



CARBON DISCLOSURE PROJECT CLIMATE CHANGES

Grendene[®]

INTRODUCTION

The Carbon Disclosure Project (CDP) discloses environmental data for companies at the request of its investors, buyers and other members of the value chain. CDP's mission is to establish a prosperous economy that works for people and the planet in the long term, with the construction of a truly sustainable economy.

At Grendene we believe that sustainable management and the mitigation of environmental impacts contribute to the future of the planet. That is why, in 2011, we started our Sustainable Development Journey, seeking to improve the way we make products, care for our people and the eco-efficiency of our operations. Therefore, we evaluate our performance through the management of our main indicators within eco-efficient operations: waste generation, energy efficiency and water consumption.

Since 2013, we have reduced our waste generation by 54% per pair produced and, we have one of the smallest water footprints in shoe production, our water consumption is approximately 75% for human use. In addition, we treat 100% of the effluent we generate and our goal in 2020 is to reuse all the effluent within our factories, with the goal of zeroing out the waste and loss of any liter of treated water. These actions prevent the emission of methane, nitrous oxide and carbon dioxide.

The energy efficiency indicator is directly incorporated into the climate change indicators. At the Crato, Farroupilha and Fortaleza Units, we have an Incentive Energy Purchase Agreement. Thus, we reduced 1,882.6 tCO₂e of greenhouse gases by using renewable energy in 2019. Emission voluntarily avoided are equivalent to 13,178 trees in 30 years in a reforestation project. Also in 2019, with the self-generation of photovoltaic energy, we avoided the emission of 116.836 tCO₂e. All of these points contribute to the reduction in carbon dioxide emissions through the use of electricity.

Therefore, our operations are based on the principle of doing more with less and we are committed to Agenda 2030 and the Planet. Thus, starting the process of annual publication in the CDP is a milestone in our Sustainable Development Journey, making the results of our actions more transparent.

CLIMATE CHANGES

CO. Introduction

(CO.1) General introduction of the organization.

In 1971 the brothers Pedro and Alexandre Grendene Bartelle founded Plásticos Grendene Ltda in Farroupilha (RS). Aware of the possibilities of plastic in the industry, they started to manufacture plastic packaging for wine bottles, until then made in wicker.

Then start manufacturing plastic parts for agricultural machines and implements. And, as a result, it became a supplier of components for footwear, pioneering the use of polyamide (nylon) as a raw material for the manufacture of shoe soles and heels. The first sandal appeared in 1978, called Nuar. In 1979 the plastic sandals collection with the brand “Melissa” was launched, inspired by the shoes used by French fishermen.

Today, Grendene markets its products for the domestic and foreign markets, has more than 24 thousand employees and five units: Farroupilha, in Rio Grande do Sul and Fortaleza, Sobral and Crato. In addition to three Melissa concept stores, one in São Paulo, one in New York and one in London.

There are always principles of responsible use of resources. For this reason, in 2011 the Grendene Sustainable Development Journey began, seeking to improve the way of making products, caring for people and the eco-efficiency of operations. In April 2019, this commitment was made official and published in Grendene's Sustainable Development Policy. It organizes a series of actions that have been carried out over this time, projects future developments in sustainable development and shows ways to create the future in which it aims to live.

(CO.2) Indicate the start and end date of the year from which the data is being reported.

	Start date	End date
2019	01/01/2019	12/31/2019

(CO.3) Select the country(ies) over which the data will be provided.

Brazil

(CO.4) Select the currency used for all financial information disclosed in your response.

BRL

(CO.5) Select the option that describes the disclosure limit for which the climate-related impacts in your company are being reported. Note that this option must be in line with the consolidation method chosen for the GHG inventory.

Operational control

Cl. Governance

(C1.1) Is there supervision by the Council on climate issues in the organization?

No

(C1.1c) Why is there no supervision by the council on climate issues, and what are the plans to change that in the future?

Main reason	Please explain
The assessment and management of climate change risks is currently supervised by the Department of Sustainable Development.	Within the medium/long term, there will be planning for the inclusion of board supervision. The management of risks and opportunities, in the short term, is the responsibility of the Sustainable Development Department.

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

Name of positions and / or committees	Responsibility	Frequency of reporting to the Council on climate issues
Manager of Environment / Sustainability	Assessment and management of climate risks and opportunities	Annually
Environmental Specialist	Assessment and management of climate risks and opportunities	Annually
Sustainable Development Analyst	Assessment and management of climate risks and opportunities	Annually

(C1.2A) Describe where in the organizational structure this (these) position(s) and/or committee(s) are located, what are their associated responsibilities and how climate issues are monitored (no include the names of individuals).

The Department of Sustainable Development belongs to the Supply Department. Its actions are based on three pillars: valuing and respecting people, eco-efficient operations and products with less impact. Among the Department's main duties are managing opportunities

and risks related to climate change, industrial energy efficiency, application of clean development mechanisms, meeting current legislation and environmental agendas, managing environmental aspects and impacts and participating in the development of smaller impact products. The Sustainability Manager and the Environment Specialist are at the strategic level of the organization, while the Sustainable Development Analyst belongs to the tactical level.

(C1.3) Are there incentives for managing climate-related issues, including meeting targets?

Provide incentives for managing climate issues
No, not at the moment, but we plan to introduce them in the next two years

C2. Risks and opportunities

(C2.1) Does the organization have a process to identify, assess and respond to climate risks and opportunities?

Yes

(C2.1a) How does the organization define “short, medium and long term time horizons”?

	From (years)	To (years)	Comments
Short term	1	2	Period for meeting the goals of our main sustainability indicators: energy efficiency, waste generation and water management.
Medium term	3	5	Period related to the return of sustainability projects.
Long term	6	10	Period related to actions with the greatest impact.

(C2.1b) How does the organization define a “considerable” financial or strategic impact on its business?

Strategic impacts are those that are directly linked to the end customer and Grendene's position in the market. Climate change management is part of the value package that we aim to deliver to consumers of our brands. Financial investments in sustainability projects are directed to obtain the best performance and serve all stakeholders.

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

Value chain step(s) covered

Direct operations

Risk management process

A specific climate risk management process

Evaluation frequency

Annually

Time horizon(s) covered

Short term

Process description

Management of sustainability indicators as a focus on reducing Scope 2 emissions.

(C2.2a) What types of risks are taken into account in the organization's climate risk assessments?

	Relevance and inclusion	Please explain
Current regulations	Relevant, always included	Monitoring of spheres related to environmental legislation, work safety and labor rights.
Emerging regulation	Relevant, always included	Monitoring of normative amendments and may change the current legislation.
Technological	Relevant, always included	We invest in innovation with the implementation of improvements that will optimize our processes, digital marketing to bring us closer to our consumers and in products that provide a better experience for consumers of our brands.
Market	Relevant, always included	Strengthening of our brands and positioning on ethical and socio-environmental issues.

(C2.3) Has an inherent climate-related risk been identified that has the potential to have a significant financial or strategic impact on your business?

No

(C2.3a) Why is the organization not considered to be exposed to climate-related risks with the potential to cause a significant financial or strategic impact on its business?

Main reason
Not yet rated

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

Yes, we identify opportunities, but we cannot materialize them.

(C2.4a) Why don't you consider that your organization has opportunities related to climate?

Main reason	Please explain
Evaluation in progress	Energy efficiency projects to reduce Scope 2 emissions.

C3. Business strategy

(C3.1) Did climate risks and opportunities influence the organization's strategy and/or financial planning?

Yes

(C3.1a) Does the organization use climate scenario analysis to inform its strategy?

Yes, quantitative

(C3.1b) Give details of the organization's use of climate scenario analysis.

Applied climate models and scenarios	Details
Brazilian energy scenario	Monitoring of the Brazilian energy matrix for the feasibility of including renewable sources in our operation in order to reduce Scope 2 emissions.

(C3.1c) Describe where and how climate risks and opportunities have influenced the strategy.

Did climate risks and opportunities influence the strategy in this area?	Description of influence
--	--------------------------

Products and services	Yes	Development of lower impact products, using renewable and recyclable materials, promoting recycling and reuse of inputs and waste practices.
Supply chain and/or value chain	Yes	Suppliers and partners that comply with environmental legislation. Acquisition of materials with less impact and consideration of social and environmental issues when purchasing inputs.
Investment in R&D	Yes	Investments in technological innovations to optimize our processes.
Operations	Yes	Efficiency in the consumption of resources in the production process and techniques for reusing materials.

(C3.1d) Describe where and how climate risks and opportunities have influenced financial planning.

Elements of financial planning that have been influenced	Description of influence
Revenue Direct costs Indirect costs	Reduction of operating costs through energy efficiency projects and reduction of other inputs inherent to the production process.

(C3.1e) Provide any additional information on how climate risks and opportunities have influenced financial strategy and planning (optional).

Investments in projects focused on reducing waste generation, consumption of electricity and other inputs inherent to the production process are aimed at gains from the business's financial point of view. The development of products with less impact improves our strategic positioning in the market and makes us more competitive with our competitors.

C4. Goals and performance

(C4.1) Was there an emissions target that was active in the reference year?

Intensity goal

(C4.1a) Provide details of your emission intensity targets and progress against those targets.

Year the goal was set

2018

Scope(s)

Scope 2 (based on location)

Intensity metric

Metric tonnes of CO₂e per megawatt-hour (MWh)

Base year

2019

Intensity value in the base year (metric tons of CO₂e per unit of activity)

7,444.368

Percentage of total base year emissions in the selected Scope(s) (or in Scope 3 category) covered by this intensity value

84%

Goal year

2019

Reduction target in relation to the base year (%)

5%

Intensity value in the target year (metric tonnes of CO₂e per unit of activity) [self-calculated]

8,449.27

Percentage of goal achieved [self-calculated]

-12%

Goal status in reporting year

Achieved

Is this goal scientifically based?

Yes, this goal was approved as being scientifically based by the Scientifically Based Goals initiative.

Please explain (including scope to target)

Through the monitoring and control of processes, energy efficiency projects and the management of industrial indicators.

(C4.2) Were there any other active climate targets in the reporting year?

Other climate goal(s)

(C4.2a) Give details of other possible climate goals, including methane reduction.

Year the goal was set

2018

Goal scope

Sustainability Goals

Goal type: absolute or intensity

Absolute

Metric type: category and Metric (target numerator, in case of reporting an intensity target)

Waste management

Water reuse

Please explain (including the scope of the goal)

Goals for energy efficiency, reduction of waste generation and water efficiency in the production process.

(C4.3) Were there any active emissions reduction initiatives in the reporting year?

Note that this can include those in the planning and/or implementation phases.

Yes, goals for reducing Scope 2 emissions.

(C4.5) Does the company have any current good and/or service that can be classified as a low carbon product or that allows third parties to avoid GHG emissions?

Yes, planning and developing products with less impact.

Yes, projects that aim to reduce or reuse resources in the operation.

C5. Emissions methodology

(C5.1) Enter the base year and the base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tonnes of CO₂e)

1,367.094

Comments

Reported emissions cover the following Scope 1 components: mobile combustion, stationary combustion, fugitive emissions, solid waste and liquid effluents.

Scope 2 (based on location)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tonnes of CO₂e)

7,444.368

Comments

Emissions reported in Scope 2 are based on the location-based approach.

(C5.2) Select the name of the standard, protocol or methodology used to collect activity data and calculate emissions.

Brazil GHG Protocol Programme

C6. Emission data

(C6.1) What was your organization's total Scope 1 gross emissions, in metric tonnes of CO₂e?

Reporting year

Gross Scope 1 emissions (metric tonnes of CO₂e)

1,367.094

Comments

Scope 1 emissions include the following sources: mobile combustion, stationary combustion, fugitive emissions and solid waste and liquid effluents.

(C6.2) Describe the method used to disclose your organization's Scope 2 emissions.

Scope 2, based on location

We are disclosing a Scope 2 value based on location

Comments

Scope 2 emissions are based on the location-based approach.

(C6.3) What was your organization's total Scope 2 gross emissions, in metric tonnes of CO2e?

Scope 2, based on location

7,444.368

Comments

Scope 2 emissions are based on the location-based approach.

(C6.4) Are there sources (eg, facilities, specific GHGs, activities, regions etc.) of Scope 1 and Scope 2 emissions that are within the selected reporting limits, but are not included in the disclosure?

No

(C6.5) Are carbon dioxide emissions from biogenic carbon relevant to the organization?

Yes

(C6.6) Report the emissions from biogenic carbon relevant to the organization, in metric tonnes of CO2.

CO2 emissions from biogenic carbon (metric tonnes of CO2)	Comments
50.81	Scope 1 emissions from biogenic carbon.

(C6.7) Describe the total gross emissions of Scopes 1 and 2 combined for the reference year (in metric tonnes of CO2e).

Gross global combined emissions of Scopes 1 and 2, in metric tonnes of CO2e

8,811.46

Scope 2 used

Based on location

Change percentage over the previous year

12%

Variation direction

Decreased

Reason for variation

We had a 12% reduction in Scope 2 emissions. The reduction was due to a reduction in electricity consumption.

C7. Emission breakdowns

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

Yes

(C7.1a) Disaggregate your total gross Scope 1 emissions by type of greenhouse gas and provide the source of each greenhouse warming potential (Greenhouse Warming Potential - GWP) used.

Greenhouse gas	Scope 1 Emissions (metric tonnes of CO2e)	GWP Reference
CH4	806.775	IPCC Fourth Assessment Report (AR4 - 100 years)
N2O	120.094	IPCC Fourth Assessment Report (AR4 - 100 years)
HFCs	5.448	IPCC Fourth Assessment Report (AR4 - 100 years)
CO2	434.777	IPCC Fourth Assessment Report (AR4 - 100 years)

(C7.2) Disaggregate the total gross Scope 1 emissions by country/region.

Country / Region	Scope 1 emissions (metric tonnes of CO2e)
Brazil	1,367.094

(C7.3) Indicate which Scope 1 gross emissions breakdowns the company can provide.

By activity

(C7.3a) Disaggregate the total gross Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tonnes of CO2e)
Mobile combustion	186.889

Stationary combustion	252.779
Solid wastes and liquid effluents	921.978
Fugitive emissions	5.448

(C7.4) Disaggregate the total gross Scope 2 emissions by country/region.

Country / Region	Scope 2, based on location (metric tonnes of CO2e)
Brazil	7,444.368

(C7.5) Indicate which Scope 2 gross emissions breakdowns the company can provide.

By business division

(C7.6) Disaggregate the total gross Scope 2 emissions by business division.

Business Division	Scope 2, based on location (metric tonnes of CO2e)
Business Areas - Rio Grande do Sul	650.718
Industrial Production Areas - Ceará	6,789.517

C8. Energy

(C8.1) During the reference year, what percentage of total operating expenses corresponds to energy costs?

More than 0%, but less than or equal to 5%

(C8.2) Select which energy-related activities were carried out by the organization.

	Indicate whether the organization carried out this energy activity in the reporting year
Fuel consumption (except raw materials)	No
Consumption of purchased or purchased electricity	Yes
Heating consumption purchased or acquired	No
Steam consumption purchased or acquired	No
Consumption of purchased or acquired refrigeration	No
Generation of electricity, heating, steam or refrigeration	No

(C8.2a) Report your organization's total energy consumption (except raw materials), in MWh.

	MWh of renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) in MWh
Consumption of purchased or purchased electricity	29,070	55,713	84,783
Total energy consumption	29,070	55,713	84,793

C9. Additional metrics

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

Description

Energy use

Please explain

In 2019, with the self-generation of photovoltaic solar energy, emissions of 116.836 tCO₂e were avoided.

C10. Verification

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

	Verification / warranty status
Scope 1	No third-party verification or warranty
Scope 2 (based on location)	No third-party verification or warranty

(C10.2) Do you check any climate-related information reported in your CDP release, in addition to the reported emissions values?

No, but we are effectively considering checking in the next two years.

C11. Carbon pricing

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

No, but we are effectively considering checking in the next three years.

(C11.2) Did your organization create or acquire carbon credits based on projects in the reporting period?

No

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

No, but we are effectively considering checking in the next three years.

C12 Engagement

(C12.1) Is the company engaged with the value chain in matters related to climate?

Yes, with other value chain partners

(C12.2) Do you engage in activities that can, directly or indirectly, influence public policy on climate-related issues, in any of the following ways?

No

(C12.3) Why is there no engagement with public policy makers on climate-related issues?

We are planning to do so in the next two years.

(C12.4) In addition to the response to the CDP, did the company publish any information on its response to climate change and the performance of GHG emissions in the reference year? If so, attach the publications.

Publication

In the voluntary sustainability report

Reference Page / Section

<https://www.grendene.com.br/sustentabilidade/pdfs/PDFpt/Relatorio%20de%20Sustentabilidade%202019.pdf>

Content elements

Corporate sustainability

Comments

The 2019 Sustainability Report encompasses the actions for sustainable development carried out by the company over the years.

Publication

In traditional reports

Reference Page / Section

https://www.grendene.com.br/sustentabilidade/pdfs/PDFpt/Invent%C3%Alrio%20de%20Emiss%C3%B5es%20de%20CO2_Grendene.pdf

Content elements

Emission values

Comments

Inventory of greenhouse gases.

Publication

Sustainable Development Policy

Reference Page / Section

<https://www.grendene.com.br/sustentabilidade/politica>

Content elements

Policy of guidelines for sustainable development actions

Comments

In April 2019, we made Grendene's Sustainable Development Policy official. The policy is based on the United Nations (UN) Sustainable Development Goals and goals connected to the evolution of global standards of quality of life and productive activity by 2030.

Our policy directs and guides all the company's decisions, throughout its value chain, organized into three pillars: valuing and respecting people, eco-efficient operations and products with less impact.

C15. Approval

(C-FI) Use this field to provide any additional information or context that you consider relevant to your organization's response. Note that this field is optional.

The emissions report was prepared internally by the Department of Sustainable Development.

The responsible team consists of two employees with the following job description and training:

- Sustainable Development Analyst - Environmental Engineering and Workplace Safety Training
- Sustainable Development Analyst - Technical training in Environment and Electrotechnics and Computer Engineering

C15.1

(C15.1) Give details about the person who signed (approved) the climate change response to the CDP.

Position	Corresponding work category
Sustainable Development Manager	Environment / Sustainability Manager



Grendene[®]