Climate Responsibility:
an agenda under implementation

Itaú Unibanco Holding S.A.

At Itaú Unibanco we understand the relevance the "climate change" theme has globally, in addition to its general impact on the society. As a financial institution, we relate to all productive sectors of the economy and, therefore, we believe in our potential to influence positive changes in society and foster a low carbon economy.

This document presents the continuous evolution of our action strategy regarding climate change, both in terms of risk management and in identifying opportunities for our business. In face of climate change impacts already observed, countries around the world have mobilized and defined forms of voluntary action to comply with international commitments to reduce the emission of greenhouse gases (GHG). International agreements were negotiated and several countries are committed to reducing their emissions. Among them, The Paris Agreement[1], established in 2015, aims to limit the increase in global temperature to a maximum of 1.5°C above pre-industrial levels.

In Brazil, this Agreement was ratified in 2016, when the country committed to adopting absolute GHG reduction targets that will directly impact the sectors of the economy and, indirectly, the financing, investment and insurance industries.

In 2017, we joined the Working Group for the Implementation of the TCFD Recommendations in banks under the leadership of UNEP-FI (United Nations Environment Program Financial Initiative) and, since 2018, we have been working on the transition to a low carbon economy, including the definition of policies, action plans and performance measurement in the face of the challenges of combating climate change.

In 2020, we developed our risk management capabilities in three main areas:

1 **Mapping and Prioritizing Climate Risks** - detailed from page 14 on;

2 **Climate Risk Sensitivity Analysis** - from page 24 on; and

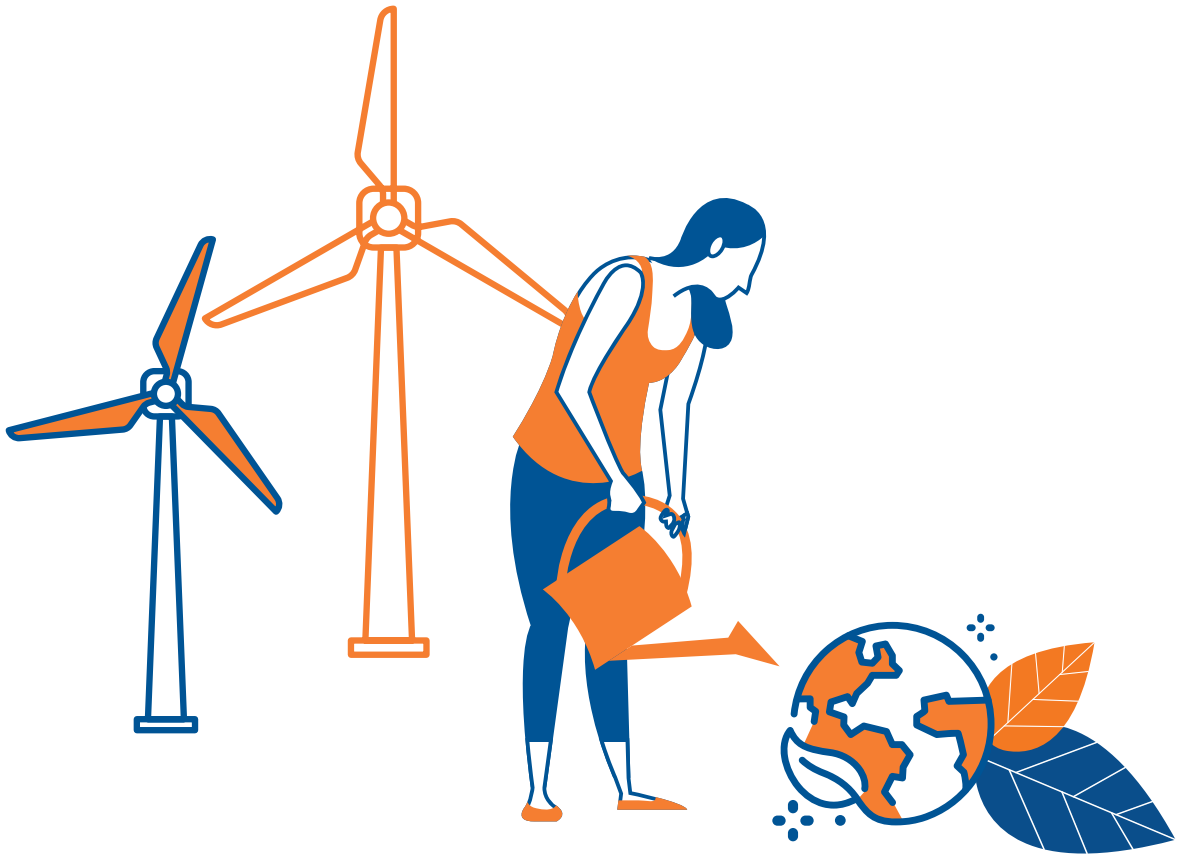
3 **Climate Scenario Analysis** - from page 27 on

We recognize the importance of climate change related impacts on business operations and vice versa. Therefore, we strive to incorporate the TCFD recommendations into the company's strategy, whose progress in implementing internal projects[2] has already reached, in 2020, about 79% of the total 100% expected for 2022 publication.

Furthermore, the scope and granularity of GHG emission calculations in our credit portfolio continue to be expanded based on the methodology available for measuring financed emissions from Partnership for Carbon Accounting Financials (PCAF)[3], a global partnership that gained our support in 2021, when we also started to use The Paris Agreement Capital Transition Assessment (PACTA) in our portfolio to assess the impacts of climate change in certain sectors[4].

[1] UNFCCC, 2015: The Paris Agreement

[2] Itaú, 2020: Compromissos de Impacto Positivo
[3] PCAF, 2021: Partnership for Carbon Accounting Financials
[4] PACTA, 2021: Paris Agreement Capital Transition Assessment



"The climate system warming is unequivocal, and since the 1950s, many of the observed changes are unprecedented."
(IPCC, 2013)[5]

According to *World Meteorological Organization* (WMO)[6] data, in 2020 the surface of the planet had already warmed 1.2ºC compared to pre-industrial levels, making it one of the three warmest years on record. Despite the decline in greenhouse gas (GHG) emissions at the beginning of the Covid-19 pandemic, preliminary data indicate that the global emissions of these gases increased in 2020. In 2019, CO_2 concentration in the atmosphere was already 415 ppm (parts per million) - well above 400 ppm, which is considered a safe concentration for humanity and the planet, placing established goals of the Paris Agreement at risk.

In this context and in order to face the challenges posed, banks from all over the world have already joined initiatives such as the Working Group for the Implementation of the TCFD Recommendations under the UNEP-FI (United Nations Environment Program Financial Initiative) leadership and support the Principles for Responsible Banking (PRB), but still with the challenge that there is much to be done. In this document, Itaú Unibanco shares with the market its continuous progress in implementing its climate agenda. Other climatic information, such as the details of our emissions and targets for operations, can also be accessed at RAI.

[5] IPCC, 2013: Climate Change 2013 - *The Physical Science Basis*
[6] WMO, 2020: State of the Global Climate

Climate finance and the new coronavirus pandemic

The COVID-19 pandemic, besides the health, social and economic impacts, has potential negative consequences for fighting climate change, resulting from the delay in international negotiations and agreements, weakening of climate policies (with the cancellation or reduction of investments and climate financing), interruptions in scientific research due to social isolation, in addition to affecting efforts to tackle climate change that, in many countries, have been left in the background in the face of an urgent need to fight the pandemic. In addition to the need of better understanding and assessment of climate risks, the pandemic has also brought opportunities for the development of more resilient businesses and the search for an economic recovery more aligned with global climate objectives, with an urgent need to develop solutions.

Commitments of positive impact and strategy related to climate change

We consider as material issues those with the ability to affect our creation of value in the short, medium and long terms, from the perspective of the management of our main audiences. In recent years, we have revised our sustainability guidelines, which has resulted in an adjustment of what is considered relevant for sustainable performance. The result of this work has been reflected, since 2019, in our Positive Impact Commitments[7], which guide our decision making and incorporate social, environmental, and governance aspects in business, operations, and relationships with our stakeholders, thus promoting a broader view of opportunities and risks inherent to business.

In 2020, due to the growing relevance of the theme and the new challenges encountered, we are dedicated to creating a new commitment, which consists of guidelines and goals aimed at private social investment. The objective is to reaffirm our pact, alongside our institutes and foundations, with the Brazilian society, promoting access and rights expansion, improving the quality of life in cities and strengthening the power of people transformation through our social private investment[8].

[7] Itaú, 2019: Relatório Anual Integrado 2019

[8] Itaú, 2019: Informações Adicionais ASG 2019

This agenda is aligned with the global context, as it considers the United Nations (UN) Sustainable Development Goals (SDGs), in addition to our Sustainability and Environmental and Social Policy and corporate governance integrated with sustainability that reiterates our commitment to sustainable development.

The Positive Impact Commitments journey was and is even more challenging amid so many changes in 2020 that reinforced the importance of dealing with environmental and social issues in an immediate and more meaningful way, seeking greatest support to adapt the projects impacted by the scenario to guarantee the evolution and fulfillment of the goals. We also reaffirm our positive impact agenda based on the implementation of new initiatives, such as *Todos pela Saúde* and the Amazon Plan, whose themes have become a material issue for us to act from now on.

Our materiality translated into the Positive Impact Commitments is presented below. The commitments most related to the climate theme are:

- **Financing positive impact sectors;**
- **Transparency in reporting and communication;**
- **Amazon Plan;**
- **Responsible management; and**
- **Responsible investment.**

Commitment that guides how we will **be accountable**

Commitments for the **country's development**

(1) Potential material theme

Commitments that generate **positive impact** through business

Commitments that are the basis of **our conduct and our way of acting**

1. Financing positive impact sectors

This commitment aims to continue increasing our financing and services in sectors that provide a positive impact. In 2019, *green bonds* unlocked BRL 11.4 billion in Brazil and, **in 2020, Itaú Unibanco participated in several of these bonds issued to raise funds for sustainability projects**. Last year, through products and services, we allocated BRL 38.6 billion to sectors with a positive impact, of which BRL 15 billion financed renewable energy generation and services. Among the economy sectors chosen for financing, 20 were selected considering their actions about climate change and the potential impacts generated by their performance in this theme after analyzing the impact of Environmental and Social issues on credit risk - among the selected ones, there are sectors economy related to health, education, sanitation and renewable energy.

Such investments have great potential to reduce the negative Environmental and Social impacts generated by the productive processes of the different sectors of the economy while they provide financial return, therefore, it is a win-win situation. Also, cross-cutting action with different classes of products and services allows action with joint solutions.

2. Transparency in reporting and communication

With this commitment, we aim to reinforce the transparency of our business and financial results, demonstrating value to our stakeholders. The society and the market have demanded positive Environmental and Social initiatives from companies and aligned with actions, therefore, there must be transparent communication for the company to build a relationship of trust with society. **Consequently, in 2020, Itaú Unibanco fulfilled its commitment by reporting 12 of the 14 indicators of Commercial Banking the SASB (Sustainability Accounting Standards Board), including the ESG theme - environmental, social and governance issues - as a recurring agenda in the disclosure of results and constantly reviewing reports to include new demands on the topic.**

3. Amazon Plan

In an unprecedented partnership between the three largest banks operating in Brazil, Bradesco, Itaú Unibanco and Santander, the Amazon Plan aims to promote sustainable development in the region at a critical moment, as increasing deforestation rates in the biome (9.5% between August 2019 and July 2020)[9] and greater social vulnerability of the population due to COVID-19 require immediate action. The involvement of the financial sector in the Amazon can contribute to its sustainable use and maintenance of the forest standing by supporting environmental conservation and developing the bioeconomy, investing in sustainable infrastructure, and guaranteeing the basic rights of the population. **The measures of the plan, developed in July 2020, focus on preservation and prosperity – both populational and economic - of the region and consist of 10 measures that will be monitored by the partnership**:

1. Zero deforestation in livestock with internal diligences and sectoral commitments
2. Stimulate sustainable cultures in the region through differentiated financing tools
3. Encourage sustainable transport infrastructure in exchange for differentiated financing conditions
4. Enable investments in basic infrastructure for regional social development

[9] INPE, 2020: Amazon deforestation up 9.5% to 11 thousand km²

5. Foster economic development and environmental conservation projects through financial instruments of green ballast (such as Carbon Credit)
6. Incorporate the impacts of climate change into credit and investment policies
7. Expand the scope of inclusion and financial guidance businesses in the region
8. Articulate the implementation of the computerized land registration system
9. Articulate the creation of a fund for working actors at local socio-economic development projects
10. Attracting investments that promote partnerships and the development of technologies to boost the bioeconomy

4. Responsible management

Aiming to improve the performance of our operations and promote sustainable practices in our supply chain, this commitment is a response to the need to implement responsible management in business. In 2019, renewable sources represented 46.1% of the entire energy matrix in the country - with demand for solar energy growing 92% and wind, 15.5% - and, in the same year, our operations became **100% based on clean and renewable electric energy** - a result achieved from purchasing RECs (Renewable Energy Certificates), certificates that track energy consumption and guarantee its renewable source. Other initiatives are also advancing our climate commitment, such as reducing Scope 1 emissions by 32% from 2018 to 2021; the PUE (power usage effectiveness)[10] of 1.79; and 93% of our suppliers' adherence to the CDP program Supply Chain - an increase of 25% compared to 2018 - which engages the chain in the climate agenda.

[10] PUE (power usage effectiveness) is an IT infrastructure efficiency metric that compares the total value of the data center's energy consumption with the value of the consumption of installed IT equipment, establishing a ratio between these two values. The closer to 1.0, the more efficient the data center is.

By adopting responsible management in its businesses, Itaú Unibanco demonstrates positive impacts to the economy, environment and society resulting from its practices and intends to positively affect the transition of other organizations in the financial sector towards a new economy[11].

5. Responsible investment

With this commitment, we aim to expand our offer and distribution of products and services to a more responsible economy with a positive impact, as resource managers are increasingly aware of their responsibility to promote better ESG practices. Since 2010, Itaú Unibanco has been working to integrate ESG issues into the investment process through an analysis methodology that estimates the impact on the company's fair value: in 2020, we reached 99.84% ESG coverage for all eligible assets at Itaú Asset Management. This milestone was reached ten years after the start of our ESG journey, demonstrating the long-standing dedication and commitment to the subject of sustainability in investments.

Responsible investments have brought tangible benefits to the environment and society as increasing amounts of investors have taken ESG aspects into account in their decision-making processes. Upon assuming such a commitment, Itaú Unibanco intends to lead by example and invite other players in the market to take similar actions to foster responsible investments.

[11] Itaú, 2019: Relatório Anual Integrado 2019

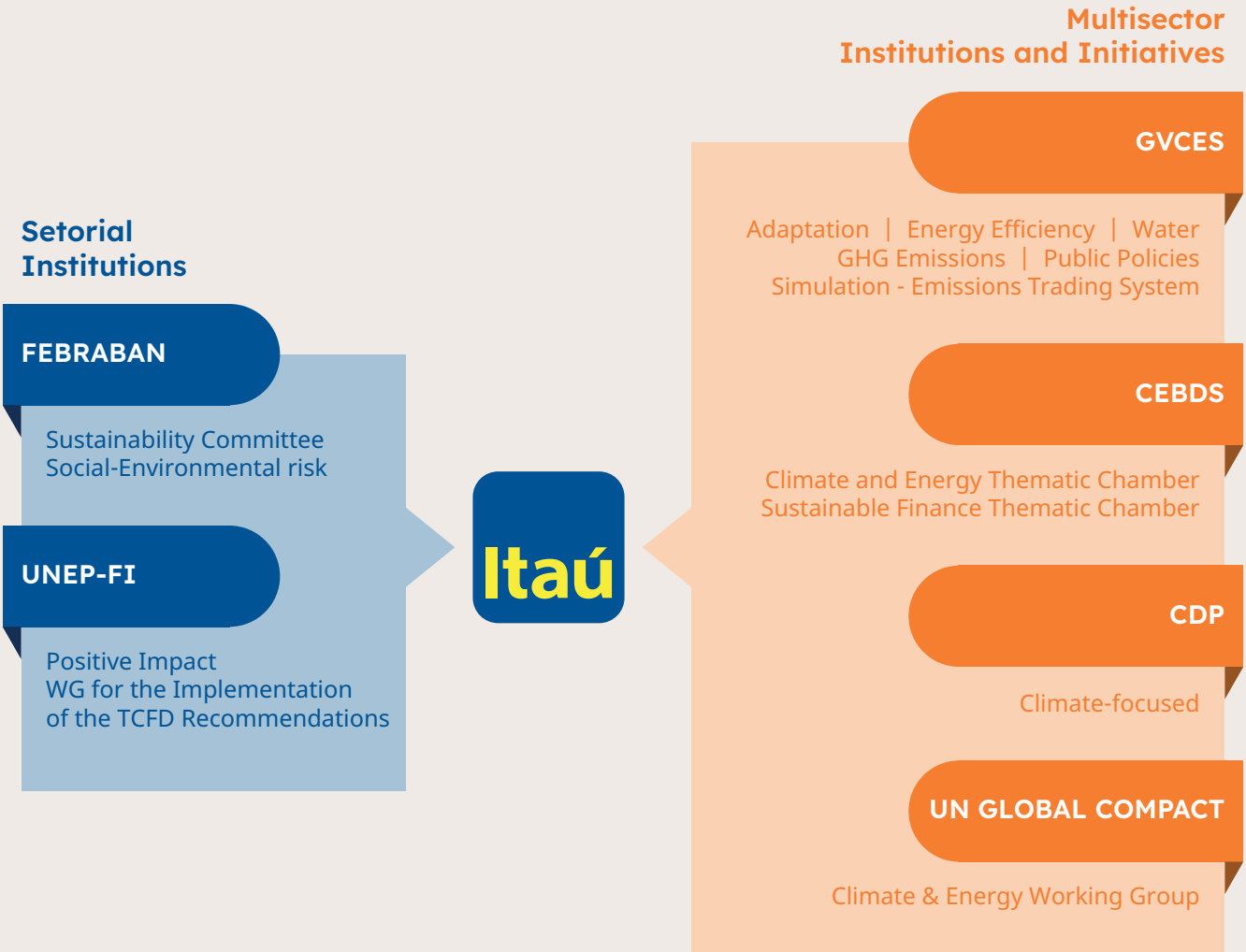
Multisectoral performance

We are part of several fronts on the national and global agendas that address climate change through voluntary commitments. We are signatories to the Principles for Responsible Investment (PRI), the Equator Principles (EP), the *Carbon Disclosure Project* (CDP) and the Global Compact, which guide our institutional practices and our business.

Besides, we are present in forums and working groups with other economic sectors to anticipate risks, map opportunities, and keep our agenda and performance constantly evolving and maturing. We have supported the development of studies that collaborate to overcome the barriers that prevent or hinder the development of a low carbon economy in the country.

The climate agenda is collective, and we acknowledge that, by joining forces with the various parties involved as partners, shareholders, and communities, we can effectively contribute to the conception and viability of solutions that bring environmental, economic, and social benefits. Moreover, our employees are also our great partners.

BANK'S EXTERNAL ACTIONS ON THE THEME



Governance

A structured corporate strategy allows integrated governance to our businesses, in which social, environmental and economic trends are incorporated into the internal procedures. We have built an integrated vision of business and operations that consider climate risk as one of the variables observed, being aware of the impacts that our businesses generate on the climate and how our activities are affected by climate change. Climate issues are part of our Sustainability and Environmental and Social Responsibility Policy and we have a specific procedure for Climate Risk Management.

In 2018, we instituted a Climate Finance Squad, hosted in the Sustainability area - with a multidisciplinary nature formed by the areas of sustainability, corporate Environmental and Social environmental and social risk, finance, investor relations and specific areas for each project - in which we developed indicators and tools for implementing and monitoring the recommendations of the *Task-Force on Climate-related Financial Disclosures* (TCFD), to strengthen the assessment and disclosure of risks and opportunities. The *squad* activities are divided into two large blocks: the first of Risk Governance, led by the Corporate Environmental and Social Risk area, and the second one consisting of Opportunities, led by the Sustainability area. This structure has allowed us to maintain a dynamic interaction with other areas of the institution and to speed up the engagement processes, the development of technologies and the structuring of the climate agenda.

Our decision-making layers follow the levels and responsibilities below:

SENIOR MANAGEMENT	**Chief Risk Officer** Executive responsible for the topic, communicate to the Executive Committee and Board of Directors	
DECISION MAKING AND SUPERVISION	**Environmental and Social Risk Committee** (Compliance, Credit Risk and Legal) Responsible for decision making on climate risks	**Positive Impact Committee** (Sustainability and Investor Relations) Responsible for PMO Squad, climate opportunities and commitment to implement TCFD
EXECUTION AND IMPLEMENTATION	**Transnational Environmental and Social Risk** Performs climate risk management in line with environmental and social risk management	**Climate Finance Squad** (Sustainability, Transnational Environmental and Social Risk, Sureties and Investor Relations) Manages the implementation of the TCFD recommendations, Governance and Risks, led by the Corporate Environmental and SocialRisk area, and Opportunities
POLICIES AND PROCEDURES	**Sustainability and Environmental and Social Responsibility Policies** Climate Risk Management Procedure	

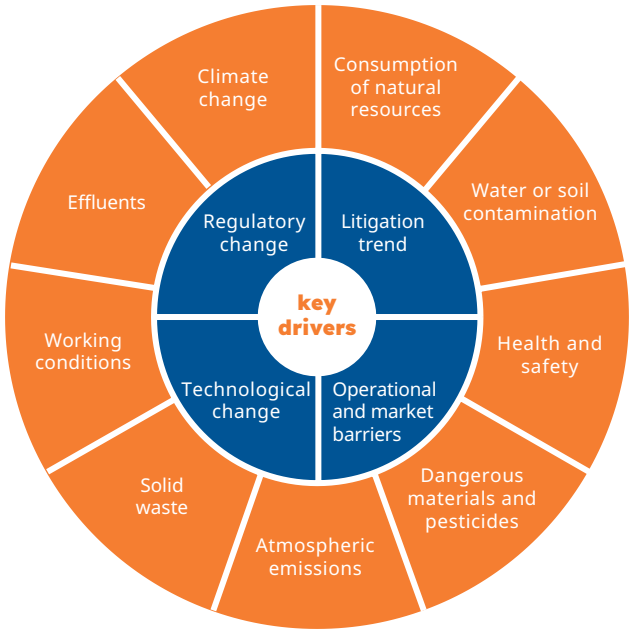
Climate risk management

Climatic risks can be classified according to their physical nature - such as a gradual increase in the average global temperature and an increase in the frequency and intensity of extreme climatic events -, or of transition, such as new regulations, technological barriers, carbon pricing, changing consumption behaviors and other risks that can impact global economic stability, also bringing risks to financial institutions. The management of climate risks is part of our Sustainability and Environmental and Social Responsibility Policy and internal procedure that guides our operations. **In 2020, we implemented and formalized our process of identifying material climatic risks for Itaú Unibanco - both of physical and transition nature and those whose materialization may result from the combination of these - and their potential impacts on socio-environmental, credit, operational risks, market, compliance and reputational**.

Our credit-related Environmental and Social Risk assessment procedure covers an individualized analysis of clients in the Large Companies segments that operate in sectors which are considered to be sensitive by Itaú Unibanco from an Environmental and Social point of view, such as the mining, steel and metallurgy, oil and gas, textile industry, paper, and cellulose, chemical and petrochemical industry, agriculture, power generation and real estate, and aims to identify and mitigate connected risks.

To differentiate and quantify the credit risk associated with the Environmental and Social issue, are used social and environmental *key drivers* that can impact the company's cash flow and compromise its ability to pay and, consequently, credit quality due to regulatory changes, litigation and fines, technological changes and/or barriers and market restrictions.

DRIVERS OF THE SOCIO-ENVIRONMENTAL RISK ASSESSMENT



The Environmental and Social assessment includes information such as the management of our customers regarding climate risk, both in **general aspects** - addressing water management practices, greenhouse gas balance, carbon intensity reduction goals and in **specific aspects such** as decarbonization strategies, investment in alternative energies, use of efficient technologies in livestock (such as pasture recovery and crop-livestock-forest integration) and use of waste for own power generation. **Our methodology has a direct impact on the credit rating of our customers (risk rating) and the climatic variable is part of this assessment model.** In this assessment we identified that, within a period of 3 to 10 years, climate change may impact 25 sectors of the economy with a relevant presence in our credit portfolio. Among the analyzed variables, issues are identified related to greenhouse gas emissions, carbon balance, risk of water scarcity, carbon pricing, technological changes, decarbonization goals, deforestation, and/or other aspects related to sensitive sectors.

To finance projects that fall under the Equator Principles[12], we request a study of climate risk - contemplating the assessment of physical and transition risks that may affect the operation, as well as the elaboration of an inventory of Scope 1 and Scope 2 emissions for projects that come to emit more than 25 thousand tons of CO_2 equivalent (tCO_2e) and study alternatives for projects that emit more than 100 thousand tCO_2e. **In addition to principles requirement, we request a public disclosure of emissions for projects that will emit more than 100 thousand tCO_2e and which ultimately reinforces the commitment to transparency for reports of our chain.**

[12] Equator Principles (EPs): risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision-making. For over 15 years, the strategic incorporation of socio-environmental subject in granting of credit occurs through the application of such principles, and our contracted Project Finance transactions follow the criteria of the *Equator Principles* III.

1| Climate risk mapping

"Climate change could therefore lead to '*green swan*' events and be the cause of the next systemic financial crisis" (BIS, 2020)[13]

Acknowledging climate risks and their potential impacts is an important step in defining an organization's climate strategy. As recommended by TCFD, the impact of climate risks should, if possible, be classified in traditional risk categories such as credit risk, market risk, liquidity risk and operational risk.

Based on an extensive bibliographic review, we mapped the potential impacts of climate risks and their transmission channels to traditional risk disciplines. These risks were evaluated regarding their possible materialization period - considering intervals of up to 2 years, from 2 to 5 years, from 5 to 10 years and above 10 years - and classified according to their nature (physical or transition risks) and possible qualitative materialization scenarios. The mapping was the first step to start prioritizing climate risks in the Company.

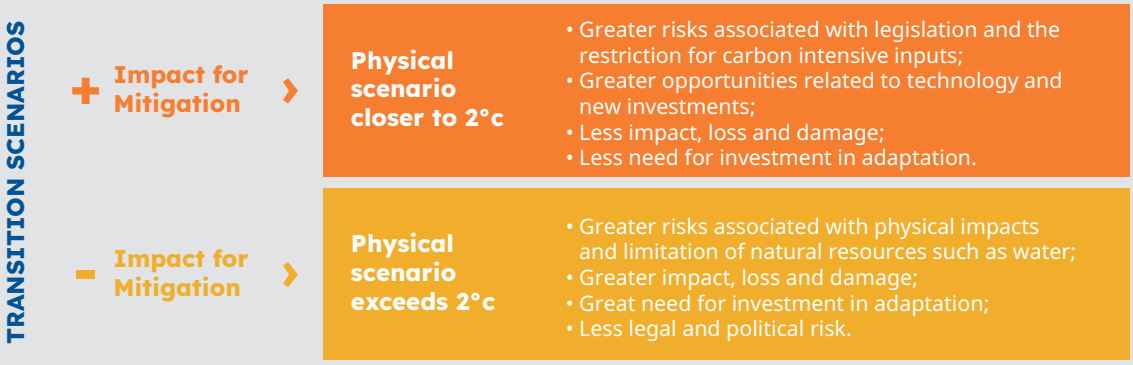
[13] BIS, 2020: The Green Swan

Definition of physical risk x transition risk

Transition risks are those that arise on the way to a low carbon economy, which may be: regulatory, technological, market or reputational.

Physical risks, to the contrary, can be **acute** when triggered by extreme weather events, such as cyclones and floods, or **chronic**, related to consequences that will emerge in the long term, such as the progressive rise in sea level. Thus, such risks threaten the integrity of physical structures and the safety of populations, and therefore, must be considered in policies for mitigating and adapting to climate change[14].

The following figure summarizes the relationship between the transition and physical scenarios[15].



[14] WayCarbon, 2018: Risco climático: uma chamada para a geração de valor
[15] WayCarbon, 2018: Navegando pelos Cenários de Risco Climático

Qualitative scenarios

SCENARIO 1: ORDERED TRANSITION

In this scenario, the transition to a low carbon economy has begun in 2020 and occurs in an orderly manner, with the action of governments and regulatory and sustained decrease in emissions of greenhouse gases. With climate regulations, carbon pricing, incentives for technological development and job creation in the new economy, there is time for the economy to adapt to the new context.

SCENARIO 2: DISORDERLY TRANSITION

In this scenario, the transition to a low carbon economy occurs late, requiring accelerated and disruptive changes in different sectors of the economy. The impacts would be more intense on certain sectors and countries, with the likelihood of a systemic financial crisis and increasing pressure on different organizations.

SCENARIO 3: MATERIALIZATION OF PHYSICAL RISKS

In this scenario the objectives of the Paris Agreement are not met, and the effects of climate change become increasingly evident. The occurrence of extreme weather events and changes in weather patterns can affect the productivity of various sectors of the economy, which may lead to a financial crisis.

The traditional risk dimensions which are most impacted by the identified climate risk categories in the risk mapping study by Itaú Unibanco are displayed below.

CLIMATE RISK AND TRANSMISSION CHANNELS: MAPPING OF CLIMATIC RISK FACTORS AND POSSIBLE MATERIALIZATION IN THE BANK'S TRADITIONAL RISK DISCIPLINES

Climatic risk factor and materialization trend (in years)		SER*	Credit	Insurance	Operational	Market	Compliance	Reputation	Strategy
Climate regulations and regulator supervision	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Obligation disclosure	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Deterioration of the portfolio's credit quality	2 to 5	▲	▲	▲	▲	▲	▲	●	▲
Portfolio climate exposure	2 to 5	▲	▲	▲	▲	▲	▲	▲	▲
Change in pricing of assets and real estate	>10	▲	▲	▲	▲	▲	▲	▲	▲
Climate litigation	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Stranded assets	>10	▲	▲	▲	▲	▲	▲	▲	▲
Credit underwriting	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Carbon pricing	2 to 5	▲	▲	▲	▲	▲	▲	▲	▲
Carbon reduction, neutralization and removal	>10	▲	▲	▲	▲	▲	▲	▲	▲
Change in environmental legislation	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Market barriers and stakeholder requirements	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Impact of physical risks	>10	▲	▲	▲	▲	▲	▲	▲	▲
Other secondary consequences of climate risks		▲	▲	▲	▲	▲	▲	▲	▲

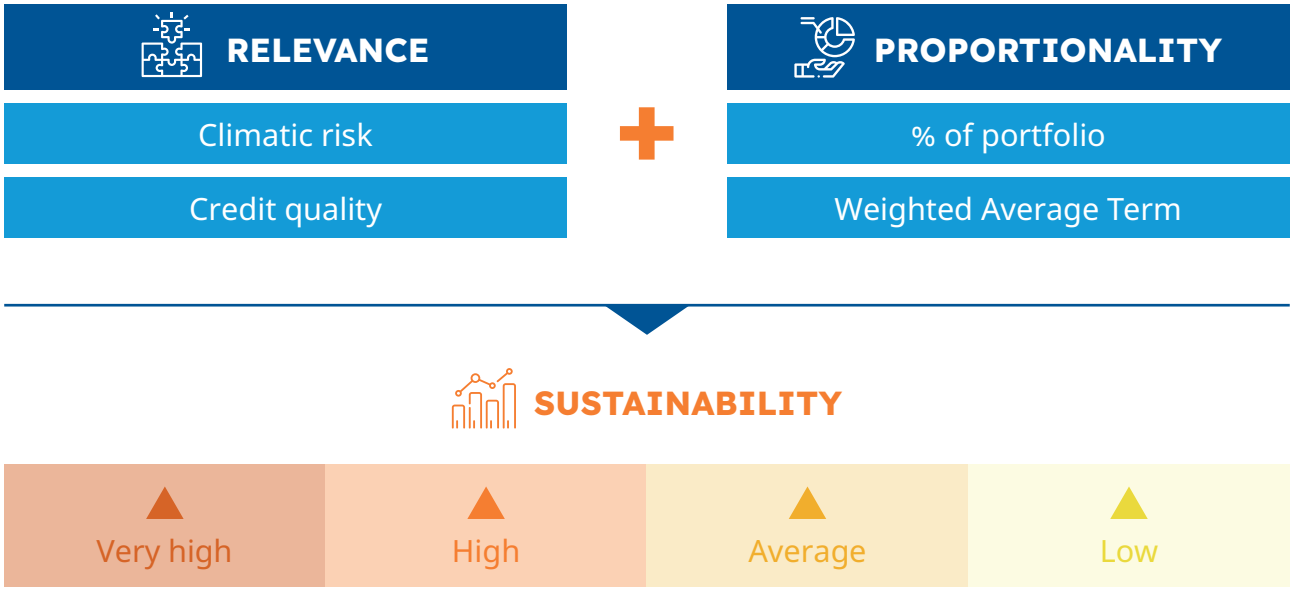
* SER – Environmental and Social Risk

Impact on risk dimensions: ▲ very low | ▲ low | ▲ average | ▲ high | ▲ very high

2|Sensibility of climate risks

"We recognize that there are some areas where the science, data or tools are not yet sufficient to estimate risks accurately. But in these cases, firms can and should explore the use of reasonable proxies and assumptions to work around these issues, rather than leaving risks unrecognized. Imperfection is not an excuse for inaction." (Sarah Breeden, 2020)16

Quantifying the potential financial impacts of climate risks is a complex activity, as it is a category of risks surrounded by a high level of uncertainty. However, methodological uncertainties and limitations cannot lead to inaction. In order to measure the sensitivity of the credit portfolio to climatic risks, Itaú Unibanco has been applying the Climate Risk Sensitivity Tool, developed jointly with Febraban. The tool combines relevance and proportionality criteria to identify which sectors and clients within a financial institution's portfolio are more sensitive to climate risks.



[16] Bank of England, 2020: Leading the change: climate action in the financial sector

The relevance of climate risk is defined by combining the sector's climate risks with the credit quality of the portfolio, assessed based on the general **risk rating** of customers or the sector concentration on investment-grade customers.

Proportionality, to the contrary, is defined based on the combination of the concentration of the credit portfolio in a specific sector or customer and of the weighted average term of the operations, since operations with a term of more than five years may be more exposed to climate risks.

The weighted average term considers the average maturity and the volume of exposures for different operations of a client or sector.

Operations with a weighted average maturity of more than 5 years are highly proportional from the point of view of climate risk, since the materialization of climate risk in the long term is more likely.

This tool allows us to visualize the climate sensitivity of our credit portfolio in order to identify the sectors and customers most affected by these risks. Therefore, the variable has been included to our previously mentioned Environmental and Social risk ratings.

Find out more:
Régua de Sensibilidade aos Riscos Climáticos (Febraban and Sitawi, 2019)
TCFD Recommendations (TCFD, 2017)

Which sectors are most exposed to climate risks?

TCFD recommendations display several sectors of the economy most likely to suffer financial impacts from climate change due to their exposure to physical and transition risks caused by the emission of greenhouse gases and dependence on water and energy. This sectors list is not exhaustive and can be adapted to the reality of each country, but it includes:

- Energy: Oil and Gas; Coal and Electric Utilities
- Transport: Air transport; Air Passenger Transport; Maritime Transport; Railway Transport; Road transport; Automobiles
- Construction Materials: Metals and Mining; Chemicals; Construction Materials; Capital goods; Real Estate Management and Development
- Agriculture, Food and Forest Products: Beverages; Agriculture; Processed foods; Paper and Forest Products.

What types of clients are most exposed to climate risks?

As presented in the Febraban climate risk sensitivity rule implementation guide, in addition to the sectoral exposure criteria, customers' credit quality is also an important variable to assess their exposure to climate risks. Therefore, we understand that customers with investment grade (rating AA to A according to CMN Resolution 2682/99) tend to have greater resilience to climate risks. These customers are more prepared to respond to the materialization of risks of climate nature, whether physical or transition, and generally have a deeper management of Environmental and Socialissues. Customers in other rating ranges may be more sensitive to climate change.

ITAÚ UNIBANCO'S SENSITIVITY TO CLIMATE RISKS

We periodically assess the sensitivity of our portfolio to climate risks and report the results to the relevant forums in accordance with our Climate Risk Management Procedure.

In December 2020, less than a quarter (23.3%) of our wholesale credit portfolio was concentrated in sectors categorized as High or Very High Sensitivity to climate risks. It is important to note that the sensitivity analysis consider trends and credit assumptions, not necessarily implying a materialization of risks. The result of the sensitivity rule considers both physical and transition risks, thus providing an integrated view of both risks. In an effort to assess sensitivities to physical and transition risks in isolation, we have achieved similar results: 22.7% and 21.5% respectively, which indicate that it is rare that any sector of the economy is affected by only one of the dimensions of climate risk.

3| Itaú Unibanco exercise on climate scenarios

ANALYSIS OF CLIMATE SCENARIOS

In its Strategy pillar, TCFD recommends carrying out analyzes of climate scenariosto assess the financial institution's resilience to different trajectories of rising temperatures. Within UNEP-FI's Working Group on implementing TCFD Recommendations, we tested different methodologies for analyzing climate scenarios, particularly global scenarios related to transition risk. **We learned procedures and concepts from the analysis, but we noticed limitations in relation to our reality.** This issue is also discussed in the Febraban's Climate Risk and Green Economy Working Group with other Brazilian banks for the development of tools for analyzing scenarios adapted to the Brazilian reality and more adhering to our risks.

OUR EXPERIENCE APPLYING THE TRANSITION CHECK TOOL

We participate in the Working Group for Implementation of the Recommendations of TCFD in banks under the leadership of UNEP-FI, since its first phase in 2017. Since then, several methods have been tested and Itaú's experience applying physical risk scenarios was described in the project's Phase I completion report.

Throughout 2020, we participated in Phase II of the pilot in which the Transition Check Tool was developed, a tool that allows the application of the Message and Remind models in different transition risk scenarios, defined by the NGFS.

The tool can be applied to the Energy; Oil and Gas; Coal; Transport; Industrial Processes, and Agriculture and Forestry sectors, with response variables in the expected loss of the different sectors of the economy. At Itaú Unibanco, we piloted the methodology for the Energy and Agriculture sectors which allowed us to understand the potential impacts of the transition risk on the expected loss of these sectors until 2030, 2040, and 2050.

Find out more:
Transition Check Tool (UNEP-FI, 2017)
UNEP-FI publications (UNEP-FI)
NGFS Climate Scenarios for central banks and supervisors (NFGS, 2020)

CLIMATE RISK FACTORS CONSIDERED IN THE SCENARIO ANALYSIS BY UNEP-FI WORKING GROUP

For each sector were considered the potential impacts of four risk factors described below. Such sectors could have a High, Moderate-high, Moderate, Moderate-low, Low, Positive impact (for sectors benefiting from the transition), or No Impact. The analysis of these impacts allowed the assessment of the sensitivity of each sector to risk factors, allowing the calibration of the model developed by UNEP-FI and expanding our capacity to analyze climate risks. The risk factors considered were:

- Cost of direct emissions: sectors with a higher emission intensity in their production processes tend to be more impacted by an eventual carbon pricing. Therefore, the analysis considers the direct emissions (Scopes 1 and 2) of that sector.
- Cost of indirect emissions: indirect emissions are especially relevant for sectors whose supply chain is carbon-intensive, as an eventual pricing could impact its suppliers and, consequently, the cost of raw materials. Therefore, the analysis considers the potential indirect emission (Scope 3) of that sector.
- Investment in low carbon technologies: some sectors of the economy will require large amounts of investment to make the transition to a low carbon economy. The analysis of the potential impact considers how complex it would be to adapt the production processes of that client to the global climate goals and targets.
- Change in revenue: changes in supply and demand curves can have significant impacts on the revenue of certain sectors of the economy, while some may even benefit from contributing to global climate objectives.

The chart below shows a comparison between the potential impacts in each sector of the economy, according to the conclusion of the study carried out in Phase II by UNEP-FI.

IMPACT INTENSITY FOR RISK FACTORS BY SECTOR

Sector	Cost of direct emissions	Cost of indirect emissions	Low-Carbon CAPEX	Revenue	General
Oil and Gas	▲▲	▲	▲	▲▲	▲▲
Agriculture	●	●	●	●	●
Real Estate	▲▲	●	●	▲▲	●
Power generation	▲	●	▲	●	▲
Metals and mining	▲	▲	●	▲▲	●
Industry	●	▲	●	▲▲	●
Transport	▲	●	●	●	●
Services / Technology	▲	▲▲	▲▲	▲	▲

▲▲ High | ▲ Moderate-high | ● Moderate | ▲▲ Moderate-low | ▲ Low

Find out more: Beyond the Horizon (UNEP-FI, 2020)

Portfolio alignment

Since 2018, we have utilized and contributed to the development of the Paris Agreement Capital Transition Assessment (PACTA) tool in order to verify the alignment of our credit portfolio with the objectives of the Paris Agreement (2°C of maximum average heating, with efforts to 1.5°C). PACTA is a new methodology, still evolving and its contributions of financial institutions are essential for the advancement of the tool. This seems to us to be the best direction for aligning the portfolio and complying with the Paris Agreement.

RESPONSIBILITY FOR THE GENERATED IMPACT - Emissions financed in the Real Estate and Vehicle segments (Scope 3)

We applied the PCAF methodology to measure part of our 2020 real estate portfolio (Commercial Real Estate, which comprises properties for commercial purposes, such as hotels, offices, industries, residential buildings for rent and commerce in general), with 304 buildings totaling BRL 4.3 billion in financing, and we identified a total of 21,700 ton of CO_2 of financed emissions. The data were calculated based on the emission factor available in the PCAF database. Regarding vehicle financing methodology, we invested in a portfolio of BRL 13.4 billion and identified a total of 834,102 tons of CO_2 in financed emissions. The calculation was performed on the entire vehicle financing portfolio and considered the brand of vehicles financed and the emission factor available in the PCAF database. We will continue to expand the scope and granularity of greenhouse gas emission calculations in our credit portfolio using the PCAF methodology for other sectors.

Glossary

CARBON DISCLOSURE PROJECT (CDP):

is an international organization that helps companies and cities to manage and publicize their environmental impact.

EQUATOR PRINCIPLES:

Set of Environmental and Social criteria for voluntary adoption by financial institutions to analyze financial products related to project financing. The Principles are based on the International Financial Corporation (IFC) - World Bank Group Performance Standards on Social and Environmental Sustainability.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC):

Intergovernmental Panel on Climate Change is the UN body created to evaluate science related to climate change.

NETWORK FOR GREENING THE FINANCIAL SYSTEM (NGFS):

Network to Make the Financial System Greener, aims to accelerate green finances and develop recommendations for banks on climate change.

TASK-FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD):

Task Force on Climate-Related Financial Disclosures, discloses climate-related financial risks used by companies, banks and investors in providing information to interested parties.

THE GLOBAL RISKS REPORT:

Global Risk Report, is an annual study by the World Economic Forum that describes the changes that occur in the global risk scenario from year to year.

WORLD ECONOMIC FORUM (WEF):

World Economic Forum, is an organization that involves political, business and cultural leaders to shape global, regional and industrial agendas.

WORLD ECONOMIC OUTLOOK:

World Economic Perspectives, is an IMF report that presents economists' analyzes of global economic developments in the short and mid-term.

WORLD METEOROLOGICAL ORGANIZATION (WMO):

World Meteorological Organization, is the United Nations agency specialized in weather, climate and water resources.


48.991
70.111
20.5
69.928
31.012
48.991
31.012
12.002

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Climate Responsibility:
an agenda under implementation