

Climate Change Management at Bradesco



June 2021

Climate Change Governance

(TCFD – G a/b)

Governance over Climate Change at Bradesco is integrated with the existing management for Sustainability-related risks and opportunities.



The Sustainability and Diversity Committee, composed of members of the Board of Directors, Vice Presidents and Executives, is responsible for overseeing the execution of our Climate Strategy. In its bimonthly meetings, it monitors the progress of objectives and goals, and recommends actions and any adjustments to the strategy.



Learn about the Committee's duties: [Regulation](#)

Our Chief Financial Officer (CFO), who is also Chief Sustainability Officer – (CSO), is responsible for managing Climate Change in the Organization at the Executive level.

Supported by the Sustainability Commission, the CFO monitors and manages the identified risks and opportunities, such as: (a) the direct environmental impacts of the operation through the Eco-efficiency Management Program, which establishes emission reduction targets (absolute and relative) for scopes 1, 2 and 3 - in

addition to energy consumption, waste disposal in landfills and business trips; (b) stakeholder engagement; and (c) business opportunities arising from climate change.

As a member of the Risk Management Committee, the CFO is responsible for assessing and resolving on the management framing and its adequacy to the Organization's strategic goals, including the review of policies, processes, systems and reports.

For example, as a member of the Products and Services, Treasury, and Investment Committees, the CFO also has influence over the management of opportunities in financial solutions.

Corporate Sustainability area is under his/her responsibility, providing support for the aforementioned resolutions, supporting other Organization's structures in the integration of the topic into the business, in addition to providing opinions on the impact of new regulations and bills in progress.

Climate Strategy

(TCFD – S a/b/c)

In the development of our Sustainability Strategy, in addition to the Relevance Matrix and the Organization's business goals, the main challenges and global macro trends were considered, as well as the national and international sustainable development agendas - especially the Sustainable Development Goals (SDGs)¹ and the Paris Agreement.

Due to its relevance for Bradesco and our clients, Climate Change is one of our priority SDGs and one of the pillars of the Sustainability Strategy, with four fronts:

Pillar of Bradesco's Sustainability Strategy

Ensuring that our businesses are prepared for climate challenges, in addition to more transparency regarding the Organization's climate impacts



Alignment to SDG 13 – Action Against Global Climate Change

Take urgent action to combat climate change and its impacts – considering, mainly, the following targets:

13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

13.b. Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries, including focusing on women, youth and local and marginalized communities

1 Reduce and mitigate the generation of greenhouse gases in our operations and manage the exposure of our operational structures to climate risks.

2 Integrate the assessment of current and future climate risks and opportunities in the decision-making and management processes of our businesses.

3 Providing financial solutions that are supportive of lower carbon consumption and production patterns and more resilient to climate impacts.

4 Promote engagement and awareness on the topic with the various stakeholders, such as employees, partners and suppliers, clients and civil society entities.



Learn about all pillars of the Sustainability Strategy, and the six SDGs prioritized by Bradesco, by accessing our website: www.bradescosustentabilidade.com.br

¹ The 17 Sustainable Development Goals with their 169 goals make up a bold global Action Plan - the 2030 Agenda, published in 2015 by the United Nations, which addresses the main challenges to sustainable development.

1. Reduce and mitigate the generation of greenhouse gases in our operations and manage the exposure of our operational structures to climate risks

Eco-efficiency Management

(TCFD – MT b/c)

Eco-efficiency Management has been present in the Organization since 2008 and is part of our strategic management on the climate issue.

By linking environmental and financial performance through process optimization, recycling, technological innovations and savings in the use of natural resources and materials, while reducing the environmental impact, it contributes to operational efficiency.

Aiming to promote and monitor the results, in 2010 we started to build multi-year plans comprising projects and targets to reduce

consumption and waste generation, including greenhouse gases (GHG).

Currently, we are implementing the third Eco-efficiency Master Plan (2019-2021), with the difference that part of its goals (energy consumption, land fleet and air fleet) is aligned with the ambition levels set out in Paris Agreement to limit global warming by up to 2°C, according to the sectorial tools indicated by Science-based Targets Initiative (SBTi).

Results are reported in the Annual GHG Emissions Inventory, according to the guidelines of GHG Protocol Brazilian Program, and are also published on our Sustainability website and in the Integrated Report.

Recent results

Direct Emissions (Scope 1) – tCO₂e

Category	2017	2018	2019	2020
Power, heat or steam generation	944	845	766	438
Transportation of materials, products, waste, employees and passengers	1054	1047	973	703
Fugitive emissions	6037	11701	8594	12493
Total gross emissions	8035	13592	10334	13635
Power, heat or steam generation	73	73	80	50
Transportation of materials, products, waste, employees and passengers	270	257	268	147
Total biogenic emissions	343	330	348	197

Target versus Performance (Scope 1)

Year	Emissions (tCO ₂ e)	Target (%)	Performance (%)	Performance Base-year (%)
2017	8035	-1.00	27	71
2018 (base year)	13592	-1.00	69	189
2019	10334	-0.13	-24	-24
2020	13635	-0.19	32	0.31

Indirect emissions (Scope 2) – tCO₂e

Category	2017	2018	2019	2020
Acquisition of energy	47761	37578	38347	142
Total gross emissions	47761	37578	38347	142

Target versus Performance (Scope 2)

Year	Emissions (tCO ₂ e)	Target (%)	Performance (%)	Performance Base-year (%)
2017	47761	-4.7	6.8	-18.7
2018 (base year)	37578	-4.7	-21.3	-36.1
2019	38347	-4.3	-2.0	-2.0
2020	142	-7.8	-99.6	-99.6

Other indirects emissions (Scope 3) – tCO₂e

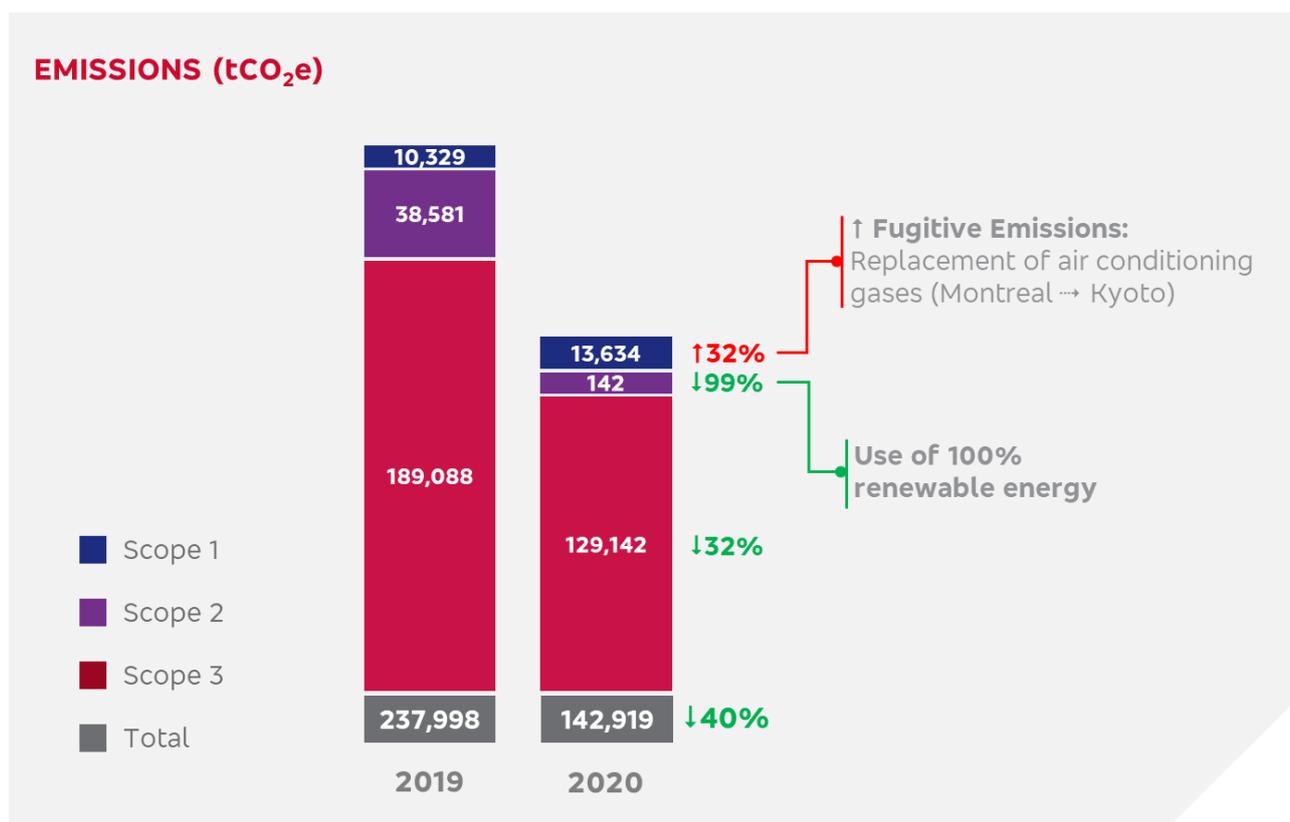
Category	2017	2018	2019	2020
Transportation and distribution (outsourced fleet – upstream)	60132	49814	63089	60385
Waste generated in operations	9828	6450	5234	4127
Business travel	26362	23532	21331	5219
Employee commuting (home-work)	92492	94023	99505	59412
Total gross emissions	188814	173819	189158	129143
Transportation and distribution (outsourced fleet – upstream)	12362	5664	7989	8673
Business travel	2274	3408	3066	1132
Employee commuting (home-work)	19939	21326	22623	13692
Total biogenic emissions	34575	30398	33678	23497

Target versus Performance (Scope 3)

Year	Emissions (tCO ₂ e)	Target (%)	Performance (%)	Performance Base-year (%)
2017	188814	-1.57	26.40	22.52
2018 (base year)	173819	-1.57	-7.94	12.79
2019	189158	-0.15	8.82	8.82
2020	129143	-0.44	-31.72	-25.70

Intensity of total emissions

Indicator	2017	2018	2019	2020
Revenue (tCO ₂ e/R\$ MM)	0.45	0.97	1.03	0.0007
Book net income (tCO ₂ e/R\$ MM)	8.11	11.79	10.53	8.64
Per capita (tCO ₂ e/employee)	0.85	2.30	2.44	1.60



Master Plan for Eco-efficiency (2019-2021) – absolute targets and performance (%)

Environmental indicator	2019		2020		2021	Period Target
	Target	Performance	Target	Performance	Target	
Water (consumption - m ³)	-2.0	9.0	-2.5	-16.5	-2.5	-6.8
Energy (consumption - kwh)	-3.7	0.3	-5.6	-15.0	-3.7	-12.5
Energy (emissions - tCO ₂ e)	-0.5	-0.8	-4.0	-99.6	-7.0	-11.2
Printing paper (consumption)	-20.0	-17.6	-3.0	-24.5	-3.0	-24.5
Own ground fleet (consumption of fuel - liters)	-4.5	7.5	-4.5	-41.6	-4.5	-12.9
Own air fleet (consumption of fuel - liters)	-	-19.0	-6.8	-26.5	-6.8	-13.2
CTI Transportation (R\$)	-4.2	0.6	-1.1	-38.0	-1.1	-6.5
Business travel – taxi (R\$)	-0.86	-0.1	-0.8	-5.6	-0.8	-2.5
Business travel – air (R\$)	-	-2.5	-1.0	-83.0	-1.0	-2.0

Climate commitments

In addition to efforts to reduce carbon generation, since 2006 Bradesco has neutralized 100% of scope 1 and 2 emissions generated by its operations through carbon credits from projects that avoid carbon generation or capture greenhouse gases (GHG) from the atmosphere - such as through forest recovery and conservation initiatives.

Aiming to broaden the mitigation and offsetting of the impacts produced by our operations, we have made two important commitments:

• Renewable energy

Since 2020, 100% of our structures have been supplied by energy from renewable sources – with this, we are one of the first major financial institutions in the world to complete this energy transition.

• Carbon Offset

As of the 2019 inventory, we neutralized 100% of GHG emissions from operational activities - including scope 3, such as logistics and business travel -, being one of the first banks to assume this level of carbon offsetting.

2. Integrate the assessment of current and future climate risks and opportunities in the decision-making and management processes of our businesses

Assessing the impacts of climate change on business requires a long-term view and identification of current and future impacts based on the analysis of different scenarios, recognizing the risks and opportunities related to them.

Climate risk management

(TCFD – RM a/b/c)

The social, environmental and climate risks to which we are exposed are the result of our relationship with suppliers and, mainly, with clients, through investments and financing.

Therefore, we have integrated climate factors into methodologies, models and tools for measuring, analyzing and controlling operational and business risks.

However, as we understand that traditional instruments are not sufficient for an adequate climate risk management, we have worked in partnerships to develop new mechanisms.

Measuring the risk of climate change

(TCFD – S c)

Since 2019, we have participated in industry initiatives focused on developing climate risk management methodologies and tools for the banking industry, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Internationally, we participate in pilot projects coordinated by the financial arm of the United Nations Environment Program (UNEP-FI), together with banks from different countries.

In the first project, we supported the development of a tool to calculate the impact of 400 quantitative transition factors (carbon emissions and capture, demographics, economic growth, energy, investment, government policies) based on sectors, subsectors and areas of operation of clients in the portfolios.

For physical factors, we considered the geographic elements (location of the clients' production assets) and the respective estimates of the increase in the frequency and severity of extreme weather events, in addition to the impact of global warming on productivity and, respectively, on clients' revenues.



Methodologies for physical and transition risks developed in the first project were published by [UNEP-FI](#).

In 2020, we maintained our participation in the project's second cycle, expanding the number of sectors assessed and fine-tuning methodologies for forecasting possible climate impacts (environmental, political, technological and market) on our clients' businesses.

In the Real Estate Credit, we assessed flood trends according under scenarios of a 4°C increase in temperature (model RCP 8.5) in 2040. As a result, we found that part of the financed properties was susceptible to losses of up to 4.5% in their value.

For transition risks, our analysis used REMIND MAgPIE model, for estimating the impacts on transportation sector under a scenario of warming up to 1.5°C and resulting significant political and economic transformations.

UNEP-FI published some of the results obtained in white papers dedicated to disseminating studies, practices and management methods created by the members of the Working Group.

White Paper	Case do Bradesco
Charting a new climate	Physical Risk - Real Estate Sector pp. 54–55
Decarbonisation and disruption	Transition Risk - Transportation Sector pp. 32–35

At the national level, we are part of the working group on Climate Risks of the Brazilian Federation of Banks (Febraban).



Learn about the studies and methodologies developed under [Febraban](#) coordination.

With the evolution of methodologies, our purpose is to incorporate these results into business decision-making, support clients in managing their exposure to climate risks, as well as support the offer of financial solutions focused on reducing the vulnerability of clients' businesses to impacts of climate change.

Financed emissions (TCFD – MT b)

In 2019, we carried out the first study, based on our own methodology, to measure the emissions financed by us through loans and financing.

In the scope, we consider those sectors significant for our credit portfolio and the economy, in addition to being critical in terms of carbon emissions.

To broaden our understanding of indirect business impacts, in June 2020, we joined the Partnership for Carbon Accounting Financials (PCAF), a global cooperation between financial institutions dedicated to the development and implementation of standardized methodologies for measuring and disclosing emissions associated with loans and investments.

In November 2020, PCAF released its first guide, The Global GHG Accounting & Reporting for the Financial Industry.

Using the methodology, we estimate carbon emissions arising from 100% of the portfolio of Corporate clients with sector classification in our database (equivalent to 60% of the total expanded loan portfolio by 2020 year end).

For this purpose, we used the national estimates of sectorial emissions available in Brazil in PCAF database, characterized in class 5, on a scale of 1 to 5 for data quality. The upper levels of the scale use actual carbon emissions data released by clients.

For the calculation, we considered Scope 1 (direct emissions) and Scope 2 (referring to energy acquisition) emissions of each assessed sector.

Estimated carbon emissions arising from activities financed from the credit portfolio for legal entities (base Dec/2020):

Sector	Balance (R\$ million)	Scopes 1 + 2 (tCO ₂ e thousand)
Manufacturing Industries	120,614	5,507
Extractive Industries	22,997	2,163
Auto	72,251	745
Agriculture, Livestock and Forestry	10,095	667
Energy	21,804	627
Transport and Storage	32,428	563
Administrative Services	16,928	69
Financial and Insurance Services	40,735	68
Water and Sanitation	771	48
Health	12,995	36
Communication and Information	18,177	38
Construction	20,878	29
Real estate activities	9,910	25
Technical, profes. and scientific activities	5,209	22
Education	4,315	6
Other activities	1,242	3
Art, culture and entertainment	681	1
Government and defense	46	0.05
Total	412,084	10,620

We are working to include other asset classes in future cycles, apply client emissions data and cover specific assessments on products and services.

Since methodological updates and improvements in information sources are expected, we intend to review the published results, aiming at the comparability and consistency of accounting for emissions financed by Bradesco.

Carbon pricing (TCFD – S a)

Carbon pricing mechanisms (such as taxation systems and carbon market) are already a reality in more than 40 countries and dozens of jurisdictions around the world.

Although in Brazil these mechanisms are not widely implemented in the economy, Bradesco has sought to be ahead of the curve through pilot studies and participation in sector initiatives to understand and prepare its business for this reality.

Carbon pricing exercises

<u>Intermediation in the carbon market</u>	We have been acting since 2018 as intermediaries (special market operators - OEM) for the purchase and sale of permits, offsets and BRU (biogenic removal units) in the Emissions Trading System Simulation (SCE) promoted by FGV at its Center for Sustainability Studies.
<u>Asset management</u>	In partnership with EPC-FGV, we published a study on the sensitivity of companies invested by BRAM – Bradesco Asset Management – to possible regulation of carbon in the Brazilian economy.
<u>Corporate investments</u>	<p>Between 2019 and 2020, we carried out a pilot study to assess the inclusion of a carbon price into the Organization's investment assessment and resource allocation tools (such as acquisitions, expansion, partnerships, infrastructure).</p> <p>Based on the study, we established a multiplier to be applied in the cost composition of certain projects, simulating the carbon pricing scenario and its impact on decision-making.</p>

Equator Principles (TCFD – RM b)

Since 2004, we have met Equator Principles when assessing large projects to ensure they are developed and managed responsibly.

With the implementation of the fourth version of the commitment at the end of 2020, we included climate change factors on a more comprehensive basis into our analyses, ensuring alignment with requirements.

Extreme events and corporate structures (TCFD – RM b)

Our Business Continuity Management (GCN) program supports the Organization's departments in planning the response to incidents that may cause the interruption of our activities, preventing potential impacts - including those of climate origin.

Digital Strategy (TCFD – S a)

The search for eco-efficiency involves reducing the consumption of natural resources and the generation of waste in operations, but it is also included into the direction of our business model.

Considering that: (a) our business is spread out and we are present throughout Brazil, we are exposed to several physical risks arising from climate change (whether prolonged droughts, changes in rainfall patterns or even the increase of the level of the Atlantic Ocean - about 14% of our branches are in coastal areas); (b) we are committed to promoting a low-carbon economy; and, (c) we are in synergy with technological advances and new forms of interaction between society and digital media and mobility, we have consolidated a model of migration of channels and accessibility that connects services and products offered in the physical world to the digital world.

In 2020, this strategy allowed 98% of banking transactions to be carried out through digital channels, a 14% increase when compared to 2019. The digital service structure reduces the impact of weather risks on the branches, helps to reduce the demand for logistics, from both clients and our support operations with interoffice mail and cash.

In a study, we found that a transaction via a digital channel (Internet, Mobile, Telebanco and ATM) emits almost 300 times less carbon per transaction than a transaction via a physical channel (branch).

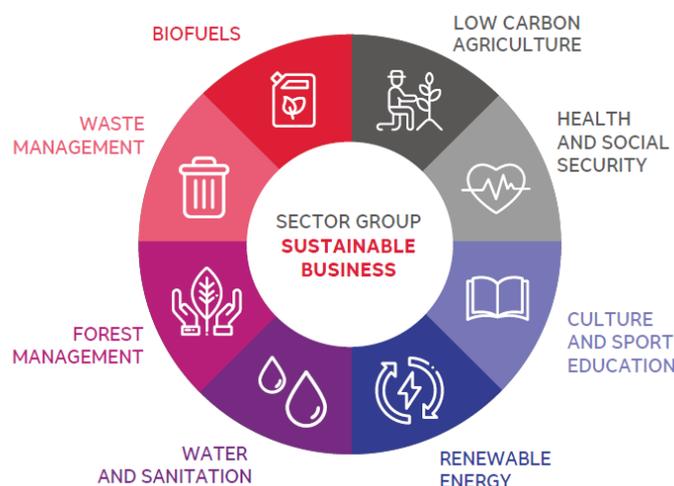
3. Providing financial solutions that are supportive of lower carbon consumption and production patterns and more resilient to climate impacts

(TCFD – S a)

As a financial institution, we can influence and support our clients in their transition to a low-carbon and more climate-resilient economy.

In this sense, we expanded our offer of solutions with social and environmental benefits and intensified our advice to clients.

In addition, of the eight key sectors that we classify as Sustainable Business for Bradesco, six are related to the climate change agenda: biofuels, low-carbon agriculture, renewable energy, sanitation and water, forest management and waste management.



Review of products and services

We have an ongoing process of reviewing our products and services, which includes, among other aspects, the analysis of environmental, social and governance (ESG) factors.

This practice helps us to develop solutions suited to our clients' needs and capable of generating environmental and social benefits.

Customized solutions for Wholesale

We are prepared to structure customized credit and debt solutions focused on our corporate clients' environmental challenges, aiming at its best performance in ESG indicators.

Our experience includes issuing instruments such as green loans, green/climate bonds and sustainability-linked bonds.

Among the solutions and lines of action, we highlight:

Framing of Renewable Energy projects	Our investment bank, BBI, is one of the country's main financial agents for renewable energy projects: in 2020 alone, we advised around 15 operations focused on generation, transmission and distribution of energy from renewable sources.
Farming-Livestock-Forest Integration (ILPF)	<p>Bradesco is the unique bank member of the ILPF Network (Farming-Livestock-Forest Integration), formed by Embrapa (Empresa Brasileira de Pesquisa Agropecuária) and companies in the agribusiness chain. The Network aims to accelerate ILPF adoption by rural producers in Brazil.</p> <p>This production system seeks to provide compatibility to agricultural, livestock and forestry production in the same area. This provides higher diversification, additional revenues, less pressure for expansion, lower levels of land degradation, in addition to mitigating the generation of carbon in production.</p>

Low Carbon Agriculture Program (BNDES)

The program offers special interest rates for farmers to recover pastures and forests and to adopt production technologies that contribute for reducing greenhouse gas emissions, combining conservation practices and economic results.

Solar Energy Financing

With one of the highest levels of solar incidence in the world, Brazil has a high potential for expanding its energy generation through solar energy. To finance this potential, we offer CDC Fotovoltaico, a credit line for the acquisition of solar energy equipment by individuals and companies.

With additional marketing efforts, we have recorded significant growth in this product in recent years – ending 2020 with a balance of almost R\$250 million.



Learn more about the financial solutions offered, accessing our [website](#).

Climate Financial Letter

In December 2020, we raised R\$ 1.2 billion through our first sustainability-linked-bond: Bradesco's Climate Financial Letter (Letra Financeira Climática). Proceeds will be used to finance or refinance projects and assets in the renewable energy, energy and operational efficiency, clean transport and sustainable buildings sectors.

This issue followed the criteria established in our Climate Finance framework, based on the main international benchmarks, and audited by an independent consultancy (second-party opinion).

The positive impacts provided, mainly in terms of avoided carbon emissions, will be monitored and published annually on the website bradescosustentabilidade.com.br.

4. Promote engagement and awareness on the topic with the various stakeholders, such as employees, partners and suppliers, clients and civil society entities.

In addition to engaging clients in risk analysis and promoting opportunities, we consider that engaging the different stakeholders with whom we relate is critical to seek joint solutions supportive of a cleaner, more climate-change resilient economy.

Employees

Strategy, commitments, guidelines and governance structures without trained, aware and engaged employees will not produce the necessary changes. Aware of this, we seek to strengthen communication and promote initiatives to engage and train our employees, and enhance the management of ESG aspects in the Organization.

In addition to training, we promote campaigns such as Racionalize (Rationalize), which works

on the conscious consumption of water and energy with employees in administrative centers and the Desperdício Zero (Zero Waste) program, which covers our network of branches throughout Brazil.

To promote climate business, we engage our commercial teams and financial solutions managers through focused workshops and meetings.

Suppliers

Since 2006, we have held the Suppliers Meeting every year, to which we invite companies that are part of the categories of strategic segments and suppliers operating in sectors of activity with the highest potential for social and environmental risk, such as furniture, civil works, vehicle maintenance, transportation of valuables, etc.

This is a moment to raise awareness of this audience on the importance of adopting positive social and environmental practices, when the guidelines on Bradesco's Social and Environmental Responsibility Program in the Supply Chain are presented.

CDP Supply Chain

We are agents for disseminating CDP Supply Chain Leadership Collaboration, through which we seek to raise awareness in our supply chain about the risks and opportunities arising from climate change. In 2020, we held concept B (Management) in CDP Supplier Engagement Rating assessment.



Our supplier management and engagement practices from a social and environmental perspective are detailed in our [Integrated Report](#).

Multi-sector engagement

We have an active participation in sustainability-related sectorial and multisectorial forums in which we address its various aspects, including climate change.

We highlight our participation in the working groups and pilot projects of the United Nations Environment Programme - Finance Initiative (UNEP FI), the Global Compact initiatives, thematic chambers of the Brazilian Business Council for Sustainable Development (CEBDS), commissions and working groups of the Brazilian Federation of Banks (FEBRABAN) and the National Confederation of Insurance Companies (CNseg), in addition to the Companies for the Climate (EPC) platform of the Center for Sustainability Studies (GVces) of the Getúlio Vargas Foundation Business Administration School (FGV-EAESP).

Voluntary commitments

Our work in the management of climate change is also reinforced by the adherence to voluntary commitments focused on the theme or covering the subject within its guidelines.



Performance and Recognition

In 2020, we were recognized with an **A concept -** at CDP Climate Change, placing us in the leadership category among the responding companies. In addition, we ranked first² in Climate Strategy, according to the classification of the Dow Jones Sustainability Indices, with the highest score in all assessed indicators.

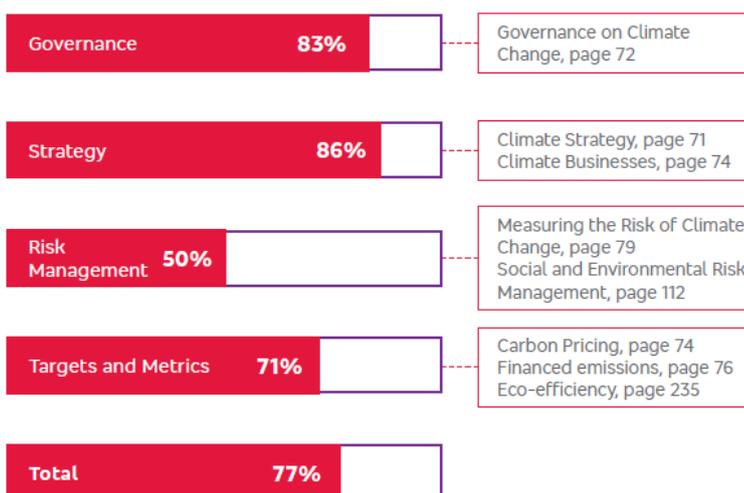
Public reporting

Details on our practices and performance in managing climate change are disclosed to stakeholders through Bradesco's communication channels and on the Organization's financial and non-financial information public reporting platforms.

We seek to constantly advance in the coverage and depth of the information reported, in line with the main reporting guidelines on the subject, such as the TCFD.

Our goal is to achieve complete adherence to the recommendations by 2022.

SELF-ASSESSMENT OF THE LEVEL OF ADHERENCE TO TCFD'S RECOMMENDATIONS



Bradesco Channels

- › bradescori.com.br
- › Bradesco Integrated Report
- › bradescosustentabilidade.com.br

Official Reports

- › Reference Form (CVM)

Thematic platforms

- › Public Register of Emissions
- › CDP Climate Change

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Junho/2021

² Shared with 5 other financial institutions rated worldwide.

Annex I - Adaptation plan to physical risks of climate change

Aiming to prepare the Organization for the impacts of climate change, Bradesco seeks to ensure that its operations and businesses are prepared for climate challenges, strengthening governance related to the subject and implementing strategies and processes for managing risks and opportunities related to the topic. We underpin our adaptation efforts in the Climate Change pillar of our Sustainability Strategy.

This pillar guides several initiatives and projects developed by the Organization, including:

- ▶ Efforts to reduce the consumption of resources and emissions from our operations (Eco-efficiency Master Plan)
- ▶ Reduction of dependence on physical areas such as branches for holding transactions

(Digital Strategy) and responses to extreme events through Business Continuity Management.

- ▶ Analysis of future climate scenarios and potential impacts on our businesses and clients (Measuring the risk of climate change)
- ▶ By being aligned with industry best practices for measuring and including climate risks and opportunities into our business (Alignment to TCFD)

The goal is to fully implement the climate risk adaptation plan within 5 years.



More information about our efforts on the subject can be found in [Integrated Report](#).

Subject Index: Practices related to the adaptation plan

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