Tim S.A. - Climate Change 2021

C0. Introdução

C0.1

(C0.1) Faça uma descrição e uma introdução geral da organização.

TIM is a telecommunications company that offers mobile and fixed telephony, data transmission and ultra-broadband services in Brazil. The company is characterized by its pioneering and innovative offerings, among a complete portfolio for individuals, as well as enterprise solutions for small, medium and large companies. In addition to traditional voice and data services, TIM offers an ultra-broadband fixed-line service, A TIM Live, WTTx technology through Ultra-fiber service, and is starting to offer IoT solutions, with successful examples in agribusiness.

TIM is one of the largest telecommunications companies in Brazil. With a focus on investing in innovation and in the quality of its network, services and customer service, TIM fulfills its mission of connecting and caring for every customer so that everyone can do more. To this end, it focuses on the pillars of innovation, customer experience and agility, based on an internal culture of accountability and the change of processes and platforms that allow a digital transformation. The new motto is – “Imagine the possibilities” – is related to a new purpose – “To evolve together with courage, transforming technology into freedom” –, and reinforces the company's objective of becoming the top telecommunications operator in Brazil.

It is listed on the B3 Novo Mercado of the Brazilian stock exchange, whose standard of governance is focused on minority shareholders and transparency in communication. The company also has ADRs (American Depositary Receipts) listed on the New York Stock Exchange (NYSE). It is controlled by TIM Brasil Serviços e Participações S.A., the company of the Telecom Italia Group, which is based in Rio de Janeiro (RJ).

In 2020, we updated TIM's materiality matrix and took an essential step in the 2021-2023 Strategic Plan by aligning, in a structured way, our business with ESG principles and ambitions. The plan, recently updated in 2021, confirms and definitively integrates the ESG aspects into the core business, presenting objectives and goals connected to what is most material for our stakeholders and the UN Sustainable Development Goals (SDGs). Among the ESG PLAN GOALS in the environmental pillar are: Reduce indirect emissions by 70% (Scope 2) by 2025; To be a carbon neutral Company (Scopes 1 and 2) by 2030; Achieve 90% of energy consumption from renewable sources by 2025 and Increase by 80% energy efficiency in data traffic by 2025, compared to 2019 and Recycle at least 95% of solid waste by 2023.

Also in 2020, TIM was listed for the thirteenth consecutive year as part of the B3 Corporate Sustainability Index portfolio, an index composed of companies that have a strong commitment to sustainability and social responsibility, and was selected as one of the "Top 10" companies on the launch of the S&P B3 Brazil ESG Index in September. In January 2021, TIM was selected to integrate the portfolio of the Carbon Efficiency Index, or ICO2, of B3, with a commitment to measure, disclose and monitor its emissions of greenhouse gases, or GHG. The constant pursuit of the best environmental, social and governance practices also ensures our presence in several international indices and rankings, such as the emerging markets FTSE4GOOD, FTSE4GOOD Latin America, MSCI leaders AWCI ESG, ESG leaders of emerging markets MSCI, among others . As a signatory of the Global Compact since 2008, TIM participates in the Human Rights Working Group organized by the Brazilian Global Compact Network since 2015 and promotes projects related to the Sustainable Development Goals ("SDG"). We recognize as essential and unavoidable the rights to data privacy, secure internet, access to information and freedom of expression.

Reinforcing its commitment to transparency, TIM has been presenting its performance in sustainability since 2004 and for 13 years has published reports in accordance with GRI guidelines, in addition to responding to the Carbon Disclosure Project (CDP) and recording its greenhouse gas (GHG) emissions in the Brazilian GHG Protocol Program since 2010.

We want to be an ESG reference in the telecommunications sector in Brazil and the recognitions received show that we are on the right path.

C0.2

(C0.2) Indique a data de início e de fim do ano do qual os dados estão sendo informados.

	Data de início	Data de fim	Indique se estão sendo fornecidos dados de emissões de anos de reporte passados	Selecione o número de anos de reporte passados para os quais serão fornecidos de emissões
Ano de reporte	Janeiro 1 2020	Dezembro 31 2020	Não	<Not Applicable>

C0.3

(C0.3) Selecione os países/áreas sobre os quais os dados serão fornecidos.

Brasil

C0.4

(C0.4) Selecione a moeda usada para todas as informações financeiras divulgadas em sua resposta.

BRL

C0.5

(C0.5) Selecione a opção que descreve os limites de reporte para os quais os impactos climáticos em sua empresa estão sendo reportados. Observe que esta opção deve estar alinhada com o método de consolidação escolhido para o inventário de GEE.

Controle operacional

C1. Governança

C1.1

(C1.1) Existe supervisão pelo Conselho sobre as questões climáticas na organização?

Sim

C1.1a

(C1.1a) Identifique o(s) cargo(s) do(s) indivíduo(s) do conselho responsável(is) pelas questões relacionadas ao clima (não inclua os nomes).

Cargo dos indivíduos	Por favor, explique
Diretor Executivo (CEO)	The CEO assessed, monitored, analyzed and provided feedback on all reports with ESG aspects brought to him by the ESG Committee. Therefore, the CEO also oversees climate-related issues. The CEO was responsible for disclosing to investors and the market during the event called TIM Day how the company acted in a disciplined manner to achieve its goals of renewable energy, carbon neutrality, emissions and eco-efficiency announced ambitious target plan, called the ESG 2020 Plan -22 and now updated for the 2021-23 triennium where our CEO approved and took to the Board of Directors bolder goals related to Climate Change: they are to reach ≥ 90% renewable energy by 2025, reduce indirect emissions by -70% by 2025 and be carbon neutral by 2030 in relation to the combined emissions of scopes 1 and 2. Commitments on Climate Change also publicly recorded by the CEO in the message that can be seen in TIM's ESG Annual Report. One of the projects that was led by the CEO was the Journey to the Cloud project, that has the objective to implement the virtualization of data centers driving greater efficiency using renewable energy.
Comitê do conselho	The Environmental goals of TIM's ESG Plan, which include emission reduction goals and transition from the energy matrix to renewables, were sent to the ESG Committee for knowledge and approval before its launch, where the ESG Committee evaluated, revised and proposed actions to consolidate plans ESG actions, projects, proposals, initiatives, goals and objectives. The ESG Committee is a body linked to the Board of Directors. The definitions of the composition and performance of the Committee are contained in the Internal Regulations of the ESG Committee. In short, the Committee has rules applicable to the advisory committee of the Board of Directors (CDA) of TIM SA ("Company"), whose objective is to support the CDA in the development and implementation of the ESG (Environmental, Social) strategy and principles and Governance), including, among other activities, the recommendation of the Company's guidelines and strategy applicable to the management of environmental issues, especially those direct commitments related to the reduction of the Impacts of Climate Change, in addition, of course, to social and governance issues . For the fulfillment of its functions, the ESG Committee will have the support of the ESG Steering Committee. The ESG Committee meets whenever necessary, in accordance with the needs of the Company's management and the Board of Directors. Note: The ESG Committee's bylaws can be accessed on the TIM IR page at: https://ri.tim.com.br/ShowCanal/Management?=yGJJRu07XZclFdKgwbc9GQ==
Diretor de Sustentabilidade (CSO)	TIM SA's ESG Director defines the company's Climate Change Policy guidelines and leads initiatives such as the creation of the GHG Inventory as an important tool for managing the company's emissions that allows us to understand our GHG emissions profile and its main sources of pollution. Topics related to climate change are managed by the director by identifying risks and opportunities for adaptation in the face of extreme weather events and encouraging the creation of solutions that seek to mitigate GHG emissions and improve the efficiency of the company and its products and services in addition to providing transparency on the company's emissions for investors, customers and its various stakeholders through the CDP and the ESG Report. TIM SA's ESG Director is linked to the Director of Regulation, Institutional Affairs and Press Relations, who, in addition to being part of the ESG Management Committee, specifically with regard to the company's sustainability issues, articulating actions of corporate social responsibility, certification of management systems, sustainability and climate change.

C1.1b

(C1.1b) Forneça mais detalhes sobre a supervisão pelo Conselho das questões relacionadas ao clima.

Frequência com que as questões relacionadas ao clima são um item da agenda programada	Mecanismos de governança nos quais as questões relacionadas ao clima estão integradas	Escopo da supervisão no nível do conselho	Por favor, explique
Programado – todas as reuniões	Análise e orientação de estratégia Análise e orientação de políticas de gestão de riscos Análise e orientação de orçamentos anuais Análise e orientação de planos de negócios	<Not Applicable>	TIM S/A's ESG Board is informed by the Strategy and Sustainability Committee, the Sustainability Management Committee and the Control and Risk Committee on a regular basis on all issues including climate related issues. The board oversees how the reported issues can influence the strategies of the company as a whole, being able to change how a specific budget can be properly allocated or approved in order to mitigate risks and get the company to move towards a better future. In particular, the Board reviews the Corporate Risk Management procedures and adapt them to properly deal with emerging risks, allocating specific budgets to risk mitigation and energy efficiency. In addition, the board reviews the 3-year industrial plan of the company in terms of cost effectiveness and business objectives, which includes specific emission reduction solutions and pathways. Within the scope of the Environmental Management and Climate Change Pillar of the Strategic Plan, the ESG Committee monitors in its meetings the status and evolution of the GHG emissions reduction targets, the implementation of the Renewable Energy Strategy, including distributed generation, when scheduled for this agenda. After the Committee recommendation, the directors directly linked to the Committee started to asses the ESG quarterly results. TIM S/A contributes with a significant portion to the achievement of the group's energy efficiency and emission reduction goals, representing 37% of the Group's total renewable energy according to the last Sustainability Report 2020. The mitigation and reduction of GHG emissions is a principle established in TIM S/A's Climate Change Policy through studies of climate risks and vulnerabilities to the company's activities in order to assess climate change adaptation and mitigation scenarios and also identify business opportunities.

C1.2

(C1.2) Forneça o(s) comitê(s) ou o(s) cargo(s) de gerência de nível mais alto com responsabilidade pelas questões climáticas.

Nome dos cargos e/ou comitês	Linha de reporte	Responsabilidade	Abrangência da responsabilidade	Frequência de reporte ao Conselho das questões climáticas
Diretor Executivo (CEO)	<Not Applicable>	Avaliação e gestão de riscos e oportunidades climáticos	<Not Applicable>	Trimestralmente
Outro comitê, especifique (ESG Committee)	<Not Applicable>	Avaliação e gestão de riscos e oportunidades climáticos	<Not Applicable>	Trimestralmente

C1.2a

(C1.2a) Descreva em que local da estrutura organizacional encontra(m)-se este(s) cargo(s) e/ou comitê(s), quais são suas responsabilidades associadas e como são monitoradas as questões relacionadas ao clima (não inclua os nomes dos indivíduos).

In December 2020, TIM created the ESG Committee, an advisory committee of the company's Board of Directors (CDA) for matters related to environmental, social and governance issues. The committee counts with members of the CDA itself – including its President, the company's CEO, and representatives of the Telecom Italia Group – having a wide range of activities, defining the strategic plan, guaranteeing and encouraging projects and monitoring the achievement of goals in all pillars under the ESG approach.

Among the attributions of the ESG Committee it is responsible for inquiring assessments from the management team on risk analysis or opportunities in the ESG area, whenever deemed necessary and appropriate for the effort of preventive performance or for the proper management of environmental and climate change, social and governance issues. These assessments are requested directly by the CEO of the company.

C1.3

(C1.3) Há incentivos para a gestão de questões relacionadas ao clima, incluindo o cumprimento de metas?

	Fornecer incentivos para a gestão das questões climáticas	Comentários
Linha 1	Sim	There are incentives on the attainment of targets related to GHG emissions reduction, usage of renewable energy, net zero Emissions, and eco-efficiency.

C1.3a

(C1.3a) Forneça mais detalhes sobre os incentivos oferecidos pela gestão das questões climáticas (não inclua os nomes dos indivíduos).

Com direito a incentivo	Tipo de incentivo	Atividade incentivada	Comentários
Diretor Executivo (CEO)	Recompensa não-monetária	Desempenho da empresa com relação a um índice de sustentabilidade climática	The incentive program for corporate executives has components related to the achievement of individual targets and/or the area of responsibility for functions relevant to the targets based on the KPIs of the ESG Plan, which in turn have environmental goals disclosed directly related to Climate Change. The climate relater KPIs are: Increase in the usage of Renewable energy (≥90% by 2025), Eco-efficiency in Data Traffic (+80% in bits/joule by 2025), Reduction of Indirect Emissions and Reduction of Indirect CO2 Emissions of Scope 2 (-70% reduction by 2025 in comparison to emissions from 2019); Achieve neutrality of GHG emissions by 2030. For confidential reasons, individual target agreements are not published.
Outro Diretor do C-suite	Recompensa não-monetária	Desempenho da empresa com relação a um índice de sustentabilidade climática	The ESG Director is part of the incentive program for corporate executives that has components related to the achievement of individual targets and/or the area of responsibility for functions relevant to the targets based on the KPIs of the ESG Plan, which in turn have environmental goals disclosed directly related to Climate Change. The climate relater KPIs are: Increase in the usage of Renewable energy (≥90% by 2025), Eco-efficiency in Data Traffic (+80% in bits/joule by 2025), Reduction of Indirect Emissions and Reduction of Indirect CO2 Emissions of Scope 2 (-70% reduction by 2025 in comparison to emissions from 2019); Achieve neutrality of GHG emissions by 2030. For confidential reasons, individual target agreements are not published.
Gerente de Energia	Recompensa monetária	Projeto de eficiência	The variable compensation of the top manager responsible for TIM's Energy Management is bonded to energy reduction, energy efficiency and emissions reduction (scope 2) targets. One of the environmental goals of the 2021-23 ESG Plan is eco-efficiency and the reduction of indirect emissions by 70% by 2025
Outros, especifique	Recompensa monetária	Projeto de eficiência	The variable compensation of the top manager responsible for TIM's Energy Management is bonded to energy reduction, energy efficiency and emissions reduction (scope 2) targets. One of the environmental goals of the 2021-23 ESG Plan is eco-efficiency and the reduction of indirect emissions by 70% by 2025 (please see ESG Report 2020, page 8: https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==#page=8

C2. Riscos e oportunidades

C2.1

(C2.1) A organização dispõe de um processo para identificar, avaliar e responder aos riscos e oportunidades climáticos?

Sim

C2.1a

(C2.1a) Como a organização define "horizontes temporais de curto, médio e longo prazo"?

	De (anos)	A (anos)	Comentários
Curto prazo	1	3	The strategy of the industrial plan has a three-year horizon, with the targets being reviewed and recalibrated annually. In addition, budgets are planned annually, and the company's Sustainability data is annually monitored and disclosed. Therefore, one year can be considered short term. The Environmental goals of the ESG Plan, such as increasing renewable energy in operations, reducing emissions and increasing efficiency, and improving production processes through the eco-efficiency indicator, are monitored and annually reviewed on a quarterly basis.
Médio prazo	3	5	Goals according to the industrial plan for three years of TIM. That is, energy savings goals and efficiency actions and plans. Progressive reduction of CO2 emissions (-28% achieved in 2020 and target of -70% by 2025), increase% renewable energy in the production and purchase total electricity (it reached 64% in 2020 and target of higher than 90% up to 2025); Improve your Eco-efficiency measured through the relationship between data traffic and the environmental impact of the energy consumed in joules (it reached 64% in 2020 and the goal is to reach + 80%).
Longo prazo	5	10	Target of being net-zero carbon dioxide emissions, that is, offsetting 100% of its GHG emissions from scopes 1 and 2 by 2030. In 2020, TIM, managed to reduce its scope 2 emissions by 28 %.

C2.1b

(C2.1b) Como a organização define um impacto financeiro ou estratégico "considerável" nos seus negócios?

Risk management at TIM is aligned with international standards, such as the Committee of Sponsoring Organizations of the Treadway Commission (Coso), a nonprofit organization that provides guidance on fraud prevention in company processes and procedures, which are incorporated into TIM Group risk management policy. It involves corporate and operational, financial, ethics and compliance, environmental including climate change, health and safety and reputational risk management processes.

Among the monitored risks are listed below long-term emerging risks with the potential to cause impacts on business:

BUSINESS CONTINUITY - These are business continuity risks: critical interruptions, inability to maintain services at a level that meets customer needs, and regular activities in the event of an unexpected event or emergencies that could interrupt the operation and are recognized threats such as and including extreme weather events such as intense rain, cyclones, floods, water crisis that impact on rationing or lack of energy and other possible natural disasters, and lack of measures to restore the system, infrastructure and the staff teams required to provide the services.

These risks can impact the quality of service, the company's image, billing and even the total interruption of the operation. TIM manages climate related risks and sees climate change as an opportunity for the creation of solutions to mitigate its own and its customers' emissions. Extreme climatic events can damage company installations and infrastructure, directly impacting business. This is why the company considers it important to undertake studies and execute adaptations in anticipation of such adverse effects, in addition to developing structured processes and practices. An example of this approach was the choice of one of the company's regional units to map the frequency of extreme climatic events over the long term, focusing on the most vulnerable equipment which represents the greatest risk for TIM, such as biosites, RBSs, industrial buildings, greenfield sites,, rooftops, among others.

C2.2

(C2.2) Descreva o(s) processo(s) para a identificação, a avaliação e a resposta aos riscos e oportunidades climáticos.

Etapa(s) da cadeia de valor abrangidas
Operações diretas

Processo de gestão de riscos
Integrado no processo de gestão de riscos multidisciplinar da empresa como um todo

Frequência da avaliação
Anualmente

Horizonte(s) temporal(is) abrangidos
Curto prazo
Médio prazo
Longo prazo

Descrição do processo
At company level, the CFO's Enterprise Risk Management (ERM) function is the unit responsible for updating the risk register (the so-called Universe of Risk) in cooperation with the risk owners for the identification and assessment of risks. Through the Guidelines of POP.370 - CORPORATE RISK MANAGEMENT, it is defined that at each start of the cycle of the Corporate Risk Management Process, the CFO defines the proposals for Risk Appetite and Tolerance based on the Strategic Objectives from the company. Process Owners must identify the processes that aim to achieve the Strategic Objectives. Each of the Process Owners must address the objectives and tolerances associated with KPIs. After receiving the Risk Appetite and Tolerance proposals, the CFO - Risk Management must consolidate this information and present it for approval by the ERM Management Committee. The Risk Appetite must be forwarded to the Board of Directors (CdA) for discussion and approval of the values defined for the annual cycle and for quarterly monitoring. At the end of the cycle of interviews, after obtaining validation of all risks by the Process Owners, the CFO-Risk Management Function carries out a homogenization and risk assessment activity. The activity aims to determine the final positioning in the Risk Control Panel (Risk Map) of all the risks that make up the universe of risks. The above guidelines are implemented in the company through another internal Procedure called "PL.511 - Risk Management for the Security of TIM Group Assets in Brazil", which addresses, as the name says, the security of TIM assets in the Brazil, where the company understands that commercial risk is an element that is always present in the corporate world and is related to the change in the relationships established between the company and the environment in which it operates. In an attempt to achieve maximum compatibility between the internal and external environment, the tendency to rigidity of corporate structures and the tendency to environmental variability including the impacts of climate change, the strategies adopted by the company aim to continually redefine its image, in a competitive way. in markets and / or in collaborative relationships in the environment in which it operates. The company's security actions generally aim to find the best solution to deal with problems related to the management of adverse events, linked to the fact that they cause damage to the company's human, intangible and material assets. The document identifies external and environmental threats as a potential circumstance of natural origin that could compromise a generic asset in the perimeter in question. From the threat that can be exploited, the presence of vulnerabilities to be exploited is determined, which can have consequences on the company's business, such as a security incident, such as interruption or strong degradation of performance that could compromise normal commercial activities and the provision of services, the requirements to ensure business continuity. Examples 1: Threat: natural event. Concept: Earthquakes, volcanic eruptions, floods, meteorological phenomena and weather phenomena (ie persistent weather conditions). Category: Loss of essential services. Environmental Factor: "Climate Phenomenon, Seismic Phenomenon, Volcanic Phenomenon, Meteorological Phenomenon, Flood". Examples 2: Threat: Energy. Concept: Loss of essential services (failure of the air conditioning system, failure of the water supply system, loss of electricity). Category: Loss of essential services. Environmental Factor: “Failure in the air conditioning system or water supply due to water crisis / drought. Loss of energy - Weather phenomenon related to thunderstorms. Where TIM operates, therefore, business continuity and asset vulnerability are well considered in TIM's Corporate Risk Management process. An application of this approach was the choice of one of the company's regional offices to map the frequency of extreme weather events in the long term, with a focus on the most vulnerable and most risky equipment for TIM, such as biosites, ERBs, industrial buildings, greenfield sites, roofs, among others. The climate risks related to the company's assets (Biosite, Mobile Station, Rooftop, Greenfield) were evaluated based on TIM's Risk Matrix, created specifically for this purpose. For each weather event, the magnitude of the impact (1-Insignificant, 2 Low, 3 Medium, 4 High, 5 Very High) was assessed for Economic, Health and Safety, Social Context / Compliance, Environmental Impact, Operational and Image / Reputation and its frequency (1 to 2 Low, 3 to 6 Moderate, 8 to 12- Significant, 12 to 25-High). The risk value is obtained by multiplying the magnitude by the frequency. Based on this risk study, TIM also carried out an adaptation survey for each of the evaluated climatic events. Energy shortages due to prolonged droughts were proven to be another factor that would negatively impact TIM's operations. In this sense, the company has been implementing initiatives to reduce energy consumption and investing in increasing the use of renewable energy in its portfolio. This mapping guides the company in planning the actions required in its business model and carbon management strategy, in addition to instigating internal initiatives to mitigate GHG emissions and adapt.

C2.2a

(C2.2a) Quais tipos de riscos são levados em conta nas avaliações de riscos climáticos da organização?

	Relevância e inclusão	Por favor, explique
Regulamentação atual	Relevante, sempre incluído	The telecommunications sector in Brazil does not have large GHG emissions in its Scope 1 caused by fossil fuel use or production processes. Therefore, the sector is not regulated in terms of emissions in Brazil. On the other hand, our grid's electricity consumption is high, reaching 627,254 MWh in 2020, so much so that this is a material issue for TIM and where we have ambitions to increase efficiency with long-term goals for greater acquisition of Renewable Energy and consequently reducing the sources of indirect emissions that constitute TIM S/A's Scope 2 report. In 2020, we reached 64% of Energy from renewable sources, considering the Brazilian Energy and Electric Matrix fundamentally based on renewable sources with hydroelectric plants. Potential risks in the existing legislation in the electricity sector could have impacting effects on the Strategy of Regulated Energy Purchase projects in the Free Market, similar to a Power Purchase Agreement (PPA) type contract and Distributed Generation Projects acting with self-generation. TIM recognizes that its operations are also exposed to risks caused by climate change. In this scenario, the management of emissions is a strategic factor for the continuity and value creation of the business.
Regulamentação emergente	Relevante, sempre incluído	Although Brazil has a Climate Change Policy defined by the National Climate Change Policy in 2020, assumed in Law 12.187/2009, but there is no specific regulation on climate change for the telecommunications sector, at state levels it is believed that there is a greater restriction trend. of emissions. TIM believes that soon the telecommunications sector will also be impacted by specific regulations (as other sectors already are). As the definitions that may arise will occur at the 26th United Nations Conference on Climate Change COP26 in Glasgow, Scotland, next stage of debates including on Article 6 of the Paris Agreement that establishes financial mechanisms for market operations and information on market regulation of carbon.
Tecnológico	Relevante, às vezes incluído	The company continues to invest in several energy efficiency initiatives, such as the 2G network sharing agreement with national competitor Telefônica Brasil/Vivo; the continuity of the Decommissioning project, which promotes the reduction of energy consumption with actions such as the gradual shutdown of the 2G network, removal of obsolete or unused equipment and replacement with more efficient ones; Journey to Cloud project for the virtualization of data centers that operate more efficiently; Unplugged sites: standalone sites that run on solar energy and satellite transmission. The Company also monitors the energy consumption efficiency of its data centers.
Jurídico	Relevante, sempre incluído	The potential impact of environmental legal responsibilities for TIM's operations associated with energy and emissions, although not significant due to the nature of the services provided being not carbon intensive, TIM is in line with the Brazilian legislation that established the National Policy on Climate Change (PNMC) since 2009, counting on law nº 12.187. Establishes the National Policy on Climate Change and other measures. Other legal risks are still considered in the company's risk assessment processes, for example the risks associated with this category include direct or indirect disturbances due to environmental issues, mainly associated with non-compliance during the implementation of the network. To conduct its operations within the standards required by law and, mainly, to strengthen its environmental risk management processes, TIM maintains teams to monitor cases of non-compliance, such as the regularization of ERBs and technical buildings with data centers.
Mercado	Relevante, sempre incluído	As a country with an energy matrix based on hydroelectric plants, Brazil, and consequently TIM, is exposed to the risk of an increase in the price of electricity, in a scenario of water scarcity. In addition, because it is a country that depends on the road modal, in a scenario of higher taxation of fossil fuels, the company is also exposed.
Reputação	Relevante, sempre incluído	Investors, customers and suppliers demand is increasing with respect to climate management. Extreme events can affect the company's transmission equipment, causing the telephony signal to stop being transmitted, thus impacting TIM's business.
Físico agudo	Relevante, sempre incluído	Extreme events can affect the company's transmission equipment, causing the telephony signal to stop being transmitted, thus impacting TIM's business.
Físico crônico	Relevante, sempre incluído	The rise in global average temperature may lead to higher consumption of electricity for cooling, since certain equipment needs low temperatures to function.

C2.3

(C2.3) Foi identificado algum risco climático inerente com potencial para causar um impacto financeiro ou estratégico considerável nos negócios?

Sim

C2.3a

(C2.3a) Forneça detalhes dos riscos identificados com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios.

Identificador

Risco 1

Em que ponto da cadeia de valor ocorre o fator de risco?

Operações diretas

Tipo de risco e Principal fator de risco climático

Físico agudo	Aumento da gravidade e da frequência de eventos climáticos extremos, como ciclones e inundações

Principal impacto financeiro em potencial

Aumento dos custos indiretos (operacionais)

Tipo de risco climático mapeado conforme a classificação de risco tradicional do setor de serviços financeiros

<Not Applicable>

Descrição específica da empresa

TIM manages climate related risks and sees climate change as an opportunity for the creation of solutions to mitigate its own and its customers' emissions. Extreme climatic events can damage company installations and infrastructure, directly impacting business. This is why the company considers it important to undertake studies and execute adaptations in anticipation of such adverse effects, in addition to developing structured processes and practices. In 2019 the company proposed a monitoring plan that covers the main measures to track climate risk. Energy scarcity as a result of prolonged droughts is another factor that would cause negative impacts on TIM's operations. In this respect, the company has been implanting initiatives to reduce energy consumption and investing in increasing the use of renewable energy in its portfolio. Considering the impact of company activities on climate change, telecommunications services help reduce emissions since they enable remote communication, reducing the need for travel powered by fossil fuels. They also provide alternatives for production processes and logistics flows in diverse sectors. An example of this approach was the choice of one of the company's regional units to map the frequency of extreme climatic events over the long term, focusing on the most vulnerable equipment which represents the greatest risk for TIM, such as biosites, RBSs, industrial buildings, greenfield sites,, rooftops, among others. Based on this risk study, TIM also conducted an adaptation survey for each of the climatic events assessed. Potential negative impacts were identified to TIM's assets: Extreme rains may damage equipment and affect the operation of the antennas. In addition, electric discharges can reach Greenfields and Rooftops equipment, impacting on their physical structure and functioning. Land slips can bury transmission lines, causing severe failures or disruptions in service. Soil degradation can expose buried cables and wires, hampering their operation and causing signal transmission failures. All the above mentioned operational impacts cause direct financial impacts. Floods, extreme rainfall and electric discharges can generate corrective maintenance costs, replacement of parts or the complete infrastructure. There are also costs related to failures or interruptions in the operation of the service.

Moreover, it is likely to be an increase in costs associated with the insurance of TIM's assets.

Horizonte temporal
Curto prazo

Probabilidade
Virtualmente certo

Dimensão do impacto
Médio-alto

É possível fornecer um valor para o potencial impacto financeiro?
Sim, uma estimativa de valor único

Valor do potencial impacto financeiro (moeda)
15800000

Valor potencial do impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
As historical survey performed, impacts related to extreme rainfall in the period of 2010 to 2015, have caused damage to TIM operations of BRL 15 million. Therefore, based on previous costs, TIM analyses show that it is possible that the same costs may occur in a short period of time.

Custo da resposta ao risco
144000000

Descrição da resposta e explicação do cálculo do custo
With the continued implementation of RAN Sharing project between the companies TIM, OI and Vivo, by the end of 2020, shared more than 6,500 stations. This initiative reduces the company's cost-related risks for acquisition of new equipment, implementation and operation, as well as electricity savings. This saving is also associated with environmental gains, since it avoided the emission of around 6,5 thousand tCO2 in 2020.

Comentários
No comments

Identificador
Risco 2

Em que ponto da cadeia de valor ocorre o fator de risco?
Operações diretas

Tipo de risco e Principal fator de risco climático

Físico agudo	Aumento da gravidade e da frequência de eventos climáticos extremos, como ciclones e inundações

Principal impacto financeiro em potencial
Aumento dos custos diretos

Tipo de risco climático mapeado conforme a classificação de risco tradicional do setor de serviços financeiros
<Not Applicable>

Descrição específica da empresa
The forecast for the Southeast region is an increase of the occurrence of strong winds and extratropical cyclones, which are usually accompanied by torrential rains. Potential negative impacts were identified to TIM assets: - Cyclones and superelevation sea level may bring down transmission towers, causing total or partial loss of infrastructure. Furthermore, increased salinity and sea level can increase corrosion rates, resulting in increased frequency of maintenance. - The operational impacts listed above are associated with maintenance costs of the physical structure, in case of partial loss of equipment or corrosion of the metal structure; costs related to the exchange of complete equipment, in case of total loss overthrow of the physical structure; and costs related to failures in services. Moreover, it is likely to be an increase in costs associated with TIM assets insurance.

Horizonte temporal
Curto prazo

Probabilidade
Mais provável que improvável

Dimensão do impacto
Alto

É possível fornecer um valor para o potencial impacto financeiro?
Não, não temos esse valor

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
Impacts related to events such as windstorms and heavy rains in the period between 2014 and 2015, caused losses higher than BRL 800 thousand to TIM. Other events occurred in that period, but their costs were not informed. Therefore, the estimate is based on the past spent on issues related to acute physical risks.

Custo da resposta ao risco
144000000

Descrição da resposta e explicação do cálculo do custo
With the continued implementation of RAN Sharing project, TIM, Oi and Vivo, by the end of 2017, shared more than 6,500 stations. This initiative reduces the company's cost-related risks for the acquisition of new equipment, as well as an economy with electricity. This saving is also associated with environmental gains, since it avoided the emission of around 7 thousand tCO2 in 2018.

Comentários
No Comments

Identificador
Risco 3

Em que ponto da cadeia de valor ocorre o fator de risco?
Operações diretas

Tipo de risco e Principal fator de risco climático

Regulamentação atual	Maiores obrigações de divulgação sobre as emissões

Principal impacto financeiro em potencial
Aumento dos custos indiretos (operacionais)

1) Brazil submits its Nationally Determined Contribution under the Paris Agreement https://www.gov.br/mre/en/contact-us/press-area/press-releases/brazil-submits-its-nationally-determined-contribution-under-the-paris-agreement 2) Letter from the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) https://www.gov.br/mre/en/contact-us/press-area/press-releases/letter-from-the-executive-secretary-of-the-united-nations-framework-convention-on-climate-change-unfccc 3) Clarifications on the new Brazilian NDC presented under the Paris Agreement https://www.gov.br/mre/en/contact-us/press-area/press-releases/clarifications-on-the-new-brazilian-ndc-presented-under-the-paris-agreement

Tipo de risco climático mapeado conforme a classificação de risco tradicional do setor de serviços financeiros
<Not Applicable>

Descrição específica da empresa
At the federal level, the Brazilian voluntary commitment (updated in 2021) to reduce by 37% the emission of greenhouse gases in Brazil compared to 2005 and also officially assuming the goal of reducing by 43% of greenhouse gas emissions greenhouse effect until 2030, compared to the same base year in the national projections of greenhouse gas emissions established by the National Policy on Climate Change (PNMC) of 2009. This policy is regulated by Decrees No. 7,390 / 2010 and No. 7643 / 2011, complemented by Sectoral Plans for Mitigation and Adaptation to Climate Change. Although the telecommunications industry is not included in Decree No. 7,390, this may give precedence for other sectors to establish targets for reducing GHG emissions. At the state level there is also a trend towards greater restriction on emissions. In São Paulo and Rio de Janeiro, the two most important states for the company's business, both in terms of physical facilities and market opportunity, there is already specific legislation on the issue of climate change. Given the relevance of the issue Climate Change for TIM, in 2019 the company updated its Climate Change Management Policy, pledging to carry out studies of climate risks and vulnerabilities to company's activities in order to assess adaptation and mitigation scenarios to climate change and to identify business opportunities. In addition, for 2020 TIM will start to act on climate issues in order to achieve the targets from its 2021-2023 Strategic Plan. Futhermore, TIM performs the legislation survey in the Environmental Management System, which includes legislation related to climate change. It is noteworthy that this survey refers only to the scope of ISO 14001 certification, which currently only covers the states of São Paulo, Rio de Janeiro and Espirito Santo.

Horizonte temporal
Curto prazo

Probabilidade
Tão provável quanto improvável

Dimensão do impacto
Baixo

É possível fornecer um valor para o potencial impacto financeiro?
Não, não temos esse valor

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
Although TIM recognizes the possibility of the events described, the Company has not yet conducted further studies to predict the financial implications and costs of such risks. TIM, however, has already been preparing for such scenarios, managing its GHG emissions since 2008 and presenting annually their results related to the issue in the Sustainability Report, demonstrating transparency and concern for the climate variable. The Portrait of this engagement is TIM's confirmation, for the 12th consecutive year, of the Corporate Sustainability Index (ISE) from B3.

Custo da resposta ao risco
0

Descrição da resposta e explicação do cálculo do custo
Given the relevance of the issue Climate Change for TIM, in 2019 the company updated its Climate Change Management Policy, pledging to carry out studies of climate risks and vulnerabilities to company's activities in order to assess adaptation and mitigation scenarios to climate change and to identify business opportunities. In addition, for 2020 TIM will start to act on climate issues in order to achieve the targets from its 2020-2022 Strategic Plan. Furthermore, TIM performs the legislation survey in the Environmental Management System, which includes legislation related to climate change. It is noteworthy that this survey refers only to the scope of ISO 14001 certification, which currently only covers the states of São Paulo, Rio de Janeiro and Espirito Santo.

Comentários
These policies provide, among other decisions, mandatory periodic reporting of GHG emissions, in effect both in Rio de Janeiro and in São Paulo, and/or the need to present a mitigation plan of GHG emissions, as it is requested in Rio de Janeiro. Thus, TIM believes - although unlikely in the short term - that it may be subject to an emission constraint if the Telecommunication industry also has to submit a goal plan.

C2.4

(C2.4) Você identificou alguma oportunidade relacionada ao clima com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios?
Sim

C2.4a

(C2.4a) Forneça detalhes das oportunidades identificadas com potencial para causar um impacto financeiro ou estratégico considerável em seus negócios.

Identificador
Opp1

Em que ponto da cadeia de valor ocorre a oportunidade?
Operações diretas

Tipo de oportunidade
Fonte de energia

Principal fator de oportunidade climática
Uso de fontes de energia com menor índice de emissões

Principal impacto financeiro em potencial
Redução dos custos indiretos (operacionais)

1) The annual costs of TIM's renewable energy projects are R$ 60.000.000,00. 2) ESG Report 2020 , see pags 08, 59 to 61, and 65 (Scope 2) https://ri.tim.com.br/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Descrição específica da empresa
TIM believes that in the near future, Brazilian companies from several sectors will cease quantifying their emissions voluntarily, making it a mandatory measure by national or regional regulations. Therefore, the company believes that the quantification of emissions as well as the improvement of its inventory in advance will require minor adjustment efforts when these activities become mandatory, bringing competitive advantages over those non-prepared peers. 1) Direct Operations - Use of renewable energy sources with low emissions: To prepare for a possible scenario of energy supply deficit due to water scarcity, TIM promotes initiatives aimed at reducing energy consumption in its services and facilities. The company has invested in restructuring processes and technology to achieve maximum efficiency, continuously improving customer service and improving energy efficiency. TIM has been investing in the contracting of renewable energy sources through distributed generation projects from plants and purchase of energy in the Free Energy Market. In 2020, the consumption of renewable energy sources reached 64% of the Company's electricity consumption. With investments underway since 2017, the target for the Distributed Generation Project is to reach 60 company-owned units by the end of 2022, including solar, hydroelectric and biogas plants with a monthly generation capacity of 38 GWh. By 2025 the company will reach 90% of energy consumption from renewable sources.

Horizonte temporal
Médio prazo

Probabilidade
Provável

Dimensão do impacto
Alto

É possível fornecer um valor para o potencial impacto financeiro?
Não, não temos esse valor

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor do possível impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
The company has not yet implemented a methodology for predicting the possible financial implications, costs and revenue of such opportunities, however, it plans to develop an action plan for the their management, so as to better assess opportunities associated with its activities.

Custo para materializar a oportunidade
60000000

Estratégia para pôr em prática a oportunidade e explicação do cálculo de custos
In order to reduce energy consumption while maintaining the same quality of products and services, it is TIM's objective. The 2021-23 Strategic Plan reflects the concern to establish the most efficient use of energy for traffic from data and commits to an 80% improvement in energy efficiency by 2025. Monitoring is done through the eco-efficiency indicator, which is a way for the company to measure its energy efficiency, through a relationship between the data service offered to the customer (bits) and the company's impact on the environment (joules of energy consumed). The factors that make up this indicator are data and voice traffic on fixed and mobile networks and energy consumption. To achieve the goal, TIM makes an agreement to share the 2G network with other operators in the national territory, continues its Decommissioning project, which promotes the reduction of energy consumption with actions such as the gradual shutdown of the 2G network, innovates in projects such as the virtualization of data centers that operate more efficiently and develop autonomous sites that run on solar energy and satellite transmission.

Comentários
No comments

Identificador
Opp2

Em que ponto da cadeia de valor ocorre a oportunidade?
Operações diretas

Tipo de oportunidade
Eficiência de recursos

Principal fator de oportunidade climática
Outros, especifique

Principal impacto financeiro em potencial
Outros, especifique (Resource efficiency - Development and/or expansion of low-emission goods and services)

Descrição específica da empresa
In order to reduce energy consumption while maintaining the same quality of products and services, it is TIM's objective. The 2021-23 Strategic Plan reflects the concern to establish the most efficient use of energy for traffic from data and commits to an 80% improvement in energy efficiency by 2025. Monitoring is done through the eco-efficiency indicator, which is a way for the company to measure its energy efficiency, through a relationship between the data service offered to the customer (bits) and the company's impact on the environment (joules of energy consumed). The factors that make up this indicator are data and voice traffic on fixed and mobile networks and energy consumption. Other examples of energy efficiency projects developed by TIM are: Journey to the Cloud project for data center virtualization generating greater efficiency; Disconnected sites: autonomous units powered by solar energy with satellite transmission.

Horizonte temporal
Longo prazo

Probabilidade
Muito provável

Dimensão do impacto
Alto

É possível fornecer um valor para o potencial impacto financeiro?
Não, não temos esse valor

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor do possível impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
New lines of financing for energy efficiency or transportation projects can affect our energy costs and can reduce operating costs of our transportation contracts, which will translate into benefits for TIM. The financial implications of this opportunity were not estimated.

Custo para materializar a oportunidade
0

Estratégia para pôr em prática a oportunidade e explicação do cálculo de custos
TIM has the goal of decreasing energy consumption while maintaining product and service quality. The 2021-23 Strategic Plan reflects the company's concern about more efficient energy use for data traffic and assumes the commitment of promoting an 80% increase in energy efficiency by 2025. To reach this target, a TIM is replacing equipment with more efficient models, enhancing its production processes and monitoring consumption by means of an eco-efficiency indicator

Comentários
The eco-efficiency indicator enables the company to measure its energy efficiency based on the relationship between the service offered to customers (bits) and the company's impact on the environment (joules of energy consumed).

Identificador
Opp3

Em que ponto da cadeia de valor ocorre a oportunidade?
Operações diretas

Tipo de oportunidade
Eficiência de recursos

Principal fator de oportunidade climática
Uso de processos de produção e distribuição mais eficientes

Principal impacto financeiro em potencial
Aumento da receita resultante de uma maior demanda por produtos e serviços

Descrição específica da empresa
To prepare for a possible scenario of energy supply deficit due to water scarcity, TIM promotes initiatives aimed at reducing energy consumption in its services and facilities. The company has invested in restructuring processes and technology to achieve maximum efficiency, continuously improving customer service and improving energy efficiency. TIM has been investing in the contracting of renewable energy sources through distributed generation projects from plants and purchase of energy in the Free Energy Market. In 2020, the consumption of renewable energy sources reached 64% of the Company's electricity consumption. By 2025 the company will reach 90% of energy consumption from renewable sources until 2025. With investments underway since 2017, the target for the Distributed Generation Project is to reach 60 company-owned units by the end of 2022, including solar, hydroelectric and biogas plants with a monthly generation capacity of 38 GWh.

Horizonte temporal
Curto prazo

Probabilidade
Virtualmente certo

Dimensão do impacto
Alto

É possível fornecer um valor para o potencial impacto financeiro?
Não, não temos esse valor

Valor do potencial impacto financeiro (moeda)
<Not Applicable>

Valor do possível impacto financeiro – mínimo (moeda)
<Not Applicable>

Valor potencial do impacto financeiro – máximo (moeda)
<Not Applicable>

Explicação do valor do impacto financeiro
New lines of financing for energy efficiency or transportation projects can affect our energy costs and can reduce operating costs of our transportation contracts, which will translate into benefits for TIM. The financial implications of this opportunity were not estimated.

Custo para materializar a oportunidade
60000000

Estratégia para pôr em prática a oportunidade e explicação do cálculo de custos
In 2018, TIM achieved savings of around 1735 MWh through three energy efficiency projects: TRX (461 MWh), free-cooling (35 MWh), decomissioning (1238 MWh). The first is a waste utilization through improved technology and efficiency. Free-cooling is a ventilation system for equipment container through cooler installation in sites of shelter type (offices), in the South and Southeast, which reduces the use of energy and refrigerants gases in air conditioning equipments. Lastly, decomissioning refers to all the disposal/exchange of equipment enabling the best monitoring of these. Besides that, it is estimated that RAN Sharing project (a lamppost with a transmitting antenna in its interior, bringing, among other advantages, reduction in energy consumption) enabled an electricity reduction of 90000 MWh through the sharing of approximately 6,500 stations between TIM, Oi and Vivo.

Comentários
No comments

C3. Estratégia de negócios

C3.1

(C3.1) Os riscos e oportunidades climáticos influenciaram a estratégia e/ou o planejamento financeiro da organização?
Sim, desenvolvemos um plano de transição para baixo carbono

C3.1a

(C3.1a) O plano de transição para baixo carbono da organização é um item de resolução programado nas Reuniões Gerais Anuais (RGA)?

	O plano de transição para baixo carbono é um item programado de resolução nas RGAs?	Comentários
Linha 1	Sim	TIM created the ESG Committee, counting with five members, including some of the TIM Board of Directors. Its main attributions are define and monitor the strategic plan, ensure the achievement of the established targets . Read more about the committee in the chapter on Governance. This committee was created on December 10, 2020, with definitions of composition and activities formalized in the ESG Committee Internal Regime. Among others, but we can highlight that they are attributions of the ESG Committee that meets quarterly: I. To evaluate the plan and general strategy of the Company's ESG (ESG Plan) that will consolidate the ESG action plans, projects, proposals and initiatives, and how they may be organized and integrated into the internal processes and organizational structures for implementation of the ESG Plan by the Company, in line with the best practices of the market and the legislation in force; II. To review the goals and indicators panel of the Company's ESG Plan, and recommend its approval by the Board of Directors; III. To follow up and routinely monitor the execution of the ESG Plan and its indicators. TIM established a new and more ambitious target plan, called Plano ESG, for the 2021-23 triennium. Based on the ambitions assumed in the 2020-2022 Strategic Plan, the Company added more challenges. Among the ESG PLAN GOALS migrating the company to a low carbon economy are: Reach 90% energy consumption from renewable sources by 2025. Reduce indirect emissions by 70% (Scope 2) by 2025. Make operations carbon neutral by 2030. These are ambitions that TIM has assumed in its 2021 ESG Plan- 23. Among the actions and projects to achieve the goals is the Distributed Generation Project with its own plants including solar, hydroelectric generating plants (CGHs) and biogas generators. Also about 20% of the electricity consumed in 2020 was purchased through contracts in the free energy market, from renewable sources. On the issue of energy efficiency, network sharing agreements, decommissioning project and actions such as the gradual shutdown of the 2G network, removal of obsolete or unused equipment and replacement with more efficient ones. Large data center virtualization projects that operate more efficiently and implementation of autonomous sites that run on solar energy and satellite transmission.

C3.2

(C3.2) A organização usa a análise de cenários climáticos para informar sua estratégia?
Sim, qualitativa

C3.2a

(C3.2a) Dê detalhes do uso da análise de cenários climáticos pela organização.

Modelos e cenários climáticos aplicados	Detalhes
Outros, especifique (IPCC, 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Chapter 27 – Central and South America", considering both acute and chronic climate risks.)	Through its internal procedure called "PL.511 - Risk Management for the Security of TIM Group Assets in Brazil", the company defines a risk management model for the security of assets (human, material, intangible, IT resources and Infrastructure) of the companies of the TIM Brasil Group, based on the ISO / IEC 31000:2018 standard. Thus, the company understands that commercial risk is an element that is always present in the corporate world and is related to the change in the relationships established between the company and the environment in which it operates. In an attempt to achieve maximum compatibility between the internal and external environment, the tendency to rigidity of corporate structures and the tendency to environmental variability including the impacts of climate change, the strategies adopted by the company aim to continually redefine its image, in a competitive way in the markets and / or collaborative relationships in the environment in which it operates. The company's security actions generally aim to find the best solution to deal with problems related to the management of adverse events, linked to the fact that they cause damage to the company's human, intangible and material assets. The document identifies scenarios external, environmental threats as a potential circumstance of natural origin that could compromise an asset of company in the perimeter in question. If the threat it be identified, the presence of vulnerabilities to be exploited is determined, which may have the consequence on the company's business, such as a security incident, such as interruption or strong degradation of performance that could compromise normal commercial activities and the provision of services, the requirements to ensure business continuity. Examples 1: Threat: Natural event. Concept: Earthquakes, volcanic eruptions, floods, meteorological phenomena and weather phenomena (ie persistent weather conditions). Category: Loss of essential services. Environmental Factor: "Weather Phenomenon, Seismic Phenomenon, Volcanic Phenomenon, Meteorological Phenomenon, Flood". Examples 2: Threat: Energy. Concept: Loss of essential services (failure of the air conditioning system, failure of the water supply system, loss of electricity). Category: Loss of essential services. Environmental Factor: "Failure of air conditioning or water supply system due to water crisis/drought. Loss of energy - Climatic phenomenon related to lightning weather. The document identifies external scenarios, environmental threats as a potential circumstance of natural origin that could compromise a company's asset in the perimeter in question. If the threat is identified, the presence of vulnerabilities to be exploited is determined, which can have consequences on the company's business, such as a security incident, such as interruption or severe performance degradation that could compromise normal business activities and the provision of services, the requirements to ensure business continuity. The company's assets for which there are controlled risks as described above are also part of the scope of the Environmental Policy and Climate Change Policy for infrastructure that has risks mapped and controlled by the Environmental Management System based on the ISO14001:2015 Standard. TIM identifies relevant environmental aspects and impacts of its activities, including those with an effect on Climate Change, such as its macro processes of Energy Management, Management of GHG Emissions and Consumption of Natural Resources, which bring situations of scarcity of water resources, alteration of air quality and pollution and points out mechanisms for mitigation and control and impacts of Legislation.

C3.3

(C3.3) Descreva onde e como os riscos e as oportunidades climáticos exerceram influência na estratégia.

	Os riscos e as oportunidades climáticos exerceram influência na estratégia nesta área?	Descrição da influência
Produtos e serviços	Sim	The company recognizes that the operation of its network consumes a great deal of electricity. Therefore, the company is replacing its energy source from Brazil's electrical system to the purchase of clean and renewable energy. Beyond that, TIM is trying to use more efficient equipment, decreasing its GEE emissions. Climate change represents an opportunity for TIM to develop more low-emission products and services. As part of the company's digital transformation, which involves digitalizing all its processes, including the customer service and relationship platforms, TIM is the first operator to migrate 100% of its data centers to the cloud. In partnership with Oracle and Microsoft, this measure enhances a series of processes, including customer service, internal operations, billing, collection and the management of digital, with speed, scalability, platforms and security, in a project that combines innovation, sustainability and efficiency. The migration process is expected to take place in the next two years, with the transfer of all TIM resources to the cloud. This change is also linked with TIM's commitment to best ESG practices, given that migration to the cloud automatically changes emissions directly related to the storage of data in physical spaces, an important step towards achieving the company's target of becoming carbon neutral by 2030. Still thinking of digital services, the company further evolved its strategic alliances and partnerships to foster the development of solutions and by means of mobile technologies and IoT. This can also be seen in the relative emissions of Scope 2, which had a reduction due to lower energy consumption in Emissions Per Customer (tCO2 e/Thousand Customers) (Scope 2), from 0.980 in 2019 to 0.753 in 2020; in Emissions Associated With Net Operational Revenue (tCO2 and/R$ MILLION) (Scope 2) from 3,100 in 2019 to 2,242 in 2020 and also shown through Emissions Per Employee (tCO2 e/Employee), from 5,068 in 2019 to 3,982 in 2020. In 2020, TIM's Net Service Revenue was R$16.7 billion Reais (R$) according to the release of Evolution of Financial Indicators presented in Mar/21
Cadeia de fornecimento e/ou cadeia de valor	Sim	TIM does not manufacture products but collaborates with its suppliers in the development of products that, by allowing customers to use TIM's services, can help them reduce their own energy and carbon footprint. This is a joint effort of our Product and Services development teams, aligned with the Purchasing and Logistics area, which continuously monitors the sustainability performance of TIM's supply chain and strives to ensure that our suppliers also control and reduce their own energy and carbon footprint. In this way, TIM is concerned with providing transparency to the emission sources throughout its value chain, that is why it maps Scope 3 emissions from the acquisition of products and its service providers such as purchased goods and services; outsourced transportation and distribution services; extraction, production and transport of purchased and consumed fuels and energy, treatment of waste discarded by the organization not included in scopes 1 and 2.
Investimento em P&D	Sim	The company invests in efficient projects to its network and TI infrastructures, such as network virtualization that promotes the economy of materials, energy, and waste generation, avoiding the need for maintenance offset. Tim has also been shutting down obsolete equipment and making the replacement for modern and more efficient equipment, decreasing the consumption of electricity. One of the main objectives of the innovation strategy is to create solutions for the business focused on the evolution of the network infrastructure, with quality gains and expansion of the coverage area. With this focus, TIM has been investing resources to expand the 4G RAN Sharing network, which consists of sharing Stations Radio Base (ERBs) with other operators for 2G and 4G networks, reducing energy consumption by switching off one of the two networks and contributing to energy efficiency. This work is conducted by the area of Architecture and Technological Innovation, which includes telecommunication professionals, electrical and electronic engineers, computer scientists and other technologists with different backgrounds, skills and experiences, covering all areas of network knowledge, who meet these demands and support Research and Development (R&D) activities. The Company evolved its strategic alliances and partnerships to foster the development of solutions and promote digitalization in rural areas, through the use of mobile technologies and IoT, creating automation solutions.
Operações	Sim	Tim is looking forward to increasing the efficiency in its environmental management processes, aiming at more efficient equipment maintenance to avoid machines and equipment breaks, such as leakage of refrigerant gases or firefighting system. Furthermore, the company actively thinks about ways to optimize the use of your fleet, to economize travels, and encourage the usage of ethanol in flex-fuel cars. TIM views energy scarcity as a significant operational risk, directly linked with the company's costs. Any interruptions in energy supply impact service provision and the customer experience. It is the company's understanding that an investment in renewable sources of energy contributes to a lower environmental impact. In 2020, TIM had 64% of its energy matrix coming from renewable sources. By 2021, the expectation is to reach 80% of renewable energy, with 60 solar, hydro and biogas power plants, which will generate 38GWh of energy monthly, enough to supply a city with 150,000 inhabitants. The Plants are among the main investments through the Distributed Generation Project. Other important TIM projects that contribute to energy efficiency, such as: * Decommissioning, which promotes the reduction of consumption of energy with actions such as removing obsolete or unused equipment and replacing it with more efficient ones. In 2020, the Company achieved energy savings of 13,815 GJ; * Journey to Cloud project for virtualization of data centers that operate more efficiently. TIM monitors the efficiency of energy consumption in its data centers via the PUE (Power Usage Effectiveness) indicator. In 2020, the average PUE improved from 1,91 to 1,87. Our aim is to improve the PUE on a yearly basis. Therefore our reported target is to lower the PUE in comparison to the previous year. * Unplugged sites: autonomous sites that run on solar energy and satellite transmission, which is projected one 1tCO2e reduction estimate per year per site. through the reduction of energy consumption of traditional sites, reducing power consumption acquired local distribution network with the energy supply and increasing the availability of local energy where there are constant problems of energy supply through the solar system. Reducing the frequency of maintenance that would require displacement and consequent emission of fossil fuel for vehicles travel to distant places.

C3.4

(C3.4) Descreva onde e como os riscos e as oportunidades climáticos exerceram influência no planejamento financeiro.

	Elementos do planejamento financeiro que sofreram influência	Descrição da influência
Linha 1	Receitas Custos diretos Custos indiretos Gastos de capital	Climate risks and opportunities exerted influence in TIM's financial planning in many ways: In 2020, the issues of ESG (Environmental, Social & Governance) were established, for the first time, as one of the fundamental pillars of the Company's Strategic Plan. The goals of ESG - not only environmental, but also social and governance aspects - were determined based on the material themes and disclosed in the presentation of the Strategic Plan. Among the GOALS PLAN ESG 2021-23 is to reach 90% of energy consumption from renewable sources by 2025. Increase by 80% energy efficiency in data traffic by 2025, compared to 2019. With investments made since 2017, the Distributed Generation Project has the goal of reaching 60 own plants by the end of 2022, including solar, hydroelectric generating plants (CGHs) and biogas generators, totaling a monthly generation of 38 GWh. In 2020, another 13 plants started operating (10 solar, 2 CGH and 1 biogas) in the states of Ceará, Mato Grosso do South, Paraíba, Pernambuco, Sergipe and São Paulo. In 2020, 64%1 of the average electricity consumption or 402,732 MWh came from renewable sources. The goal is to reach at least 90% by 2025. In December 2020, TIM achieved reach 74%. Our operations are largely dependent on the continuous and uninterrupted performance of our controls, network technology systems and certain hardware. Our technical infrastructure (including our network infrastructure for mobile telecommunications services) is vulnerable to damage or disruption of information and telecommunications technology failures, power loss, floods, storms, fires, terrorism, willful misconduct, human error and similar events . Our infrastructure can be damaged as a result of natural disasters or other unexpected events. Our operations may be suspended or interrupted for an indefinite period in the event of adverse events as a result of power shortages, damage to our transmission base, natural disasters, climate change or other environmental or natural events such as storms or man-made disasters or any other cases of unexpected damage. Such impacts can have disproportionate geographic impacts, which can range from impacts to a single address of an entire city or region. If we are unable to mitigate or prevent such damage, in the event of natural or man-made disasters and any other unexpected events, the suspension or interruption of our operations could have an adverse effect on the continuity of our operations, our financial results and the compliance with regulations. Any of these occurrences could result in reduced user traffic and reduced revenue, and harm our customer satisfaction levels, our reputation and compliance with some of our regulatory obligations. In order to avoid or reduce indeterminate periods of suspension, or interruption of operations caused by damage to our transmission bases, natural disasters or any other unexpected events, we have implemented an internal policy aimed at the continuous mapping of systemic vulnerabilities, in order to improve the selection process of key projects, in order to expand the robustness of the network infrastructure technique and gradually make it more resistant. The company uses demand forecasts to make investments, however such forecasts may be inaccurate due to economic volatility and result in lower than expected revenues. We make certain investments, such as the acquisition of materials and the development of our network infrastructure, based on our forecasts of the amount of demand that customers will have.

C3.4a

(C3.4a) Dê eventuais informações adicionais sobre como os riscos e as oportunidades climáticos influenciaram a estratégia e o planejamento financeiro (opcional).

The company also identifies opportunities for improvement to reach levels of excellence in its Environmental Management System (SGA). It works on improving performance in processes and controls. And where the issue of climate change is strategic, not only for business continuity, but also for value creation. Because of this, the Company monitors its GHG emissions annually, since 2010, as a way to anticipate the challenges that the subject presents and the growing demand from society for a more sustainable position. TIM's GHG inventory is based on the most widely accepted guidelines in the international and national scenarios regarding the quantification and disclosure of GHG emissions, such as the GHG Protocol - methodology disseminated on a worldwide scale, for accounting, elaboration and publication of the greenhouse gas inventory and the Intergovernmental Panel on Climate Change (IPCC) guidelines.

C4. Metas e desempenho

C4.1

(C4.1) Havia uma meta de emissões ativa no ano de reporte?
Meta absoluta

C4.1a

(C4.1a) Forneça detalhes de suas metas de emissões absolutas e do progresso em relação a essas metas.

Número de referência da meta
Abs 2

Ano em que a meta foi definida
2020

Abrangência da meta
Para a empresa como um todo

Escopo(s) (ou categoria do Escopo 3)
Escopo 2 (com base no mercado)

Ano-base
2019

Emissões abrangidas no ano-base (toneladas métricas de CO2e)
53806

Emissões abrangidas no ano-base como porcentagem do total das emissões do ano-base em um Escopo(s) selecionado(s) (ou na categoria do Escopo 3)
100

Ano da meta
2025

Meta de redução com relação ao ano-base (%)
70

Emissões abrangidas no ano da meta (toneladas métricas de CO2e) [calculadas automaticamente]
16141.8

Emissões abrangidas no ano de reporte (toneladas métricas de CO2e)
38717

Porcentagem da meta alcançada [autocalculada]
40.061915559072

Status da meta no ano de reporte
Em andamento

Esta meta tem base científica?
Não, mas esperamos definir uma nos próximos 2 anos

Meta desejada
<Not Applicable>

Por favor, explique (incluindo a abrangência a meta)
This target applies to Italian operations TIM SA The emissions taken into consideration are and indirect emissions due to purchase and consumption of electrical energy (Scope2). The target is in line with an ambitious Group target: becoming Carbon Neutral in 2030. In 2021, TIM started a project to join the SBTi initiative to validate its emissions targets.

Número de referência da meta
Abs 1

Ano em que a meta foi definida
2019

Abrangência da meta
Para a empresa como um todo

Escopo(s) (ou categoria do Escopo 3)
Escopos 1+2 (com base na localização)

TIM has a defined goal in its strategic plan to be Carbon zero in its combined carbon emissions from its scopes (scopes 1 and 2) by 2030. See pages 08, 64 -67 in ESG Report 2020: https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Ano-base
2019

Emissões abrangidas no ano-base (toneladas métricas de CO2e)
58938

Emissões abrangidas no ano-base como porcentagem do total das emissões do ano-base em um Escopo(s) selecionado(s) (ou na categoria do Escopo 3)
100

Ano da meta
2030

Meta de redução com relação ao ano-base (%)
100

Emissões abrangidas no ano da meta (toneladas métricas de CO2e) [calculadas automaticamente]
0

Emissões abrangidas no ano de reporte (toneladas métricas de CO2e)
44190

Porcentagem da meta alcançada [autocalculada]
25.0229054260409

Status da meta no ano de reporte
Em andamento

Esta meta tem base científica?
Não, mas esperamos definir uma nos próximos 2 anos

Meta desejada
<Not Applicable>

Por favor, explique (incluindo a abrangência a meta)
The target is in line with an ambitious Group target: becoming Carbon Neutral in 2030. In 2020, the company managed to reduce its indirect scope 2 emissions by 28% and its combined scope 1 and 2 (carbon neutral target) emissions by 30% (not only 25%), taking into account the purchase of carbon credits to offset scope 1 emissions, which reinforces the emissions reduction initiatives. In order to complement the company's internal efforts, since 2014 TIM has invested in the purchase of carbon credits to offset part of its emissions. In the Scope 1 , the TIM sought to gain more in-depth understanding of this question by calculating its carbon footprint, a study which measures a product or service's specific GHG emissions during the course of its life cycle. The analysis showed that each 1 Mb of data transmitted over 4G technology results in an emission of 1.47 g of CO2 e. The major stages affected in the company's operations are related to burning diesel in generators and consuming electricity. In the Scope 2, there was a reduction due to lower electricity consumption in 2020. In 2021, TIM started a project to join the SBTi initiative to validate its emissions targets.

C4.2

(C4.2) Havia alguma outra meta climática ativa no ano de reporte?
Meta(s) para aumentar a produção ou o consumo de energia de baixo carbono
Outra(s) meta(s) climática(s)

C4.2a

(C4.2a) Dê detalhes sobre a(s) meta(s) de aumento da produção ou do consumo de energia com baixos níveis de carbono.

Número de referência da meta
Low 1

Ano em que a meta foi definida
2020

Abrangência da meta
Para a empresa como um todo

Tipo de meta: absoluta ou de intensidade
Absoluta

Tipo de meta: vetor de energia
Eletricidade

Tipo de meta: atividade
Consumo

Tipo de meta: fonte de energia
Somente fonte(s) de energia renovável

Métrica (numerador da meta, em caso de divulgação de uma meta de intensidade)
MWh

Denominador da meta (somente metas de intensidade)
<Not Applicable>

Ano-base
2019

Valor ou porcentagem no ano-base
50

Ano da meta
2025

Valor ou porcentagem no ano da meta
90

Valor ou porcentagem no ano de reporte
64

Porcentagem da meta alcançada [autocalculada]
35

Status da meta no ano de reporte
Em andamento

Esta meta faz parte de uma meta de emissões?
Reach 90% energy consumption from renewable sources by 2025. TIM depends on a constant supply of energy at a competitive cost for its telecommunications networks, stores and administrative buildings. Given its impacts and strategic importance, in addition to being a material topic for the company, energy management is one of the commitments assumed in the 2021-23 ESG Plan, with targets for the transition to renewable energy and emissions reductions.

Esta meta faz parte de uma iniciativa abrangente?
Não, não faz parte de uma iniciativa abrangente

Por favor, explique (incluindo a abrangência da meta)
TIM energy management is based on two fronts: energy efficiency and the pursuit of renewable sources. Aligned with the guidelines set forth in the company's Environmental Policy, a number of measures are being implemented: In 2020, 64%1 of the company's average electricity consumption or 402,732 MWh was from renewable sources. The target is to reach at least 90% by 2025. By December 2020, TIM had managed to reach 74% With investments underway since 2017, the target for the Distributed Generation Project is to reach 60 company-owned units by the end of 2022, including solar, hydroelectric and biogas plants with a monthly generation capacity of 38 GWh;In 2020, another 13 plants (10 solar, 2 hydroelectric and 1 biogas) came into operation in the states of Ceará, Mato Grosso do Sul, Paraíba, Pernambuco, Sergipe and São Paulo.

C4.2b

(C4.2b) Dê detalhes de outras eventuais metas climáticas, incluindo de redução de metano.

Número de referência da meta
Oth 1

Ano em que a meta foi definida
2021

Abrangência da meta
Para a empresa como um todo

Tipo de meta: absoluta ou de intensidade
Absoluta

Tipo de métrica: categoria e Métrica (numerador da meta, em caso de reporte de uma meta de intensidade)

Manejo de resíduos	Porcentagem do lixo total gerado que é reciclado

Denominador da meta (somente metas de intensidade)
<Not Applicable>

Ano-base
2020

Valor ou porcentagem no ano-base
12

Ano da meta
2023

Valor ou porcentagem no ano da meta
95

Valor ou porcentagem no ano de reporte
96

Porcentagem da meta alcançada [autocalculada]
101.204819277108

Status da meta no ano de reporte
Em andamento

Esta meta faz parte de uma meta de emissões?
No. TIM recognizes its direct and shared responsibility in managing the post-consumer phase of its products (smartphones, modems, batteries and accessories). In parallel, the company is aware that the operation also generates hazardous and non-hazardous waste both in administrative processes and in processes involving the installation and maintenance of infrastructure. This waste has to be disposed of correctly in accordance with legal requirements in order not to contaminate the environment and to avoid sanctions and fines for the company.

Esta meta faz parte de uma iniciativa abrangente?
Não, não faz parte de uma iniciativa abrangente

Explique (incluindo a abrangência da meta)
The efficient and responsible management of solid waste is included in the goals assumed by TIM in its 2021-23 ESG Plan. The company has the target of recycling at least 95% of the waste generated by its operations and maintaining this level by 2023. Accordingly, it intends to limit waste disposal in landfills by up to 5%. See page 63, ESG Report 2020: https://ri.tim.com.br/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg== Until the beginning of 2020, TIM had a commitment to recycle at least 13% of the waste generated in the offices, but Due to the permanence of employees in the home office, the generation of solid waste in the offices presented a lower amount in the year. With a lower volume of organic waste, the percentage of recycling was double, 24%. See page 72, ESG Report 2019: https://ri.tim.com.br/Download.aspx?Arquivo=7s+kqo8GPwUuDXDeLu4HWA==

C4.3

(C4.3) Existiam iniciativas de redução de emissões ativas no ano de reporte? Observe que isto pode incluir aquelas nas fases de planejamento e/ou implementação.
Sim

C4.3a

(C4.3a) Identifique o número total de iniciativas em cada estágio de desenvolvimento; para aquelas em fase de implementação, identifique a economia de CO2e estimada.

	Número de iniciativas	Economia anual total estimada de CO2e em toneladas métricas de CO2e (somente para linhas marcadas com *)
Em fase de pesquisa	0	0
A ser implementada*	1	1500
Implementação iniciada*	2	58938
Implementada*	1	237
Não será implementada	0	0

(C4.3b) Dê detalhes sobre as iniciativas implementadas no ano de reporte na tabela abaixo.

Categoria de iniciativa e Tipo de iniciativa

Geração de energia de baixo carbono	Outros, especifique (Renewable energy purchase)

Economia anual estimada de CO2e (toneladas métricas de CO2e)
7533

Escopo(s)
Escopo 2 (com base no mercado)

Voluntário/obrigatório
Voluntária

Economia monetária anual (unidade monetária – conforme especificada em C0.4)
0

Investimento necessário (unidade monetária – conforme especificada em C0.4)
0

Período de retorno
4 a 10 anos

Duração estimada da iniciativa
Em andamento

Comentários
Number of initiatives: 02 - Total estimated annual CO2e savings in metric tonnes CO2e:53.806tCO2e (scope 2) of 2019 base year. 53,806 * 70% (reduction target) = 37,664tCO2e ÷5 (from 2020 up to 2025) = 7,533tCO2e/Year. Includes energy efficiency and renewable energy projects such as Distributed Generation projects, which aim to reach 60 own plants by the end of 2022, including solar, centrals hydroelectric generators (CGHs) and biogas generators, totaling a monthly generation of 38 GWh; in addition to about 20% of electricity consumed in 2020 was purchased in the free energy market, from renewable sources, a space for negotiation that works independently from the concessionaires, such as Power Purchase Agreement. With this, the goal is to reduce indirect emissions from Scope 2 by - 70% to up to 2025 and reach 90% of energy from renewable sources by 2025.

Categoria de iniciativa e Tipo de iniciativa

Eficiência energética nas construções	Programa de manutenção

Economia anual estimada de CO2e (toneladas métricas de CO2e)
1500

Escopo(s)
Escopo 2 (com base na localização)

Voluntário/obrigatório
Voluntária

Economia monetária anual (unidade monetária – conforme especificada em C0.4)
0

Investimento necessário (unidade monetária – conforme especificada em C0.4)
0

Período de retorno
4 a 10 anos

Duração estimada da iniciativa
Em andamento

Comentários
Unplugged sites: Unplugged sites: standalone base stations, solar powered units with satellite transmission. In the project to expand its 4G coverage, which will reach all Brazilian municipalities by 2023. The objective is to take the fourth generation network to places of difficult access and without available electricity, with the installation of towers and antennas powered by solar panels. Each project site has its own solar energy generation with photovoltaic panels and also uses lithium batteries, which guarantee complete autonomy and more capacity for charging and discharging cycles, resulting in a longer useful life for the equipment. In this way, the operator guarantees greater 4G coverage with a simplified infrastructure, low environmental impact and lower cost. Estimated reduction in conventional energy consumption of approximately 15MWh per year for each site or approximately 1 tCO2e considering grid energy.

Categoria de iniciativa e Tipo de iniciativa

Eficiência energética nos processos de produção	Substituição de máquinas/equipamentos

Economia anual estimada de CO2e (toneladas métricas de CO2e)
237

Escopo(s)
Escopo 1

Voluntário/obrigatório
Voluntária

Economia monetária anual (unidade monetária – conforme especificada em C0.4)
0

Investimento necessário (unidade monetária – conforme especificada em C0.4)
0

Período de retorno
Nenhum retorno

Duração estimada da iniciativa
Em andamento

Comentários
In addition to the 2G network sharing agreement with Vivo, TIM maintained its Decommissioning project, which promotes a reduction in energy consumption by means of the gradual deactivation of the 2G network, the removal of obsolete or unused equipment, which is substituted with more efficient models. In 2020, the company obtained energy savings of 13,815 GJ no ano ~ 3837 Mwh.

C4.3c

(C4.3c) Que métodos a empresa usa para estimular os investimentos em atividades de redução das emissões?

Método	Comentários
Orçamento específico para a eficiência energética	TIM's corporate practices encompasses the continuously replacement of old network and administrative equipment for more modern and more energy efficient models. TIM is therefore investing in more energy efficient alternatives to reduce its own energy consumption and emissions.
Engajamento dos funcionários	TIM engages its employees in projects and initiatives related to climate change and the reduction of energy consumption. Staff awareness encompasses daily actions to avoid wasting electricity in routine administrative tasks. In addition, TIM has sought greater engagement of its employees through training on climate change issues and dissemination by Management of the strategy containing environmental objectives and targets of the ESG Plan related to climate change, in order to encourage efficient use of resources.
Orçamento específico para o P&D de produtos de baixo carbono	The ICT industry's technology and smart services through the Internet of Things (IoT) have the potential to cut global carbon emissions, reduce resource intensity, stimulate economic growth and deliver substantial social benefits. Telenor continues to engage with the industry organisations. In 2019, TIM was the first carrier to initiate 5G technology tests in Brazil by means of partnerships with teaching institutions, technology suppliers and start-up hubs. Enabling the use of the full potential of disruptive applications foreseen for 5G, such as Autonomous vehicle, connected home, remotely operated machines. The 5G technology can reduce emissions of greenhouse gases, as new applications become available and scanning is used more efficiently.

C4.5

(C4.5) A empresa possui algum bem e/ou serviço atual que pode ser classificado como produto com baixos níveis de carbono ou que permita que terceiros evitem emissões de GEE?
Sim

C4.5a

(C4.5a) Forneça detalhes dos produtos e/ou serviços da empresa classificados como produtos com baixos níveis de carbono ou que permitam que terceiros evitem emissões de GEE.

Nível de agregação
Grupo de produtos

Descrição do produto/Grupo de produtos
Group of products, including: • Mobile internet in 3G, 4G, 4.5G and 5G DSS > Fixed and mobile telephony > Corporate voice and data solutions and digital services • TIM Live: fixed ultra-broadband • Pioneer in Agribusiness > TIM 4G in the Countryside – coverage in over 6 million hectares • High definition 4G calls > VoLTE (Voice over LTE) Technology > Less time to complete call and • greater stabilityDesign and evaluation of energy consumption / CO2 emission products, as intelligent services for companies, • governed by a community that allows for virtualization and desmaterialization, with a particular focus on intelligent services (IoT) and databases in the new, Recarga, and parcers with digital content providers.

Estes produtos têm baixos níveis de carbono ou permitem evitar emissões?
Emissões evitadas

Taxonomia, metodologia ou projeto usado para classificar produtos como tendo baixos níveis de carbono ou para calcular emissões evitadas
Outros, especifique (Product efficiency, saving resources and consuming less energy)

Porcentagem da receita dos produtos de baixo carbono no ano de reporte
0

Porcentagem do valor total do portfólio
<Not Applicable>

Classes de ativos/tipos de produtos
<Not Applicable>

Comentários
TIM's businesses, telecommunications and broadband services, allow the reduction of emissions in other sectors through information and communications technology. TIM believes that its services in mobile and fixed telephony, ultra-broadband and IoT applications and for agribusiness and industry result in the reduction of GHG emissions that would be generated if people had to use any means of transport to be able to meet someone or do a meeting. Furthermore, in several segments our service is the basis for optimizing production processes and logistical flows, significantly reducing emissions associated with energy consumption. TIM sought to gain more in-depth understanding of this question by calculating its carbon footprint, a study which measures a product or service's specific GHG emissions during the course of its life cycle. The analysis showed that each 1 Mb of data transmitted over 4G technology results in an emission of 1.47 g of CO2 e. The major stages affected in the company's operations are related to burning diesel in generators and consuming electricity.

C5. Metodologia de emissões

C5.1

(C5.1) Informe o ano-base e as emissões do ano-base (Escopos 1 e 2).

Escopo 1

Início do ano-base
Janeiro 1 2010

Fim do ano-base
Dezembro 31 2010

Emissões do ano-base (toneladas métricas de CO2e)
1614.9

Comentários

Escopo 2 (com base na localização)

Início do ano-base
Janeiro 1 2010

Fim do ano-base
Dezembro 31 2010

Emissões do ano-base (toneladas métricas de CO2e)
15624

Comentários
No comments

Escopo 2 (com base no mercado)

Início do ano-base

Fim do ano-base

Emissões do ano-base (toneladas métricas de CO2e)

Comentários
No comments

C5.2

(C5.2) Selecione o nome da norma, do protocolo ou da metodologia usado/a para coletar dados de atividades e calcular as emissões.

Brazil GHG Protocol Programme
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Dados de emissões

C6.1

(C6.1) Qual foi o total de emissões brutas de Escopo 1 da organização, em toneladas métricas de CO2e?

Ano de reporte

Emissões brutas de Escopo 1 (toneladas métricas de CO2e)
5472.745

Data de início
<Not Applicable>

Data de fim
<Not Applicable>

Comentários

C6.2

(C6.2) Descreva o método usado para reportar as emissões de Escopo 2 de sua organização.

Linha 1

Escopo 2, com base na localização
Estamos divulgando um valor de Escopo 2 com base na localização

Escopo 2, com base no mercado
Temos operações em locais onde podemos acessar fatores de emissões de fornecedores de eletricidade ou fatores de emissões residuais, mas não podemos reportar um valor de Escopo 2 com base no mercado

Comentários
TIM depends on a constant supply of energy at a competitive cost for its telecommunications networks, stores and administrative buildings. Given its impacts and strategic importance, in addition to being a material topic for the company, energy management is one of the commitments assumed in the 2021-23 ESG Plan. TIM energy management is based on two fronts: energy efficiency and the pursuit of renewable sources. With investments underway since 2017, the target for the Distributed Generation Project is to reach 60 company-owned units by the end of 2022, including solar, hydroelectric and biogas plants with a monthly generation capacity of 38 GWh; Around 20% of the electrical energy consumed in 2020 was renewable and was bought on the free energy market, a negotiation space that functions independently of the power utilities. The breakdown of energy consumption is: 21% from the free market (100% renewable), 18% from the Distributed Generation Project (100% renewable) and 61% from the National Energy Grid (48.4% of the Brazilian energy matrix is renewable and 84.8% of the electric matrix is renewable, according to the 2020 National Energy Balance).

C6.3

(C6.3) Qual foi o total de emissões brutas de Escopo 2 de sua organização, em toneladas métricas de CO2e?

Ano de reporte

Escopo 2, com base na localização
38717.254

Escopo 2, com base no mercado (se aplicável)
<Not Applicable>

Data de início
<Not Applicable>

Data de fim
<Not Applicable>

Comentários

C6.4

(C6.4) Existem fontes (por ex., instalações, GEEs específicos, atividades, regiões etc.) de emissões de Escopo 1 e Escopo 2 que estejam dentro dos limites de reporte selecionados, mas que não estão incluídas na divulgação?
Não

C6.5

(C6.5) Explique as emissões globais brutas de Escopo 3 da organização, divulgando e explicando eventuais exclusões.

Bens e serviços adquiridos

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
564.243

Metodologia de cálculo das emissões
Emission factors from Ecoinvent® database.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
0

Por favor, explique
Emissions in this category consider the carbon footprint of all the paper consumption in the company. Em 2021 a TIM está reavaliando a materialidade das categorias do escopo 3 para incorporar mais fontes emissoras.

Bens de capital

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Atividades relacionadas a combustível e energia (não incluídas no Escopo 1 ou 2)

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
9744.915

Metodologia de cálculo das emissões
Percentage of T&D losses from national network system and fuel emission factors from the Ecoinvent® database.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
0

Por favor, explique
Once it is a relevant emission source, TIM started performing the information collection in 2016 based on company's total consumption of fuel and electricity.

Transporte e distribuição upstream

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
6336.493

Metodologia de cálculo das emissões
Emissions calculated from mileage traveled or fuel consumption. Emissions factors for air freight were provided by DEFRA based on the transported load and the distance between flights. Other fuel emission factors were provided by GHG Protocol Brasil 2020 tool.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
100

Por favor, explique
All transportation directly paid by TIM is accounted in this category and all the data was provided by our value chain.

Resíduos gerados nas operações

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
128.525

Metodologia de cálculo das emissões
Emission factors from IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories).

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
0

Por favor, explique
Refers to the emissions from the final destination of waste generated in our operations. The amount of waste disposed is controlled by TIM.

Viagens de negócios

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
1075.522

Metodologia de cálculo das emissões
Emission factors from the Brazil GHG Protocol Programme tool based on data from IPCC (2006 IPCC Guidelines for National Greenhouse Gas Inventories) and DEFRA.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
0

Por favor, explique
The data used is based on TIM's control over the business travels.

Deslocamento de funcionários (ida e volta do trabalho)

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
1062.183

Metodologia de cálculo das emissões
Emission calculated from the distance traveled by employees in their way from home to work and the mode of transportation used, using the 2020 GHG Protocol Brasil tool.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
0

Por favor, explique
Emission calculated from the distance traveled by employees in their way from home to work and the mode of transportation used. The distance traveled is calculated based on a questionnaire that is answered by our employees.

Ativos arrendados upstream

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Transporte e distribuição downstream

Status da avaliação
Relevante, calculadas

Toneladas métricas em CO2e
33.832

Metodologia de cálculo das emissões
Emissions calculated from mileage traveled or fuel consumption. Emissions factors were provided by the 2020 GHG Protocol Brasil tool.

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
100

Por favor, explique
Refers to outsourced transportation of loads, from data given by the value chain partners.

Processamento de produtos vendidos

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Uso de produtos vendidos

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Tratamento de produtos vendidos ao final de sua vida útil

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Ativos arrendados downstream

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Franquias

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Investimentos

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Outros (upstream)

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

Outros (downstream)

Status da avaliação
Não relevante, explicação fornecida

Toneladas métricas em CO2e
<Not Applicable>

Metodologia de cálculo das emissões
<Not Applicable>

Porcentagem das emissões calculada com dados obtidos de fornecedores ou parceiros da cadeia de valor
<Not Applicable>

Por favor, explique
TIM studied all the Scope 3 emissions categories and found this not to be a material emission source and, therefore, decided not to account this category for the moment. However, in 2021 the company is reassessing all Scope 3 categories to account more emissions as possible considering also the quality of the data available. So, in a near future this category could be assessed.

C6.7

(C6.7) As emissões de dióxido de carbono provenientes do carbono biogênico são relevantes para a organização?
Sim

C6.7a

(C6.7a) Forneça as emissões provenientes de carbono biogênico relevantes para a organização, em toneladas métricas de CO2.

	Emissões de CO2 provenientes de carbono biogênico (toneladas métricas de CO2)	Comentários
Linha 1	200.662	Scope 1: 200.662 tons of biogenic CO2. Scope 3: 844.32 tons of biogenic CO2.

C6.10

(C6.10) Descreva as emissões combinadas globais brutas de Escopos 1 e 2 para o ano de reporte, em toneladas métricas de CO2e, por receita total em moeda unitária, e forneça eventuais métricas de intensidade adicionais adequadas para as operações de negócios.

Valor da intensidade
0.00000256

Numerador da métrica (Emissões combinadas globais brutas de Escopos 1 e 2, em toneladas métricas de CO2e)
44190

Denominador da métrica
receita total unitária

Denominador da métrica: Total de unidade
17268000000

Valor do Escopo 2 usado
Com base na localização

Porcentagem de variação em relação ao ano anterior
24.55

Direção da variação
Diminuiu

Motivo da variação
The revenue used to answer this question was the net revenue. In 2019 our net revenue was 17,377 R$ million and the intensity figure was 0.00000339 tCO2e/net revenue. This reduction mostly occurred because of the the electricity consumption that was reduced due to pandemic and because the electricity emissions factor from the grid also reduced in 2020, compared to 2019. Also, a part of the reduction is due to the fact that TIM is always looking for ways to improve its efficiency and reduce its emissions.

Valor da intensidade
4.54

Numerador da métrica (Emissões combinadas globais brutas de Escopos 1 e 2, em toneladas métricas de CO2e)
44190

Denominador da métrica
Outros, especifique (Number of employees)

Denominador da métrica: Total de unidade
9723

Valor do Escopo 2 usado
Com base na localização

Porcentagem de variação em relação ao ano anterior
21.6

Direção da variação
Diminuiu

Motivo da variação
The overall GHG emissions of combined Scope 1 and 2 were 25.02% lower than emissions in 2019, because TIM implemented more activities to reduce emissions and because of the pandemic situation in 2020, that ended causing a drop in the electricity usage in buildings.

C7. Decomposição das emissões

C7.1

(C7.1) Sua organização decompõe suas emissões de Escopo 1 por tipo de gás de efeito estufa?
Sim

C7.1a

(C7.1a) Decomponha o total de emissões brutas globais de Escopo 1 por tipo de gás de efeito estufa e forneça a fonte de cada potencial de aquecimento global de efeito estufa (GWP) utilizado.

Gás de efeito estufa	Emissões de Escopo 1 (toneladas métricas de CO2e)	Referência de GWP
CO2	1143.176	Quarto Relatório de Avaliação do IPCC (AR4 – 100 anos)
CH4	6.275	Quarto Relatório de Avaliação do IPCC (AR4 – 100 anos)
N2O	13.708	Quarto Relatório de Avaliação do IPCC (AR4 – 100 anos)
HFCs	4309.586	Quarto Relatório de Avaliação do IPCC (AR4 – 100 anos)

C7.2

(C7.2) Desagregue o total de emissões brutas de Escopo 1 por país/região.

País/Região	Emissões de Escopo 1 (toneladas métricas de CO2e)
Brasil	5472.745

C7.3

(C7.3) Indique quais desagregações de emissões brutas de Escopo 1 a empresa pode fornecer.

Por atividade

C7.3c

(C7.3c) Desagregue o total de emissões brutas de Escopo 1 por atividade de negócio.

Atividade	Emissões de Escopo 1 (toneladas métricas de CO2e)
Stationary combustion	814.766
Mobile combustion	348.393
Fugitive emissions	4309.586

C7.5

(C7.5) Desagregue o total de emissões brutas de Escopo 2 por país/região.

País/Região	Escopo 2, com base na localização (toneladas métricas de CO2e)	Escopo 2, com base no mercado (toneladas métricas de CO2e)	Eletricidade, aquecimento, vapor ou refrigeração (MWh) adquiridos e consumidos	Eletricidade, aquecimento, vapor ou refrigeração de baixo carbono adquiridos e consumidos, contabilizados na abordagem do Escopo 2 com base no mercado 2 (MWh)
Brasil	38717.254	0	627254.01	0

C7.6

(C7.6) Indique quais desagregações de emissões brutas de Escopo 2 a empresa pode fornecer.

Por divisão de negócios

C7.6a

(C7.6a) Desagregue o total de emissões brutas de Escopo 2 por divisão de negócios.

Divisão de negócios	Escopo 2, com base na localização (toneladas métricas de CO2e)	Escopo 2, com base no mercado (toneladas métricas de CO2e)
North Region	2038.181	0
Mid-West Region	2282.173	0
South Region	8650.556	0
Northeast Region	5246.73	0
East Region	4979.064	0
TIM São Paulo	11523.99	0
TIM Rio de Janeiro	3996.561	0

C7.9

(C7.9) Como o total de emissões brutas (Escopos 1 e 2 combinados) do ano de referência variou em comparação com o do ano de referência anterior?

Diminuiu

C7.9a

(C7.9a) Caso tenha ocorrido qualquer variação no total das emissões brutas (Escopos 1 e 2 combinados), identifique as razões dessa variação e compare cada uma delas com as emissões do ano anterior.

	Mudança nas emissões (toneladas métricas de CO2e)	Direção da variação	Valor das emissões (porcentagem)	Explique os cálculos
Variação no consumo de energia renovável	15089	Diminuiu	28	TIM has been promoting measures to boost energy consumption efficiency, such as the gradual decommissioning of the 2G network and the removal of obsolete or unused equipment, which is being replaced by more efficient models. TIM energy management is based on two fronts: energy efficiency and the pursuit of renewable sources. With investments underway since 2017, the target for the Distributed Generation Project is to reach 60 company-owned units by the end of 2022, including solar, hydroelectric and biogas plants with a monthly generation capacity of 38 GWh.
Outras atividades de redução de emissões	0	Sem alteração	0	TIM has been promoting measures to boost energy consumption efficiency, such as the gradual decommissioning of the 2G network and the removal of obsolete or unused equipment, which is being replaced by more efficient models. The project "Journey to the Cloud " was set to promote the virtualization of data centers driving greater efficiency; Unplugged sites: autonomous units powered by solar energy with transmission via satellite. Although TIM is conducting different projects that aim to reduce GHG emissions, TIM does not have enough data to be able to exactly disclose the actual impact of each project or climate action.
Desinvestimentos	0	Sem alteração	0	TIM has been promoting measures to boost energy consumption efficiency, such as the gradual decommissioning of the 2G network and the removal of obsolete or unused equipment, which is being replaced by more efficient models. Although TIM is conducting this decommissioning and therefore, disinvesting in 2G technology, TIM does not have enough data to be able to exactly disclose the actual impact of each project or climate action.
Aquisições	0	Sem alteração	0	There are no acquisitions that have enough data available to disclose the impacts on changes regarding GHG emissions.
Fusões	0	Sem alteração	0	There are no mergers that have enough data available to disclose the impacts on changes regarding GHG emissions.
Variação na produção	348	Diminuiu	31	Scope 1 - Consisting of vehicles of executives and security staff. In 2020, there was a reduction in travel due to the adoption of remote working because of the pandemic, resulting in lower fuel consumption.
Mudança de metodologia	0	Sem alteração	0	There were no significant changes in the methodology.
Mudança de limite	0	Sem alteração	0	There were no changes in the boundaries.
Mudança das condições físicas de operação	347	Aumentou	8.8	Scope 1 - The increase was due to equipment maintenance and the replacement of gases with high global warming potential
Não identificado	0	Sem alteração	0	There were no unidentified changes in the boundaries.
Outros	154	Aumentou	23	Scope 1 - refrigerant gases and fire extinguishers - Increase due to greater use because of power outages.

C7.9b

(C7.9b) Seus cálculos sobre o desempenho das emissões em C7.9 e C7.9a têm como parâmetro o valor das emissões de Escopo 2 com base na localização ou o valor das emissões de Escopo 2 com base no mercado?

Com base na localização

C8. Energia

C8.1

(C8.1) Durante o ano de referência, qual porcentagem do total de gastos operacionais corresponde aos gastos com energia?

Mais de 30%, mas inferior ou igual a 35%

C8.2

(C8.2) Selecione quais atividades relacionadas à energia foram realizadas pela organização.

	Indique se a organização realizou esta atividade energética no ano de reporte
Consumo de combustível (exceto matérias-primas)	Sim
Consumo de eletricidade comprada ou adquirida	Sim
Consumo de aquecimento comprado ou adquirido	Não
Consumo de vapor comprado ou adquirido	Não
Consumo de refrigeração comprada ou adquirida	Não
Geração de eletricidade, aquecimento, vapor ou refrigeração	Sim

C8.2a

(C8.2a) Relate os totais de consumo de energia (exceto matérias-primas) de sua organização, em MWh.

	Valor de aquecimento	MWh de fontes renováveis	MWh de fontes não renováveis	Total (renováveis e não renováveis) em MWh
Consumo de combustível (exceto matérias-primas)	LHV (menor poder calorífico)	784.68	4380.75	5165.42
Consumo de eletricidade comprada ou adquirida	<Not Applicable>	290169	224522	514691
Consumo de aquecimento comprado ou adquirido	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de vapor comprado ou adquirido	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de refrigeração comprada ou adquirida	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumo de energia renovável (não combustível) autogerada	<Not Applicable>	112563	<Not Applicable>	112563
Consumo total de energia	<Not Applicable>	403516.68	228902.75	632419.43

C8.2b

(C8.2b) Selecione as aplicações de consumo de combustível de sua organização.

	Indique se a organização adota esta aplicação de combustível
Consumo de combustível para a geração de eletricidade	Sim
Consumo de combustível para a geração de calor	Sim
Consumo de combustível para geração de vapor	Não
Consumo de combustível para a geração de refrigeração	Não
Consumo de combustível para cogeração ou trigeração	Não

C8.2c

(C8.2c) Informe a quantidade de combustível em MWh que a organização consumiu (exceto matérias-primas) por tipo de combustível.

Combustíveis (exceto matérias-primas)
Óleo diesel

Valor de aquecimento
LHV (menor poder calorífico)

Total de combustível em MWh consumido pela organização
3163.78

Combustível consumido, em MWh, para a autogeração de eletricidade
3035.29

Combustível MWh consumido para a autogeração de calor
128.49

Combustível consumido, em MWh, para a autogeração de vapor
<Not Applicable>

Combustível em MWh consumido para a autogeração de refrigeração
<Not Applicable>

Combustível MWh consumido para a autocogeração ou autotrigeração
<Not Applicable>

Fator de emissão
2.64695

Unidade
Kg de CO2e por litro

Fonte do fator de emissões
Stationary source: CO2: Ministry of Science, Technology, Communication and Innovation. Third National Communication of Brazil to the United Nations Framew ork Convention on Climate Change. Brasília: MCTIC, 2016; CH4 / N2O: 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion. Mobile Source: CO2: Ministry of Environment. National Inventory of Atmospheric Emissions by Road Automotive Vehicles 2014. CH4 / N2O: 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3: Mobile Combustion.

Comentários
As it was used diesel both in stationary and mobile sources, it was calculated an average of the emissions factors, considering an emissions of 2.64614 kgCO2e/liter for the stationary sources and 2.64775 kgCO2e/liter for mobile sources.

Combustíveis (exceto matérias-primas)
Biodiesel

Valor de aquecimento
LHV (menor poder calorífico)

Total de combustível em MWh consumido pela organização

376.46

Combustível consumido, em MWh, para a autogeração de eletricidade
361.18

Combustível MWh consumido para a autogeração de calor
15.28

Combustível consumido, em MWh, para a autogeração de vapor
<Not Applicable>

Combustível em MWh consumido para a autogeração de refrigeração
<Not Applicable>

Combustível MWh consumido para a autocogeração ou autotrigeração
<Not Applicable>

Fator de emissão
0.1422

Unidade
Kg de CO2e por litro

Fonte do fator de emissões
2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion.

Comentários
The CO2 emissions of Biodiesel are considered emissions from biologically sequestered carbon (2.431 kg Biogenic CO2/liter). Biodiesel was used diesel both in stationary and mobile sources.

Combustíveis (exceto matérias-primas)
Gasolina de motor

Valor de aquecimento
LHV (menor poder calorífico)

Total de combustível em MWh consumido pela organização
1216.97

Combustível consumido, em MWh, para a autogeração de eletricidade
0

Combustível MWh consumido para a autogeração de calor
1216.97

Combustível consumido, em MWh, para a autogeração de vapor
<Not Applicable>

Combustível em MWh consumido para a autogeração de refrigeração
<Not Applicable>

Combustível MWh consumido para a autocogeração ou autotrigeração
<Not Applicable>

Fator de emissão
2.30922

Unidade
Kg de CO2e por litro

Fonte do fator de emissões
Mobile Source: CO2: Ministry of Environment. National Inventory of Atmospheric Emissions by Road Automotive Vehicles 2014. CH4 / N2O: 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3: Mobile Combustion.

Comentários
Fuel consumption in our own fleet. In Brazil there is an addition of 27% of Bioethanol, but this part will be reported in the Bioethanol fuel section.

Combustíveis (exceto matérias-primas)
Bioetanol

Valor de aquecimento
LHV (menor poder calorífico)

Total de combustível em MWh consumido pela organização
408.21

Combustível consumido, em MWh, para a autogeração de eletricidade
0

Combustível MWh consumido para a autogeração de calor
408.21

Combustível consumido, em MWh, para a autogeração de vapor
<Not Applicable>

Combustível em MWh consumido para a autogeração de refrigeração
<Not Applicable>

Combustível MWh consumido para a autocogeração ou autotrigeração
<Not Applicable>

Fator de emissão
0.0115

Unidade
Kg de CO2e por litro

Fonte do fator de emissões
Hydrous ethanol Mobile Source: CO2: Ministry of Environment. National Inventory of Atmospheric Emissions by Road Automotive Vehicles 2014. Final Report. CH4: 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 3: Mobile Combustion N2O: extrapolated value. Anhydrous Ethanol Mobile Source: CO2: Ministry of Environment. National Inventory of Atmospheric Emissions by Road Automotive Vehicles 2014. Final Report. CH4 / N2O: extrapolated value.

Comentários
Hydrous Ethanol is used just called Ethanol and is a type of fuel used in our own fleet. Commercial motor gasoline in Brazil is a mix of 27 % Anhydrous ethanol and 73% pure motor gasoline. As it was used both hydrous ethanol (0.01342 kgCO2e/liter) and anhydrous ethanol (0.00959 kgCO2e/liter), it was made an average of the emission factors to report it. Also, CO2 emissions of bioethanol are considered emissions from biologically sequestered carbon, being 1.53 kg Biogenic CO2/liter for anhydrous ethanol and 1.46 kg Biogenic CO2/liter for the hydrous ethanol.

C8.2d

(C8.2d) Dê detalhes sobre a eletricidade, o aquecimento, o vapor e a refrigeração que a organização gerou e consumiu no ano de reporte.

	Geração bruta total (MWh)	Geração consumida pela organização (MWh)	Geração bruta de fontes renováveis (MWh)	Geração de fontes renováveis consumida pela organização (MWh)
Eletricidade	115959.61	115959.61	112924.31	112924.31
Aquecimento	0	0	0	0
Vapor	0	0	0	0
Refrigeração	0	0	0	0

C9. Métricas adicionais

C9.1

(C9.1) Forneça as métricas adicionais relacionadas ao clima relevantes para seus negócios.

C10. Verification

C10.1

(C10.1) Indique o status da verificação/garantia que se aplica às emissões relatadas.

	Status da verificação/garantia
Escopo 1	Processo de verificação ou garantia por terceiros em vigor
Escopo 2 (com base na localização ou com base no mercado)	Processo de verificação ou garantia por terceiros em vigor
Escopo 3	Processo de verificação ou garantia por terceiros em vigor

C10.1a

(C10.1a) Forneça mais detalhes sobre a verificação/garantia realizada para as emissões de Escopo 1 e anexe as declarações relevantes.

Ciclo de verificação ou garantia em vigor
Processo anual

Status do ano de reporte atual
Completo

Tipo de verificação ou garantia
Garantia limitada

Anexe o documento
EY_Carta de Asseguração_GRI_GHG_SASB_TIM_Ing.pdf
CDP-verification-template_revEY.pdf

Página/seção de referência
2020 ESG Report - Assurance Report (EY) - see page 113 https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Norma pertinente
ISAE3000

Porcentagem de emissões divulgadas e verificadas (%)
100

C10.1b

(C10.1b) Dê mais detalhes sobre a verificação/garantia realizada para as emissões de Escopo 2 e anexe as declarações relevantes.

Abordagem do Escopo 2
Escopo 2, com base na localização

Ciclo de verificação ou garantia em vigor
Processo anual

Status do ano de reporte atual
Completo

Tipo de verificação ou garantia
Garantia limitada

Anexe o documento
EY_Carta de Asseguração_GRI_GHG_SASB_TIM_Ing.pdf
CDP-verification-template_revEY.pdf

Página/seção de referência
2020 ESG Report - Assurance Report (EY) - see page 113 https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Norma pertinente
ISAE3000

Porcentagem de emissões divulgadas e verificadas (%)
100

C10.1c

(C10.1c) Dê mais detalhes sobre a verificação/garantia realizada para as emissões de Escopo 3 e anexe as declarações relevantes.

Categoria de Escopo 3
Escopo 3 (upstream e downstream)

Ciclo de verificação ou garantia em vigor
Processo anual

Status do ano de reporte atual
Completo

Tipo de verificação ou garantia
Garantia limitada

Anexe o documento
EY_Carta de Asseguração_GRI_GHG_SASB_TIM_Ing.pdf
CDP-verification-template_revEY.pdf

Página/Seção de referência
2020 ESG Report - Assurance Report (EY) - see page 113 https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Norma pertinente
ISAE3000

Porcentagem de emissões divulgadas e verificadas (%)
100

C10.2

(C10.2) Você verifica alguma informação relacionada ao clima relatada em sua divulgação do CDP, além dos valores de emissões relatados em C6.1, C6.3 e C6.5?
Não, estamos aguardando por normas/processos de verificação mais consolidados

C11. Precificação do carbono

C11.1

(C11.1) Alguma (ou algumas) de suas operações ou atividades é regulamentada por um sistema de precificação do carbono (por ex., ETS, Cap & Trade ou Carbon Tax)?
Não e não prevemos ser regulamentados nos próximos três anos

C11.2

(C11.2) Sua organização criou ou adquiriu créditos de carbono com base em projetos no período de divulgação?
Não

C11.3

(C11.3) A organização usa um preço interno do carbono?
Não, mas pretendemos fazê-lo nos próximos dois anos

C12. Engajamento

C12.1

(C12.1) Há engajamento da empresa com a cadeia de valor nas questões relacionadas ao clima?
Sim, com nossos fornecedores

C12.1a

(C12.1a) Dê detalhes da estratégia de engajamento com os fornecedores sobre questões climáticas.

Tipo de engajamento
Coleta de informações (compreensão do comportamento dos fornecedores)

Detalhes do engajamento
Coletar informações dos fornecedores relacionadas às mudanças climáticas e ao carbono pelo menos anualmente

Porcentagem de fornecedores por número
64

Porcentagem do total de gastos com aquisição (diretos e indiretos)
0

Porcentagem das emissões de Escopo 3 relacionadas aos fornecedores, conforme divulgado em C6.5
100

Justificativa para a cobertura do engajamento
t is TIM's understanding that strategic and responsible management of the suppliers in its chain is key to ensuring the offer of quality services to customers. This is essential in guaranteeing continuity in the supply of products and services offered by business partners, preventing the risk of shortages and ensuring the joint creation of innovations and differentials in products and services. In parallel, it is important to ensure the creation of positive value in the TIM chain, engaging suppliers in good social and environmental management practices, in addition to good business practices.

Impacto do engajamento, incluindo as medições de sucesso
Moreover, during the year 831 suppliers, or 64%, also responded to the socio environmental questionnaire aimed at assessing risks (such as child and forced labor, the existence of an environmental management system, activities harmful to the health and safety of workers, among others) and proposing corrective measures. The reduction in the volume of socioenvironmental assessments compared with 2019 was due to alterations in the qualification procedure. The requirement for assessment was changed to the nature of the product/service rather than its cost.

Comentários
No comments

C12.3

(C12.3) Há engajamento da empresa em atividades que possam, direta ou indiretamente, influenciar as políticas públicas nas questões climáticas por meio de alguma das seguintes formas?

Outros

C12.3e

(C12.3e) Forneça detalhes sobre as outras atividades de engajamento empreendidas.

(i) TIM participates in the Companies for the Climate Program (EPC), a voluntary initiative launched in 2009, coordinated by the Center for Sustainability Studies of the Getulio Vargas Foundation (GVces) which brings together companies from several segments.

(ii) The group of Companies for the Climate works as a Brazilian business platform that aims to adapt to low-carbon economy by supporting strategies, policies and GHG emissions management systems, and by stimulating its positioning on regulatory measures.

(iii) TIM often participates in group FGV's Workshops for Companies for the Climate, which brings together professionals in activity forums in training, exchange programs and communication on the issue.

(iv) Through its Environmental and Climate Change Management Policies, TIM proposes the following actions: continuous improvement and pollution prevention; compliance with current environmental regulations; reducing waste of energy and materials; continuous improvement in emission management; among others.

By being aligned with the Companies for the Climate platform, TIM is committed to GHG emission management actions attuned with the company's strategy in aligning to the climate change scenario.

C12.3f

(C12.3f) Quais os processos adotados para garantir que todas as atividades diretas e indiretas da empresa, que influenciam a política, sejam consistentes com a estratégia global de mudanças climáticas?

The Control and Risks Committee (CRC) is a specialized committee linked to the Board of Directors (BoD) and has among its duties: "Supervise and monitor the Company's social responsibility issues and /or its controlled companies, monitoring the consistency of the actions carried out according to the principles established by the Code of Ethics and Conduct of the Company". The results of GHG emissions and company goals are presented to the Control and Risk Committee (CCR) and the BoD is aware of the activities developed by the CRC. In addition, the Corporate Social Responsibility area, which is under the Regulatory, Institutional and Press Relations directory, is responsible for the direct monitoring and ensuring that all activities performed by TIM, regardless of business division and geographical area, are in line with the company's Strategy and Policy on Climate Change Management. The centralization of all issues related to Climate Change theme by Corporate Social Responsibility area ensures that all activities which may affect directly or indirectly the formulation of policies are aligned to company's climate strategy. Once the CSR area is also responsible for TIM Sustainability Report, many GRI performance indicators (formulated according to the Global Reporting Initiative) are monitored through this process, which represent the company's performance regarding different aspects.

C12.4

(C12.4) Além da resposta ao CDP, a empresa publicou alguma informação sobre sua resposta frente às mudanças climáticas e ao desempenho das emissões de GEEs no ano de referência? Em caso afirmativo, anexe as publicações.

Publicação
No relatório voluntário de sustentabilidade

Status
Completo

Anexar o documento
TIM_2020_ESG_REPORT.pdf

Página/Seção de referência
ESG report 2020 < Climate Change - see page 64 https://ri.tim.com.br/List/Download.aspx?Arquivo=Gu5/+Ky1bJj7N9TBSGWYOg==

Elementos do conteúdo
Governança
Estratégia
Riscos e oportunidades
Valores de emissões
Metas de emissões
Outras métricas

Comentários
Driven by the aspiration to “be a benchmark in ESG in Brazil”, TIM established a new and more ambitious plan of targets for the period from 2021- 23, called the ESG Plan. Starting with the ambitions assumed in the 2020- 2022 Strategic Plan, the company has added additional challenges, as shown ahead. Due to the higher demand for services, we intensified the offer of digital channels and the quality of our customer care processes. Today our user base of 51 million people has a wide range of products at its disposal and the consumer profile continues to undergo transformation. We have an ecosystem in which the customer is the key element in our strategy, both in our core business and in enabling new revenue sources. In December 2020, we updated the TIM materiality matrix and took an essential step in the 2021-2023 Strategic Plan by aligning our business with ESG principles and ambitions in a structured manner. The plan, updated in 2021, confirms and definitively integrates ESG aspects into the core business, presenting goals and targets aligned with the most material elements for our stakeholders and with the UN Sustainable Development Goals (SDGs). We want to be a benchmark in ESG in the telecommunications sector in Brazil, and the recognitions we have received demonstrate that we are on the right path. Our listing on the B3 ISE (Corporate Sustainability Index) for thirteen consecutive years exemplifies the company’s active record in this area, as well as our ongoing commitment to the UN Global Compact, in place since 2008. In terms of the environment, we are progressing in a disciplined manner towards achieving our targets in renewable energy, carbon neutrality, emissions and ecoefficiency.

C15. Aprovação

C-FI

(C-FI) Use este campo para fornecer qualquer informação ou contexto adicional que considere relevante para a resposta da sua organização. Observe que este campo é opcional e não é pontuado.

No comments

C15.1

(C15.1) Forneça detalhes sobre a pessoa que assinou (aprovou) a resposta sobre mudanças climáticas ao CDP.

	Cargo	Categoria de trabalho correspondente
Linha 1	Diretor de ESG da TIM S/A	Diretor de Sustentabilidade (CSO)

SC. Módulo de cadeia de fornecimento

SC0.0

(SC0.0) Se preferir, forneça uma introdução separada para este módulo.

TIM believes that its business activities must be carried out taking into consideration the expectations of all those we interact with, the so-called stakeholders (that is, all people or things affected by our activities). We group our stakeholders in eight categories: customers, suppliers, competitors, institutions, the environment, community, shareholders and Human Resources (internal stakeholders).

TIM's goal is to achieve balance in the dimensions of economic, environmental, social and governance sustainability. We have showed over the years their engagement with the highest level of corporate governance, economic responsibility and strong commitment to social and environmental aspects.

This commitment allowed us to be the only company in the sector to be listed in the B3's Novo Mercado, to maintain a Statutory Audit Committee, to be part of the ISE portfolio for 13 consecutive years and to be a recent member of the new S&P/B3 Brasil ESG index.

While telecommunications services contribute towards greenhouse gas (GHG) emissions, their operations are exposed to the risks provoked by climate change. For TIM, managing emissions constitutes a strategic factor for business continuity and value generation. TIM's Climate Change Policy establishes that the implementation of mitigation and adaptation measures is indispensable for the well-being of society. The resolutions in the document are based on the requirements of Brazilian and international legislation, the determinations of regulatory authorities and the guidelines of the TIM Italia Group.

Customers

For TIM, the customer experience is closely linked with service and customer service quality. The company understands that the customer experience influences the construction of its image, customer loyalty, market presence and competitiveness. For this reason, this is a central focus of company strategy.

Addressed as the heart of the business, the customer experience underwent an extreme test in 2020, with the reduction in personal contact and greater dependence on means of communication due to the pandemic. The quality of the services rendered was even further highlighted as it became clear that these services are essential. For the company, enhancing the user experience and perception of performance continues to be an imperative . ESG PLAN TARGET - Halve customer complaints to Anatel

by 2023, compared with 2019.

TIM is a pioneer in relation to ESG ("Environmental, Social & Governance") issues in the Telecommunications sector in Brazil. For more than a decade, TIM has been part of the Portfolio of the B3 Sustainability (ISE-B3), being the sector company that has been in the Index for the longest time.

As part of its commitment to society, TIM conducts an annual inventory of the GHG emissions sources in its operations and calculates too, the impact of the Intensity of Greenhouse Gases (GHG) emissions by customers and that associated with the Net Operating Revenue

Suppliers

Just as it is concerned with its customers, TIM A TIM understands that the strategic and responsible management of suppliers is related to the importance of the supply chain for offering quality services to customers. At the same time, it is important to ensure the creation of positive value in TIM's chain, engaging suppliers in good management practices of social and environmental aspects, as well as economic ones.

It is TIM's understanding that strategic and responsible management of the suppliers in its chain is key to ensuring the offer of quality services to customers. This is essential in guaranteeing continuity in the supply of products and services offered by business partners, preventing the risk of shortages and ensuring the joint creation of innovations and differentials in products and services. In parallel, it is important to ensure the creation of positive value in the TIM chain, engaging suppliers in good social and environmental management practices, in addition to good business practices. To monitor potential risks in its chain, TIM requires suppliers to respond to questionnaires on ethics and conflicts of interest, as well as on socio-environmental questions before any contract is signed.

In 2020, around 64% of suppliers responded to the socio-environmental questionnaire, which seeks to assess risks and propose corrective actions.

Aware of the importance of driving climate awareness, every year TIM promotes a Climate Change workshop for employees and suppliers. The objective is to boost awareness of the need for mitigating, adapting and reducing our impact, as well as alerting people to the effects of climate change. In 2020, the event was held virtually, with the participation of suppliers and service providers in the Network and Logistics operations.

Reference (1) - ESG Overview : https://ri.tim.com.br/ShowCanal/Overview?=MselyJYoDzu+TR+KfZ+lFg==

Reference (2) - ESG Report 2020: https://ri.tim.com.br/Download.aspx?Arquivo=z/o6Kcs01BPSUPdhltK7wg==

SC0.1

(SC0.1) Qual é a receita anual da sua empresa para o período de referência declarado?

	Receita anual
Linha 1	17268000000

SC0.2

(SC0.2) Sua empresa tem um ISIN que você esteja disposto a compartilhar com o CDP?

Sim

SC0.2a

(SC0.2a) Use a tabela abaixo para compartilhar o ISIN.

	Código de país ISIN (duas letras)	Identificador numérico ISIN e dígito de verificação simples (10 números ao todo)
Linha 1	BR	TIMPACNOR1

SC1.1

(SC1.1) Aloque as emissões da empresa para os clientes listados abaixo, de acordo com os bens e serviços que vendeu para eles neste período de referência.

Membro solicitante
Banco do Brasil S/A

Escopo das emissões
Escopo 1

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
231.99

Incerteza (±%)

Principais fontes de emissões
Fugitive Emissions are the main source of Scope 01, followed by Stationary and Mobile Combustion sources.

Verificada(s)
Não

Método de alocação
Alocação com base no valor de mercado dos produtos adquiridos

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Banco do Brasil represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

Membro solicitante
Banco do Brasil S/A

Escopo das emissões
Escopo 2

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
1641.25

Incerteza (±%)

Principais fontes de emissões
Electrical Energy Purchased from the grid.

Verificada(s)
Não

Método de alocação
Alocação com base no valor de mercado dos produtos adquiridos

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Banco do Brasil represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

Membro solicitante
Banco do Brasil S/A

Escopo das emissões
Escopo 3

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
803.12

Incerteza (±%)

Principais fontes de emissões
The major sources of Scope 03 are Loss from electrical energy transmission, Upstream Transportation, and Commuting.

Verificada(s)
Não

Método de alocação
Alocação com base no valor de mercado dos produtos adquiridos

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Banco do Brasil represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

Membro solicitante
Caixa Econômica Federal

Escopo das emissões
Escopo 1

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
721.96

Incerteza (±%)

Principais fontes de emissões
Fugitive Emissions are the main source of Scope 01, followed by Stationary and Mobile Combustion sources.

Verificada(s)
Não

Método de alocação
Alocação com base no valor de mercado dos produtos adquiridos

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Caixa Econômica Federal represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

Membro solicitante
Caixa Econômica Federal

Escopo das emissões
Escopo 2

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
5107.57

Incerteza (±%)

Principais fontes de emissões
Electrical Energy Purchased from the grid.

Verificada(s)
Não

Método de alocação
Alocação com base no valor de mercado dos produtos adquiridos

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Caixa Econômica Federal represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

Membro solicitante
Caixa Econômica Federal

Escopo das emissões
Escopo 3

Nível de alocação
A empresa como um todo

Detalhes do nível de alocação
<Not Applicable>

Emissões em toneladas métricas de CO2e
2499.31

Incerteza (±%)

Principais fontes de emissões
The major sources of Scope 03 are Loss from electrical energy transmission, Upstream Transportation, and Commuting.

Verificada(s)
Não

Método de alocação
Selecione

Explique como foi identificada a fonte de GEEs, incluindo as principais limitações a este processo e as suposições adotadas
Emissions were calculated based on the percentage of revenue that Caixa Econômica Federal represents of the total TIM's revenue. Therefore, emissions were allocated based on this percentage.

SC1.2

(SC1.2) No caso de terem sido publicadas informações na questão SC1.1, forneça referências.

To allocate emissions to customers, TIM used only primary data, considering either the number of corporate lines each client represents or the total revenue from each client in comparison to total lines and revenue the company resulted in 2019.

SC1.3

(SC1.3) Quais os desafios de alocar emissões para diferentes clientes e o que o ajudaria a vencer esses desafios?

Desafios de alocação	Explique o que o ajudaria a vencer esses desafios
A diversidade de linhas de produtos torna ineficaz o controle contábil preciso de cada produto/linha de produtos em termos de custos	TIM offers a great diversity of services, among them: mobile telephony, fixed local and long distance telephony, as well as services of data transmission and internet access. The inventory is not focused on the distribution of emissions by product, but by area of the company. In this context, the allocation of emissions to a specific customer becomes a challenge.
A carteira de clientes é muito grande e diversificada para permitir o acompanhamento preciso das emissões de cada cliente	The major challenge in allocating emissions to TIM's different customers is the determination of a common factor to be used as rationale, mainly because there is a variety of services that might be provided by TIM (mobile and fixed telephony, data and internet).

SC1.4

(SC1.4) Você planeja desenvolver futuramente recursos para alocar emissões para seus clientes?
Sim

SC1.4a

(SC1.4a) Descreva como planeja desenvolver seus recursos.

TIM is developing a carbon footprint study for one of its products. This study will further support our ability to allocate GHG emissions among our customers, accordingly to the type and amount of products (services) purchased.

SC2.1

(SC2.1) Proponha algum projeto climático mutuamente benéfico no qual você possa colaborar junto com membros específicos do Supply Chain do CDP.

SC2.2

(SC2.2) As solicitações ou iniciativas de membros do Supply Chain do CDP levaram sua organização a tomar iniciativas de redução de emissões em nível organizacional?
Não

SC4.1

(SC4.1) Estão sendo fornecidos dados no nível do produto para os bens ou serviços da organização?
Não, não fornecerei os dados

Envie sua resposta

Sua resposta está sendo enviada em qual idioma?

Inglês

Confirme como a sua resposta deve ser gerenciada pela CDP

	Estou enviando para	Envio público ou não público	Você está pronto para enviar as perguntas adicionais sobre a cadeia de fornecimento?
Estou enviando minha resposta	Investidores Clientes	Público	Sim, enviar as perguntas sobre a cadeia de fornecimento agora

Confirme abaixo

Li e aceito os Termos aplicáveis