TELEFÔNICA BRASIL CLIMATE ACTION PLAN









CONTENT 1. INTRODUCTION 2. **OBJECTIVES AND EMISSIONS HISTORY** Objectives **Emissions history** Offset and neutralization of emissions 3. **RISKS AND OPPORTUNITIES** Risks and opportunities identified Risk management and adaptation plan PLAN MODELS 4. Operational model Value chain model Commercial model Financial model Governance model 5. JOURNEY TO NET ZERO EMISSIONS

INTRODUCTION

Climate Change and Digitalization

"Connectivity is the foundation upon which our businesses are built, and therefore, we work to make our network low in pollutant emissions and the most efficient in the industry. We promote digitalization and connectivity as catalysts to assist our clients in developing their activities more efficiently and sustainably."

Climate change represents one of the most significant challenges in this century. According to the latest synthesis report¹ from the IPCC (Intergovernmental Panel on Climate Change), the planet's temperature has increased by 1.1 °C compared to the period of 1850-1890 due to over a century of human activities involving fossil fuel combustion, as well as unequal and unsustainable use of energy and land. These changes have already led to widespread adverse impacts, resulting in losses and damages to nature and people due to the increased occurrence of extreme changes documented as heatwaves, intense precipitation, prolonged droughts, and tropical cyclones.

To prevent even greater catastrophes from occurring and to safeguard global stability, joint efforts from governments, society, and businesses are necessary to limit global warming to 1.5 °C by 2100, achieving net zero emissions by 2050, as outlined in the Paris Agreement. This entails reducing greenhouse gas (GHG) emissions, notably carbon dioxide (CO2), to levels that do not exceed the limit of 1.5 °C, as well as neutralising residual emissions through their removal and permanent storage, in accordance with the Science Based Targets (SBTi)² methodology that establishes the Net Zero standard in line with IPCC recommendations.

This removal can be achieved through technologies that directly capture CO₂ from the atmosphere or with Naturebased Solutions (NBS), such as forest restoration and ecosystem revitalization that act as natural carbon sinks. Considering the interdependence between climate, biodiversity, and human society, the conservation of nature has been highlighted as a key factor in combating climate change. Without urgent mitigation and adaptation actions, these components are increasingly threatened, endangering the health and well being of both current and future generations.

In addition to reducing fossil fuel combustion, cutting GHG, and protecting and regenerating the environment, the practice of the circular economy is crucial in addressing climate change and biodiversity loss. This model is becoming increasingly intertwined with climate solution planning, considering that approximately 70% of greenhouse gas emissions are tied to the management and use of materials, according to the Circularity Gap Report.

In contrast to the linear model, where the logic is based on extraction, production, use and disposal, the circular economy aims to enhance the value of products by analyzing their lifecycle to keep them within the production chain for as long as possible. This reduces waste generation and the squandering of resources like water and energy. Incorporating the circular economy into business models is essential for reducing global GHG, especially in technology and telecommunications sectors that heavily rely on a range of finite mineral resources from nature, including precious metals and rare earth elements.

Report available at: https://www.ipcc.ch/report/sixth-assessment-report-cycle.
 The information can be verified at: https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf

On the other hand, digital transformation is considered one of the catalysts towards a low carbon economy, as digital solutions allow commutes to be replaced with remote activities, as well as optimize the use of energy resources in urban infrastructures, agricultural and industrial productions. Through digitalization and services like Big Data and the Internet of Things (IoT), Telefônica Brasil facilitates this transition for businesses and society, providing solutions that assist in reducing customer emissions.

According to a report from the Exponential Roadmap initiative³, the digital sector is responsible for only 1.4% of global emissions. At the same time, it has the potential to be a significant factor in reducing emissions by half by 2030, as it could revolutionize all parts of the global economy in the next decade. Despite its positive impact being greater than its negative aspects, Telefônica Brasil is concerned with decarbonizing its operations and those of its entire value chain, aiming to influence suppliers and customers to act and commit to more environmentally responsible practices.

In 2020, recognizing the urgency and significance of reducing CO_2 emissions and aligned with the parameters of Telefónica Group, Telefônica Brasil adopted new Energy and Climate Change objectives for 2025, 2030, and 2040, in alignment with the 1.5 °C scenario of the Paris

Agreement. These objectives were validated by the SBTi initiative at the group level, demonstrating a commitment to contribute towards achieving these targets.

As a means of external accountability and internal guidance to achieve its short, medium, and long term objectives, Telefônica Brasil has developed this Climate Action Plan. This plan provides regular updates on the progress of reducing greenhouse gas (GHG) emissions, as well as the actions implemented and the plans for the Company's decarbonization. Furthermore, the document integrates the climate strategy with the Company's commercial and financial strategies, incorporating commitments involving actions with customers and the supply chain.

This plan will be updated annually, or more frequently if necessary, and should be approved by the Company's Board of Directors through the reporting of the Quality and Sustainability Committee. It will also be made available on the Company's Investor Relations website. Telefônica Brasil will receive feedback from external stakeholders, including investors, regarding the plan through the email address: Sustentabilidade Telefônica Brasil (sustentabilidade.br@ telefonica.com). Each feedback received will be evaluated and considered by the internal team and will be responded to as promptly as possible.

OBJECTIVES AND EMISSIONS HISTORY

Objectives

The primary climate objective of Telefônica Brasil is to achieve net zero emissions by 2040, including emissions from its value chain - Net Zero commitment. Additionally, the Company has set intermediate objectives, which involve reducing emissions by 90% across scopes 1 and 2 by 2030 and neutralizing the remaining emissions from these scopes through nature-based solutions starting in 2025. In the journey towards achieving net zero emissions by 2040, the decarbonization plan of Telefônica Brasil includes short term (2025), medium term (2030), and long term (2040) objectives, validated by the SBTi initiative⁴. The ultimate objective is to minimize emissions across all scopes, aligned with the 1.5 °C scenario, and neutralize residual emissions to generate a net zero impact on the climate.

3. Report available at:

https://exponentialroadmap.org/wp-content/uploads/2020/03/ExponentialRoadmap_1.5.1_216x279_08_AW_Download_Singles_Small.pdf.

4. It includes absolute reduction objectives compared to the base year (2015 for scopes 1 and 2 emissions, and 2016 for scope 3 emissions)



	Energy efficiency	Renewable energy	Emissions of scopes 1 and 2	Value chain emissions (Scope 3)	Emissions avoided in customers through digitalization	Neutralization
Short term 2025	Reduce energy consumption per unit of traffic by 90% compared to 2015.	Maintain 100% renewable electricity, expanding the distributed generation project.	Reduce emissions by 72% compared to 2015 ⁵ .	Reduce emissions by 39% compared to 2016.	Contribute to customers' emission reduction through connectivity services and EcoSmart solutions ⁶ .	Neutralize emissions of scopes 1 and 2 annually.
Medium term 2030			Reduce emissions by 90% compared to 2015.	Reduce emissions by 56% compared to 2016.		Neutralize residual emissions (10%) of scopes 1 and 2 annually.
Long term 2040			Maintain at least a 90% reduction in emissions compared to 2015.	Reduce emissions by 90% compared to 2016.		Neutralize residual emissions (10%) annually.

Emissions history

Accounting and Reporting

Since 2010, Telefônica Brasil has been annually preparing the emissions inventory from its operations (scopes 1 and 2), following the methodological guidelines of the GHG Protocol. This approach is based on principles of relevance, completeness, consistency, transparency, and accuracy.

The inventory includes gases from both the Kyoto Protocol and the Montreal Protocol, ensuring coverage of emissions from all of the Company's equipment, regardless of the technology used. The information encompasses all of the Company's operations in Brazil (unique territory of operation). Among the included facilities are the Radio Base Stations (RBS), fixed and mobile telephony centers, data centers, stores, call centers, and offices.

Emissions from the value chain (scope 3) have been included in the inventory since 2016, considering the most relevant categories within the company's context.

Given the significance of this scope for Telefônica Brasil's total emissions and to enhance the data quality and calculation methodology, a new screening of the 15 categories according to the GHG Protocol was conducted in 2021. Categories representing more than 5% of scope 3 emissions were identified as material, and these are incorporated into the Company's inventory.

5. Due to the efforts undertaken, Telefônica Brasil achieved this objective in 2021, surpassing the target and committing to maintaining this reduction in 2025. 6. Currently, the Company is working on defining a long-term objective.



Annually, the emissions inventory is verified by an independent auditing company as a means to enhance the reliability of data completeness and the accuracy of externally reported results.

Following the principle of transparency, since 2010, Telefônica Brasil has been reporting its emissions in the Public Emissions Registry of the Brazilian GHG Protocol Program⁷, consistently receiving the Gold Seal since 2012. In addition to the inventory, avoided emissions resulting from renewable energy consumption and energy efficiency measures implemented are also calculated and verified annually.

Emissions

In 2022, Telefônica Brasil emitted approximately 314 thousand tCO₂e (scopes 1, 2, and 3).

Telefônica Brasil's 2022 GHG Emissions



TOTAL: 314 thousand metric tons of CO₂e

Emissions of operations (scopes 1 and 2)

Scope 1 emissions represent direct emissions generated in operations arising from organization controlled activities. The sources of scope 1 emissions for Telefônica Brasil are:

• **Stationary resources:** Emissions derived from fuel combustion in generators.

 Mobile Sources: Emissions derived from fuel combustion in fleet vehicles.

• Fugitive Emissions: Leakage of refrigerant gases, primarily from air conditioning equipment.

In 2022, Telefônica Brasil emitted a total of 32,190 tCO_2e , considering its operations (scope 1). Fugitive emissions from air conditioning equipment are the primary emission source (83%) within the operations, followed by emissions from fuel combustion in generators (9%) and the fleet of vehicles (8%).

Scope 2 emissions represent indirect emissions due to electricity consumption in operations. More than 90% of energy consumption at Telefônica Brasil is required to maintain the operation of technical infrastructures (Radio Base Stations, fixed and mobile telephony centers).

From the perspective of a market-based approach, Telefônica Brasil has zeroed its CO_2 emissions from electricity (scope 2), as it uses 100% renewable energy. In terms of a location based approach, the Company's emissions would be equivalent to 74,682 tCO₂e.

The history of scopes 1 and 2 emissions since the base year is presented as follows:

Emissions (tCO ₂ e)	2015	2016	2017	2018	2019	2020	2021	2022
Scopes 1 and 2 (market)	263,744	190,278	228,207	163,492	73,913	78,101	63,018	32,190
Scope 1	97,926	94,186	108,532	84,441	73,913	78,101	63,018	32,190
Scope 2 (market)	165,818	96,092	119,675	79,051	0	0	0	0
Scope 2 (location)	211,809	128,178	161,892	141,992	130,664	112,706	230,945	74,682
Biogenic	15,107	14,073	13,555	12,608	9,589	9,668	8,907	12,922
Offset ⁸	0	0	0	0	73,913	78,101	63,018	25,752
Neutralized ⁹	0	0	0	0	0	0	0	6,438

Chain Model Emissions: (scope 3)

Scope 3 emissions represent indirect emissions generated throughout the Company's value chain, both upstream and downstream. These emissions result from the Company's activities but occur from sources neither owned nor controlled by the Company. source of emissions in its value chain, accounting for 82% of the scope 3 total emissions.

Then, emissions from the use of products sold to customers account for 15%. Emissions associated with energy related activities and business travel represent 2% and 1%, respectively.

In Telefônica Brasil, supply chain emissions (from purchasing products, services, and capital goods) are the primary

The history of scope 3 emissions since the base year is presented below:

Emissions (tCO ₂ e)	2016	2017	2018	2019	2020	2021	2022
Scope 3	640,349	*	*	630,512	358,123	346,715	281,581
Category 1 Purchase of products and services	265,588	*	*	434,735	226,380	179,145	177,770
Category 2 Capital goods	132,140	*	*	105,821	58,352	48,334	52,933
Category 3 Energy related activities	39,681	*	*	9,764	7,325	6,439	4,979
Category 6 Business travels	19,560	*	*	8,822	1,591	106	3,352
Category 11 Use of products sold	183,379	*	*	71,371	64,475	112,691	42,547

*In 2021, we performed methodological improvements in calculations considering the base year (2016) and more recent years (2019-2021), which is why results for 2017 and 2018 are not available.

8. Utilization of carbon credits from emissions reduction (avoided emissions).

9. Utilization of carbon credits from emissions absorption (permanent removal of emissions from the atmosphere).

Offset and neutralization of emissions

vivo 🕈

"The investments of Telefônica Brasil in carbon credits have already contributed to the preservation of hundreds of hectares and thousands of trees in projects that prevent deforestation in the Amazon biome."

Since 2019, Telefônica Brasil offsets 100% of emissions that have not yet been possible to eliminate from its operations (scope 1), mainly through projects that support local ecosystem conservation initiatives, verified with the international standard VCS (Verified Carbon Standard):

REDD+ VALE DO JARI: The initiative, developed by Fundação Jari and Biofílica S.A., empowers local farmers with sustainable management techniques and agro extractive production in Pará and Amapá, promoting the well being of communities and turning them into custodians of forest resources. In addition to the benefits of carbon credits, the project also holds the additional CCB (Climate, Community & Biodiversity Standard).

REDD+ EVERGREEN: It protects the forests in one of the regions with the highest deforestation rates in the Amazon Biome, the municipality of Apuí, in Amazonas. The project promotes the development of income alternatives for extractive communities. It helps protect 250 bird species, 40 mammal species, and 15 reptile species, as well as safeguarding flora species like Mahogany, Cedar, Copaiba, Andiroba, Brazil Nut, and Rosewood.

OTHER PROJECTS: : CIKEL Brazilian Amazon REDD / VTRM Renewable Energy / Green Farm DAP AR EUC; DAP AR NAT; DAP REDD+GF / Green Fleet Valecard / BAESA Project / J.B. Hunt Intermo dal Transportation Project / Pacajai REDD+ Project / Landfill Gas Recovery and Flaring Project in the El Verde Landfill, Leon / Stipa Nayaa Wind Farm.

In order to achieve net zero emissions, Telefônica Brasil will adhere to the SBTi corporate "Net Zero" standard, which includes, in summary, two important premises: (1) reduce emissions in alignment with the 1.5 °C scenario and (2) neutralize the remaining emissions through permanent removal of CO, from the atmosphere.

As an interim target on its Net Zero journey, starting from 2025, Telefônica Brasil will remove from the atmosphere all emissions that are not possible to avoid (approximately 10%) from scopes 1 and 2. This will be achieved through capturing and storing carbon in the form of biomass. This objective can be accomplished by developing forest projects that absorb CO_2 or purchasing removal carbon credits. The latter had already begun in 2022 when 20% of the Company's offset was provided by the project:

MULTISPECIES REFORESTATION IN MATO GROSSO:

A reforestation project involving 50 native species in an 8 thousand hectare area, which includes replanting and natural forest management. Apart from the positive environmental impact, the project also engages in educational activities, forms economic and social partnerships with the local population to enable sustainable livelihoods from the forest, and ensures the preservation and strengthening of biodiversity. The farm where the project is carried out serves as a hub for national and international research on fauna and flora and serves as a model for agroforestry best practices in the Amazon biome, as well as a nursery for seedlings used in other regional plantations.

With the initiatives mentioned above, from 2019 to 2022, Telefônica Brasil has already offset 169,121 tCO2e. The quantity retired per project can be verified in the annual report in the Public Emissions Registry (Brazilian GHG Protocol Program)¹⁰.

RISKS AND OPPORTUNITIES

"According to the World Economic Forum, natural disasters and extreme climate events are among the most severe risks both in the short and long term."

In the latest Global Risks Report¹¹ by World Economic Forum, natural disasters and extreme climate events appear as the second most severe risks in the short term. In the 10 year future, the top four positions are occupied by risks related to climate change and the consequences of human impact on the environment: (1) Failure to mitigate climate change, (2) Failure to adapt to climate change, (3) Natural disasters and extreme climate events, and (4) Loss of biodiversity and ecosystem collapse.

Companies must assess the risks and opportunities presented by climate change, as they can lead to irreversible effects and impact their activities and value chain. Currently, the most recognized methodology on the international stage for analyzing climate-related risks and opportunities is that of the Task Force on Climate Related Financial Disclosure (TCFD). Telefônica Brasil adopts the TCFD's recommendations for analyzing risks and opportunities, enabling the incorporation of climate change into long term business decisions, aiming to minimize risks and maximize opportunities.

Risks and opportunities identified

The assessment considers 100% of Telefônica Brasil's operations, which are exclusively focused within the national territory, encompassing around 30 thousand physical assets including telecommunication towers, fixed and mobile network centers, offices, call centers, data centers, and stores. Physical risks are evaluated using climate variable projections for two different scenarios of CO₂ concentration

pathways (Representative Concentration Pathway - RCP) defined by the IPCC within the temporal horizons of 2030, 2040. and 2050:

SCENARIO	DESCRIPTION			
RCP 2.6	Aligned with the Paris Agreement, where the temperature increase at the end of the century does not exceed 2 °C compared to pre-industrial levels.			
RCP 8.5	The "business as usual" scenario, where the temperature increase at the end of the century is around 4 °C compared to pre- industrial levels.			

Transition risks and opportunities are evaluated using the scenario from the International Energy Agency (IEA NZE 2050), aligned with the Paris Agreement, which outlines the efforts needed to reduce GHG and achieve global net zero emissions by 2050. This scenario was complemented with information from the NGFS¹² scenario, aiming to provide a more comprehensive analysis of Telefônica Brasil's exposure to climate change. The analysis in this scenario considers various variables established in the model, such as future carbon prices and electricity prices.

The quantitative and qualitative analysis of risks and opportunities is based on the following information:

 Projection of variables based on RCP 2.6 and 8.5 scenarios, such as temperature increase, precipitation, or the number of days with extreme temperatures.

11. Available at: https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf.

^{12.} The Network for Greening the Financial System (NGFS) is a group of central banks and supervisors that share best practices and contribute to the development of environmental and climate risk management in the financial sector.

• Projection of non-climatic variables based on IEA and NGFS NZE 2050 scenarios, such as electricity prices or CO₂ emissions prices.

• **Projection of non-scenario-based variables,** available at Telefônica Brasil or provided by external sources, such as the increase in IoT connections or future projections of GHG emissions from Telefônica Brasil.

• **Physical assets of Telefônica Brasil,** along with their geolocation and economic value, intersecting with projections of climate based variables from scenarios.

• Analysis of historical data from Telefônica Brasil, such as GHG emissions, electricity consumption, and average prices for that consumption.

Considering the information on which the analysis is structured, the probability of occurrence for each identified physical and transition risk is estimated, along with their potential impacts and economic assessment. This results in an expected level of exposure for each type of risk in each of the analyzed scenarios.

In the RCP 2.6 scenario, the risks primarily stem from the transition to a decarbonized economy due to increased electricity prices. On the other hand, in the RCP 8.5 scenario, the most relevant risks are physical, associated with changes in specific climate variables (increased extreme weather events like floods) and chronic changes (rising temperatures and precipitation).

Given the characteristics of Telefônica Brasil's business, the analyzed scenarios would primarily present significant opportunities, mainly linked to digital solutions that assist customers in decarbonizing their activities.

The main identified physical and transition risks by Telefônica Brasil, along with its management strategy, are presented as follows:

CATEGORY	NATURE	DESCRIPTION	FINANCIAL IMPACT	MANAGEMENT
Physical risks	Chronic	Increased electricity consumption due to a higher need for cooling associated with global temperature rise.	Increase in operational costs (electricity OPEX and maintenance), as well as an increase in CAPEX due to early equipment retirement.	An Energy Efficiency Plan aimed at reducing electricity consumption, for example through projects involving free cooling, equipment modernization, and the incorporation of more critical technical specifications in the network equipment being acquired by the Company, enabling them to operate at higher temperatures.
Physical risks	Acute	Increased likelihood of service interruptions and equipment damage due to a higher occurrence of extreme weather events such as heavy rainfall, strong winds, floods, etc.	Increased operational costs and CAPEX for replacing damaged assets, as well as revenue loss due to service unavailability (loss of profit).	Global Business Continuity System, ensuring maximum operational resilience in the face of any interruption. Additionally, potential damage to assets caused by extreme weather events is factored into the Company's insurance model.
Transition risks	Market	Increase in energy prices due to higher dependence on fossil fuels and carbon pricing in Brazil.	Increase in operational costs (electricity OPEX).	In addition to the Energy Efficiency Plan aimed at reducing energy consumption, the Company also has a Renewable Energy Plan (such as involvement in distributed generation projects), which allows Telefônica Brasil to be less dependent on fluctuations in regulated energy prices in the country.

Additional note: Telefônica Brasil also evaluates and manages other transition risks, such as regulatory risks (increased prices of certain products and services due to taxes or fees related to direct or indirect CO₂ emissions), technological risks (early retirement of assets related to climate control or energy due to a low carbon transition), and reputational risks (increased demand for climate-related action from stakeholders and rising costs of CO₂ compensation). However, these risks have a lesser impact and are not among the key risks.

The key opportunities for Telefônica Brasil related to climate change and its management strategy are presented as follows:

CATEGORY	NATURE	DESCRIPTION	FINANCIAL IMPACT	MANAGEMENT
Opportunities	Resource Efficiency	Cost optimization in networks and operations through better energy management.	Reduction of operational costs (electricity OPEX).	The Energy Efficiency Plan provides a significant competitive advantage to the sector, enhancing network efficiency and resilience without causing an increase in energy consumption.
Opportunities	Energy Sources	Reduction of exposure to energy price volatility and savings in OPEX through the use of renewable energy instead of conventional sources.	Reduction of operational costs (electricity OPEX).	Maintaining electricity consumption 100% renewable is one of the key climate objectives of Telefônica Brasil. The company sees opportunities for cost reduction by investing in long term contracts for renewable energy generation projects.
Opportunities	Products and Services	Expanding business volume in a low carbon economy by selling digital products and services that help customers reduce their CO ₂ .	Increase in revenue due to higher demand for products and services that contribute to the decarbonization of the economy.	Digital solutions based on connectivity, IoT, Cloud, and Big Data can potentially optimize resource consumption and reduce the customers' environmental impact. Therefore, the Company's business units see an opportunity to promote digital services, contributing to the decarbonization of customers.

Risk management and climate change adaptation plan

Applicable to 100% of Telefônica Brasil's operations: Radio Base Stations (RBS), fixed and mobile telephony centers, data centers, stores, call centers, and offices.

The risk management at Telefônica Brasil follows a structured management model to identify, measure, and possibly mitigate the risks it is exposed to. The model is aligned with the company's strategy, based on the methodology of the COSO (Committee of Sponsoring Organizations of the Treadway Commission), facilitating the prioritization and development of coordinated actions in response to identified risks. To guide this management, Telefônica Brasil implemented a Risk Management Policy approved by the Board of Directors and employed a Risk Management methodology, both aligned with internationalbest practices and corporate governance.

For risk assessment, both the bottom up and top down perspectives are considered.

Bottom up: Based on a self assessment perspective where managers are responsible for identifying specific risks in their area, as well as evaluating and defining the response to them.

Top down: A cross functional assessment of specific risks is conducted to group them into categories that reflect the most relevant themes for the Company. The Audit and Control Committee assists the Company's Board of Directors in overseeing the risk management system. In order to ensure proper governance by this Committee, regular meetings are held to report the results of risk management efforts, and specific presentations about the key risks the Company is exposed to are provided.

Climate risks are considered a fundamental risk for Telefônica Brasil and are monitored within the Risk Management Model of the Company. Given the significance of this issue, Telefônica Brasil has a climate change adaptation plan in place to avoid the materialization of the impacts identified.

The plan includes several lines of action to limit the exposure to both physical and transition risks and enhance the Company's resilience to climate change. The main measures contained in the adaptation plan are as follows:

Acute Physical Risks Extreme Weather Events

Business continuity plans for climate-related disasters that could impact Company's operations are established. In order to prevent financial losses due to the replacement of network assets damaged by extreme events, climate risk modeling is conducted. Information from all locations where infrastructure is installed is compared with historical data on these events using relevant computer systems (such as RMS, EQCat, etc). As a result of this process, probabilities of potential losses are determined across different scenarios and return periods. This data analysis helps identify the most efficient structure to determine the limits and retentions of material damage in the insurance program. In addition to covering material damages, this insurance program also covers the loss of revenue and/or customers.

To manage acute physical risks derived from climate change, Telefônica Brasil has a dedicated Business Continuity Management department that engages in proactive risk management, ensuring maximum operational resilience against any potential disruptions.

Telefônica Brasil carries out its continuity plans to establish how to restore essential functions that may be disrupted. Additionally, Company maintains a global crisis management system to handle high impact threats, including experts for each type of incident (such as natural disasters). The local committee operates in four phases: (1) crisis alert; (2) impact assessment; (3) development and implementation of action procedures; (4) return to normalcy after the crisis.

Chronic Physical Risks Average Temperature Increase

Energy Efficiency Plan encompasses a set of projects aimed at reducing energy consumption and cooling needs, such as free cooling for air conditioning using external air (more commonly used in sites in the South of Brazil), upgrading air conditioning systems and equipment, or including technical specifications in the purchase of network hardware to enhance their resistance to higher temperatures.

These measures not only promote efficiency in the energy used for cooling but also prevent equipment breakdown, which is expected to increase in the future due to rising average temperatures and a higher probability of heat waves. Another example of projects that Telefônica Brasil has undertaken in this area are those developed under a new format called (ESaaS – Energy Saving as a Service). This model compensates a specialized provider based on the pricing of the energy savings generated by the project.

The partner company is responsible for the planning, investment, operation, and maintenance of the energy solution, which can include the replacement of air conditioning equipment, energy supply systems, lighting, or electricity generation.



Market Transition Risks Increase in energy price

The Renewable Energy Plan is based on establishing long term electricity purchase contracts to maintain a 100% renewable energy supply. In addition to reducing risks related

PLAN MODELS

PLAN MODELS

Action Areas to Achieve Objectives

The climate action plan of Telefônica Brasil is guided by five fundamental models that form the pathway to achieve short, medium, and long term objectives.

 The operational model aims to generate efficiencies in Telefônica Brasil's internal processes to reduce scopes 1 and 2 emissions and offset/neutralize those that have not yet been avoidable.

2 The value chain model addresses scope 3 emissions by engaging and developing suppliers and manufacturers and applying circularity criteria in the procurement of equipment and materials.

3 The commercial model encourages Telefônica Brasil to develop and offer digital products and services that enable customers to reduce their emissions and promote conscious consumption, encouraging consumers to use sustainability criteria in their purchasing decisions.

The financial model encompasses tools for investing in operational efficiency and internalizing carbon pricing as catalysts to support decision making and financial analysis of climate change.

Finally, the governance model, cross cutting across the entire Company, guides the other models. Telefônica Brasil operates based on a robust governance framework focused on achieving the goals related to priority topics for its strategy, including climate objectives. Within this model, Company also to the volatility of energy costs generated by the country, the plan enables less dependence on I-RECs, contributing to OPEX savings as it fixes the energy price for an extended period.

acknowledges its ability to influence society and establishes alliances with groups aligned with its interests to foster discussions and actions to combat climate change.

Operational model

Main Objectives

Achieve a 72% reduction in scopes 1 and 2 emissions by 2025, compared to 2015.

Achieve a 90% reduction in scopes 1 and 2 emissions by 2030, compared to 2015.

Sustain the 90% reduction in scopes 1 and 2 emissions by 2040, compared to 2015.

Achieve a 90% reduction in the energy consumption indicator per unit of traffic (MWh/Pb) by 2025, compared to 2015.

Maintain the use of electricity 100% from renewable sources.

Key Action Areas:

- Measures to reduce fuel usage in generators.
- Fleet replacement and use of renewable fuels.

 Modernization of air conditioning equipment, leak control, and replacement of refrigerant gases with lower impact alternatives.

- Energy efficiency projects.
- Renewable energies: free market and expansion of distributed generation projects.
- Compensation/neutralization of emissions.

Despite not being a sector heavily reliant on fossil fuels, telecommunications rely on a significant amount of electricity to maintain the transmission network and data switching operations. Energy efficiency is one of the most important pillars to ensure the environmental and economic sustainability of digitalization, as it is the sector's primary input.

Maintaining electricity consumption stable and reducing GHG emissions even with business growth is one of the major challenges for Telefônica Brasil. The company is addressing this challenge by implementing Energy Efficiency and Renewable Energy plans, along with various other initiatives.

Telefônica Brasil also has a guideline called "Low Carbon Procurement Instruction", which aims to guide technical teams on applying energy efficiency and low carbon principles in the procurement of equipment that are significant energy and refrigerant consumers. This guideline is aligned with the Supply Chain Sustainability Policy and the Energy Management Policy. Through this guideline, the Total Cost of Ownership (TCO) concept is incorporated into the acquisition process, considering the amount of energy the equipment will consume during its use and the associated carbon emissions, not just the purchase cost.

Key actions related to scope 1 emissions

Management of consumption by equipment and addressing high emission sites.



Combustion in stationary sources

Over two thousand generators spread throughout

Use of diesel and gasoline in generators to provide emergency electricity during power shortages, in order to prevent a disruption of services.

> Increased lithium battery autonomy, with a delay in generator activation in case of power outage.

> Studies for the implementation of batteries through Energy Saving as a Service (ESaaS), considering the

most sustainable available technology.

> Delay and rotation of generators (65 technical sites planned for 2023).

> Revision of the maintenance process for primary cabins to avoid generator usage (623 cabins projected for 2023).

> Investigation into generators powered by renewable fuel.

> Elimination of off grid sites.

Combustion in mobile sources

Around five thousand vehicles in our fleet.



Use of vehicles for commercial, installation, maintenance, and plant inspection purposes, as well as for executive transportation.

> Promotion of efficiencies in per kilometer consumption through fleet replacement and alerts

for the accomplishment of regular preventive maintenance

> Use of ethanol in 100% of the flex fleet, which encompasses the majority of vehicles.

> Expansion of the electric vehicle fleet: planned the inclusion of 200 vehicles in 2023.



> Retrofitting machines for gases with lower impact (zero ODP and lower GWP) (planned for 45 technical sites in 2023).

- > Replacement of the cleaning gas R141b with lower impact gases, such as SF80 (complete substitution in technical sites starting from July 2023).
- > Utilization of PVC curtains to reduce the coverage area that the air conditioning needs to cool (planned for 30 technical sites in 2023).
- > Maintenance actions to mitigate operational failures and leaks.
- > Collection and reuse of gases or sending for cleaning and/or proper disposal.
- Enhanced leak control through process digitalization, enabling better data monitoring and management.

Key actions related to scope 2 emissions

Energy efficiency and renewable energies.

Electricity consumption

Over 35 thousand consumption points spread across all states of Brazil.

Energy Efficiency Plan

> Power Saving Features (PSF): Implementation of energy consumption optimization systems by using artificial intelligence tools. Expected to reach 10 thousand sites by the end of 2024.

> Network Transformation: Projects related to the shutdown of legacy networks such as 2G and 3G, equipment consolidation, network reconfiguration, and replacement of copper networks with fiber optics (which is 85% more efficient in customer access). According to a real world measurement study, 5G technology is up to 90% more efficient th an 4G in terms of energy consumption per unit of traffic.¹³ > Model (ESaaS – Energy Saving as a Service): Studies to assess the feasibility of projects for modernizing, monitoring, and automating air conditioning systems, battery replacements, among others.

> Other energy efficiency actions: Replacement of fluorescent lamps with LED technology, power factor correction, installation of motion sensors and telemetry, among others.

In 2022 alone, the Company implemented a total of 26 energy efficiency initiatives in operations and offices, which resulted in saving 72 GWh, thus avoiding the emission of more than 3 thousand $tCO_{3}e$ into the atmosphere.

Renewable Energy Plan:

Company aims to diversify and regionalize its sources of generation to ensure supply reliability. To achieve 100% renewable consumption, it combines the purchase of incentivized energy from the free market with **distributed generation projects** and the acquisition of I-RECs certificates for sites where conversion to one of the initial models is not yet feasible.

Distributed Generation (DG) Project:

Since 2018, Telefônica Brasil has been producing a portion of its own energy through the distributed generation model, using renewable sources including solar (61%), hydroelectric (27%), and biogas (12%). By 2022, it had a total of 48 operating renewable energy plants. Investments in the distributed generation model are made by contracted companies, with a long term partnership commitment of up to 20 years with Telefônica Brasil. With all plants operational, Telefônica Brasil will generate approximately 711 thousand MWh of energy per year, enough to supply the entire consumption of a city with up to 300 thousand inhabitants. Once the 85 plants included in the project are completed, distributed generation will account for approximately 90% of Telefônica Brasil's low voltage consumption, serving around 30 thousand units including stores, towers, antennas, telecommunications equipment, and offices. In addition to the environmental benefits of using renewable and low impact sources, this measure also contributes to reducing energy costs.

The gains from this model are substantial. Designed for regional energy supply, **decentralized energy** generation systems ensure the optimization of project areas, and since they are located close to consumption points, they help reduce technical losses. The distributed generation project also contributes to the creation of direct and indirect employment opportunities in localities and fosters community development through the construction and operation of the plant.

Neutralization of emissions

Telefônica Brasil's is committed to reduce emissions from its operations and the entire value chain by a minimum of 90% by 2040, neutralizing a maximum of 10% of remaining residual emissions. The neutralization of emissions is crucial to achieve a balance between the emissions produced by the Company and those removed from the atmosphere through carbon capture or absorption.

In order to offset the impact of emissions that have not yet been avoided, Telefônica Brasil will enter the voluntary market to purchase carbon credits and/or develop its own carbon removal projects, always verified by accredited third parties and in accordance with the Company's established criteria:

• **Carbon absorption projects,** preferably **nature-based** ones, such as reforestation, afforestation or ecosystem restoration using native plant species. • **Projects with environmental and social co-benefits** that contribute, as much as possible, to achieving the Sustainable Development Goals (SDGs)¹⁴ and respect the rights of local communities and indigenous populations.

• **Projects certified** with nationally/internationally¹⁵ recognized standards and verified by an accredited third party.

• Preferably with territorial scope in Brazil.

With operations in all states of Brazil, Telefônica Brasil will prioritize carbon credit projects developed within the country that offer significant opportunities for mitigation actions based on nature-based solutions. A study¹⁶ conducted by the consulting firm Waycarbon and ICC Brazil highlighted the Country's potential to meet a substantial portion of the global demand for carbon credits under Article 6.4 of the Paris Agreement, potentially covering up to 28% of the estimated carbon credit demand (around 4.3 thousand MtCO2e). In the voluntary market, the Brazilian supply could cover up to 48.7% of the global demand, according to the study.

- Demonstration of additionality criteria.
- Demonstration of long term impact

In the short to medium term (up to 2024, for scopes 1 and 2), Telefônica Brasil will use carbon credits for emissions reduction from deforestation and degradation, aiming to help curb deforestation in Brazil and contribute to biodiversity conservation. Additionally, carbon removal credits will be obtained through absorption projects. The credits acquired by 2024 must adhere to specific criteria, including support for conservation and sustainable forest management of Brazilian forests, demonstration of additionality, provision of environmental and social co-benefits, and certification according to recognized standards verified by an accredited third party.

Supporting projects that protect forests is crucial during the transition to net zero emissions. The Science Based Targets initiative (SBTi)¹⁷ recommends that companies prioritize protecting and enhancing carbon sinks (terrestrial, coastal, marine, etc.), by investing in mitigation actions beyond their value chain. Particularly in Brazil, where a significant portion of emissions stems from land-use changes, supporting REDD+ (Reducing Emissions from Deforestation and Forest Degradation) projects is highly relevant.

Value chain model Main Objectives

Reduce by 39% CO₂ emissions in the value chain (scope 3) by 2025, 56% by 2030, and 90% by 2040, using 2016 as the base year.

Include Ecodesign criteria in 100% of new equipment models under the Telefônica Vivo brand for customers by 2025.

Include circularity criteria in 100% of eletronic equipment purchase processes from B2B/B2C customers by 2025.

Restore 90% of fixed line equipment (modems and decoders) collected from customers by 2024, and recycle 100% of equipment that cannot be reconditioned.

Indirect emissions (scope 3) occur throughout an organization's value chain, including emissions from suppliers, customers, product usage, waste disposal, amoung others. Since these emissions occur outside an

organization's direct control, reducing them requires effective cooperation and engagement across the entire chain with partners and suppliers.

At Telefônica Brasil, due to the significant work being done to decarbonize the Company's operational model and consequently reduce scopes 1 and 2 emissions, scope 3 emissions have become increasingly relevant. In 2016 (base year), scope 3 emissions represented 77% of total emissions. By 2022, this share had risen to 90% of total emissions. The largest source of these emissions is the purchase of products and services, accounting for over 60% of scope 3 emissions, followed by capital goods at nearly 20%. As a result, the supply chain is where 80% of emissions in Telefônica Brasil's entire value chain are concentrated.



In order to achieve the goal of reducing scope 3 emissions, Telefônica Brasil collaborates with its suppliers to disseminate information, development, and maturity throughout the chain. Telefônica Brasil's supply chain comprises companies of different regions, sizes, and segments, ranging from suppliers of cell phones and gadgets sold in the Company's stores and website to suppliers of heavier equipment used in network infrastructure, like antennas and transmitters, as well as service providers, such as consultancies and communication agencies.



With such a diverse supply chain, Telefônica Brasil conducted an in depth assessment of all supplier categories to establish a meaningful and inclusive emissions scope. Adhering to the principles of fairness and equity, the Company's core value was to provide equal development opportunities to all suppliers within each selected category.

Key Actions

Carbon Program in Suppliers' Chain

In 2021, Telefônica Brasil took a significant step by establishing the Supplier Carbon Program with the aim of engaging suppliers on climate change business impacts and proposing initiatives for measuring, managing, and reducing greenhouse gas (GHG) emissions. Among 1.2 thousand suppliers, 125 companies from the most carbon intensive categories were selected: electronic equipment (B2B and B2C), energized network equipment, passive network materials, and network services, as well as logistics and transportation services that involve significant fuel use. This selection covers 90% of emissions and 52% of spending within the supply chain. The majority of suppliers, around 75%, are local companies.

The engagement program covered various stages, starting with an assessment of each supplier's maturity in relation to their involvement in the topic. The results for such diagnosis showed that a significant portion of suppliers (76%) did not conduct inventories, which made it difficult to establish quantitative goals without a history of emissions. Yet, it also highlighted this programs importance in developing our supply chain. Next, the program included a series of webinars in which we facilitated a knowledge journey on carbon emissions, ranging from basic levels (such as how to create an inventory) to more advanced topics, including climate risks and transparency in reporting.

Throughout 2022, Telefônica Brasil worked with these suppliers to establish voluntary commitments in the fight against climate change, offering different levels of commitment, ranging from creating emissions inventories to achieving Net Zero. As a result of the program, 60% of engaged suppliers are taking climate action, accounting for 82% of our supplier emissions. The entire process was supported by a specialized international consultancy that provided technical assistance in crafting individualized commitments for the suppliers.

Given the continuous evolution of the supply chain, Telefônica Brasil engages in an ongoing process of supplier development. The cycle begins with evaluating and selecting representative carbon intensive suppliers, followed by engagement and training stages. This leads to identifying and measuring their CO_2 impact and then collaborating with these companies to establish voluntary targets for emissions reduction, renewable energy usage, or carbon offsetting. The entire process is supported by a mechanism for monitoring each supplier's progress during the registration and renewal stages for new procurements.





Starting in 2021, the most relevant suppliers in terms of emissions were invited to participate in the CDP Supply Chain program, which aims to collect supplier related information regarding climate change. This includes the measurement and management of greenhouse gas emissions, the implementation of reduction practices, and the adoption of renewable energies. Moreover, the program provides a platform for companies to share best practices, learn from each other, and collaborate on reducing CO_2 emissions. In essence, the CDP Supply Chain program

promotes transparency, engagement, and collective action concerning climate change in the supply chain. In 2022, a total of 50 suppliers of Telefônica Brasil, representing 66% of supply chain emissions, were invited to respond to the CDP questionnaire on climate change.

The supply chain is dynamic and continuously evolving. For 2023, we aim to cover 90% of emissions in our supply chain, with suppliers participating in the CDP Supply Chain program.

Ecodesign for Products and Services



Ecodesign helps reduce the use of raw materials in manufacturing, the energy consumption of the product, and the emissions associated with both production processes and the product's usage phase.

Telefônica Brasil works collaboratively with its suppliers to implement ecodesign measures in products and encourages them to prioritize a full lifecycle assessment, considering the preservation of natural resources, such as water and electricity, as well as the reduction of single-use plastics. The Half SIM Card is an Ecodesign example that achieved a 50% reduction in plastic usage.

New models based on digitalization also contribute to eliminating the use of materials, such as the eSIM launched in 2021 for businesses in an innovative manner. The migration from the traditional physical SIM card to the eSIM technology is done entirely remotely. In 2022, over 88 thousand migrations were performed. Without the need for a physical chip, we reduce plastic usage in packaging and lower carbon emissions from transporting these materials. Additionally, it's worth highlighting the convenience of activating or transferring lines, the security, and the conservation of the chip itself.

As an objective, Telefônica Brasil aims to incorporate Ecodesign criteria for all new equipment models that are delivered to customers' homes under the Company's brand by 2025. To achieve this, Company collaborates with its suppliers, encouraging them to prioritize a comprehensive lifecycle assessment that considers the preservation of natural resources, such as water and electricity, in addition to reducing the use of single use plastics.

Sustainable Procurement

With 82% of Telefônica Brasil's scope 3 emissions coming from suppliers, collaborating with companies that have defined decarbonization strategies positively impacts reducing emissions associated with their procurement of goods and services.

As a result, Telefônica Brasil has been incorporating new requirements related to climate change into its procurement process. The Company requests that its strategic suppliers establish emission reduction goals aligned with the Science Based Targets initiative (SBTi). Specifically, these suppliers, which are significant in terms of emissions, are expected to commit to developing science-based reduction targets with SBTi within six months after signing the contract. They must also complete the validation process with SBTi within the specified program timeline.

Furthermore, Telefônica Brasil is gradually incorporating environmental and circular economy criteria into acquiring electronic equipment. In 2022, Company established criteria for assessing purchased equipment's repairability, recyclability, durability, and upgradability. The goal is for 100% of electronic equipment procurement processes to include these circularity criteria by 2025.

Extending the Lifespan of Materials and Equipment

Implementing a circular economy in the business model can drive sustainable practices that benefit the environment, which is crucial in addressing climate change and biodiversity loss. It is cost effective and innovative for reducing vulnerability to input and material supply fluctuations or scarcity.

With the goal of refurbishing and reusing 90% of fixed equipment (modems and decoders) collected from customers' homes by 2024, Telefônica Brasil practices the refurbishment and repurposing of equipment and materials before their disposal. This process allows for the reintroduction of these items into the Company's supply chain.

In 2022 alone, around 1.2 million of these devices were refurbished and returned to customers' homes in perfect working condition, avoiding the emission of more than 97 thousand tons of CO_2 associated with the manufacturing of new equipment. Over the last seven years, Telefônica Brasil has recovered over 8.5 million moderns and decoders. For this process, customers can schedule home collection or return the used devices to stores through the call center, web forms, or their artificial intelligence system (Aura).

The repair and reuse of Telefônica Brasil's equipment contribute to a circular economy and the reduction of scope 3 emissions by decreasing the need to purchase new equipment. This reduces the impact that would be generated throughout the entire production cycle of a new device, from raw materials to the transportation of the new product to distribution centers.

When repair and reuse are not possible, the equipment is handed over to a Telefônica Brasil partner company, which collects, transports, stores, separates different materials (ferrous metals, non-ferrous metals, batteries, glass, plastics, among others) and carries out recycling. In this final stage, all materials are transformed into raw materials that the industry can reuse. What cannot be reused is converted into a source of energy.

Recycling electronic waste avoids the need to extract new resources, as it allows the recovery of increasingly scarce materials on our planet, reducing the need for raw material extraction and saving energy. This contributes to reducing emissions throughout the value chain. Out of the total e-waste generated in Telefônica Brasil's operation, over 98% is recycled.

Commercial model

Main Objectives

Expand the portfolio and representation of products with the Eco Smart Seal for B2B customers.

Incorporate sustainability criteria into customer decision making.

- Refurbish mobile devices, encouraging their reuse.
- Expand 5G, resulting in increased energy efficiency.

The era of technology is advancing rapidly, bringing innovations like artificial intelligence, cloud computing, 5G connectivity, and the Internet of Things (IoT), which promise to bring about significant transformations in the coming years. This digital revolution holds enormous potential to drive the economy while reducing energy consumption and resource waste across various sectors. Moreover, it supports global health, sustainability, and economic objectives, enabling swift change through new business models. As indicated by a study conducted by the Exponential Roadmap initiative, the advancement of digital technologies can significantly reduce emissions in other sectors. In the fields of energy, industry, agriculture, construction, and transportation, the study points out that digital solutions can decrease fuel consumption related emissions by 15% by 2030, and up to 35% when considering other impacted factors. This is due to the capacity of these solutions to influence consumers, business decisions, and system transformation. The study emphasizes that the digital revolution and progress in information technologies are crucial elements for transitioning towards disruptive business models that integrate sustainability, resource efficiency, circular economy, and climate actions into their operations.

At Telefônica Brasil, we are committed to assisting our customers in the decarbonization of their activities, utilizing digital transformation and connectivity as key factors for efficient resource use and sustainability promotion. We provide information about the environmental benefits or attributes of our products and services, enabling customers to identify how the purchase of technology will help further their own sustainability goals.

Main Actions

Connectivity

Connectivity is the first step to access the digital world. It is the core service we directly offer our customers and is present in most of our advanced digital solutions.

Our strategy focuses on optimizing our network through energy efficiency, renewable energies, and advanced technologies, such as fiber optics replacing copper (85% more energy efficient) and 5G (up to 90% more efficient than 4G in terms of energy consumption per unit of traffic). In 2022, the effective arrival of 5G in Brazil made Telefônica Brasil a protagonist in the future of this technology. The activation of the fifth generation, in the 3.5 GHz frequency, for mobile networks is already a reality in the 27 capital cities, representing 24% of the Brazilian population. In 2023, the technology will reach more locations, revolutionizing various sectors of the Brazilian industry, such as agribusiness. In this sense, Telefônica Brasil will meet the growing demand for connectivity, accelerating the digital ecosystem, by using its experience and market leadership to deliver solutions for individuals and businesses with all the potential that only 5G will enable

With these actions, the Company can offer a robust, secure, stable, increasingly sustainable and low carbon network to meet the growing demand for data, enabling the adoption of actions that favor the reduction of CO₂ emissions, such as remote work, migration of services and servers to the cloud, remote education and healthcare, among others.

Connected Life

Thanks to connectivity, our residential segment customers can use applications or online services that allow them to transform their daily actions into more sustainable ones, such as telecommuting, remote learning, audio/video calls, car sharing, satellite navigation applications, real time access to public transportation apps, shared accommodation, online shopping, and online banking.

To understand the usage profile of these applications and the adoption of new more sustainable habits, such as reducing travel, we surveyed over 3.3 thousand customers in Spain, Brazil, and Germany in 2022. With the data obtained, we developed a methodology that allows us to quantify CO_2 emissions that are avoided thanks to the use of our connectivity and digital applications by B2C customers. The main findings of this research were that the most frequently used digital applications are audio/video calls, online shopping, and online banking. All of them make it possible to reduce or eliminate daily commutes or longer trips, facilitating telecommuting, remote learning, and access to online services. This implies a reduction in the fuel consumption of vehicles that are no longer used and therefore a reduction in the related GHG emissions.

Our customers also use car and accommodation sharing applications (less polluting options than traditional ones), public transportation apps that provide real time information encouraging their use, or satellite navigation apps that provide information about the most efficient routes.

Through a methodology developed with the support of Carbon Trust, we could convert the energy, operational, or material efficiencies generated by the implemented services into CO_2 emissions that were no longer generated (avoided emissions). Calculating in this way, in 2022 our customers avoided 23.6 million tons of CO_2 by using our broadband and mobile connectivity services in the B2C segment, as well as digital services. This demonstrates the capability of new technologies to accelerate the transformation of the economy toward a more sustainable model.

Eco Smart Seal

Using as a base its network that works 100% with renewable energy and low CO₂ emissions, Telefônica Brasil offers B2B customers solutions based on Connectivity, Internet of Things (IoT), Cloud, Big Data or 5G, which promote digital transformation and provide significant environmental benefits in their activities or production processes. This includes resource optimization, driving the transition to circular economy models, and emissions reduction. The Eco Smart Seal identifies products' environmental benefits, allowing customers to incorporate sustainability criteria into their purchasing decisions. As a result, customers can develop their businesses more efficiently and sustainably, enhancing their competitiveness in the market.





The Eco Smart Seal is **verified by AENOR (Spanish** Association for Standardization and Certification) ensuring the reliability of environmental benefits mapped in each solution and helping our customers identify how digitalization can make their organization more efficient and sustainable.

The seal has in four variations, representing different environmental benefits: energy efficiency, water consumption reduction, CO_2 emissions reduction, and circular economy.

Energy efficiency

Services that allow the customer to control and manage the energy of installations and/or equipment, reducing their energy and/or fuel consumption.

> Fleet management, services that enable fuel savings.

Cloud services, reduce the customer's energy consumption by using highly efficient platforms or servers in data centers.

Water consumption reduction

uildings, or applied to services like rrigation management in cities or agriculture, wich reduce water resource consumption.

Smart Agro solutions promote ligitalization in the agricultural secto and enhance decision making based on crop data and environmental parameters to optimize resource usage, especially water in irrigation, as well as fertilizers, pesticides, and other agricultural input

CO₂ emissions reduction

Digital Workplace solutions enable remote and hybrid work, which can reduce employee commuting to the workplace

Air Quality Sensors and the use of Big Data based on the collected data (environmental pollution and traffic) are used to predict pollution levels and implement measures to improve air quality and reduce CO, emissions.

Circular Economy

Services that allow monitoring of equipment/assets and provide information about their operational status, optimizing maintenance and preventing breakdowns, thus extending their lives

Products and services that optimize production processes, reducing raw material consumption or minimizing losses.

The incorporation of blockchain technology, in many of such examples provides improvements in traceability, transparency, and security, enabling faster and more efficient ways of doing things, there by promoting the circular

Eco Rating Seal

Telefônica Brasil was a pioneer in bringing the Eco Rating Seal in the country in 2016, offering customers more sustainable consumption options. This initiative measures the environmental impact of mobile phones throughout their entire lifecycle using a methodology that assigns a score (between 1 and 100) to each device, with higher scores indicating greater sustainability. The label also provides additional information on the following topics:

> **Durability:** The robustness of the device, including battery lifespan and the warranty period for the phone and its components.

> Repairability: The smartphone can be easily repaired, including a design and support to extend its lifespan.

> Recyclability: This covers how the device's components can be recovered and disassembled, the information provided to facilitate this, and how its materials can be recycled. > Efficiency: The amount of greenhouse gas emissions generated during the smartphone's entire lifecycle.

> Efficiency in resource usage : The amount of scarce raw materials required to manufacture the device and its impact on the depletion of natural resources.

In Brazil, this initiative has the participation of manufacturers like Motorola, Samsung, and OPPO. A significant portion of smartphone portfolio, approximately 50 models available through Vivo's sales channels (online store and physical stores) already carry the Eco Rating classification.

Among the key objectives are assisting customers in incorporating sustainability criteria into their purchasing decisions and **encouraging manufacturers to reduce the impact of their devices, as the environmental performance becomes evident through the seal.**



Telefônica Brasil continues to work towards engaging other manufacturers in reducing the environmental impacts of their devices. In 2022, 71% of the mobile phone catalog offered to customers already featured this system.

The Eco Rating Seal is promoted through store activities and the Vivo website. The entire store team is trained to assist consumers during the selection process. To view the rating of a smartphone, customers can simply access the website and select the desired device.

Cell Phone Trade in and Recycling

Reutilization and recycling of used cell phones reduce energy and resource consumption by avoiding manufacturing new devices. That's why Telefônica Brasil offers its customers the option to trade in their cell phones through the program "Vivo Renova". The program encourages the reuse of cell phones, extending the lifespan of these devices.

To incentivize the trade in of these devices, Telefônica Brasil offers discounts to customers who turn in their used phones when purchasing new smartphones. The returned devices are assessed based on their model and condition, restored, and sold through a partner company. In 2022, over 124.8 thousand cell phones were collected, and since the program's inception in 2013, around 770 thousand cell phones have been reutilized.

In Brazil, more than 2 million tons of electronic waste are generated annually, and less than 3% of this volume being recycled. Given this scenario, Telefônica Brasil's program "Vivo Recicle" raises awareness nationwide about the environmentally proper disposal of electronic waste, ensuring that all collected materials are recycled and reintroduced into the production cycle.

The program collects small waste items like cell phones, accessories, cables, chargers, headphones or earphones, and used batteries of any model and carrier. Collection bins are available in all of our stores nationwide. In 2022, 11.3 tons of electronic waste were collected. The program as a whole has collected over 5.2 million items, properly disposing more than 139 tons of waste materials.



Financial model

Objectives

Continue to invest in more efficient infrastructure, such as the replacement of copper with fiber, and embrace efficiency generation and modernization through the Energy Saving as a Service (ESaaS) model.

Implement new mechanisms to internalize the internal carbon price starting from 2023.

Adhere to national and international requirements for disclosing the impact of climate change on the business.

Decarbonizing the global economy is urgent and crucial to avoid greater disasters and wealth loss in this century, according to the study¹⁸ by the Boston Consulting Group (BCG) titled "Seizing Brazil's Climate Potential". Transitioning to a Net Zero planet will require an investment of US\$ 100.15 trillion over the next three decades. Brazil is viewed as a leader in offering tangible climate solutions with the potential to attract investment on the scale of US\$ 2-3 trillion by 2050. Among the factors that position Brazil in this role, BCG highlights the potential for reforestation and forest protection (representing approximately 10% of the world's potential for nature-based mitigation solutions) as well as the significant presence of renewable energy sources in the country's energy matrix (85% compared to 26% globally). Additionally, there are potentials in the areas of sustainable agriculture and green industrial products.

In line with the Country's potential, Telefônica Brasil is taking actions toward a decarbonized economy, leveraging and diversifying the available tools to track this process in a financially viable manner.

Main Actions

Investments in efficiency and infrastructure

As a way to integrate its sustainability strategy into its business strategy, Telefônica Brasil has decided to link financing to relevant ESG commitments for the Company, stakeholders, and the social, economic, and geographic context in which it operates.

Recognizing their joint responsibility to promote a sustainable financial market and undertake the necessary efforts to transition to a sustainable economy, Telefônica Brasil has created the Sustainability-Linked Financing Framework¹⁹ (the "Framework"). This document enables the Company to align its financial strategy, mission, and sustainability objectives goals while facilitating the channeling of resources from institutional investors and clients into investments that contribute to a low carbon economy. Furthermore, it allows the Company to promote the global development of the sustainable financial market.

For the selection of KPIs and goals, Telefônica Brasil conducted a study to assess topics with the highest potential for society and strategic importance for Company in two dimensions: environmental and social. This evaluation has considered aspects such as double materiality, alignment with the strategy, ESG trends, additional value, and importance for the market and sustainability experts. In this context, ESG topics with already established advancements in recent years, such as Renewable Energies and Management of Electronic Waste, or those with regulatory or market driven objectives, such as network expansion, were not included. These topics were already linked to internal and external mechanisms driving them within the Company. Therefore, Telefônica Brasil chose to select KPIs and goals that demonstrate to stakeholders how the Company aims to achieve its objectives through a diverse and inclusive team and processes guided by alow carbon economy.

Available at: https://web-assets.bcg.com/45/e6/345b6c554c5fbc5155cc86b3ce8a/brazil-climate-report-sept-15.pdf.
 Available at: https://ri.telefonica.com.br/pt/esg/relatorios-de-sustentabilidade#tipo_39.

In 2022, Telefônica Brasil issued BRL 3.5 billion in Sustainability-Linked Bonds (SLBs), its first debt instrument tied to achieving ESG goals. Up to 2027, these commitments foresee a 40% reduction in direct greenhouse gas emissions (scope 1) compared to 2021 in the environmental pillar, aligning with the decarbonization journey towards net zero emissions. In the social sphere, Telefônica Brasil aims to achieve an indicator equal to or greater than 30% representation of black individuals in leadership positions. The funds are used to strengthen the Company's cash position and support ordinary business operations. Currently, Telefônica Brasil's investments are primarily focused on growth technologies, emphasizing Fiber and 5G expansion, which results in energy efficiency for the Company.

To continue investing in operational modernization and efficiency, since 2021, Telefônica Brasil has also been adopting the Energy Saving as a Service (ESaaS) model for project analysis. This model involves an agreement between the Company and a specialized supplier that designs the solution, invests in it, performs maintenance, and ensures energy savings. These actions encompass various initiatives, such as the replacement of air conditioning systems (leading to reduced fugitive emissions), batteries, and lighting. The service is paid to the supplier based on the savings generated from the implemented measures. With this model, Telefônica Brasil can leverage third party investment and expertise, allowing the Company to focus on its core business, reduce energy consumption, and generate operational expenditure savings (OPEX).

In addition to the ESaaS model, Telefônica Brasil also allocates a portion of its CAPEX (capital expenditures) to implement projects that result in energy efficiency, reducing the impact of energy consumption. In 2022 alone, approximately BRL 5.7 million were invested in initiatives that bring this efficiency to the Company.

Lastly, Telefônica Brasil is contributing to aligning with best practices in sustainable finance, including international advancements, such as the European taxonomy.

Carbon Pricing

Establishing an internal carbon price is one of the most effective ways for companies to manage risks and opportunities associated with reducing their emissions, thereby internalizing the costs and enabling efficient financing for their transition to a low carbon economy.

From this perspective, Telefônica Brasil is working collaboratively within the group to establish an internal carbon price as a catalyst to assist in the journey to achieving net zero emissions by 2040. The internal carbon price will help the Company make better investment decisions and equipment purchases that influence achieving and improving its emission reduction objectives.

Currently, Telefônica Brasil already has a directive in place to incorporate a shadow price in the decisions related to the purchase of energy consuming equipment (electricity and/or fuels), as well as equipment containing refrigerant gases. This corporate directive, known as the Low Carbon Purchasing Instruction, guides the need to calculate the Total Cost of Ownership (TCO) of such equipment, including carbon costs. This allows for directing procurement decisions toward more efficient technologies and equipment with a lower carbon footprint. With this strategy, the Company aims to avoid future CO_2 emissions, with the financing being carried out through CAPEX.

In parallel, the development of an internal GHG emissions fee is under consideration. This fee could generate revenue for Telefônica Brasil to purchase carbon credits and/or fund its own carbon removal projects, helping to neutralize its emissions, starting with scopes 1 and 2 by 2025. This effort impacts the Company's operational areas responsible for generating emissions, with its financing sourced from OPEX.



Disclosure of the Impact of Climate Change on the Business

Companies need to be vigilant about how climate change can affect their financial management, understanding the associated costs and the benefits/savings achieved through proper management. Assessing the need for investment to ensure business continuity in a decarbonized economy, as well as market opportunities, is extremely important both in the short and in the medium and long term.

Although currently there aren't requirements obligating companies to report the impact of climate change in their financial statements in Brazil, there are movements in this direction within the scope of the SEC (Securities and Exchange Commission) and CVM (Brazilian Securities and Exchange Commission) for publicly traded companies, especially following the launch of IFRS S2 Climate-related Disclosures.

Given this context and investors growing interest in climaterelated matters, Telefônica Brasil is identifying potential costs, benefits, and savings associated with its activities related to climate change. The Company's commitment is to monitor key regulations in this regard in order to be prepared to comply with them to provide transparent information to its stakeholders.

Currently, Telefônica Brasil reports in its Quarterly Results release a view of revenues related to B2B digital products and services that have environmental and low carbon benefits. According to the Eco Smart methodology, most of these products and services fall under activities that can contribute to climate change mitigation and adaptation, as they help clients become more efficient while decarbonizing the economy. In 2022, Telefônica Brasil achieved revenues of BRL 1.6 billion from Eco Smart products and services that promote energy efficiency and climate change, aligned with the objective of limiting global temperature rise to 1.5 °C. In 2022, the Company's clients avoided approximately 23.6 thousand tons of CO₂ emissions with the solutions offered, demonstrating the potential of connectivity and digital services to reduce CO₂ emissions and align with the shift towards more sustainable models

Governance Model

Transparency and integrity in the management of climate change by companies are becoming increasingly relevant principles in disclosing their commitments. According to TCFD's (Task Force on Climate-related Financial Disclosures) recommendations, companies must have well defined governance mechanisms to allocate responsibilities to different governance bodies and ensure the fulfillment of objectives outlined in the climate action plan.

Telefônica Brasil incorporates sustainability topics into its organizational culture, and environmental issues and climate change are cross cutting subjects throughout the Company. They form one of the six pillars within the strategic framework of #SustainableVivo (#VivoSustentável)

Governance Mechanisms

The energy and climate change strategy are part of the Company's Responsible Business Plan (RBP), with its indicators and goals monitored and approved by the Board of Directors through the reporting of the Quality and Sustainability Committee which meets ordinarily twice a year and, extraordinarily, whenever called by the Chairman of the Committee.

Among its various responsibilities, this committee assesses and monitors the alignment of the Company's sustainability and quality strategy, suggests improvements when opportunities arise, and periodically examines, analyzes, and tracks the RBP and the Company's sustainability indices, recommending potential actions when opportunities are identified. Achieving environmental, climate change, and net zero emissions goals is embedded within the RBP, which aggregates all ESG goals and objectives. the Energy Efficiency Plans and Renewable Energy Plan that constitute the adaptation strategy to climate change. The RBP also encompasses climate change related opportunities, such as goals associated with the Eco Rating and Eco Smart seals, which demonstrate to our B2C and B2B customers the sustainability of our products and services.

Jointly with the Sustainability Management, the Vice President of Institutional Relations and Sustainability is responsible for reporting to the aforementioned committee in all meetings, with the support, when needed, of the Senior Managers of Facilities, Maintenance, or Network Operations responsible for implementing the action plans related to emissions mitigation and management of climate change risks.

Under the Sustainability Management, there is the Socioenvironmental Management, which plays a multifunctional role by interacting with all operational areas whose activities impact carbon emissions or are affected by climate change. Considering the geographical dispersion and the variety of areas involved in climate-related issues, it is necessary to consolidate and monitor activities, indicators, and projects throughout the Company. The management is responsible for driving the achievement of climate objectives from the emissions reduction perspective, reviewing and reporting KPIs internally and externally.

The environmental responsibilities within the Vice Presidency of Institutional Relations and Sustainability also aim to foster multilateral relationships and actions with other stakeholders, essential for addressing global challenges such as climate change. This structure is responsible for guiding and overseeing the implementation of the strategic pillar #SustainableVivo (#VivoSustentável) throughout the Company and value chain. Lastly, the Company's Procurement Management is also involved in climate change management, responsible for conducting low carbon purchases, primarily through the procurement of renewable energy and the implementation of the Total Cost of Ownership (TCO).

Additionally, 20% of the executive individual bonus and the employee profit sharing program are tied to the achievement of ESG goals related to customer experience, greenhouse gas emissions reduction, reputation, and diversity. The emissions reduction represents 5% within the allocated 20% for non-financial KPIs, and these goals are set annually (short term). In 2022, a New Long Term Incentive Plan was announced, which includes the expectation of the right to receive the full value corresponding to a certain number of representative units of Company's shares in the variable remuneration of executives (statutory directors and/or employed directors), with climate change indicators among the evaluation criteria - 10% of the long term variable remuneration of executive administrators is linked to offset/neutralization and reduction of CO₂ emissions to fulfill Telefônica Brasil's²⁰ goal by 2025, establishing a minimum compliance threshold of 90%, below which the Achievement Degree and the corresponding Multiplying Coefficient will be zero.

Policies

Telefônica Brasil has different policies that guide the Company in improving its environmental performance and achieving its climate objectives in the short, medium, and long term, such as:

Environmental Policy

Telefônica Brasil is committed to protecting the environment, improving internal eco-efficiency and promoting the transition to a decarbonized company, enhancing its resilience to climate change and incorporating physical and transition risks into the Company's management.

20. The intermediate goal of Telefônica Brasil is to neutralize emissions from Scopes 1 and 2 starting in 2025 through nature-based solution.

Energy Management Policy

Encompasses continuous improvement in energy efficiency, progress in using renewable energy sources, internalization of carbon pricing, and active collaboration with suppliers to reduce scope 3 emissions, particularly in the supply chain and customer equipment.

Supply Chain Sustainability Policy

Sets out minimum criteria for responsible business, including environmental issues, such as climate change, intending to promote emissions reduction in the supply chain.

Engagement of Internal Departments

Telefônica Brasil believes that to ensure the business's long term sustainability, all decisions must be made within parameters considering sustainable development and the impacts generated for stakeholders, society, and the planet. Therefore, it's important to build an organizational culture that promotes ESG aspects among employees.

The Company works on developing campaigns, communications, and engagement with employees throughout the year, addressing environmental impact and conscious consumption issues. For example, during the 2022 Environmental Month campaign, a specific action was taken to calculate the emissions from employees' home to work commutes and offset those emissions through carbon credits from a project that protects the Amazon rainforest. This action was part of a broader context aimed at showing employees the impact of their day to day activities on the climate and the importance of reducing emissions.

Other impactful actions in engaging and educating employees in which Telefônica Brasil participates are presented below: **Sharing Experiences:** Periodic internal virtual workshops are organized in which best practices from operators in different countries within the group are shared in terms of energy efficiency and climate change. The purpose is to showcase these practices for local replication.

Global Energy and Climate Change Workshop: The Annual Workshop from Telefónica Group, held since 2009, serves as a meeting point for leaders of the group's energy transformation and key collaborating partner companies in this field. The event gathers over 250 participants from all countries where Telefónica Group is active, presenting and sharing the latest initiatives in energy efficiency, renewable energy, carbon emissions reduction, as well as new challenges established in the realm of climate change in collaboration with different areas of the Telefónica Group.

Energy and Climate Change Awards: These awards recognize the work of Telefónica Group's employees throughout the year in achieving objectives related to reducing carbon footprint and leading responsible digitalization with the environment. In 2022, Telefônica Brasil won the best project award in the scope 3 category with the Supplier Chain Carbon program.

Communication and Reporting

Telefônica Brasil is a publicly traded company with securities listed on B3 S.A. (Brasil, Bolsa, Balcão ("B3")) and the New York Stock Exchange ("NYSE"). Corporate governance directs the Company's operational strategy and the application of the Responsible Business Principles with ethics, transparency, and adherence to applicable legal requirements and relevant capital market legislation.

Transparency in accountability and disclosure of relevant information is one of the pillars of Telefônica Brasil's operations, aiming to provide information to shareholders, the market, and other stakeholders of interest.



In this context, the Company is recognized by the CDP and other sustainability indices as a global leader in combating climate change and other sustainability related initiatives.

Leader

consecutive year.



vivo 🕈

Inclusion in the "A List" of the Climate Questionnaire.

A score in the Supplier Engagement

for

the third

initiative

• We are part of the FTSE4Good ESG indices (Emerging Markets and Latin America).

• Recognized as one of the top 100 companies in ESG Corporate Governance in Merco's ranking and with the best reputation in the telecommunications sector in Brazil.

Furthermore, Telefônica Brasil follows the TCFD's recommendations for analyzing and reporting climate change risks and opportunities.

Strategic Alliances

Included in the CDP Brazil Climate Resilience Index (ICDPR70), which assesses companies' resilience in transitioning to a low carbon economy.

ICO2 B3

B3's Efficient Carbon Index (ICO₂): Our actions have been included in the portfolio that lists companies with the best efficiency in managing greenhouse gas emissions.



Since 2012, the Company's GHG emissions inventory has been classified as the Gold Seal in the Public Emissions Registry, a platform developed by the Brazilian GHG Protocol Program.

 Ninth most sustainable company in the sector in the world by the S&P (CSA) ranking and the 3rd consecutive year among as leading companies in sustainability in The S&P Sustainability Yearbook.

• We are included in S&P's ESG indices (Latin America, Emerging Markets, and Global). One of Telefônica Brasil's climate action pillars is strategic alliances as part of its commitment to society, working collaboratively with other companies to mitigate and adapt to climate change. Additionally, the Company also collaborates with other telecommunications companies, placing digitalization at the forefront of the global political agenda for climate change and environmental sustainability.

Among the initiatives, participation in the following task forces and associations stands out:

CEBDS (Brazilian Business Council for Sustainable Development): It's a non-profit civil association that promotes sustainable development through collaboration with governments and civil society. It brings together more than 80 business groups operating in Brazil, responsible for 47% of Brazilian GDP. Representing the World Business Council for Sustainable Development (WBCSD) in Brazil, CEBDS operates in different thematic chambers, such as water, biodiversity and biotechnology, energy and climate change, sustainable finance, and social impact. Since 2019, Telefônica Brasil has been a member of CEBDS, participating in discussion groups on climate and biodiversity, among other topics.



Commitments established by CEBDS and endorsed/ signed by Telefônica Brasil:

- Climate Neutrality
- Business Leaders for Climate
- Letter of Support from the Business Sector to the Brazilian Carbon Compulsory Market
- Brazilian Business Commitment to Biodiversity

UN Global Compact: An initiative to engage companies and organizations in adopting ten principles in human rights, labor, environment, and anti-corruption. As part of this partnership, Telefônica Brasil participates in the Net Zero Ambition Movement, an acceleration initiative that challenges and supports UN Global Compact member companies to establish climate commitments that are ambitious, science-based and integrated into their business strategies. This initiative is based on Sustainable Development Goal 13 (Climate action) and the goals of the Paris Agreement. The movement advocates for science-based targets as a powerful way to drive impactful outcomes for Brazilian society, and it aims to work with the Brazilian business sector to achieve individual commitments and collective ambitions.

Participation in sectoral working groups on climate change: Recognizing that collective efforts can help align all companies with the objectives established in the Paris Agreement, Telefónica Group actively collaborates with other telecommunications associations, such as GSMA²¹ and JAC²² in joint initiatives to define aspects of greenhouse gas emissions quantification, establish ambitious reduction goals, or enhance climate action in the supply chain.

JOURNEY TO NET ZERO EMISSIONS

Milestone Achieved and Future Vision

Since 2015, Telefônica Brasil has reduced its total emissions by 65%, considering scopes 1, 2, and 3, having as a goal to achieve a 90% reduction and net zero emissions by 2040 through the neutralization of residual emissions by carbon removal from the atmosphere (up to 10% at most). For that purpose, Telefônica Brasil's Climate Strategy is structured with short, medium, and long term planning, as presented in this document.

Within this decade, Telefônica Brasil aims to achieve net zero emissions for both direct and indirect emissions from its operations (scopes 1 and 2). Considering these scopes, the company reached an 88% reduction milestone in 2022 compared to the 2015 baseline, surpassing the preestablished goal for 2025.

This progress is largely attributed to using 100% renewable electricity in all operations since late 2018, which allowed the elimination of scope 2 emissions (market-based approach). In 2015, these emissions accounted for over 60% of the total (scopes 1 and 2), highlighting the company's strong commitment to mitigating the impact of energy consumption.

In addition to sourcing exclusively clean electricity, the Company has implemented numerous energy efficiency initiatives to reduce energy consumption despite increasing traffic (petabytes , PB). Since 2015, the reduction achieved for the MWh/PB indicator has been 87%.

The GSMA is an organization of mobile operators and related companies dedicated to supporting the standardisation, implementation and promotion
of the mobile phone system. It has approximately 800 cell phone operators and over 200 related companies as members.
 The JAC (Joint Audit Coperation) is a sectorial initiative of 17 telecommunications operators that have combined efforts to verify, evaluate
and develop the implementation of sustainability standards in common supplier factories.

Within scope 1, Telefônica Brasil has implemented important initiatives in the past two years that have also contributed to the reduction of 88%. These include expanding the use of ethanol to cover 100% of the nearly 5 thousand flex fuel vehicles (resulting in a substantial reduction in fossil fuel emissions within the fleet category) and implementing more efficient processes and operational improvements for air conditioning equipment in data centers, buildings, and transmission structures, thereby preventing fugitive emissions of refrigerant gases. Telefônica Brasil will continue its efforts to achieve a 90% reduction in scopes 1 and 2 emissions by 2030. However, the primary challenge today lies in scope 3 emissions, which account for 90% of the Company's total emissions.

In this regard, the Company is working to engage its key suppliers in the climate change theme (main category of emissions within the value chain). Telefônica Brasil aims to influence the establishment of reduction targets by these suppliers, contributing to the collective evolution and construction of a path toward decarbonization.





Milestones achieved between 2015 and 2022:

Reduction of 65% in emissions considering scopes 1, 2, and 3.

Offset of 169,121 tCO₂ e between 2019 and 2022 through the purchase of carbon credits.

Reduction of 100% in scope 2 emissions (purchase choice) compared to 2015, achieved by using 100% renewable electricity by the end of 2018.

> Reduction of 87% in the energy consumption indicator per unit of traffic compared to 2015, achieved by decreasing energy consumption by

1.4% and increasing data traffic by 7.7 times during the same period.

Expansion of the distributed power generation > project, reaching 48 plants in 2022.

Implementation of 277 energy efficiency projects > since 2010, resulting in savings of BRL 345 million, 529 GWh, and avoidance of 84 thousand tCO₂

> Engagement of over 100 suppliers in the Supply Chain Carbon Program.



- > Continuing investment in network efficiency and
- Continue to lead in assessments such as CDP.





