) production cleaner. The portion of energy from renewable sources at Duratex oscillated between 66.8% to 74% from 2014 to 2019, including operations in Colombia (even though Duratex´s participation in the capital of Tablemac, currently called Duratex Colombia, only became practically complete in 2016: 99%). These data reflect Duratex's efforts to use cleaner fuels to reduce emissions from fossil fuel sources, and also reduce operating costs with traditional fuels (such as natural gas and GMP oil). For Ceramic Coatings, the use of possible renewable sources to compose the energy matrix is under study. This assessment is addressed in conjunction with Duratex's technical and sustainability team, and is still being assessed, still confidentially, by our board.

Time horizon
Long-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)
394658220

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

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

Explanation of financial impact figure
The furnace of the panel plant in Agudos (São Paulo, Brazil) was adapted to the complete replacement of natural gas used for thermal energy generation by biomass. Biomass was already partially used in the unit in some production lines, and the total replacement of natural gas occurred in fact from July 2018 on. Although the initial investment for equipment improvements was high (around R$ 43 million), the Return On Investment (ROI) forecast for a 20-year horizon represents about 9 times the initial investment. The ROI was calculated based on a simulation of the theoretical consumption of natural gas, if the project had not occurred, less the equivalent of the biomass consumption. The formula adopted was as follows: gain from the investment in the year (R$ 21,915,407) times 20 years; of the result, the cost of the project was subtracted (R$ 43,469,920); finally, dividing the result by the cost of the project (R$ 43,469,920), we obtain 904.14%, which represents R$ 394,658,220.

Cost to realize opportunity
43649920

Strategy to realize opportunity and explanation of cost calculation
Duratex's Sustainability Strategy, developed in 2016, has 4 pillars (people, processes, products & services and new business models), from which derived targets to be achieved until 2025. Within the pillar processes, there are targets comprinsing the reduction of energy consumption, reduction of direct emissions, besides the increase of the energy matrix from renewable sources.
Some examples of adjustments in productive lines that have helped to improve the numbers mentioned above include the gradual replacement of GMP oil by biomass at Itapetininga (São Paulo, Brazil) and Taquari (Rio Grande do Sul, Brazil) units; improved energy efficiency of Deca Division with the adjustment in furnace temperature (ceramics); use of rotary kiln (metals) to reduce the use of natural gas and electric energy;suitability of equipment for automatic shutdown, etc. The case study of the furnace adaptation of the Agudos panel unit was adopted as a reference because it is a recent example, in addition to bringing a relevant impact not only finacial but also in therms of emissions reduction (in 2017, before the furnace adaptation, Scope 1 emissions at Agudos panel unit was 44,542.056 ton CO2e. In 2019, after the complete implementation of the project, Scope 1 emissions at the unit was down to 15,749.406 ton CO2e). However, this diversity of actions that have already brought results to the company, and should continue to occur for the evolution of Duratex´s figures, illustrates how committed the company is to this renewable energy matter. In this way, the potential gains can be even greater, considering the efforts already made and those in progress.
The investment made in Agudos plant (R$43 million), included project planning, equipment, materials, labor, tests and maintenance, and was divided as follows:
- Initial investment: R$ 35,366,920
- Machines and Equipment: R$ 31 Million – 87% of initial investment
- Civil works: R$ 1.3 Million - 4% of the initial investment
- Assembly and installations: R$ 2.7 million – 8% of the initial investment
- Studies and Projects: R$ 0.366 million – 1% of the initial investment
- Complementary investment: R$ 2,283,000 (Improvements of the feeding system, chips and thermal oil heating)
- Gas consumption during project implementation: R$ 6,000,000

Comment
Duratex has an approval target for the use of renewable sources in its energy matrix and will be announced in 2021.

Identifier
Opp3

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

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

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

Company-specific description
Currently, our costumers, partners and influencers are looking for more and more water-saving and energy-saving products. This is evident in research carried out by Duratex. In addition to an innovative design product, they are looking for products that bring savings. Our clients from construction companies are also looking for products with lower environmental impact and aim at construction of more sustainable buildings. The growing concern of large construction companies to offer sustainability-certified buildings such as LEED (Leadership in Energy and Environmental Design) also increases the demand for this type of product (specially for Deca and Ceusa´s brand). In 2020, we started a project with the most representative units of Ceramic Coatings, to assess the environmental impact of products in their portfolio, with a life cycle assessment approach, in particular with a carbon footprint and water footprint approach.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-low

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

Potential financial impact figure (currency)
122500000

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

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

Explanation of financial impact figure
The amount of R$ 122.5 million represents the revenue of products from Deca Comfort line in 2020. In comparison to 2019, there was an increase of R$17.5 million in

Deca Comfort line sales, which already illustrates how the consumers demand for sustainable products is becoming more representative. This technology is present in all of the brand's faucets, bathroom single-handle and basin mixers. Deca comfort products bring more comfort to consumers while also helps to save water resources. This innovation, which has no impact on the design of tap and mixers, guarantees a standard flow, regardless of whether a buiding has low or high pressure plumbing system. This results in a smooth and costant jet of water, that does not cause unpleasant splashing when washing hands, for instance. This system has been patented.
With this type of product, wich represented 15% of sales in Metals Division and 2% of Duratex's revenue in 2020, there is the opportunity to meet the emerging requests of this most demanding publics, strengthening the brand.

Cost to realize opportunity
3016000

Strategy to realize opportunity and explanation of cost calculation
Within the "Products & Services" pillar of the Duratex Sustainability Strategy, developed in 2016 and launched in 2017, there is the following target: "For 100% of the finished metals and Deca toilets portfolio to be eco-efficient" by 2025. In 2019, 30 % of the sanitary toilets portfolio and 100% of the bathroom faucet portfolio were classified as eco-efficient.
The cost of R$ 3,016,000 of Deca Comfort involves the cost for changing all the faucets to 1/4 of a turn, changing line production and the cost of research and development of internal mechanism itself. Research and Development - R$ 2,210,000.00 Tooling technology - R$ 210,000.00 and changing line production R$596,000.

Comment
In our revisitation of our sustainability framework, which has been taking place during the year 2020, eco-efficient solutions will gain an even greater weight in the company's strategic context, further increasing the positive impact on consumer choice.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	Yes, we intend to include it as a scheduled AGM resolution item	Duratex already carries out strict control of emissions from its operations. This information is publicly available and can be accessed through the GHG Protocol Brazil and the carbon balance included in the Integrated Report. In addition, we are working on defining the science-based targets, which are expected to start being implemented in 2021, and we are committed to maintaining ourselves as a carbon positive company. All initiatives aimed at a low-carbon transition plan are discussed by the ESG Executive Management with the Sustainability Committee and the Board, which decide on the necessary approvals and next steps.

C3.2

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

C3.2a

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

Climate-related scenarios and models applied	Details
Other, please specify (Economic Sensitivity to Environmental Aspects)	At Duratex´s Sustainability Strategy, the theme "Climate Change" was established within the pillar "Processes" of the Strategy. One of the targets related to the Climate Change theme, "Reduce Duratex's absolute GHG emissions by 25% (scope 1)", required the projection of scenarios of market demands and production in all divisions of Duratex, so that the targets could be estimated for each year (as a result of this analysis). Currently, these targets are under review, since the company's business are expanding to other sectors and the Sustainability Strategy is being reviewed as well. In the forest business, it is already an incorporated part of Duratex's research and improvement routine to work on preventive and adaptive fronts regarding climate change, taking into account scenarios of extreme weather events, such as drought, flooding and wind breaking. In addition, a relevant example that we can cite as a case study is the Edaphoclimatic studies carried out in 2019 and follow with the developments in 2020 and 2021. Situatuion: Duratex, in view of its strategic growth plan and analyzing the possible risks involved in expansion and divestments, needed to assess and direct its decisions. Task: A more in-depth and focused assessment was needed for this strategic analysis Action: In 2019, in partnership with Embrapa (a Brazilian Agricultural Research Corporation), Duratex has carried out a study to assess current and future climate vulnerabilities in the Zona da Mata region (Atlantic Forest), in regions that are important for our forest business. The edaphoclimatic study identified, evaluated and quantified temperatures, water balance, rainfall, water deficiency and temperature evolution in the regions studied, considering the period from 1980 to 2050, with projections and scenarios for the long term for the northeast region. The following climatic assessments of the regions of interest were carried out: *For periods of 30 years (1985 to 2015) and 10 years (2006 to 2015), aiming to verify possible recent changes in trends; *For future periods between 2021 to 2030 and 2031 to 2040, using the Hadgen2-ES global model of climate change, on a monthly scale. Result: Through this assessment, possible vulnerabilities were mapped over the next four decades in order to anticipate scenarios for planning the operation. As a result, it was found that none of the objective areas of study for Duratex presented risks in the scenarios evaluated for the specific characteristics of our planted forests. None of the areas under study presented climatic risks that could impact the Company's forestry business, guiding decision-making. Decisions are treated confidentially at Duratex and will be disclosed in ideal opportunities. Duratex also selects species crosses and, later, adapt clones to the main growing regions of Duratex: in São Paulo, Minas Gerais, Rio Grande do Sul and Alagoas. Thus, materials that do not withstand drought well, or do not develop in wetlands, will not be selected for the regions where these phenomena may occur. This is the first form of selection considering tolerance to climate change that is occurring. Problems with floods and winds are more frequent in Rio Grande do Sul. The drought issues are more frequent in Minas Gerais and Alagoas. We also participate in a cooperative project involving the Forest Research Society and 14 other companies in the forestry sector, aimed at the evaluation of species crosses produced by drought tolerant parents for subsequent selection of the best crosses and the best clones for drought tolerance. These trials are being evaluated in João Pinheiro and Buritizeiro-MG and Alagoinhas-BA, places with a history of severe drought.

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	The search for sustainable innovations in products and services is driven by our purpose to offer Solutions for Better Living. Our Sustainability Strategy has water related targets for the pillar of Processes and Products and Services, foccusing on ecoeficiency and reduction in consumption for irrigation. A study was carried out in 2015 involving the Evaluation of the Sustainability Index of Hydrographic Basins to asses the hydrological resources of the basins where our industrial units are located, using the most recent data made available by international organisms, hydrographic basin committees and government bodies. Aware of the importance of reducing water consumption not only within its production process, but also during the use of its products, Duratex began to look for more conscientious consumption solutions. In 2017, the market was introduced to Deca Comfort technology, that brings more comfort to consumers while also helping to save water resources (up to 60% water savings in relation to products without this technology). This innovation, which has no impact on the design of taps and mixers, guarantees a standard flow, regardless of whether a building has low or high pressure plumbing system. In 2020, R$ 122.5 millions were collected with the Deca Comfort line. Sales with the line accounted for 15% of Deca Metals Division sales in 2020. As a result, Deca Comfort being a solution that reduced water consumption and also indirect carbon emission in the use phase, provided an improvement in use, the company adopted the strategy of applying the mechanism to all product lines (taps) of the Deca brand. A service also provided by Duratex (and which has a corporate target linked to its development) is the "Pro-Água", through which, based on the demand of customers (residential, commercial or industrial), we plan actions and application of water-saving products and devices in buildings, from the simplest to the most complex, to rationalize and qualify the use of this natural resource. Our specialized professionals develop diagnoses and suggest measures to be taken to monitor and minimize consumption, avoid waste - including maintenance plans - and / or promote the reuse of water. Since its outset, the Deca Pro-Agua program has already developed more than 600 projects, of which 127 were performed in 2020, representing R$514,816.24 in sales (net).
Supply chain and/or value chain	Yes	An important factor that allows Duratex operations to be stable is the constant control and monitoring of its supply chain, in order to avoid risks. Similarly, companies with wich Duratex relates and sells products and services are increasingly interested in the full extent of their value chains, which also involves the suppliers of their suppliers. In this way, Duratex's potential entry into a carbon market would be more facilitated as its image in terms of supply chain management becomes better and better. In that sense, Duratex was the first company in South America to obtain FSC certification (since 1995), and in 2020 we had 97.5% of our proprietary forest area certified. In addition, Duratex has developed the GFD - Duratex Supplier Management program, through which critical suppliers respond to socio-environmental questionnaires and undergo on-site visits. This questionnaires also includes and verifies how suppliers address industrial emissions issues. In 2020, 220 suppliers were mapped and selected. Of that total, 192 responded to the self-assessment questionnaire, representing 54.0% of Duratex's supplier spending (around of R$1.8 billion). Duratex also promotes activities such as workshops to assist its suppliers to improve their adherence to issues of relevance to GFD.
Investment in R&D	Yes	To better understand the impacts of the use of natural resources, the influence of climatic seasonality and the sustainability of planted forests, there should be long-term monitoring of carbon, water and nutrient flows in these ecosystems. Therefore, since 2008, Duratex is one of the companies that participated in the creation of the "Eucflux - Torre de Fluxo" a cooperative program, which has an experimental research base installed in an area of 200 hectares that periodically captures data about our planted forests, contributing to scientific studies regarding the best sustainability practices and production optimization for this type of cultivation. Coordinated by IPEF (Institute of Science and Forest Research) and CIRAD (Agricultural Research for Development), the program was renewed in 2017 for its 2nd phase and now has 6 companies. In 2020, Duratex invested R$ 36,916.00 in Eucflux. This program aims to quantify the inputs and outputs of carbon, water and nutrients for a complete rotation of Eucalyptus, increasing the collection of biogeochemical cycles of forests, which help to formulate practical recommendations, optimize production and ensure the sustainability of crops. This program has already provided relevant information to improve forest management, such as the reduction in the fertilization of forest plantations. It also showed that one hectare of planted forest sequesters more than one tonne of CO2 per month and that, after harvesting, the carbon balance is again positive seven months after planting the new stand. In this sense, advances in research in this field provide specific data characterizing Duratex plantations and assist in the improvement of carbon capture and balance measurement methodologies. Since there is no consolidated methodology or regulation in Brazil in terms of carbon balance and commercialization, Duratex invests in its own studies.
Operations	Yes	Duratex's investments in equipment adaptations and replacement of fuels lead to operational adjustments in some production lines, and increase or reduce the demand for certain types of materials. The most recent major investment (in the order of R$ 43 million) occurred at the Agudos panel unit (São Paulo), gradually reducing the demand for natural gas at this plant, whose total replacement for biomass materialized in 2018. The investment accounted for about 23.8% of Duratex's general expenses in 2018 (R$ 180.7 million). In order to minimize the impact on the production, the adjustments in the power plant of the unit were carried out during the maintenance shutdown previously programmed for the unit. We seek to guide investments in improvements in more carbon-intensive operations at the Company. That was the case of the Louças Sul unit, which was the most carbon intensive unit of the crockery units. As a result, the oil-fired furnace was deactivated, which reduced emissions at the unit (about 13% in scope 1 stationary combustion operations)

C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Acquisitions and divestments	In Colombia, where Duratex operates with 3 panel plants and 10,690 hectares of forests, there is already an established regulation in line with the reduction targets derived from the Paris Agreement. In 2016, the Colombian government created a carbon tax, which imposes charges on carbon emissions, and in 2017 developed a mechanism that allows companies to compensate emissions through projects such as the "Carvida Duratex", as the local program is called. Between 2010 and 2017, Duratex Colombia captured 956,000 tCO2e, certified in 2018 by ICONTEC (Colombian Institute of Technical Standards). This fact that allowed the collection of approximately U$S 3,9 millions, with the sale of "bonuses" referring to 937,503 tCO2e. This financial amount represented 3.3% of Duratex's revenue from Colombian operations in 2018. In 2020, the quantification of carbon credits was not updated, however, by 2021 they will be quantified again and the company expects to have an income of more than 550,000 USD. For our brazilian operations, discussion and financial analyses are in course. In 2020, we continued our studies to improve the carbon capture accounting and carbon pools/sinks in order to improve our carbon balance methodology. We also actively participated in forums of the IBA ("Brazilian Tree Industry"), the main entity in Brazil leading the discussions related to the carbon market. Starting in 2020, climatic issues started to be considered in the studies and processes for mergers and acquisitions. Once an aquisition occur, Duratex has a Social and Environmental Program to implement, which focuses on the standardization and dissemination of its socio-environmental policies, practices and systems over a 2-year timeline. The objective of the Program is to mitigate and avoiding risks to our business, including carbon emissions issues. Thus, in the case of business expansion through the acquisition of new companies, such as the acquisition of Cecrisa (Portinari) at the end of 2019, Duratex performs a systematic integration of the business in socio-environmental terms and evaluating the impact of energy matrix on carbon emissions, helping to develop action plans for mitigation and migrate to a less carbon-intensive matrix, replacing coal (currently the main source of energy). In 2019, new projects were proposed by the Duratex Innovation Center considering the influence of a future carbon tax on the energy matrix. We analyzed the viability of the implementation of a clean energy matrix based on solar energy in our operational units. The cost avoided by the non-emission of carbon from fossil sources and the taxation that would possibly be in force in Brazil was used to calculate the Net Present Value. The first calculated avoided cost was R$ 674.235,62 for one operational unit. The project was presented to the executive committee in October, 2020, but with the increase in dollar rates due to the pandemic and the fact that we still had ongoing energy contracts with competitive prices, the project was put on hold. However, it is woth mentioning that the executive committee strongly recomended the periodic review of the costs and benefits brought out by the implementation of the clean energy matrix, so that the company can be prepared to implement it once the scenario is favorable.

C3.4a

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

Climate change management is one of the priority themes of Duratex´s Sustainability Strategy which contains the key elements and strategic themes from which derived 45 targets to be achieved until 2025 and was structured in 4 pillars: People, Processes, Products & Services and New Business Models. Within the Pillar "Processes", there is the theme "Climate Change". Climate change became no longer seen just as carbon management and goes through a theme in a broader and strategic way for the company. We understand that Duratex, as a representative company in Brazil, has the potential and should contribute to reducing GHG emissions and to combating global warming, promoting innovation, incorporating new technologies into production processes and articulating partnerships for the value chain and public organizations to develop joint solutions. In this sense and with the Sustainability Strategy reviewed, climate-related targets comprising Brazilian operations were established to be achieved until 2025: "Reduce absolute GHG emissions at Duratex by 25% (scope 1)"; "Reduce relative GHG emissions at Panels by 50% (scope 1)"; "Reduce GHG emissions at Deca and Hydra by 10% (scope 1)" and "Increase measurement of scope 3 emissions by 50%". Our emissions targets are under review, to also cover our last company acquired (Cecrisa/Portinari), further aligning with the company's long-term growth strategy.

In 2018 and 2019, we carried out a work to revisit our accounting for GHG emissions. We evaluate critically our inventory of industrial emissions, as well as our agricultural emissions inventory, with the support of the Plantar Carbon consultancy. With the suggestions pointed out, we specially improved our inventory with improvements in the methodological approach to native areas, planted areas and presentation of our balance of emissions and removals and following the norm ABNT NBR ISO 14064: 2007.

Our reported environmental indicators are verified by independent auditors every year. In 2020, we improved the way we manage and calculate these indicators by implementing the Climas (climate) system, an online platform that gathers information related to the environmental indicators we follow. In addition to the corporate reportof the indicators, the industrial units follows up this numbers and communicate periodically through dissemination on boards of management, managerial meetings, dialogues with the operating teams, internal events, and environment agencies, among others..We also made progress with the consolidation of the agricultural inventory of Colombia and the emissions and agricultural inventories of LD and Caetex (in which we have equity interest).

C4. Targets and performance

C4.1

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

Both absolute and intensity targets

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
2017

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1

Base year
2012

Covered emissions in base year (metric tons CO2e)
265184.97

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

Target year
2025

Targeted reduction from base year (%)
25

Covered emissions in target year (metric tons CO2e) [auto-calculated]
198888.7275

Covered emissions in reporting year (metric tons CO2e)
270958.25

% of target achieved [auto-calculated]
-8.70830650771803

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
The absolute target established is: “Reduce 25% of Duratex's direct emissions (Scope 1)” in relation to the base year (2012). It was developed in 2016, based on a review of Duratex's material themes that resulted in the company's Sustainability Strategy, to be started in 2017. This target covers Duratex's operations in Brazil, excluding the Ceramic Coatings business. In 2012, Duratex's participation in the capital of Tablemac (currently Duratex Colombia) went from 25% to 37%, and its emissions have not yet been accounted for, so the percentage of Scope emissions was 100% in the base year. In 2020, the operations contemplated in the target would represent 95.58% of direct emissions.
Currently, the Strategy and its targets are under review, with the aim of establishing a science-based emission target. Considering the projections made at the time the milestones were drawn up, the emissions from Duratex's Brazilian operations in 2020, which include the Deca (Metals and Ceramics), Hydra and Wood (Forest and Panels) divisions, and being accounted for for the first time, Ceramic Coating , totaled 270,958.25 tCO2e, above the expected milestone for 2020 (203,218.69 tCO2e). The increase in the company's absolute emissions of approximately 9% was due to acquisitions and expansions in the Ceramic Coatings area.
The expected evolution to reach the goal in 2025 was not linear, since variable production projections were considered.
It is important to highlight that Duratex is revisiting its emissions targets, including for the Colombia and Ceramic Coating units. The expectation is to disclose the goals with a scientific basis in 2021, together with the Company's new Sustainability Strategy. The goals are to reduce emissions and maintain a positive carbon balance within the business.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Year target was set
2017

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 1

Intensity metric
Other, please specify (tCO2e/m3)

Base year
2016

Intensity figure in base year (metric tons CO2e per unit of activity)
0.04084

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2025

Targeted reduction from base year (%)
50

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.02042

% change anticipated in absolute Scope 1+2 emissions
31

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.011582769

% of target achieved [auto-calculated]
143.277331047992

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
The established relative target is: “Reduce relative GHG emissions in Panels (Division in Brazil) by 50% (scope 1)” in relation to the baseline year (2012). It was developed in 2016, based on a review of Duratex's material themes that resulted in the company's Sustainability Strategy, as of 2017. This target only covers Duratex's operations in Brazil. In 2012, Duratex's participation in the capital of Tablemac (currently Duratex Colombia) went from 25% to 37%, and its emissions have not yet been accounted for, so the percentage of Scope emissions was 100% in the base year.
The expected evolution to reach the goal in 2025 was not linear, since variable production projections were considered. In 2020, the relative indicator for this target was 0.01158 tCO2e / m³ (56.72% less than the mark). The project to replace natural gas with biomass at the plant in Agudos - São Paulo has contributed to the reduction of absolute direct emissions from this plant and has considerably impacted the Panel Division's results in meeting the target.
It is important to emphasize that Duratex is revisiting its emissions targets to propose targets with a scientific basis. The expectation is to disclose them next year, together with the Company's new Sustainability Strategy.

Target reference number
Int 2

Year target was set
2017

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 1

Intensity metric
Metric tons CO2e per unit of production

Base year
2016

Intensity figure in base year (metric tons CO2e per unit of activity)
0.0002675

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2025

Targeted reduction from base year (%)
10

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.00024075

% change anticipated in absolute Scope 1+2 emissions
9

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.000215101

% of target achieved [auto-calculated]
195.884112149533

Target status in reporting year

Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
The relative target established is: "Lower relative GHG emissions at Deca by 10%" in relation to the baseline year (2012). It was developed in 2016, from the review of the material themes of Duratex that resulted in the company's Sustainability Strategy, to start in 2017. This target only covers Duratex's Brazilian operations in Deca Division.
For Deca metals business, the baseline was 0.00026750 tCO2e/part.
The expected evolution to reach the target in 2025 was not linear, since variable production projections were taken into account. In 2020, the relative indicator for this target was 0.000215 tCO2e/unit of metals, and the target to 2025 is to mantain at least a 10% reduction in comparison to the baseline year.
It is important to emphasize that Duratex is revisiting its emission targets a study to propose science-based targets. The expectation is to release them at 2021, together with the new Sustainability Strategy of the Company.

Target reference number
Int 3

Year target was set
2017

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 1

Intensity metric
Other, please specify (tCO2e/kg)

Base year
2012

Intensity figure in base year (metric tons CO2e per unit of activity)
0.000639673

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2025

Targeted reduction from base year (%)
10

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.0005757057

% change anticipated in absolute Scope 1+2 emissions
9

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.000364384

% of target achieved [auto-calculated]
430.358949025518

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
The relative target established is: "Lower relative GHG emissions at Deca by 10%" in relation to the baseline year (2012). It was developed in 2016, from the review of the material themes of Duratex that resulted in the company's Sustainability Strategy, to start in 2017. This target only covers Duratex's Brazilian operations in Deca Division.
For Deca Sanitary Ware business, the baseline was 0.000639673 tCO2e/kg.
The expected evolution to reach the target in 2025 was not linear, since variable production projections were taken into account. In 2020, the relative indicator for this target was 0,00036438 tCO2e/kg, and the target to 2025 is to mantain at least 10% of reduction in comparison to the base year (0,000639673 tCO2e/kg).
It is important to emphasize that Duratex is revisiting its emission targets, a study to propose science-based targets. The expectation is to release them next year, together with the new Sustainability Strategy of the Company.

Target reference number
Int 4

Year target was set
2017

Target coverage
Business division

Scope(s) (or Scope 3 category)
Scope 1

Intensity metric
Metric tons CO2e per unit of production

Base year
2016

Intensity figure in base year (metric tons CO2e per unit of activity)
0.00001625

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure
100

Target year
2025

Targeted reduction from base year (%)
10

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]
0.000014625

% change anticipated in absolute Scope 1+2 emissions
1

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year (metric tons CO2e per unit of activity)
0.0000096656

% of target achieved [auto-calculated]
405.193846153846

Target status in reporting year
Achieved

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain (including target coverage)
The relative target established is: "Lower relative GHG emissions at Deca by 10%" in relation to the baseline year (2012). It was developed in 2016, from the review of the material themes of Duratex that resulted in the company's Sustainability Strategy, to start in 2017. This target only covers Duratex's Brazilian operations in Deca Division. For Deca Hydra business, the baseline was 0.00001625 tCO2e/unit of product (this baseline refers to the first year of emissions operational control of all Hydra business - 2016).
The expected evolution to reach the target in 2025 was not linear, since variable production projections were taken into account. In 2020 the relative indicator for this target was 0.000009666 tCO2e/kg, and the target to 2025 is to mantain at least 10% of reduction in comparison to the base year (0.00001625 tCO2e/kg).
It is important to emphasize that Duratex is revisiting its emission targets, a study to propose science-based targets. The expectation is to release them next year, together with the new Sustainability Strategy of the Company.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2017

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: energy carrier
Steam

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)
Percentage

Target denominator (intensity targets only)
<Not Applicable>

Base year
2016

Figure or percentage in base year
72

Target year
2018

Figure or percentage in target year
95

Figure or percentage in reporting year
89

% of target achieved [auto-calculated]
73.9130434782609

Target status in reporting year
Underway

Is this target part of an emissions target?
This target directly influences the scope 1 emission reduction target of the Company and the Madeira business.

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

Please explain (including target coverage)
The company assumed to reach 95% of the energy mix come from renewable resources to generate thermal energy at Panel units (by 2018), contributing to the reduction of fossil carbon in the atmosphere. It is important to emphasize that Duratex is revisiting its targets to propose targets with a scientific basis. The expectation is to disclose them next year, together with the Company's new Sustainability Strategy.

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
2017

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

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

Other, please specify	Other, please specify (Increase measurement of Scope 3 emissions by 50%)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2016

Figure or percentage in base year
171

Target year
2025

Figure or percentage in target year
257

Figure or percentage in reporting year
274

% of target achieved [auto-calculated]
119.767441860465

Target status in reporting year
Achieved

Is this target part of an emissions target?
Expanding our measurements of indirect emissions is important to evaluate our supply chain in order to manage, mitigate possible impacts and evaluate the actions to reduce emissions. In addition to increasing the accounting for Scope 3 sources, this goal also aims to engage suppliers and our supply area to understand the impact of our chain in carbon emissions.

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

Please explain (including target coverage)
The goal of increasing the measurement of Scope 3 emissions by 50% is based on the mapped facilities of Duratex that we had in this scope in 2016 (171 indirect sources of emissions). In 2020, we surpassed the goal and reached a total of 274 installations, with the increase of measurements in Colombia.
We expanded the assessment of emissions from waste processing at industrial units, as well as the accounting of emissions from the production of raw materials and transportation of the finished product, and we expanded the accounting of emissions from waste disposal.

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	1	11518
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	1	5061.09
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	Hydropower

Estimated annual CO2e savings (metric tonnes CO2e)
5061.09

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
39963887

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
Duratex purchases energy on the open market. The initiative does not have a specific duration, and for this reason we have adopted the period of 3 to 5 years, due to the 5-year contract renewal term. It is estimated a gain of around 20% for being in the free energy market.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The definition of legal requirements is considered to drive investment in emission reduction activities in Duratex´s units
Financial optimization calculations	Financial optimizations can drive investment in emission reduction activities. Replacement of new materials, technologies, equipments for emissions reduction can be defined according to positive financial analysis.
Employee engagement	Duratex with its internal education program for Sustainability , Ciranda D, promotes training resulting from its management systems, which also include awareness of the use of natural resources and climate change. The program is an online platform where employees can participate in quick courses, with quizzes to answer what they have learned, as well as tips from books, videos and articles on the topic. The Ciranda D stands out for the possibility of exchanging knowledge. Employees can share good practices or send suggestions for videos, books, articles, to generate greater interaction between different units and businesses. On the platform there is also a ranking of participation, through a score. The objective is to recognize the most engaged and participative employees.
Dedicated budget for energy efficiency	Implementation of projects to increase the energy efficiency of our production processes and to expand the use of renewable resources in our energy mix. Example: installation of capacitors to better use energy in metal smelting ovens, modernization of compressed air generation and electroplating systems and automation of lighting systems to prevent waste. Installation of mills that process waste from panel manufacturing (biomass), sending this waste to combustors that generate the hot gas needed to dry the wood particles.
Dedicated budget for other emissions reduction activities	Implementation of projects. Examples: production of organic compost, produced by using the sludge from the Effluent Treatment Stations and ash from the burning of biomass. As a consequence, a waste volume was not disposed of in a landfill.

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
When expanding its forest areas, Duratex uses only areas that have already been anthropized, such as pasture or sugarcane, changing the intensive use of land to forest. Furthermore, as the forest grows, carbon is stored. In 2020, we recorded a carbon stock in our planted forests (commercial areas) of 19 million tons of carbon, considering Brazil and Colombia units.

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

Estimated CO2e savings (metric tons CO2e)
19761994.54

Please explain
This estimated CO2e savings was calculated for the 2020 inventory. The removal of planted forests from forest units in Brazil and Colombia this year was 301.998,3 tCO2e.

Management practice reference number
MP2

Management practice
Practices to increase wood production and forest productivity

Description of management practice
Duratex has its own forest breeding program, which aims to develop varieties more adapted to the many different climatic conditions, better productivity and pest resistance.
The savings will be estimated in the coming years.

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

Estimated CO2e savings (metric tons CO2e)
184053.04

Please explain
The estimate was made based on eucalyptus forests productivity in 2020 and the Annual Average Increase ("IMA" factor) of Duratex´s forests, considering the difference between carbon stocked in forests that presented values higher than the average productivity (IMA 35). The comparison was made between the average IMA for the sector and the average IMA for Duratex's areas.

Management practice reference number
MP3

Management practice
Composting

Description of management practice
At the Wood Division, we have continued to reuse biomass and sludge ash from effluent treatment to produce natural fertilizers at the composting plants installed at the Agudos (SP) and Uberaba (MG) units. In 2020, 25.982 t of sludge waste were destined for composting and incorporated into the soil for fertilization.

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

Estimated CO2e savings (metric tons CO2e)
19486.84

Please explain
Duratex, when consuming organic fertilizer, incorporating into the soil in addition to or replacing traditional nitrogen fertilizer, we no longer emit, in due proportions, carbon of fossil origin into the atmosphere. In 2020, the amount of organic fertilizer used represented the equivalent of 19.486,84 tons CO2e of emissions avoided by not using nitrogen fertilizer.

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
Group of products

Description of product/Group of products
Wood from forests; MDF panels, laminated flooring made from MDF and MDP panels, High-density.

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

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Sectorial Analysis: group of durable goods and product made from renewable material)

% revenue from low carbon product(s) in the reporting year
55.3

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
Whereas Duratex manufactures products accepted as "durable goods" with low intrinsic carbon emissions, all product groups are considered to be "low carbon". Products made from reforested wood, with responsible management practices and conservation. And especially for the Madeira business, we have an energy matrix based 89% on renewable sources.

Level of aggregation
Group of products

Description of product/Group of products
Metal fittings: taps, mixers, dischargevalves, showers.

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 (LCA - ISO NBR ISO 14040)

% revenue from low carbon product(s) in the reporting year
2.1

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
Apart from kitchen faucets, Duratex's entire portfolio of metal fittings is eco-efficient. In addition, we have Deca Comfort technology, which keeps the water flow of the tap constant during its use, providing the best comfort, as well as savings, directly influencing the outcome of environmental footprints. Each 1 liter/min less at the use phase, there is a decrease of 50 m^3 in the water footprint and 14.5 kg CO2eq in the carbon footprint of the product. In 2020, R$122.5 million were collected with Deca Comfort line, accounting for 15% of Deca Metal Division Sales and 2.1% of Duratex's net revenue.

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 2012

Base year end
December 31 2012

Base year emissions (metric tons CO2e)
264375.99

Comment
This base value covers the operations of the Deca (Metals and Ceramics Sanitary Ware), Hydra (electric showerheads) and Wood (Panels and Forests), existing operations at the time.

Scope 2 (location-based)

Base year start
January 1 2012

Base year end
December 31 2012

Base year emissions (metric tons CO2e)
56918.06

Comment
This base value covers the operations of the Deca (Metals and Ceramics Sanitary Ware), Hydra (electric showerheads) and Wood (Panels and Forests), existing operations at the time.

Scope 2 (market-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
0

Comment
In 2017, the consumption of scope 2 (market-based) was 76,562.40 MWh . The emissions were not considered for this source, since the energy traced came from Small Power Centers (PCHs).
2017 was the first year that Duratex started to measure market-based scope 2 emissions.

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
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
The Greenhouse Gas Protocol: Scope 2 Guidance
Other, please specify (US EPA CLIMATE LEADER,)

C5.2a

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

US EPA CLIMATE LEADER. Design Principles. 2005.

Greenhouse Gas Conversion Factor Repository. DEFRA. UK. 2018.

Other information:

Emission factors:

EPE. Balanco Energetico Nacional. 2018. (biomass/wood)

SABESP- Companhia de Saneamento Básico do Estado de São Paulo (biological oxygen demand - BOD)

Oliveira, 2010. Master thesis of ESALQ/USP. (fertigation)

DEFRA. Methodology for EF. 2018 (air travel)

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)
290135.18

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Brazil´s operations scope 1 - 277.629,21 tCO2e
Colombia´s operations scope 1 - 12.505,98 tCO2e
(including all GHG)

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
Since 2017, we have established our methodology to report a Scope 2 market value. Together with our energy supplier, we have aligned the best way to receive consumption information and also the declaration, in accordance with the requirement of the GHG Protocol.
Duratex, in line with its suppliers, consumes electricity from the incentive energy contract for some units in Brazil.

C6.3

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

Reporting year

Scope 2, location-based
57523.28

Scope 2, market-based (if applicable)
45916.94

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
In accordance with Scope 2, our consumption based on location was 854,347.05 MWh, which corresponds to 57,523.28 tCO2e (total emission of 50,978.03 tCO2e in Brazil and 6,545.25 tCO2e in Colombia).

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?
No

C6.5

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

Purchased goods and services

Evaluation status
Relevant, not yet calculated

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
Duratex still does not calculate the emissions that occur in the extraction and production of produts (raw material). It is possibly a relevant issue, but we must expand our knowledge. According to studies carried out on Life Cycle Assessment for some products in our portfolio, emissions related to productive inputs are possibly the 3rd most relevant value on our supply chain. Duratex committed to increase the monitoring of its indirect emissions by 50% until 2025.

Capital goods

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
Duratex still does not calculate the emissions that occur in the extraction and production of capital good (equipments). It is not a relevant issue. According to studies carried out on Life Cycle Assessment for some products in our portfolio, emissions related to capital goods are not relevant to the product's environmental footprint.

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

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
Duratex still does not calculate the emissions that occur in the extraction and production of fuels used inn our supply chain. It is not a relevant issue. According to studies carried out on Life Cycle Assessment for some products in our portfolio, emissions related to this fuels are not relevant to the product's environmental footprint.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
42639.53

Emissions calculation methodology
Duratex uses GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and emissons factors of IPCC. For this cathegory we calculate emissions from transportation and distribution of products purchased by vehicles that are not owned or operated by the organization, as well as other outsourced transportation and distribution (including both inbound and outbound logistics).
Informations about distance traveled by upstream transport are accounted for and determined by the Supply area. The emission factors (emission / km traveled) are applied to calculate GHG emissions for each fuel.

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

Please explain
Duratex's Supply area has an outsourced route survey and mapping system, which makes it possible to collect information to calculate emissions. Currently, this system has been expanded and unified for the company's businesses. The drop in the emission value compared to 2019 is due to the effect of the pandemic in the 1st quarter of 2020, together with the optimization of the logistics.

Waste generated in operations

Evaluation status
Relevant, calculated

Metric tonnes CO2e
21835.04

Emissions calculation methodology
Duratex follows the GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and IPCC and Brazil´s Wastewater system.
For this category, we calculate effluent and solid waste emissions by applying the factors for each type of waste disposal and for each type of effluent treatment.
Scope 3 emissions were approximately 85% higher compared to 2019, as a result of the increased mapping of emissions from the units in Colombia and Brazil

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

Please explain
Emissions from solid waste and effluents are calculated with factors recommended in the literature and IPCC. The factors are not specific to the recipients to which we send our waste.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
473.66

Emissions calculation methodology
We calculate emissions from air travel for Duratex employees. All flights are informed by the contracted Travel Agency (Turismo de Maringá). Our Supplement Area is responsible for the dates. Trips are classified into short, medium and long distance and the respective conversion factors are applied in the calculation of emissions.
The drop in emissions related to business travel is a consequence of the security measures brought about by the pandemic.

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

Please explain
All the flights data are provided by our Travel Agency contracted.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1644.14

Emissions calculation methodology
Duratex follows the GHG Protocol methodology for calculating our Emissions Inventory, including scope 3, and IPCC emission factors.
Emissions referring to the collective transport of Duratex employees are calculated based on fuel consumption information or on the mileage of the vehicles that make the journey (home / work / home). Emission factors are applied for each situation.
The increase in emissions related to the displacement of employees is a consequence of the security measures brought about by the pandemic, such as the increase in the number of chartered people to maintain distance.

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

Please explain
Distance and fuel information is provided by third-party companies that provide transportation services to Duratex. Data is collected and entered into our emissions calculation system.

Upstream leased assets

Evaluation status
Relevant, calculated

Metric tonnes CO2e
5028.445

Emissions calculation methodology
Duratex follows GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and emissons factors from IPCC .
Emissions refer to leased farms with operations carried out by third parties. This amount refers to the Taquari Forestry unit.

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

Please explain
With the review of the sustainability strategy in 2016, Duratex committed to increase the monitoring of its indirect emissions by 50% until 2025. In 2017, Duratex started to expand the mapping of its scope 3 sources, and an action plan was constructed to report the most relevant emission sources in the coming years.
This category is being analyzed by Duratex.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
11054.19

Emissions calculation methodology
Duratex uses GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and emissons factors of IPCC. For this cathegory we calculate emissions from transportation and distribution of our produced products by vehicles that are not owned or operated by the organization, as well as other outsourced transportation and distribution (including both inbound and outbound logistics). Informations about distance traveled by upstream transport are accounted for and determined by the Logistic area. The emission factors (emission / km traveled) are applied to calculate GHG emissions for each fuel.

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

Please explain
Duratex's Supply area has an outsourced route survey and mapping system, which makes it possible to collect information to calculate emissions. Currently, this system has been expanded and unified for the company's businesses. The drop in the emission value compared to 2019 is due to the effect of the pandemic in the 1st quarter of 2020, together with the optimization of the logistics.

Processing of sold products

Evaluation status
Relevant, not yet calculated

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 could be relevant for Wood Business, in wich our wood products are processing by joiners and furniture industries. With the review of the sustainability strategy in 2016, Duratex committed to increase the monitoring of its indirect emissions by 50% until 2025. In 2017, Duratex begun to understand and to map the scope 3 emissions sources, and an action plan was constructed to report the most relevant emission sources in the coming years. This category is being analyzed by Duratex.

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
With the review of the sustainability strategy in 2016, Duratex committed to increase the monitoring of its indirect emissions by 50% until 2025. In 2017, Duratex begun to understand and to map the scope 3 emissions sources, and an action plan was constructed to report the most relevant emission sources in the coming years. This emission would be representative for Deca products. According to studies carried out on Life Cycle Assessment for some products in our portfolio, emissions related to this water treatment represents a significant percentage in the product use phase.
When using our products, greenhouse gas emissions can be related to the consumption of electricity and gas in our showers. However, considering the company's entire portfolio (about 12%), we are researching an action plan to report the most relevant emission sources in the coming years. This category is being analyzed by Duratex.

End of life treatment 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
Our products have a long durability and the emissions from the end-of-life treatment of sold products represent 0.1% of emissions in the life cycle assessment study.

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
Not applicable for Duratex. We do not have downstream leased assets.

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
Duratex does not have franchises . This category is not applicable to Duratex´s operations

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
This category is not applicable to Duratex´s operations. Our inventory is based on our operating limit. Although Duratex has investments in other companies, there is no operational control.

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
Not applicable for Duratex.

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
Not applicable for Duratex.

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?
Partially

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
Distribution

Scope 3 category
Upstream transportation and distribution

Emissions (metric tons CO2e)
42639.53

Please explain
Duratex uses GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and emissons factors of IPCC. For this cathegory we calculate emissions from transportation and distribution of products purchased by vehicles that are not owned or operated by the organization, as well as other outsourced transportation and distribution (including both inbound and outbound logistics). Informations about distance traveled by upstream transport are accounted for and determined by the Supply area. The emission factors (emission / km traveled) are applied to calculate GHG emissions for each fuel.
The emissions in this category cover the transportation of the purchase of our inputs and raw materials. It represents 51,6% of Duratex´s scope 3 emissions.

Activity
Distribution

Scope 3 category
Downstream transportation and distribution

Emissions (metric tons CO2e)
11054.19

Please explain
Duratex uses GHG Protocol methodology to calculate our Emissions Inventory, including scope 3, and emissons factors of IPCC. For this cathegory we calculate emissions from transportation and distribution of our produced products by vehicles that are not owned or operated by the organization, as well as other outsourced transportation and distribution (including both inbound and outbound logistics). Informations about distance traveled by upstream transport are accounted for and determined by the Logistic area. The emission factors (emission / km traveled) are applied to calculate GHG emissions for each fuel.
The emissions in this category cover the shipment of finished products. It represents 13,37% of Duratex´s scope 3 emissions.

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)
395518.46

Methodology
Default emissions factors

Please explain
Based on biogenic carbon emission data related to direct operations (this figure includes emissions (306,695.84 tCO2e Brazil and 23,454.65 tCO2e Colombia and 65,251,952 tCO2e Brazil and 116,023 tCO2e of renewable CO2 emissions).

CO2 removals from land use management

Emissions (metric tons CO2)
301978.32

Methodology
Default emissions factors

Please explain
This amount includes removals from commercial areas due to stock differences (62.178,63 tCO2e Brazil and -129.395,54) and the increase in conservation areas (231.267,39 tCO2e Brazil), and understory removal (137.927,83 tCO2e Colômbia).

Sequestration during land use change

Emissions (metric tons CO2)
0

Methodology
Default emissions factors

Please explain
Not applicable. At Duratex there is no change in land use.

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)
14750.66

Methodology
Default emissions factors

Please explain
Biogenic carbon results from the use of ethanol, ethanol on gasoline, and biodiesel in diesel. This amount includes Brazil and Colombia emissions.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)
327154.363

Methodology
Default emissions factors

Please explain
For processing/manufacturing machinery, the biogenic carbon comes from burning biomass (this amount includes 303744,17 tCO2e Brazil and 23410,19 tCO2e Colombia 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
Duratex's forestry business is responsible for the supply of wood (wood for the production of MDF and MDP) and represented approximately 7.5% of all greenhouse gases from Brazilian operations in 2020 (including scopes 1, 2, 3 and emissions from agricultural activity). And this business is responsible for all of our carbon removals. For the Panels Business, responsible for the consumption of wood and the production of MDF and MDP, emissions (Scope 1, 2 and 3) from the Brazil and Colombia units represent 35% of Duratex's total emissions.

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)
0.076692956

Denominator: unit of production
Other, please specify (cubic meters (m3))

Change from last reporting year
Much lower

Please explain
Indicator : 0,011582769 tCO2e/m3 Brazil and 0,065110187 tCO2e / m³ Colômbia represents relative emissions of Duratex Panels production.

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
0.000045038

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
342597.37

Metric denominator
unit total revenue

Metric denominator: Unit total
5879616000

Scope 2 figure used
Market-based

% change from previous year
29

Direction of change
Increased

Reason for change
Duratex's revenue grew mainly as a result of the implementation of the price readjustment of the Deca division and the incorporation of Cerâmica's results. And emissions increased by about 52% compared to 2019, mainly due to the two new Ceramic Coating units, whose emission corresponds around 30% of the issuance of Duratex S.A.
It is important to highlight that Duratex is revisiting its emission targets, including for the Colombia and Revestimento Cerâmico units. The expectation is to disclose the goals with a scientific basis in 2021, together with the Company's new Sustainability Strategy. The goals are to reduce emissions and maintain a positive carbon balance within the business.
Duratex also purchases energy on the free market. The initiative has no specific duration, so we have adopted a term of 3-5 years, due to the 5-year contract renewal term. A gain of around 20% is estimated for being in the free energy market.

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	264154.21	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	10796.64	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	12071.75	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	3014.58	IPCC Fifth Assessment Report (AR5 – 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)
Brazil *Reported in GHG Protocol Brazil (Kyoto Protocol)*	277629.21
Colombia *Reported in GHG Protocol Brazil (Kyoto Protocol)*	12505.98

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)
Deca (included Metals, Sanitay Ware and Hydra)	37366.562
Wood (included Forest and Wood Panels)	55791.248
Central Office, Show Room and Distribution Center	201.464
Ceusa - Ceramic tiles and floors	184269.931
Duratex Colombia (Wood Panels)	12505.973

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
Central Office	19.46	-23.558145	-46.659214
Forest Area - Agudos	6238.368	-22.488451	-49.133606
Forest Area - Itapetininga	4953.579	-23.586486	-48.105526
Forest Area - Taquari	18.36	-29.803859	-51.846371
Forest Area - Uberaba	7434.364	-19.75334	-47.97688
Panels - Agudos	13798.179	-22.488451	-49.133606
Panels - Botucatu	162.47	-22.879022	-48.452454
Panels - Itapetininga	8293.671	-23.586486	-48.105526
Panels - Taquari	2623.074	-29.803859	-51.846371
Panels - Uberaba	5598.218	-19.742167	-47.978368
Show Room - Deca	0.163	-23.568771	-46.672883
Metals - Jacareí	152.562	-23.28647	-45.9779
Metals - Jundiai	1191.419	-23.202716	-46.843107
Metals - São Paulo	1973.898	-46.843107	-46.688054
Ceramics - João Pessoa	10680.622	-7.178436	-34.910088
Ceramics - Jundiaí I	16115.756	-23.18171	-46.861324
Ceramics - Queimados	6859.452	-22.730522	-43.62375
Ceramics - Recife	334.424	-8.254303	-35.027161
Hydra - Aracajú	58.427	-10.916818	-37.073895
Ceusa - Urussanga	184269.931	-28.533263	-49.319493
Duratex Colombia - Panels Barbosa	1108.193	6.43161	-75.346086
Duratex Colombia - Panels Manizales	3361.96	5.030965	-75.432513
Duratex Colombia - Panels Yarumal	7802.302	6.812468	-75.495412
Distribution Center Pernambuco	22.405	-8.261007	-35.017262
Distribution Center Tubarão	0.428	-2.848	-49.03
Distribution Center Betim	13.957	-19.985502	-44.19023
Distribution Center Ceramics MG	79.797	-19.813478	-43.884447
Distribution Center Ceramics SC	57.156	-28.471164	-49.033994
Distribution Center Hydra	8.019	-10.916904	-37.073991
Show Room RC	0.077	-23.575357	-46.666158

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Mobile Combustion	24864.044
Stationary Combustion	239859.313
Industrial Process	3276.302
Solid Waste and liquid effluents	7251.773
Fugitive sources	3120.286
Agriculture emissions	11763.462

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.

Emissions disaggregated by category (advised by the GHG Protocol)

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

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

Activity
Processing/Manufacturing

Emissions category
Total

Emissions (metric tons CO2e)
252112.112

Methodology
Default emissions factor

Please explain
This total includes all scope 1 emissions related to the production process of operations in Brazil.

Activity
Processing/Manufacturing

Emissions category
Total

Emissions (metric tons CO2e)
12272.456

Methodology
Default emissions factor

Please explain
This total includes all scope 1 emissions related to the production process of operations in Colombia.

Activity
Agriculture/Forestry

Emissions category
Non-mechanical

Emissions (metric tons CO2e)
5078.09

Methodology
Default emissions factor

Please explain
Emissions refer to agricultural fertilizing activities(4,858.00tCO2e in Brazil and 219,100 tCO2e Colômbia).

Activity
Agriculture/Forestry

Emissions category
Non-mechanical

Emissions (metric tons CO2e)
6685.379

Methodology
Default emissions factor

Please explain
Emissions refer to emissions from fire in planted forests. (6,670.9584 tCO2e Brazil and 14.4207 tCO2e Colombia)

Activity
Agriculture/Forestry

Emissions category
Mechanical

Emissions (metric tons CO2e)
252112.112

Methodology
Default emissions factor

Please explain
Within the total scope 1 (252,112.1129 tCO2e), these emissions refer to the emissions from mechanized agricultural activities in Brazil, including equipment used for operations in forests.

Activity
Agriculture/Forestry

Emissions category
Total

Emissions (metric tons CO2e)
11763.465

Methodology
Default emissions factor

Please explain
These emissions refer to the total agricultural emissions (fires and fertilizers).

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)
Brazil	50978.03	45916.94	160800	81631.2
Colombia	6545.25	0	50348.05	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)
Deca (included Metals, Sanitay Ware and Hydra)	6780.553	2070.436
Wood (included Forest and Wood Panels)	37023.657	36672.684
Central Office and Show Room	64.95	64.95
Ceusa - Ceramic tiles and floors	7108.868	7108.868
Duratex Colombia	6545.247	0

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)
Central Office	26.676	26.676
Forest Area - Agudos	34.312	34.312
Forest Area - Itapetininga	0.371	0.371
Forest Area - Taquari	0	0
Forest Area - Uberaba	12.063	12.063
Hydra Aracajú	493.766	0
Ceramics - João Pessoa	601.876	0
Ceramics - Jundiaí I	941.765	919.734
Ceramics - Queimados	744.2	0
Ceramics - Recife	916.423	0
Metals - Jacareí	252.346	0
Metals - Jundiaí	1219.529	1150.702
Metals - São Paulo	1610.644	0
Panels - Agudos	13245.564	13035.825
Panels - Botucatu	153.286	153.286
Panels - Itapetininga	9316.953	9280.1
Panels - Taquari	5103.276	5087.659
Panels - Uberaba	9157.83	9069.065
Ceusa - Urussanga	7108.868	7108.868
Duratex Colombia - Panels Barbosa	4106.544	0
Duratex Colombia - Panels Manizales	756.318	0
Duratex Colombia - Panels Yarumal	1682.384	0
Show Room Deca	4.272	4.272
Show Room RC	2.234	2.234
CD Tubarão	5.575	5.575
CD Betim	0.766	0.766
Revestimento ceramico MG	6.255	6.255
Revestimento ceramico SC	17.407	17.407
CD Hydra Aracaju	1.646	1.646

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)
Electrical Energy Acquisition	57523.277	45916.94

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	3519.65	Decreased	6	As renewable energy sources, we have biomass and electricity the consumption in Brazil and Colombia operations, adding the consumption of ethanol in the Brazilian operations. In this scenario, we had a reduction of only 6% in emissions. Total emissions in Brazilian operations from this consumption in 2019 were 49,498.06 tCO2e. In 2020, the emission was 52,277.92 tCO2e, representing an emission increase of 6%. On the other hand, for the consumption of biomass as an energy source (our main renewable fuel in scope 1), the emission reduction went from 8,459.94 tCO2e in 2019 to 6,353.34 tCO2e in 2020, about 25% reduction. Electricity remained from 45,926.92 tCO2e in 2019 to 45,916.94 tCO2e in 2020. In ethanol, there was an increase in emissions, but it is not representative of the total emissions of these fuels. In Colombia's operations, unlike the Brazilian operations, renewable energy emissions decreased by 48%, from 12599.521 tCO2e in 2019 to 6,545.25 tCO2e in 2020, as well as a reduction of about 35% in emissions of biomass. For the calculations, we add the values of emissions from renewable energy sources from the units in Brazil and Colombia, we have 49,498.06 tCO2e in 2019 and 59,277.80 tCO2e in 2020. We have a 6% reduction in emissions from 2019 to 2020. = 1-(59277.80/62797.44) = 6%
Other emissions reduction activities	3923.019	Decreased	7	Improvement in energy efficiency and improvements in the productive processes at Duratex's factories, impacted on the reduction of CO2 emissions. Among the units of Louças Queimados, Louças Jundiaí, Metais Jacareí, Metais Jundiaí and Acute Panels, the reduction was 7%, comparing the emissions of 2019(58443,79984 tCO2e) and 2020 (54520,78 tCO2e). For the calculations usamos = -1(54520,78/58443,79984) = 7%
Divestment	0	No change	0	There was no divestment in the year 2020
Acquisitions	143255.058	Increased	100	Emissions related to operations recently acquired. Cecrisa units were accounted for in the 2020 reporting cycle.
Mergers	0	No change	0	Not applicable in this reporting period for Duratex.
Change in output	0	No change	0	The production´s effect was not relevant to the impact on emissions compared to 2019-2020.
Change in methodology	0	No change	0	There was no change in the period as a justification to represent an reduction or increase in emissions.
Change in boundary	0	No change	0	There was no change in the period as a justification to represent an reduction or increase in emissions.
Change in physical operating conditions	0	No change	0	There was no change in the period as a justification to represent an reduction or increase in emissions.
Unidentified	0	No change	0	There was no change in the period as a justification to represent an reduction or increase in emissions.
Other	0	No change	0	There was no change in the period as a justification to represent an reduction or increase in emissions.

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?

Location-based

C8. Energy

C8.1

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

More than 10% but less than or equal to 15%

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

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)	921715.85	1083068.5	2004784.4
Consumption of purchased or acquired electricity	<Not Applicable>	683981.8	170366.1	854347.9
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	1605697.63	1253434.64	2859132.28

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	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Fuels (excluding feedstocks)
Natural Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
728132.85

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
56.1

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006

Comment
CO2 56.1 kg GHG / GJ
CH4 0.001 kg GHG / GJ
N2O 0.0001 kg GHG / GJ

Fuels (excluding feedstocks)
Wood Chips

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
908761.49

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
116

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of biomass from wood were considered:
CO2 116.0 kg GHG/GJ
CH4 0.0348 kg GHG/GJ
N2O 0.00464 kg GHG/GJ

Fuels (excluding feedstocks)
Fuel Oil Number 1

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
15026.27

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
77.4

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of fuel oil were considered:
CO2 77.4 kg GHG/GJ
CH4 0.003 kg GHG/GJ
N2O 0.0040 kg GHG/GJ

Fuels (excluding feedstocks)
Diesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
71857.18

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
74.1

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of fuel oil were considered:
CO2 74.1 kg GHG/GJ
CH4 0.0039 kg GHG/GJ
N2O 0.00439 kg GHG/GJ

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

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
3403.79

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.00038

Unit
metric tons CO2e per m3

Emissions factor source
PBGHGP 2016 - GHG Protocol Brazil

Comment
The following emission factors for stationary combustion of ethanol were considered:
CO2 1.457 t GHG/m3
CH4 0.000384 t GHG/m3
N2O 0.000013 tGHG/m3
Net calorific value of ethanol 6300 kcal/kg
Density of ethanol 809 kg/m3 (BEM 2015)
Conversion factor kcal - MWh 0.000001 MWh/kcal

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

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1045.19

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
69.3

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of gasoline were considered:

CO2 69.3 kg GHG/GJ
CH4 0.025 kg GHG/GJ
N2O 0.008 kg GHG/GJ

Fuels (excluding feedstocks)
Liquefied Petroleum Gas (LPG)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
51257.13

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
63.1

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of liquefied petroleum gas were considered:
CO2 63.1 kg GHG/GJ
CH4 0.001 kg GHG/GJ
N2O 0.0001 kg GHG/GJ

Fuels (excluding feedstocks)
Subbituminous Coal

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
215567.92

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
1.81629

Unit
metric tons CO2 per GJ

Emissions factor source
IPCC. 2006 Guidelines -Energy. 2006.

Comment
The following emission factors for stationary combustion of sub-bituminous coal were considered:
CO2 1.816 kg GHG/GJ
CH4 0.00001 kg GHG/GJ
N2O 0.00002 kg GHG/GJ

Fuels (excluding feedstocks)
Acetylene

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization

25.38

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
3.385

Unit
metric tons CO2 per GJ

Emissions factor source
"The engineering tool box -
Fuels - Higher and Lower Calorific Values"

Comment
The following emission factors for stationary combustion of acetylene were considered:
CO2 3,38462 kg GHG/GJ

Fuels (excluding feedstocks)
Biodiesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
9550.56

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
74.07

Unit
metric tons CO2 per GJ

Emissions factor source
Duratex uses GHG Protocol methodology to calculate our Emissions Inventory

Comment
The following emission factors for stationary combustion of biodiesel were considered:
CO2 74.07 kg GHG/GJ
CH4 0.0003 kg GHG/GJ
N2O 0.0006 kg GHG/GJ

Fuels (excluding feedstocks)
Propane Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
156.6

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

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

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

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

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
3

Unit
metric tons CO2 per GJ

Emissions factor source
"The engineering tool box -
Fuels - Higher and Lower Calorific Values"

Comment
The following emission factors for stationary combustion of propane were considered:
CO2 3 kg GHG/GJ

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
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Hydropower

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

MWh consumed accounted for at a zero emission factor
81631.21

Comment
In 2020, Duratex purchased electricity from electric power purchase agreement with the companies Enel (5-year contract started in 2019), which sell electricity from hydroelectric / small hydroelectric plants. Of the traceable consumption, covered by this contract, the GHG emission factor is zero because it is energy from a hydroelectric plant.

C9. Additional metrics

C9.1

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

Description
Waste

Metric value
304373.99

Metric numerator
Generation of waste in Duratex (unit - tonne)

Metric denominator (intensity metric only)
Not applicable

% change from previous year
69

Direction of change
Increased

Please explain
In 2020, we started implementing the 1st stage of the Environmental Management program in the 2 Portinari plants, taking into consideration the integrated management in the 4 Ceramic Tiles plants. With this integration, there were many synergies in terms of optimization of environmental management, in particular measuring and managing waste.
Although the 69% increase in the reported generation of waste, the ratio of waste disposal in landfills to total waste inventoried ratio is 8%, down 58% in the last 5 years. Also, over 84,600 metric tons of waste were reused internally in production processes in 2020.

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
KPMG_Duratex_Relatório de Asseguração GRI_ING_VF.pdf
Duratex_RA_2020_Book_en.pdf

Page/ section reference
"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

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
.
KPMG_Duratex_Relatório de Asseguração GRI_ING_VF.pdf
Duratex_RA_2020_Book_en.pdf
KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING.pdf

Page/ section reference
"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
Duratex_RA_2020_Book_en.pdf
KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING.pdf

Page/section reference
"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Waste generated in operations

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING.pdf

Page/section reference
"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Business travel

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
Duratex_RA_2020_Book_en.pdf
KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING.pdf

Page/section reference
"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Employee commuting

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
KPMG_Duratex_Relatório de Asseguração GRI_ING_VF.pdf
Duratex_RA_2020_Book_en.pdf

Page/section reference
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"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Downstream transportation and distribution

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
.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
Duratex_RA_2020_Book_en.pdf
KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING.pdf

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"KPMG_Relatório_de_Verificação_GEE_Duratex_2020_ING" - all pages
"KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf" - all pages
"Duratex_RA_2020_Book_en.pdf" - pages 49,87,88 and 89.

Relevant standard
ISO14064-3

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

C11. Carbon pricing

C11.1

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

C11.1a

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

C11.1c

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

Colombia carbon tax

Period start date
January 1 2019

Period end date
December 31 2020

% of total Scope 1 emissions covered by tax
76

Total cost of tax paid
200554.44

Comment
Since the market carbon implementation in Colombia, Duratex already provided income of about U$S 3.954 millions. In 2020, the quantification of carbon credits was not updated, however, by 2021 they will be quantified again and the company expects to have an income of more than 550,000 USD

C11.1d

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

Colombia started carbon taxation on December, 2016 and Tresury Ministry established incidence of taxes for fuel purchases. On June, 2017 the Environmental Ministry enacted a decree for emission compensation. Companies in charge of taxation started to have the alternative of offsetting their emissions. At the beginning of 2017, the compensation could be only with projects carried out in the Colombian territory. At Duratex Colombia, this system and also the projects for offsetting are already established and it is the first big company in Colombia to assurance its carbon credits. Duratex´s Colombia Strategy is the continuation of the "CARVIDA" project, related to compensation of carbon bonus through carbon capture from forests.

In Colombia, we received the Icontec Forest Compensation certificate, an achievement linked to the Carvida Duratex program – a carbon bonus for life, in 2018. Between 2010 and 2017, our forests captured 956 thousand tons of carbon dioxide, equivalent to the total emissions of all the vehicles that circulate in the Metropolitan Area of Valle de Aburrá (Medellin and neighboring municipalities) for 14 days each year, over the period mentioned. The recognition serves as evidenced that our Greenhouse Gas Forests Compensation program based on forest cultivation is the largest in Colombia.

Since the market carbon implementation in Colombia, Duratex already provided income of about U$S 3.954 millions. In 2020, the quantification of carbon credits was not updated, however, by 2021 they will be quantified again and the company expects to have an income of more than 550,000 USD

In Brazil, we collaborated until 2018 with a Voluntary Emissions Trading System, which simulates the functioning of a Cap & Trade emissions market. In this model, there is a restriction on the total volume of issues and the companies participating in the system buy and sell securities to manage their respective

GHG emission. For the next year, we intend to resume participating in the program, since there is the possibility of simulating the emissions trading with removals from planted forests, allowing an analysis more aligned with the reality of Duratex's businesses.

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, other partners in the value chain

C12.1a

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

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Climate change performance is featured in supplier awards scheme

% of suppliers by number
3

% total procurement spend (direct and indirect)
50

% of supplier-related Scope 3 emissions as reported in C6.5
95.7

Rationale for the coverage of your engagement
The total number of suppliers in 2020 was 6,772. Since 2013, we conduct the Duratex Supplier Management Program or GFD, a complete set of mechanisms to identify, select and monitor the social, environmental, economic and quality performance of suppliers that provide products and services essential for our operations. In the GFD dynamic, the suppliers selected are asked to answer a self-assessment questionnaire. The selection of suppliers that participate in the GFD Program is carried out based on the analysis of a criticality matrix, which assesses, in one axis, the Relevance of the Category, considering: (i) Reduction in production / productivity, (ii) Influence on the product ; (iii) Influence on cost; and in another axis, Sustainability Risk, considering: (i) Exposure and incidence of Socio-environmental problems, (ii) Co-responsibility (probability), (iii) Reputation (probability). Companies that have similar social and environmental impacts are grouped into five general sectors. Participants are classified into these groups: Industry, Hard services, Utilities, Services and Mining. In 2020, 192 suppliers, representing 54% of the procurement spend, answered the questionnaire, which includes issues related to greenhouse gas management, GHG inventory, water and biodiversity management. The selection criteria are the volume of payments made to the supplier, the criticalness of their sector of operation to our business and their history of participation in the program. In 2020, we kept a good performance average in the program, with consolidated score of 7.3 in a 0 to 10 scale. No suppliers had score below 5 in this mapping. This methodology for analyzing and selecting suppliers was revised in 2017, with the goal of incorporating sustainability criteria into the procurement process. Duratex´s partners' activities were grouped into categories, which were used to map the most critical and highest risk social and environmental aspects. Based on this matrix, the appropriate management measures were established for each category, according to the stage of the relationship: pre-contract, negotiation and contracting – with supplier monitoring and/or development.

Impact of engagement, including measures of success
In 2020, the percentage of suppliers who scored equal to or above 8.0 in the GFD dropped from 35% to 25%, being the first time since the beginning of the Program that this drop has occurred. The drop is mainly due to the inclusion of new issues and, consequently, to the increase in the level of demand in relation to the social and environmental performance of suppliers. Participants with grades between 7.0 and 8.0 went from 39% to 34% of the total. Regarding the Environment dimension of the GFD Program, the following themes are covered:
• Existence of an environmental management system;
• Occurrence of environmental infringements or complaints;
• Waste management and disposal (reduction initiatives and targets);
• Water (access to quality water in the necessary quantity, level of consumption, consumption reduction targets, effluent disposal and incidence of significant spills);
• Energy (access to energy in the necessary quantity and quality, level of consumption, consumption reduction targets, energy matrix);
• Atmospheric emissions;
• GHG Emissions (emissions reduction initiatives and targets);
• Noises;
• Biodiversity (operation's impact on biodiversity and conservation actions);
• Use of renewable or recycled raw materials,
• Product and packaging recovery initiatives;
• Environmental origin of the wood (in the case of sectors that use native wood);
• Freight efficiency (in the case of the Transport sector);
• Energy efficiency, electrical matrix, initiatives aimed at energy conservation (in the case of the Energy sector).
In general, as in previous years, the themes relating to regulation and/or legislation had greater adherence by suppliers, such as the issues of Compliance (average adherence of 86.8%), Health and Safety (77.3%) and Environment (66.6 %).
This year, new issues were included and, consequently, an increase in the level of demand in relation to the social and environmental performance of suppliers. On issues related to GHG emissions, the objective was to assess the extent to which suppliers have explicit commitments related to climate change. It is noteworthy that, this year, as in the previous year, no supplier participating in the GFD obtained a total score below 5.0, a significant gain, since this range represented 3% of the total respondents in 2017.

Comment
Every year, Duratex recognizes outstanding suppliers in the GFD assessment and monitoring cycle. Outstanding practices are identified during technical visits made to company facilities (34 in 2020) and awards are aimed at valuing advancement in incorporating sustainability practices into business, in addition to inspiring other companies to adopt similar measures. In 2020, due to sanitary restrictions resulting from the pandemic, it was not possible to hold the annual supplier recognition event. However, all awarded suppliers received a recognition trophy. In January 2021, videoconferences were held with each of the suppliers in order to recognize the good practices implemented.

C12.1d

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

ESPAÇO ARVORAR (ARVORAR PLACE) - Since 2017, the "Espaço Arvorar" at the Agudos (SP) forest unit is opened to the public. It is a place dedicated to raising visitor awareness about the history and importance of wood, through sensorial experiences and lots of information. There are five environments that are open to visits by children, young people and adults, free of charge. The topics highlighted in the space are: music, the use of wood, biodiversity, sculpture, native forests, benefits of planted forests for carbon stock, tools made of wood, huge constructions, housing, and carbon sequestration. The place is open for students and other interested parties from all over Brazil. In 2019, Duratex received 8030 visits at Espaço Arvorar. In 2020, due to sanitary restrictions resulting from the pandemic, the "Espaço Arvorar" had to remain closed.

WOOD BUSINESS: In November 2002, we also participated in the last annual meeting of the CDP Benchmark Club, presenting the Duratex case study: "Genetic improvement as a tool to face climate change"

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

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

Yes

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

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

Management practice reference number

MP1

Management practice

Other, please specify (Encouraging good management practices through fostered forests)

Description of management practice

Duratex fosters more than 27,000 hectares of forests, destined to supply its panels plants. Duratex shares its technical knowledge with fostered smallholders to encourage best management practices in their forests, in order to reduce socio-environmental impacts and increase forest productivity.

Your role in the implementation

Knowledge sharing
Operational

Explanation of how you encourage implementation

Duratex has a due diligence system for the supply of controlled timber and for fostered forests. Through this system, Duratex ensures the compliance of non-certified timber suppliers with labor, environmental, land, tax and occupational health and safety legislation, laying the foundation for future certification. Duratex also provides tree saplings for timber producers, which give preference to wood supply to Duratex. Additionally, one of the targets of the Sustainability Strategy is "For 80% of areas to be certified (FSC) by 2035."
In 2019, Duratex started the process of involving producers partners in order to guide them to obtain the seal. . In 2019, 50 of them participated in a meeting, organized by us, to get to know the concepts on which the certification is based and understand the necessary adjustments. In November 2020, the 1st group of producers was subject to an external audit. At the end of the process, the certification was recommended, covering 20.1% of the fostered forest areas. The target is to have 80.0% of these areas certified by 2035.

Climate change related benefit

Increasing resilience to climate change (adaptation)
Increase carbon sink (mitigation)
Reduced demand for fossil fuel (adaptation)
Reduced demand for fertilizers (adaptation)
Reduced demand for pesticides (adaptation)

Comment

The good management practices encouraged by Duratex in fostered areas allow the reduction of the use of inputs and natural resources, in addition to increase productivity. By using the seedlings supplied by Duratex, all the benefits of the genetic improvement program are shared with the fostered smallholders, such as the utilization of genetic materials well adapted to the local conditions, giving them better resilience to climate change.

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

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

Yes

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations
Funding research organizations

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

Through involvement with associations and trade organizations, we anticipate trends and progress in the market. Corporately, we participate in the Brazilian Association of Publicly Traded Companies (Abrasca), the Federation of Industries of the State of São Paulo (Fiesp), the Brazilian Institute of Investor Relations (IBRI), Ethos Institut Ethos and Brazilian Business Network for Life Cycle Assessment (Rede ACV).
Under the auspices of our forestry activities, associations considered strategic to are: Brazilian Tree Industry (Ibá); Forestry Science and Research Institute (Ipef); and Forestry Investigation Society (Sociedade de Investigações Florestais - SIF).
As a Deca Business we also participate of: Brazilian Association of Sanitation Materials (Asfama), National Confederation of Industries (CNI), Brazilian Association of Building Materials Industry (ABRAMAT).

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Some of the associations mentioned and others important associations that Duratex makes part:
The Abrasca - Brazilian Association of Publicly Traded Companies aims to bring together brazilian companies in an organization that, in addition to the experiences of its associates, achieves the improvement of corporate governance policy practices, especially and comprehensively as it relates to the Capital Markets - structural basis of a market economy and more specifically in the field of relationship with shareholders, in the research, study, dissemination and debate of procedures and mechanisms that allow a constant and qualified expansion of this market.
IBA - The Brazilian Tree Industry, is the association responsible for institutionally representing the planted tree production chain, from the field to the industry with its main stakeholders. Ibá advocates on behalf of the industry's interests aiming at adding value to products obtained from planted pine and eucalyptus trees, as well as other species used for industrial purposes with officials and governmental agencies, entities of the planted trees production chain and important sectors of the economy, social and environmental organizations, universities, schools, consumers and the press—domestically and internationally. IBA's mission is to increase competitiveness in the industry and align member companies at the utmost standard of science, technology and social and environmental responsibility for the entire planted trees production chain, pursuing innovative solutions for the Brazilian and global market.
IPEF - Institute for Research and Forest Studies, created in 1968, is a non-economic association whose objective is to plan, implement and coordinate actions and manage resources for studies, analysis and research in the area natural resources, with an emphasis on forest science.
ASFAMAS - One of the objectives of the entity involves the presentation of proposals to value the areas of sanitation and housing. Besides representing the industries of the sector, ASFAMAS promotes the continuous improvement of quality and productivity.
FIESP - The structure of Fiesp reflects the strategic thinking and the homogeneous treatment that the entity confers on the various productive chains and unions, regardless of the size of the companies or the segment to which they belong.

How have you influenced, or are you attempting to influence their position?

Our participation in associations and industry organizations contributed to our ability to forecast market trends and keep pace with changes in regulations and other matters relevant to the areas in which we act.
Abrasca - Duratex has a representant as president of the association.
ASFAMAS - Our Industrial Director at Deca e Hydra is President at ASFAMAS (Brazilian Association of Sanitation Materials), and CNI Member of the committee, contributing to the maintenance of a permanent dialogue to build an agenda that stimulates and strengthens innovation in Brazilian companies and the federal government
IBA - Our CEO is the Vice-president Wood Panels sector and we also have representatives in the Commitees.
IPEF - Our Manager of Forest Technological Development and Environment is representant on the Deliberative Council
Duratex is a Concil part of Brazilian Network Life Cycle Assessment (Rede ACV). This association aims to create an environment of cooperation among companies, to articulate governments, and to make available and disseminate to information about LCA in Brazil. The company also actively participates in the greenhouse gas emissions working groups and the Climate Change Committee, led by Ibá (Brazilian Tree Industry), where issues of relevance to the sector are discussed, as well as the sector's positioning in relation to legislation and future opportunities.

C12.3d

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

No

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?

Duratex ensures a common approach to multiple climate engagement activities across business divisions due to the alignment of the Business Strategy with our current Sustainability Strategy and Sustainability Policy, which includes, among other aspects, climate change.

Duratex has a strategic representatives, aligned and knowledgeable about this Sustainability Strategy, that participate in Associations such as managers, directors, vice-president and president. These employees represent the goals of our company and can influenciate actions to be implemented in our business, antecipate legislation and implement market trends.

Our experts, also knowledgeable about the Company's Strategy, participate in technical discussions and share information and trends that influence our industry. They are always participating in pre-established agendas and have the responsibility to communicate, engage and propose action plans for strategic issues for the company, such as climate change.

As an example, we can mention the participation in Ibá's working groups and committees related to climate change and the evaluations of opportunities in market indices related to the theme.

In line with our governance process, managements share experiences and information for the various levels of the company, such as the Executive Committee and the Sustainability Committee for establishing and approving action plans, with a view to advancing the theme in the company. Issues such as a science-based goal and carbon balance were addressed and discussed with these Duratex Committees and action plans were established for the year 2020.

In addition, the strategy is always strengthened in our communications and the goals until 2025 have their respective leaders who report the actions and achievements carried out during the year.

In line with market trends, the increasingly latent questions in the ESG sphere by investors and the purpose of the Solutions for Better Living company, a major project, started in 2019, is underway at the company to revisit the Sustainability Strategy from Duratex, and the theme of climate change permeates and gives direction to transversal axes of the strategy. We are currently in the final stage of approving the framework with our Councils to start setting up our commitments. This strategy will be announced in 2021.

Direct and indirect activities that are not in line with the Company's purpose or the Sustainability Strategy are not followed.

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
.
Duratex_RA_2020_Book_en.pdf

Page/Section reference
Sections: Our Forests (page 20), Awards (page 26), Sustainability Strategy (page 29), Environmental and Social Program (page 30), Risk Management (pages 40 to 42), Eco-efficiency and Environmental Management (pages 44 to 47), Climate change (pages 48 and 49). GRI Attachment (pages 87 to 89).

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify (Economic and financial results.)

Comment
In the Duratex Integrated Report 2020, we inform the latest work we have done on climate risk scenarios in forestry operations, the company's latest carbon balance, with GHG emissions from our industrial and forestry activities, and emissions from our chains and also the carbon removals that occurred during the year, demonstrating our positive impact. Also reporting on our Sustainability Strategy goals, we report on the progress of our goals related to emissions and the expansion of our scope 3.

Publication
In voluntary communications

Status
Complete

Attach the document
.
duratex_GHG 2020_2021.pdf

Page/Section reference
Inventory of greenhouse gas emissions 2020 - All pages

Content elements
Emissions figures

Comment
The Public Register of Emissions, in accordance with the GHG Protocol Brazil, for the inventoried year of 2020 was already submited on Brazil´s Plataform. Our report is validated by the third party. The inventory for 2020 is attached.

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
Yield

Description of impact
Every time Duratex acquires a new area for forest planting, a positive impact is generated on conserving biodiversity. Duratex's forests are planted only in areas which were already used for commercial activities, so not only deforesting is prevented, but also part of these areas is set aside for conservation purposes, where the natural regeneration of these areas is made possible.
Along with planted forests, Duratex maintains areas of native vegetation containing habitats suited to the development of local fauna and flora. These areas are connected through the biodiversity corridors at Duratex´s units, contributing to the preservation of animal and plant species. Studies have been conducted since the 1970s in partnership with universities in the conservation areas have monitored the positive impacts of the biodiversity conservation actions we carry out.
In these locations, measures are in place to protect the environmental values, such as prohibiting hunting and fishing, patrols by forest rangers, actions for preservation and mitigation of forest fires, reduced speed limits and control of invasive species. These actions aim to protect old growth forests, thus also protecting the biodiversity found in these areas, including species within the local flora and fauna that are rare or threatened by extinction. We have already identified 1,414 flora and 1,136 fauna species. From this total, 15 flora and 24 fauna species are classified as threatened species by the International Union for Conservation of Nature (IUCN).

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

Description of the response(s)
Duratex is responsible for 128,859.1 hectares of own and leased areas in Brazil, 32.4% of which are set aside for conservation. Duratex continues to adopt best forestry management practices, certified according to FSC standards, ensuring the maintenance of conservation areas and habitats suited to development of fauna and flora. These conservation areas in our forest areas are interspersed with planted eucalyptus, allowing for connection between conservation areas and facilitating the flow of animals and plants.
In Rio Grande do Sul, Duratex also helps producers by supporting their environmental licensing processes, sharing our intellectual capital so that these forest owners meet all of the legal requirements for forestry management.
Since 1977, Duratex has carried out various studies on plant and animal life through partnerships with universities and research institutions that showed considerable diversity of wildlife and plant life in the conservation areas and forest plantations throughout different biomes. In 2019, we renewed our participation in the program for another seven years.
These studies contribute to the development of scientific research in Brazil by sharing the results with the scientific community through theses, dissertations, papers and participation at congresses.
In 2019, we underwent an international consultancy assessment that ranked our management practices among the best standards worldwide, which reflects our commitment to sustainable development since the beginning of our operations. In 2020, Duratex was nominated by the Annual Summary of Timber and Pulp Assessments as the most transparent Company in Brazil and the Americas in ESG commitments in the wood and pulp industries. This ranking is developed by the Sustainability Policy Transparency Toolkit (SPOTT) program. The Company was ranked 4th out of a total of 100 companies appraised in the world ranking. In 2020, Duratex scored 76.1%, up 10.2 percentage points from 2019. The average score of all appraised companies was 22.6% in 2020.

Management practice reference number
MP2

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Yield
Other, please specify (Local community)

Description of impact
Duratex does not use fire as a management practice. Actions guarantee prevention and combating of forest fires, so as to protect crop and conservation areas, as well as the community and employees, machinery and company facilities. The destruction of plant cover, resulting in an increase in the occurrence of ecological and humanitarian disasters, such as: soil erosion and major floods.

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

Description of the response(s)
Many forest workers are qualified as forest firefighters; surrounding communities are informed about forest operations and are given a communication channel that can be used to report fires; firebreaks maintenance.

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

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

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

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number
MP1

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Other, please specify (Working conditions)

Description of impacts
Duratex gives technical guidance to its outgrowers, ensuring that the best forest management practices are in place. By doing this, the conservation areas are adequately protected (no harvesting there), the soil is protected and the workers' rights are respected.

Have any response to these impacts been implemented?
Yes

Description of the response(s)
The due diligence system established by Duratex for wood procurement ensures these positive impacts are amplified. Desk and field audits are conducted on all wood suppliers. If issues are found, an action plan is generated with a deadline to folow up. If there are major or recurring problems, the supplier is suspended until the issue is resolved.

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.

Duratex is an integrated business platform, focused on offering Solutions for Better Living. This understanding is a reflection of the consolidation of the elements of our culture, whose transformation process started about four years ago. Since then, we have reformulated our team, especially our leaders; and we establish management standards that strengthen Our Way of Being and Doing, focused on the People, Processes, Customers and Results pillars.

In 2020, despite the crisis scenario, we were able to present our best result in almost 70 years of history. And we have achieved this without cutting jobs while protecting the health of all of those who are part of Duratex. At the end of the year, we had a record free cash flow generation, amounting to R$1,128.8 million, excluding projects, a result that was far above expectations. The Wood Division, whose Adjusted and Recurring EBITDA represented more than 60.0% in the consolidated statements at the end of 2020, is noteworthy. Net revenue grew 17.3% in relation to 2019, closing the year with R$5,879.6 million. Despite the pandemic, we continued to implement projects and continued to grow. We obtained international financing for the construction of one of the world's largest dissolving wood pulp plants, LD Celulose, a joint venture with Austria's Lenzing AG. Worth mentioning is the expansion of sales to the foreign market, up 26.9% on a year-on-year basis, as a result of conquering new markets since early 2020.

Over 2020, investments reached R$487.4 million, of which R$302.1 million were allocated to fixed and intangible assets. This amount includes, among other operations, the investment of R$5.4 million in the new Ceramic Tiles line (started in 2019), R$185.3 million in the formation of biological assets, and R$20.5 million allocated to the acquisition of land in the region of Itapetininga (SP). This acquisition will further reduce wood panel production costs, considering the reduction in the average forest and plant radius.

Relevant fact:

On July 15, 2021, Duratex (DTEX3) informed the market of the change of name to Dexco, also changing, as of August, its trading code on the Brazilian Exchange (B3), to DXCO3.

Duratex is now Dexco. In the year in which we celebrated 7 decades of operations and recorded the best results in our entire history, together with our brands – Deca, Portinari, Hydra, Duratex, Ceusa and Durafloor – we are taking another important step in our trajectory. The change symbolizes the company's new growth moment.

With the change, we consolidated our profile centered on the end consumer and on their journey. The promise of the new brand – Viver Ambientes – fulfills the purpose of offering Solutions for Better Living and translates greater attention to people, also combining the solidity of conscious and efficient business management with a careful look at design in the delivery of high-end products. differentiated quality and aesthetics.

A fundamental part of this movement is the attentive look at the meaning of each of the brands. In an integrated manner, the company's business revisited its visual identities and its marketing strategies. They brought new promises, new positioning, new territories and new visual language. Movement aligned with consumer-centricity. And as that message was renewed, the corporate brand review became more necessary. A brand platform was then established which, with the purpose of offering Solutions for Better Living, creates environments that can be experienced in their entirety, as it is from the harmonious coexistence between aesthetics and functionality that Dexco's solutions will be able to offer well-being, comfort and care for people's lives.

The transformation also represents a new moment of development. For the next few years, investments of approximately R$ 2.5 billion are planned for a new growth cycle. In addition, the permanent search to attract new businesses, which are profitable and in line with the Company's purposes, continues to be one of the strong guidelines of this new moment with projects that enable important advances in the process of digitization and improvement of the consumer journey.
5167-20210715-Material-Fact.pdf

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 of Duratex	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.

Duratex is a publicly traded company with 70 years of history, that has the Value Proposition of offering Solutions for Better Living to customers and consumers. With our business divisions - Wood, Deca and Ceramic tile - we are working to produce and sell products for the furniture and finishings sectors in the civil construction industry. We are part of people's daily lives, working in the segments of wood panels, bathroom fixtures and metals, electric showers and ceramic tiles, through our brands recognized in their segments for their design and quality: Durafloor, Duratex, Deca, Hydra, Ceusa and Portinari. As a member of the Brazilian Association of Publicly-Held Companies (ABRASCA), Duratex maintains its commitment to the ABRASCA Code of Self-Regulation and Good Practices of Publicly-Held Companies, with best market practices and the principles of transparency, equity, accountability, and corporate responsibility.

Nowadays, Duratex has sixteen industrial units located in the South, Southeast and Northeast regions of Brazil and three additional wood panels units in Colombia, Notable among the products in our portfolio are MDP and MDF paneling, fiberboard sheets, wood flooring, sanitary ware, metals, metal fittings and electric showers. Besides serving the Brazilian market, our products reach over 50 countries, with a special presence in South America, Central America, Africa and the USA. In addition to the factories, Duratex is responsible for more than 140 thousand hectares of planted forests and conservation areas in Brazil and Colombia. Duratex ensures the use of the best native area conservation and management practices. On July 1st, 2020, we celebrated the 25th anniversary of our Forest Steward - ship Council® (FSC®) certificate of responsible forest stewardship. We were the 1st Company in the entire southern hemisphere to obtain it and the 5th in the world. Our chain of custody is also certified, ensuring the traceability of the wood used in our production process. In our forest areas in Brazil and Colombia, we produce eucalyptus seedlings in nurseries, planting them at our own farms and at leased farms and using the wood to supply the fiberboard and paneling factories. We also manufacture the resin used to bind the particles and fibers in MDP and MDF panels. Verticalization of operations and the proximity between planted areas and industrial units are some of our main competitive advantages, adding value to our business at a lower cost. We acquired, in 2020, the Viva Decora constructech, an online platform with more than 10 million single sessions per month, and continued to work on the LD Celulose project, a joint venture with Lenzing AG, which will be one of the world's largest pulp plants.

In 2020 we witnessed the outcome of maturity of discussions on climate change in the Company, which will have an even greater impact when we revisit our sustainability strategy, whose new version will be disclosed in 2021. We are now addressing the commitment to reducing and setting GHG emission targets in a strategic way. We will soon complete a science-based study with proposed GHG emission targets in line with Duratex's zero carbon strategy. We calculate our GHG emissions by following the guidelines of The Greenhouse Gas Protocol – the top international benchmark for corporate emission calculation – and its Brazilian counterpart, the Brazilian GHG Protocol Program. Attentive to all opportunities to help fight climate change, we continually seek to replace the use of fossil fuel with renewable alternatives and adopt new and less polluting equipment in our industrial processes. In 2020, over 56.0% of the energy we used came from renewable sources (including Scope 1 and Scope 2 energy), and outstanding were the panel operations with 86.0% of its matrix composed of renewable energy.

SC0.1

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

	Annual Revenue
Row 1	5879616000

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	BR	DTEXACNOR3

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.
KPMG_Duratex 2020_Brasil e Colombia_CDP.pdf
duratex_GHG 2020_2021.pdf

Duratex_RA_2020_Book_en.pdf

Requesting member
MRV Engenharia e Participações

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1265.69

Uncertainty (±%)
5

Major sources of emissions
Duratex's scope 1 emissions were distributed between its business, Deca (32%), Ceramic Tiles (68%) and Wood (18%). Stationary combustion represents the largest source of emissions for these businesses, where natural gas and biomass fuels stand out. The latter is the most significant fuel for the manufacture of products consumed by MRV.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The specific calculation of GHG emissions by product purchased is not yet a possible form of reporting. We consider the issue based on revenue and products sold to the customer.
The Duratex Emissions Inventory is verified by a third party. However, there is no specific verification regarding the allocation of emissions reported to MRV.

Requesting member
MRV Engenharia e Participações

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
238.13

Uncertainty (±%)
5

Major sources of emissions
Duratex's businesses that represented the largest scope 2 emissions were Wood (73%). Scope 2 of Duratex refers only to electricity from hydroelectric plants. According to scope 2 (marked-based), the allocation would result in 214.48 tCO2e.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The specific calculation of GHG emissions by product purchased is not yet a possible form of reporting. We consider the issue based on revenue and products sold to the customer.
The Duratex Emissions Inventory is verified by a third party. However, there is no specific verification regarding the allocation of emissions reported to MRV.

Requesting member
MRV Engenharia e Participações

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
368.56

Uncertainty (±%)
5

Major sources of emissions
Duratex's businesses that represented the largest scope 3 emissions were Wood (84%), Deca (9%) and Ceramic Tiles (6%). Transport and Distribution (upstream and downstream) and waste management are more the representative contributions of this scope.

Internally, we aim to expand the mapping of the Company's scope 3 emissions. Major advances were made during the last three years and we continue to challenge ourselves to expand reporting.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The specific calculation of GHG emissions by product purchased is not yet a possible form of reporting. We consider the issue based on revenue and products sold to the customer.
The Duratex Emissions Inventory is verified by a third party. However, there is no specific verification regarding the allocation of emissions reported to MRV.

SC1.2

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

Public emissions data that have been used for this estimation are available on the websites below. Sales volume data for MRV is not publicly available.

Public Register of Emissions: https://www.registropublicodeemissoes.com.br/participantes;

Duratex Integrated Report 2020 : https://www.duratex.com.br/Relatorio-Anual-2020/en/pdf/Duratex_RA_2020_Book_en.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	Specific strategy for each costumers could improve our allocation. Specify our process emission or to develop a customer-specific tracking system involving production and logistic transportation also could help overcome the challenges in each of our business.

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.

Duratex still needs to develop capabilities to allocate emissions to its customers due to the number and diversity of its portifolio. The emissions allocation is a challenge for each product of Duratex´s brand. Evolution on carbon footprint could be a stage to improve this measure.

Duratex intends to start a detailed study on life cycle assessment of its products, covering all the company's businesses. The project will be supported by external consultants and will be segmented by type of business of the company. The intention is that in the first year of the project we will have advances in ceramic tiles.

SC2.1

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

Requesting member
MRV Engenharia e Participações

Group type of project
Relationship sustainability assessment

Type of project
Assessing products or services life cycle footprint to identify efficiencies

Emissions targeted
Actions to reduce customers' operational emissions (customer scope 1 & 2)

Estimated timeframe for carbon reductions to be realized
1-3 years

Estimated lifetime CO2e savings
0.9

Estimated payback
Other, please specify (Opportunity is still in the early stages to determine an estimated payback.)

Details of proposal
The study would impact the specific knowledge of scope 1 (MRV) and scope 3 (Duratex) emissions. After mapping, it would be possible to act on the possibilities of reducing emissions and financial return.
For taps, for exemple, with each flow decrease in 1 liter/min at the use phase, there is a reduction of 50 m^3 in the water footprint and 14.5 kg CO_2eq in the carbon footprint of the product. For wood products we estimate a stock of 0,9 tCO_2e/m^3 of wood products which will remain stored in the product for years.

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?
No, I am not providing data

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