

The background of the entire page is a photograph of a modern building at night. The building has a large, curved, cantilevered roof. On the underside of this roof, the letters "5G" are illuminated in a bright blue, glowing font. Below the roof, there is a large, dark, curved structure that looks like a stylized bird or a wave. The building is surrounded by city lights and other structures in the background. The overall color scheme is dark blue and black, with the glowing "5G" and the white text providing contrast.

2022 ESG REPORT

Summary

Message from the CEO

Presentation

- 6** About the report
- 7** New materiality

ESG Vision

- 12** ESG Journey at TIM
- 15** 2023-25 ESG Plan
- 16** 2022 ESG highlights
- 20** Commitments and recognitions

Governance

- 25** Profile
- 27** Governance structure
- 37** Financial results
- 40** Anti-corruption
- 47** Risk management
- 52** Operation
- 58** Innovation
- 64** Customer
- 69** Suppliers
- 72** Privacy and data protection

Environmental

- 77** Environmental Management System
- 80** Climate change
- 86** Energy
- 88** Circular economy
- 89** Waste

Social

- 92** Digital inclusion
- 94** Employees
- 106** Diversity and Inclusion
- 116** Human rights
- 118** Instituto TIM

Attachments

- 123** Certifications
- 124** GRI content index
- 136** SASB content summary
- 138** Assurance report
- 140** Credits

Message **from the CEO**

GRI 2-22

2022 was marked by two major transformations in the telecommunications sector, in which TIM is proud to have played a leading role: the launch of 5G technology and the consolidation of the mobile telephony market. We led the implementation of the fifth generation network in all the state capitals, covering all the districts in key markets such as São Paulo, Rio de Janeiro, Curitiba and Recife. In parallel, we engaged in the integration of the assets acquired from Oi Móvel, rapidly capturing synergies and creating value for our shareholders and customers.

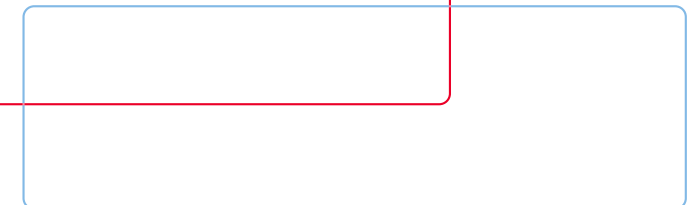
And our pride is even greater because everything the company did in the year was, as always, based on the best environmental, social and governance practices. At TIM, the ESG agenda is a fundamental component of the business and a catalyst of internal and external engagement.

Internally, we foster an environment of respect, dialogue and stimulus for continuous evolution. These efforts are perceived by the market. In

2022, we were recognized by Great Place to Work (GPTW) as a company that offers best HR management practices and stimulates trust and innovation. Accordingly, we were listed on the B3 GPTW Index, which encompasses the publicly traded organizations on the Brazilian exchange with the best work environments.

We were first in Brazil and 10th globally on the Refinitiv Diversity & Inclusion Index, a global index that assesses corporate diversity practices. Moreover, we were considered the best company in Latin America on the Bloomberg 2023 Gender Equality Index (GEI) and were placed 7th among the 484 companies selected globally from diverse sectors.

We continue to strengthen and channel our social investment through the Instituto TIM which, in addition to promoting human development, contributes towards TIM's ESG strategy and the company's indirect economic impacts on society. Enterprise, technology





Message **from the CEO**

GRI 2-22

and scientific-mathematics education projects contributed towards improving the lives of children, young people and their families. And the members of the Instituto TIM Bateria or Drum school spread joy wherever they went. The project has been in place since 2010 and promotes musical education and integration for children, adolescents and adults, including persons with disabilities.

Regarding digital inclusion, we have no doubt that telecommunications activities generate positive impacts beyond the business. Being positioned as the first operator with 100% presence in Brazilian municipalities, with 96% 4G coverage at the end of 2022, translates our concern about connectivity as a lever for quality of life for people. Through our digital development strategy on fronts such as bankarization, education, agribusiness and logistics we drive the democratization of access to services of general interest, while generating more value for the business. We have reached this capillarity while guaranteeing effective security in data traffic for our customers and partners with ISO 27001 certification, the international information security management standard.

In the environmental area, our greenhouse gas (GHG) reduction targets jointly with the TIM Group were validated by the Science Based Target initiative (SBTi). Our commitments are to become a zero carbon company by 2040 and to decrease scope 3 GHG emissions, those we are indirectly responsible for generating, by 47% by 2030.

We have already achieved important partial results. In 2022, we increased our energy efficiency in data traffic by 127% compared with 2019. We ended the year with 100% of the energy consumed from renewable sources through distributed generation and the acquisition of I-REC certificates. Another key initiative was our adhesion to the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD), which provide guidance for companies on the most appropriate way to report how they manage their climate initiatives.

In yet another year, our efforts to drive ever greater sustainability were recognized by the main Brazilian and international indexes. For the 15th consecutive year, we were listed on the B3 Corporate Sustainability Index (ISE), the main reference for investors in Brazil. At the beginning of 2023, we were once again chosen as a member of the Sustainability Yearbook, the S&P Global yearbook that presents the leading companies in sustainability worldwide. We received the Gold seal from the EcoVadis platform, placing us among the top 5% telecommunications organizations in sustainability management in the world.

As signatories to the UN Global Compact since 2008, we redoubled our commitment to achieving the Sustainable Development Goals (SDGs), aligned with our business's material topics. This is possible because we have a robust corporate governance structure with clear policies and rules to guide our activities, which contributed to our inclusion on the list of Pro-ethical companies elaborated by Brazil's Federal Comptroller General (CGU).

We concluded 2022 with important achievements and results in the three dimensions that guide our Environmental, Social and Governance vision which I am pleased to present in this ESG Report, alongside our targets and commitments aligned with TIM's purpose of evolving together with courage and respect, transforming technology into freedom.

Enjoy reading it!

Alberto Mario Griselli
CEO, TIM Brasil

“Telecommunications generate positive impacts beyond the business”

01

Presentation

About the report
New materiality



About **the report**

GRI 2-2, 2-3, 3-2

TIM presents its 2022 ESG Report. The document provides information on the company's actions, projects and initiatives in Brazil in the period from January 1 to December 31, 2022. The publication reports on the results obtained in the environmental, social and governance pillars, considering the 2022-24 ESG plan elaborated by the company and sets forth its new commitments for the period 2023-2025.

The TIM reports in Brazil, published since 2004, are important instruments for disseminating information to the company's stakeholders and for ensuring accountability to society. Considered a benchmark publication for the company, the document also guides the monitoring and continuous improvement of its ESG (Environmental, Social and Governance) management and practices).

This report was elaborated in compliance with the Global Reporting Initiative (GRI) Standards and the Sustainable Development Goals (SDGs) of the United Nations Global Compact, to which TIM has been a signatory since 2008. It also contains Telecommunications sector indicators from the Sustainability Accounting Standards Board (SASB) and is submitted to limited assurance by EY (*Ernst & Young*). The report is published in Portuguese and English.

The consolidated data in this document are aligned with the scope of the TIM financial report, including, when applicable, information on the assets purchased from Oi. In this process, the company acquired 100% of the capital of Cozani RJ Infraestrutura de Telecomunicações S.A., the company that corresponds to the part of the unit of assets, rights and obligations of the part of Oi Móvel acquired by TIM.

This report was elaborated in accordance with TIM's material topics - contents and indicators considered to be priorities for reporting, management and monitoring -, that were updated in a multistakeholder listening process in 2022. Accordingly, the publication is divided into four major chapters:

- **ESG Vision;**
- **Governance;**
- **Environmental; and**
- **Social.**



*The TIM **ESG reports** for previous years may be accessed [here](#)*



Any doubts and comments about the report may be addressed to **respsocialcorp@timbrasil.com.br**

New materiality

GRI 2-29, 3-1, 3-2

The periodic process of elaborating the materiality matrix encompasses consulting the company's external and internal stakeholders. It is one of the mechanisms that enables the frequent review of TIM's ESG strategies, with a view to the continuous improvement of the company's practices and commitments.

In 2022, TIM renewed its materiality matrix in the light of new trends that take into account financial and socioenvironmental perspectives, so-called double materiality, also in line with the new GRI Universal Standards published in 2021.

The new materiality matrix orientates the reporting of information in this report, as well as constituting the basis for the development of TIM ESG strategy.



In 2022, **TIM renewed** its materiality matrix

With support from a specialized consultancy, the construction of the new matrix encompassed five stages:

Definition

- purpose, scope and tools to be used

Identification

- mapping of stakeholders and refinement of list of topics

Prioritization

- survey of socioenvironmental and financial impact perspectives of executives, stakeholders, specialists and providers of capital

Analysis

- verification of results, elaboration of materiality matrix and recommendations

Validation

- approval of topics and recommendations by senior management and the Board of Directors

After the definition of the scope and identification of stakeholders, 20 topics were raised initially: six each in the environmental and social areas and eight in governance.

In the following phase, prioritization, the work was divided into three parts to listen to the selected audiences:

Assessment of socioenvironmental impacts

- organization of five interviews and five online consultations with external specialists and a focus group comprising 12 TIM employees.

Assessment of financial impacts

- individual interviews with six TIM vice presidents and an external specialist and online consultations with seven company executives, eight market specialists and two representatives of the TIM Group in Italy.

Perception of relevance

- organization of 1,006 online consultations by means of an electronic form, in which the participants indicated their perception of the five most relevant topics for TIM. The stakeholder groups involved were: employees, customers, service providers, start-ups, innovation hubs or agents and participants in Istituto TIM projects.



TIM believes that technology and telecommunications have the power to connect people, break down geographical barriers and promote global collaboration, enabling joint work to achieve the 2030 Agenda targets

The correlated SDGs are:







Discover more about the Sustainable Development Goals on the UNO [website](#)

All the results were analyzed and the information raised was validated with the senior management of the company. At the end of the process eight material topics were indicated for TIM and put to the Board of Directors.

Compared with the last process, the topics that were no longer considered material were: Promoting diversity and equality of opportunities, Operational and post-consumer waste management and Strategic and responsible supplier management. Although these are important subjects for TIM and continue to be considered in the company's practices, policies and ESG plan, these topics were not indicated as priorities from the perspective of the diverse stakeholders consulted. It should be noted that investment in network infrastructure and reliability was added to **Service Quality** and the only new topic was **Transparency and relations with priority audiences**.

Material topic GRI 3-2	Financially material*	Socio-environmentally material*	Indicators	Stakeholders who most addressed the topic	Correlated SDGs
 Innovation and technology	Innovation, greater competitiveness, better reputation, provision of new services	Support for migration from the standard of use of voice to data, opening pathways for digital transformation in diverse sectors, such as education, agriculture, healthcare, finance, public services etc.; in conjunction with the reduction in environmental impacts, inclusion and access; and business perpetuity	Own indicators	Executive board, market specialists, TIM Italia, employees, customers, suppliers and service providers, start-ups, innovation hubs or agents, participants in Istituto TIM projects	<div>8</div> <div>9</div> <div>11</div>
 Digital inclusion and connectivity	Investments in infrastructure and network expansion, better reputation	Digital inclusion with support for digital literacy measures, stimuli for the correct use of technology; guarantee of access to diverse public services that are being digitalized	GRI 203 Indirect economic impacts 2016 GRI 413 Local Communities 2016 Own indicators	Executive board, market specialists, TIM Italia, employees, participants in Istituto TIM projects	<div>1</div> <div>5</div> <div>9</div> <div>10</div> <div>11</div>
 Privacy and data security	Reduction in exposure to legal risks and loss of confidential information, better reputation, customer loyalty	Brand differentiation, better reputation	GRI 418 Customer privacy 2016 Own indicators	Executive board, market specialists, TIM Italia, external specialists, employees	<div>16</div>
 Energy efficiency	Dependence on public pricing policies and impossibility of long-term budget preparation	Increase in consumption of renewable energy, stimulus for free energy market and distributed generation, generation of employment in the plants, reduction in GHG emissions, 5G technology as precursor of more efficient processes	GRI 302 Energy 2016 GRI 305 Emissions 2016 Own indicators	Executive board, TIM Italia employees, customers, start-ups, innovation hubs or agents	<div>7</div> <div>12</div> <div>13</div>

* Most relevant aspects indicated by stakeholders during TIM materiality development consulting process.

Material topic GRI 3-2	Financially material*	Socio-environmentally material*	Indicators	Stakeholders who most addressed the topic	Correlated SDGs
 Service quality	Better reputation, customer loyalty	Positive customer experience; support for change in behavior with greater use of data than voice, also support for access to digital public services, education and others; dependence link with suppliers to ensure service quality; brand differentiation, better reputation	Own indicators	Market specialists, customers, start-ups, innovation hubs or agents	9
 Health, well-being and safety	Reduction in leaves and turnover due to health issues, increase in innovation and reduction in attraction and retention costs	Pride in belonging, brand differentiation, better reputation, quality of life, transfer of knowledge	GRI 401 Employment 2016 403 GRI Occupational health and safety 2018 GRI 404 Training and education 2016 405 GRI Diversity and equal opportunity 2016 Own indicators	External specialists, employees, customers, suppliers and service providers, start-ups, innovation hubs or agents, participants in Instituto TIM projects	3 5 8
 Ethics, integrity and compliance	Business perpetuity, reduction in exposure to legal risks, greater competitiveness, impact on market value, access to capitals	Incorporation of concepts into organizational culture, pride in belonging, reputational gains	GRI 205 Anti-corruption 2016 GRI 206 Anti-competitive behavior 2016 General disclosures (GRI 2)	Market specialists, external specialists, employees	16
 Transparency and relations with priority audiences	Business perpetuity, greater competitiveness, increase in market value	Customer loyalty (clarity in communications, respect and care in service; use brand potential to engage in causes company believes in); pride in belonging (transparency around career plans and development opportunities); reputational gains (sustainability data should be solid to guarantee correct evaluation)	GRI 417 Marketing and Labeling 2016 General disclosures (GRI 2)	External specialists, employees, suppliers and service providers	12 16

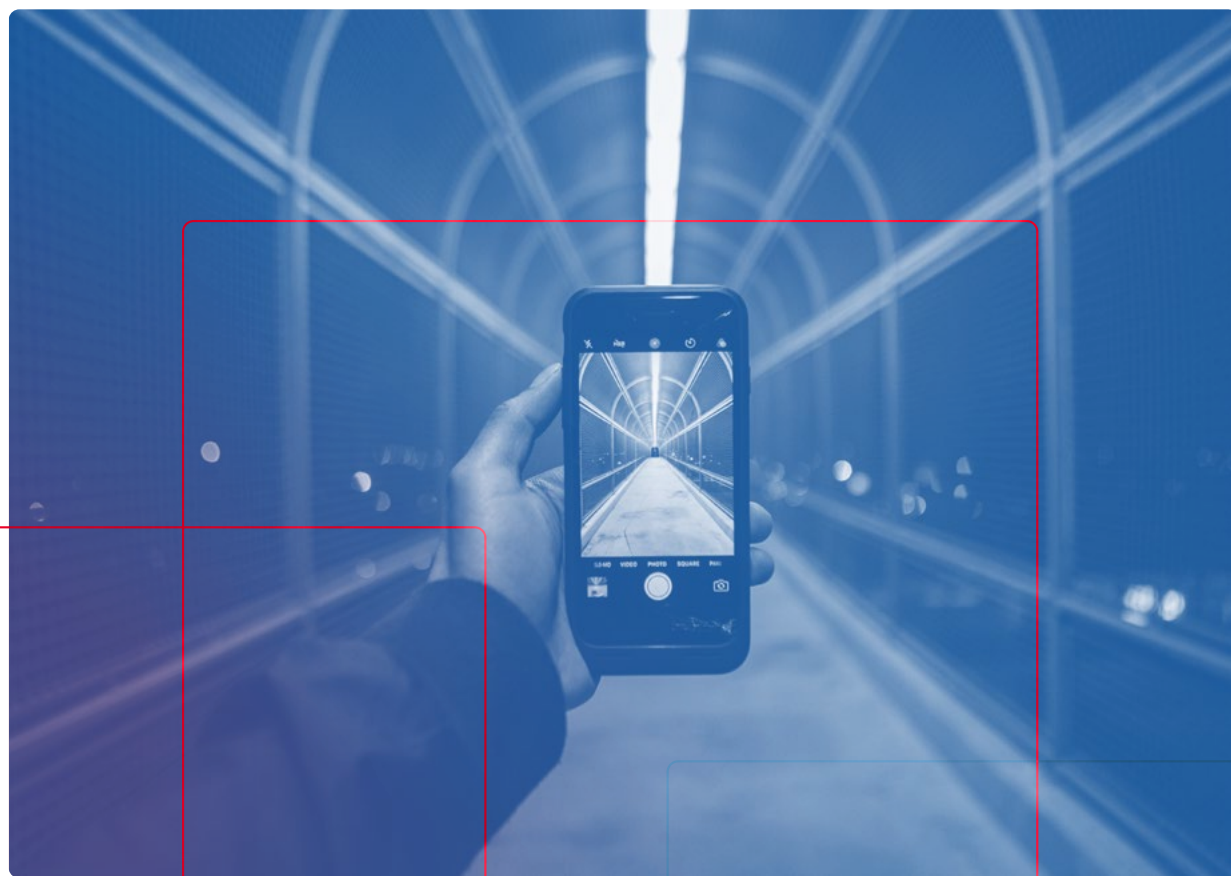
* Most relevant aspects indicated by stakeholders during TIM materiality development consulting process.

02 ESG Vision

ESG Journey at TIM
2023-25 ESG Plan
2022 ESG highlights
Commitments and recognition

ESG Journey at TIM

GRI 3-3



TIM's activities in the ESG (Environment, Social and Governance) area have been publicly recognized by organizations and bodies in different areas of activity for over a decade. The material topics which guide the elaboration of this report, anchored on these three pillars, have been part of the company's business strategy since 2019 and have helped build positive business results, aligned with sustainability.

TIM has been listed on the B3 Corporate Sustainability Index (ISE-B3) for 15 years, the longest standing telecommunications company on the index. Since 2011, TIM has been listed voluntarily on the Novo Mercado, which has the highest level of corporate governance on the Brazilian stock exchange, in addition to being the first and only telecommunications carrier nominated as a Pro-Ethical (Pró-Ética) company by the Brazilian Comptroller General (CGU).



The material topics which orientate the elaboration of this report, anchored on these three pillars, are part of the company's business strategy

As a signatory to the UN Global Compact and to UN Women, which it joined in 2021, TIM has developed projects connected with the SDGs and recognizes rights to data privacy, secure internet, access to information and freedom of expression as essential and unalienable.

In the field of promoting diversity and inclusion, TIM has become a Brazilian and international benchmark. The company establishes targets and commitments and implements diverse initiatives in the areas of gender, race, LGBTI+ community, generations and disabled persons, among others. In 2021, the company became the first Brazilian carrier on the Refinitiv Diversity & Inclusion Index, coming first in Telecom on a global level. This position was maintained in 2022, with the company ranked as one of the ten best in the world.



TIM was also the first Brazilian carrier to win the GSMA Diversity in Tech international award, which recognizes organizations with practices that promote equality, diversity and human rights in the technology sector worldwide. In 2023, TIM is once again listed on the Bloomberg Gender Equality Index, comprising companies from 45 countries, with only 16 from Brazil. The company was elected the best in Latin America in gender

equality and placed 7th globally. The experience accumulated during the course of this journey shows significant advances in governance, with the creation of the ESG Committee, linked with the Board of Directors, in 2020. This instance oversees and monitors the TIM ESG Plan, which encompasses short, medium and long-term targets for key corporate sustainability topics, which are updated annually.



The company's policies related to Social Responsibility, Human Rights, Diversity, the Environment, Climate Change Management, Corporate Risk Management, Anti-corruption, Supplier relations, Occupational Health and Safety, Privacy, among others, **are publicly available for free consultation** by all TIM stakeholders. [Access](#)

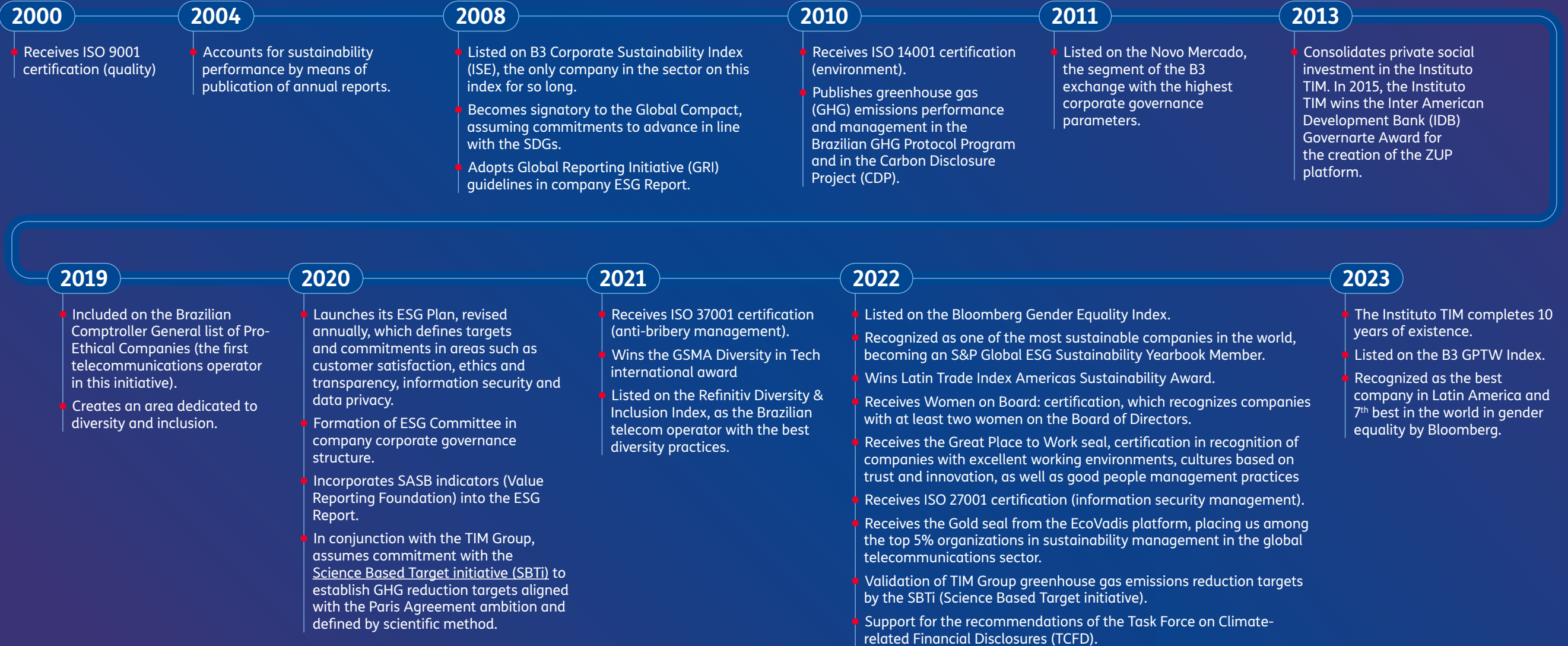
GRI 2-23

International recognition

In January 2023, for the second consecutive year TIM was considered one of the most sustainable companies in the world by S&P Global ESG, the organization responsible for the Dow Jones Sustainability Index (DJSI). Once again the company was included in the 2023 Sustainability Yearbook for the evolution of its performance in the DJSI submission process.

TIM also came in first place among the companies in Latin America in the Bloomberg 2023 Gender Equality Index (GEI) and was placed 7th among the 484 companies selected from diverse sectors globally. With a score of 88.38, an eight point increase over the previous result, TIM was distinguished by the increased representativeness of women in the IT and Engineering work force, for its target for women leaders and for the reduction in the salary gap between men and women. Factors contributing to this performance included the project in support of mental health issues among female employees, training on unconscious biases for employees and leaders, the practice of recruiting women after periods out of work and support for organizations that promote gender equality.

Transparency and **ESG commitments** timeline






2023-25 ESG Plan

Caption

◀ New/altered target

TIM Group commitment

SLB Sustainability-linked bond

Pillar	Enablers	Commitments	2023-2025 Targets		2022-2024 Plan	2022 Results
 Environmental	<ul style="list-style-type: none"> Mitigating GHG emissions in line with scientific targets (SBTi - Science Based Target Initiative) Boosting efficiency and use of green energy through Distributed Generation and acquisition in the free market Demobilizing obsolete technologies through innovation and infrastructure sharing Promoting efficient and responsible management of solid waste 	Net Zero* (scopes 1, 2 and 3) ◀ TIM	≤0	2040	-	-
		Reduction of scope 3* emissions (categories 1, 2 and 11) ◀ TIM	-47%	2030	-	-
		Carbon neutral* (scopes 1 and 2) TIM	≤0	2030	-100%	0 ¹
		Renewable energy (DG + FM + I-REC) TIM	100%	2025	100%	100%
		Eco-efficiency in data traffic* (bit/Joule) ◀ SLB	+110%	2025	+80%	+127%
		Recycling solid waste	≥95%	2025	≥95%	73%
		Engagement** (per year) ◀	≥82%	2025	≥80%	86%
 Social	<ul style="list-style-type: none"> Promoting an inclusive environment, with equality of opportunities, valuing talent and caring for the health and integrity of employees Developing digital education to meet demand for connectivity Maintaining the Instituto TIM as a benchmark in ST&I and education projects Extending access to 4G connectivity to all the municipalities in Brazil 	Black employees ◀	>40%	2025	≥40%	37.3%
		Women in leadership positions ◀ TIM	>35%	2025	≥35%	34.4%
		Employees trained in ESG skills (per year)	≥99%	2023	≥99%	99%
		Employees trained in digital capabilities ◀	≥7,500	2025	+5,000	4,015
		4G presence SLB	100%	2023	100%	96%
		National Mobile Consumer NPS (Net Promoter Score) ◀	≥50	2025	-	-
		ISE, Novo Mercado and Pró-Ética	Maintain	2025	Maintain	Maintained
 Governance	<ul style="list-style-type: none"> Maintaining recognition as a company with the highest level of commitment to transparency and corporate governance Disseminating ESG principles to potential high risk and impact suppliers, developing co-participation in the reduction of GHG emissions (Scope 3) Adopting best practices related to compliance, information security and data protection and privacy Promoting customer empowerment through digital transformation 	ISO 14001, ISO 9001 (network), ISO 9001 (billing), ISO 27001 and ISO 37001	Maintain	2025	Maintain	Maintained

* Base year 2019.

** Measured by Mercer Climate and Engagement Survey favorability index.

¹ TIM incorporated Non-Kyoto fugitive emissions into the scope 1 emissions carbon neutrality target, making its emissions monitoring even more rigorous.

In 2022, scope 1 and 2 emissions were reduced by 84% in relation to the 2019 base year. The 2030 target is to reduce emissions by 100% compared with the 2019 base year. In 2022, with the purchase of carbon credits and renewable energy certificates (I-RECs), TIM managed to neutralize its emissions for the year, result represented in the table by the number “0” (“zero”).

2022 ESG highlights



Environmental

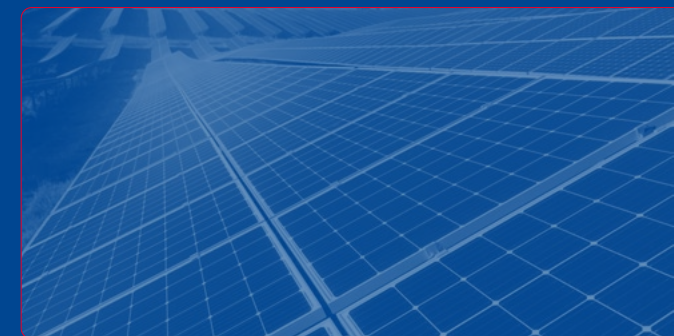
~50% self-generated
energy

Validation of TIM Group
GHG emissions reduction targets
by the SBTi

Adhesion to TCFD
recommendations

+127% energy
efficiency in
data traffic

100% of energy
consumed from
renewable
sources (with
acquisition of I-RECs)



1st place globally among
telecommunications
companies in the
Refinitiv Diversity &
Inclusion Index

One of the **best**
companies to work
for, listed on the B3
GPTW Index

Engagement level:
86% favorability
in the climate survey,
3 p.p. up on 2021

1st mobile operator
with coverage of
100% of Brazilian
municipalities, with
96% covered by 4G

1st company in
Latin America in
the Bloomberg Gender
Equality Index and **7th**
in the world



Social



Governance

ISO 27001
certification,
international
information security
management standard

For the 2nd year
selected by S&P Global
as member of the
Sustainability Yearbook

15 years on
the ISE, the
longest standing
telecommunications
company on the B3
sustainability index

Gold Seal from the
EcoVadis platform,
positioning TIM among
the **top 5%** of telecom
companies in the world

For the 2nd time
running on the
Comptroller General
(CGU) list of
Pro-Ethical companies



Stakeholder engagement GRI 2-25, 2-29, 3-3

Material topic: Transparency and relations with priority groups

SDG **12** **16**

TIM believes that engaging its stakeholder groups generates value both for the company and for society. This is why the company works on developing relations based on trust, that favor mutual learning, innovation, improved risk management and reputation.

TIM is committed to transparency in its relations and communication with stakeholders, in particular, priority groups such as customers, employees and investors.

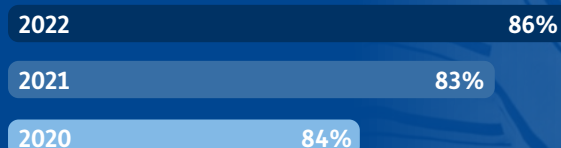
TIM's engagement and relationship actions with its main stakeholder groups are based on its [Engagement Policy](#). This establishes a set of principles aimed at valuing transparent dialogue and communication to build high quality bonds and solid and ethical relations. The instrument also seeks to address stakeholder manifestations internally, so that they receive an efficient response and drive improved risk management and help identify opportunities.

2022-24 ESG Plan

Target

Maintain employee engagement level at a minimum of **80%**

Result



In building its ESG agenda and materiality matrix, TIM follows these same principles to promote dialogue with its stakeholder groups.

The company's main stakeholders are:





Engagement actions

Employees

- Management Meeting encompassing all professional leaders to facilitate the achievement of strategic goals, monitor results and strengthen a culture of face to face communication;
- Monthly management meetings to talk about people management and transversal topics in the company;
- Reinforcement of a culture of innovation, accountability, collaboration and sustainability;
- Communication actions, training sessions, workshops and rounds of conversation that promote reflection on important topics for the business;
- Appraisal of performance, career and succession plans;
- Active intranet and corporate social network with content that is interesting for employees, allied with the use of digital systems and tools in daily routines;
- Endobranding and endomarketing actions to align employees with the brand positioning and new offerings and services;
- Ongoing organizational climate and pulse surveys.

Customers

- Multiple service channels: Meu TIM application; Virtual assistant; Social networks; WhatsApp; online chat; Call Center: 144* and 1056* help lines; Meu TIM Website;
- Ombudsman: a higher channel that assists customers who have already resorted to the TIM customer service channels;
- Specialized service for the hearing impaired;
- Users' Council with the participation of users and representatives of consumer defense organizations.
- Experience and satisfaction surveys to identify consumer profiles and habits, attractiveness of services and products, image, among others;
- Branding initiatives aimed at bringing the company closer to customers, such as actions created within major events like the Rock in Rio festival (further information on [page 56](#)).

Government

- Monitoring of strategic public policy and regulatory agendas for the telecommunications sector and modifications to legislation and/or the passage of new laws;
- Participation in discussions about strategic questions, such as the implementation of 5G, implantation of telecommunications infra-structure, greater access to connectivity, regulation of the use of new technologies (IoT) and energy efficiency. These are debates that demand the effective participation of governmental and regulatory bodies, operators and, in some cases, actors from other value chains, such as financial institutions and players in the power sector.
- Participation in sector associations with a view to monitoring and promoting the formulation and implementation of public telecommunications policies at a national and regional level.

Shareholders and investors

- Disclosure of quarterly results, market communications and organization of events;
- Provision of the “Fale com RI (Contact IR) channel for requesting information and sharing suggestions addressed to the Board of Directors;
- Publication of information for investors and analysts through the [Investor Relations](#) website, inclusion on the Investor Relations mailing list via registration on the website and requests for information and clarification of doubts by the email ri@timbrasil.com.br.

Suppliers

- Engagement in best practices related to ethics and social and environmental questions via the procurement process, integrity and socioenvironmental due diligence questionnaires, promotion of awareness workshops and campaigns.

Financial assistance received from government (BRL thousands) GRI 201-4

	2020	2021	2022
Tax and duty deductions	169,540	176,741	166,110
Investment, research and development grants and other relevant types of grants	17,427	13,548	10,324
Total	186,967	190,289	176,434



Commitments and recognitions

GRI 2-23, 3-3



TIM is listed on Brazilian and international indexes that measure and demonstrate the company's engagement in questions such as human rights, diversity, inclusion and sustainable development, in addition to the application of best governance practices. The company also participates in forums and organizations that promote debates on these subjects as a proactive player that fosters positive transformations for society.

These indexes and organizations include:

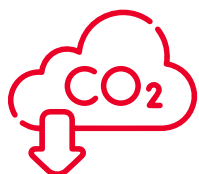
- Global Compact and SDGs: signatory to the UN Global Compact since 2008, TIM adopts the SDGs as a guideline for the formulation of integrated strategies. TIM is committed to supporting the ten principles established in the areas of human rights, protection of the environment, labor conditions and anti-corruption, incorporating them as part of its strategy, culture and daily operations;
- FGVces Business Initiatives: for over a decade TIM has participated in the Iniciativas Empresariais (Business Initiatives) network coordinated by the Fundação Getúlio Vargas Center for Sustainability Studies (FGVces), a knowledge production center aimed at the exchange of experiences and provision of stimuli for the advance of the sustainability agenda in companies;

• B3 indexes, the Brazilian stock exchange:

- Business Sustainability (ISE-B3): listed on the index for 15 consecutive years. This comprises the Brazilian companies with the best corporate sustainability practices, reflecting the company's maturity and pursuit of continuous advancement;
- Carbon Efficient (ICO₂-B3): the company is on this index for companies committed to reporting their greenhouse gas emissions transparently;
- Brasil ESG (S&P/B3): TIM has been on this B3 index since 2020. It measures the performance of securities aligned with sustainability criteria weighted by the S&P DJI ESG scores;
- B3 Diversity and Inclusion Index;
- Great Place to Work Index (IGPTW B3): TIM joined the GPTW B3 Index in 2023, an indicator of the average performance of assets of B3 companies certified by the Great Place to Work (GPTW) as the best environments to work in in Brazil;
- Teva Women in Leadership Index: TIM is recognized among the companies on the B3 with the highest proportion of women on its Board of Directors and committees;



- CDP Brazil Climate Resilience Index (ICDPR-70): TIM has responded voluntarily to the Carbon Disclosure Project (CDP) since 2010 and is listed on the CDPR Climate Resilience Index, created by the organization;
- GHG Protocol: since 2010 TIM has disclosed its GHG emissions inventory in the Brazilian GHG Protocol Program;
- Refinitiv Diversity & Inclusion: after the assessment of over 11,000 companies in terms of diversity and inclusion, TIM occupies the 10th position globally; it is first in the Telecom sector and first in Brazil in the index, being the only Brazilian company to assess diverse and inclusive work environments;
- FTSE4GOOD: the company is on the FTSE4Good Index Series (Emerging Markets Index, Latin America Index);



TIM has responded to the CDP **since 2010**

- Morgan Stanley Capital International Indexes (MSCI):
 - MSCI ACWI ESG Leaders: listed on index portfolios linked with the MSCI ESG Leaders Index, which has conducted assessments of governance and analyses of social and environmental indexes of more than 6,000 publicly traded companies worldwide;
 - MSCI Emerging Markets ESG Leaders;
- Women on Board (WOB) certification, which recognizes and publicizes organizations that have at least two women on the Board of Directors or Advisory Boards;
- Bloomberg Gender Equality Index (GEI): TIM is the first company in Latin America and 7th among global companies committed to internal inclusion and gender equality policies;
- **Pró-Ética** (Pro-Ethics): for the second time running, TIM is listed in the Brazilian Comptroller General (CGU) **Empresas Pró-Ética**, an initiative that promotes a more integral, ethical and transparent corporate environment. The operator is the only telecom company in the country to achieve this recognition.



Membership of external organizations

GRI 2-28

TIM belongs to bodies, organizations and associations both with active participation in the governance of those of importance in the institutional and regulatory environment for the telecommunications sector, highlighted in the box at the side, and with technical contributions for the development of best practices and participation in key forums in the market.



Membership with participation in governance		
Body	Purpose	TIM participation
National Association of Fixed and Mobile Telephony Operators (Conexis Brasil Digital)	This non-profit organization represents landline and mobile telecommunications carriers authorized to operate in Brazil by the Brazilian telecommunications regulatory body, ANATEL	Member of the Board
Brazilian Telecommunications Association (Telebrasil)	A private non-profit body that represents and works towards the development of operators and suppliers to the communication and information technology sectors	Member of the Board
GSM Association (GSMA)	This organization represents the interests of mobile telephony operators and promotes technology development in the mobile communications industry worldwide	Member
Brazilian Telecommunications Resources Association (ABR Telecom)	The mission of this organization is to promote, operate and manage integrated technical solutions among members for the provision of telecommunications services in compliance with regulatory requirements	Member of the Board of Directors
ConectarAGRO	The purpose of this association is to promote accessible connectivity in the hinterland of the country, benefiting agricultural producers in order to leverage agribusiness	Member of the Board of Directors



Membership without participation in governance

- Brazilian Association of Publicly Traded Companies (Abrasca);
- Brazilian Business Communication Association (Aberje);
- Brazilian Technology, Information and Communication Law Association (ABDTIC);
- Brazilian Financial Law Association (ABDF);
- Brazilian Telecommunications Companies Tributary Studies Association (Abetel);
- Brazilian Risk Management Association (ABGR);
- Brazilian Human Resources Association (ABRH);
- Brazilian Training and Development Association (ABTD);
- Information and Communication Technology and Digital Technologies Association (Brasscom);
- São Paulo Italian Chamber of Commerce (Italcam);
- Business Coalition for Racial and Gender Equality;
- Business Coalition for Ending Violence Against Women and Girls;
- São Paulo Federation of Goods, Services and Tourism (FecomercioSP);
- Fundação Abrinq;
- Fundação Getúlio Vargas (FGV);
- Applied Tax Studies Group (Getap);
- Institutes, Foundations and Companies Group (Gife);
- Business Leaders Group (Lide);
- Instituto Akatu;
- Brazilian Institute of Competitive, Consumption and International Trade Studies (Ibrac);
- Brazilian Investor Relations Institute (Ibri);
- Technology and Society Institute (ITS);
- Instituto Ethos;
- ***Istituto Italiano di Cultura*** (IIC);
- Companies and LGBTI Rights Forum +;
- Lide Mulher;
- Mobile Ecosystem Forum (MEF);
- UN Women;
- UN Global Compact;
- Social Inclusion Business Network (Reis).

Profile
Governance structure
2022 Highlights
Financial results
Anti-corruption
Risk management
Operation
Innovation
Customer
Suppliers
Privacy and data protection

03

Governance

Profile

GRI 2-1, 2-6

TIM S.A. is a telecommunications company that provides fixed and mobile telephony, data transmission and ultra broadband services for people and companies all over Brazil. With its headquarters in Rio de Janeiro (RJ), it is controlled by TIM Brasil Serviços e Participações S.A., a company of the Telecom Italia Group.



The company is oriented to **ethics, loyalty and good faith**

It is a publicly traded company with shares on the B3 Novo Mercado exchange and American Depositary Receipts (ADRs) listed on the New York Stock Exchange (NYSE). For this reason, it is subject to the rules of Brazil's Comissão de Valores Mobiliários (CVM) and the US Securities and Exchange Commission (SEC) and complies with the Sarbanes-Oxley Act (SOx).

The company does business oriented to ethics, loyalty and good faith, in pursuit of:

- transparency in business;
- fair competitive conduct;
- excellence in market competitiveness;
- the well-being and growth of the community in which it operates;
- valuing its human resources; and
- promoting sustainable development.



Acquisition of Oi Móvel assets

In April 2022, the purchase of the assets of Oi Móvel by TIM, jointly with the operators Vivo and Claro was concluded. With this acquisition, TIM became the leader in national coverage, in addition to receiving 16.4 million users from 29 different national codes.

The first stage of the migration process – concluded in June, almost one month ahead of schedule – consisted of the liberation of the TIM network for the new users, who were able to navigate the network of the two operators simultaneously, in a roaming-like model.

The next stage, currently underway, is the incorporation of Oi infrastructure into the TIM network, with efficient spectrum use. Lastly will come systemic integration, when tariffs and billing will be taken over directly by TIM. Customers are informed beforehand within the determined time limits about all the changes, which occur automatically with no impacts for the user. In addition to maintaining the number used with the previous operator, users will not have to change chip to continue navigating and making calls.

Imagine the **possibilities**

GRI 2-23



Purpose

To evolve together with courage, transforming technology into freedom



Values

- **Courage** to innovate and always think differently
- **Respect** is taking care of everyone and valuing each one
- **Freedom** to access what is important to you



Strategic pillars

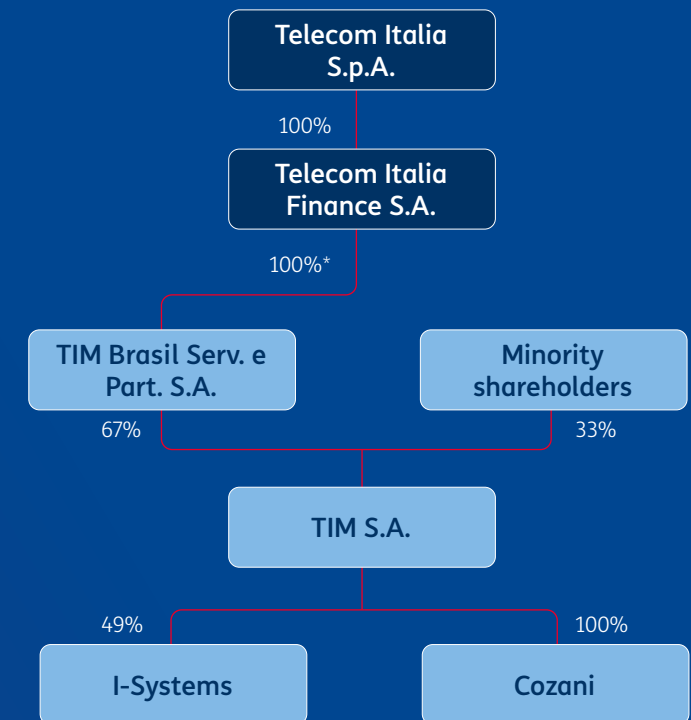
- Innovation
- Customer experience
- Agility



Goal

To reinforce the innovation pillar, boosting preference and reducing rejection, being perceived as the best liked operator with the highest recall

Shareholder structure



*Telecom Italia S.p.A. has one share of TIM Brasil Serv. e Part. S.A.

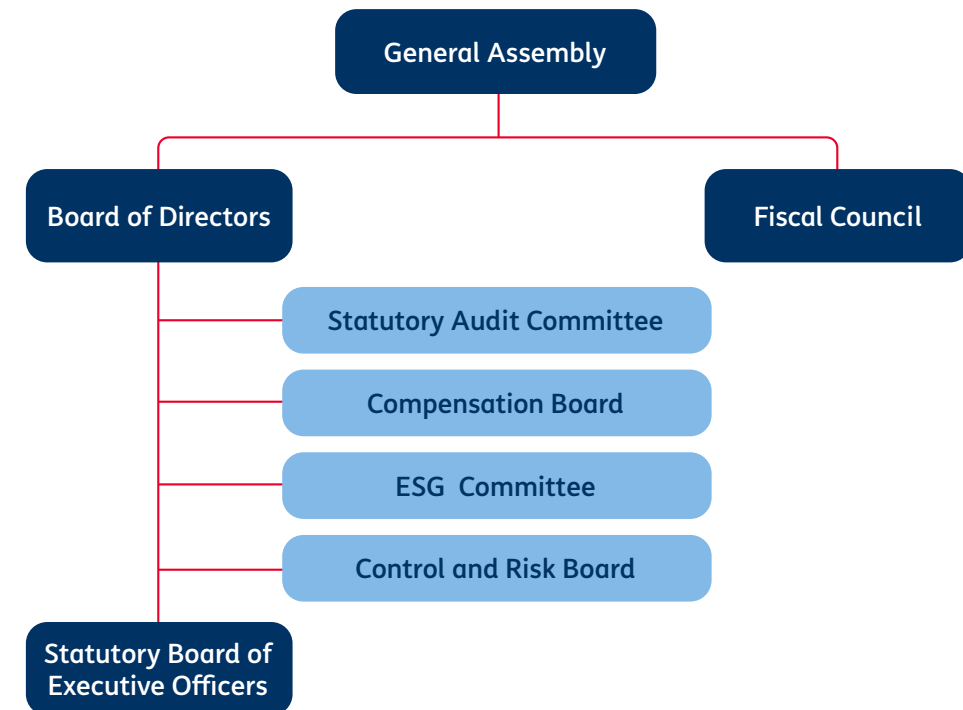
Governance structure

GRI 2-9, 3-3

TIM S.A. is a publicly traded company, administered by a Board of Directors, a Statutory Board and supervised by a Fiscal Council, whose duties and responsibilities are governed by Brazilian legislation, the company by-laws, the listing regulations of the B3 Novo Mercado and the company's own internal regulations.



The TIM Board of directors comprises **10 members**, of whom four are independent



Board of Directors GRI 2-14

The current TIM Board of Directors consists of ten members - four of whom are independent and three, or 30%, of whom are women. The board is responsible for strategic decision making to ensure business continuity and to conduct management with best governance and transparency practices. Its members are elected by the General Shareholders' Meeting, for a two-year term of office, with re-election permitted for the same period of time.

It is the TIM Board of Directors' duty to promote the perpetuity of the company from a long-term and sustainable perspective, incorporating best financial, social, environmental and corporate governance considerations into the business and operations. The TIM Board of Directors and advisory committees meet at least once every quarter.

GRI 2-16



It is the Board of Directors' duty to **promote the perpetuity of the company**

Members of the Board of Directors GRI 2-11

- Nicandro Durante - Chairman (independent member, not on the Statutory Board)
- Adrian Calaza - Member (renounced compensation)
- Alberto Mario Griselli - Member (renounced compensation)
- Claudio Giovanni Ezio Ongaro - Member (renounced compensation)
- Elisabetta Paola Romano - Member (renounced compensation)
- Flavia Maria Bittencourt - Member (independent)
- Gesner José de Oliveira Filho - Member (independent)
- Herculano Aníbal Alves - Member (independent)
- Michela Mossini - Member (renounced compensation)
- Michele Valensise - Member

The current term of office of the ten members of the Board of Directors will last until the Ordinary General Meeting in 2023.



See the [TIM Administrative Body Member Indication Policy](#)

Composition and indication GRI 2-10

The Board of Directors may comprise at least five and, at most, 19 effective members, elected by the TIM General Meeting. Of this total, at least two or 20%, whichever is greater, should be independent, as defined in the B3 Novo Mercado regulations.

Indications for the Board of Directors may be made by the company administration or any company shareholder, in accordance with law 6.404/76 and the rules of the regulatory body, Comissão de Valores Mobiliários (CVM). Any proposals of reelection should take into account experience, performance and attendance at meetings during the term of office, results of the periodic Board assessment process, as well as any conclusions related to the need to adjust the composition of the Board.

Indications for the Board of Directors may be made by the company administration or any company shareholder

The indication of members of the company's administrative bodies should also take into account the company's by-laws, internal regulations and the legislation in force, with a view to reflecting and consolidating the structures existing to protect the interests of shareholders and the market.

The selection process should be in accordance with the organization's values and principles, its strategy and stage of maturity. It may be conducted internally by the company or with support from contracted independent professionals for consultation and assessment of the candidates.

The process should also observe the recommendations of the Brazilian Institute of Corporate Governance (IBGC) regarding the qualifications of candidates for the company's administrative bodies. In general terms the indication process aims to ensure that the company's administrative bodies are manned by members with a diversified profile, with an appropriate number of independent members and enough people to enable the nomination of committees, permitting the effective debate of ideas and impartial, well grounded decision making.

The indication process should also consider the following criteria:

- unblemished reputation;
- availability of time for adequate dedication to the exercise of the function and responsibility assumed, which goes beyond attendance at meetings and reading required documentation;
- professional experience in diverse areas and complementary competencies;
- whenever possible, diversity of gender, race/ethnic origin, and generation, with experience in varied segments, covering among others, differentiated cultural aspects to permit the company to benefit from a plurality of viewpoints, experiences, arguments and a more secure and effective decision making process;
- whenever circumstances permit, it is recommended that at least 30% of the members of the Board of Directors, its committees and the Statutory Board should come from minority social groups (women, black people, different generations), with experience in varied segments, encompassing, among other things, differentiated cultural aspects.



Committees GRI 2-12, 2-13, 2-14, 2-18, 2-20

Four Advisory Committees, made up of members, provide support for discussions by the Board of Directors:

Compensation Committee

- The committee assesses compensation criteria for directors and senior executives. It is permanent. The committee reports to the Board of Directors prior to the meeting normally held after the Annual Ordinary General Meeting. The People, Culture and Organization area makes suggestions to the Compensation Committee about compensation levels. These are based on current compensation strategy and may be complemented with inputs from external consultancies.

TIM compensation practices are approved by the Board of Directors on an annual basis. The Board of Directors is responsible for forwarding the maximum global compensation proposed for approval by the shareholders in the General Meeting.

Control and Risk Committee

- This committee monitors compliance with corporate governance rules, oversees risk management, internal controls and SOx, the Integrity Program and corporate social responsibility actions and initiatives.

ESG Committee

- This body helps in the development and implementation of ESG principles and strategy. Its attributions include: defining ESG targets and monitoring the ESG Plan annually, evaluating TIM's participation in voluntary initiatives and commitments and supervising risk management and opportunities associated with ESG topics, including climate questions.

It is responsible for informing the Board of Directors, the Audit and the Control and Risk Committees about situations involving questions and approaches to ESG with the potential to impact the company's image, reputation and assets. It is also the ESG Committee's function to recommend the Board of Directors' approval of corporate ESG standards and procedures, as well as actions to disseminate them and monitor them; to review ESG reports, institutional communications and environmental, social and governance initiatives that have public repercussion, to recommend changes and improvements; and to recommend joining or maintaining any Brazilian and international protocols, principles, agreements, pledges, initiatives and treaties directly or indirectly related to this area.

The ESG Committee is supported by an ESG Steering Committee, consisting of statutory directors representing the following areas: Regulatory, Institutional and Press Relations, Legal & Corporate Affairs and People, Culture & Organization. Its function is to incorporate the ESG Committee's guidelines and instructions into the company's activities and organizational structures.

Statutory Audit Committee

- This body oversees compliance with standards of the capital market regulatory bodies, such as the Comissão de Valores Mobiliários (CVM) in Brazil and the Securities and Exchange Commission (SEC) in the United States, which are also reflected in the TIM by-laws. It supervises the quality and integrity of financial reports, as well as compliance with regulatory and statutory standards. It also monitors risk management, internal control and SOx processes and the activities of internal and independent auditors. The committee supervises and assesses all kinds of contracts between the company and its subsidiaries, on the one hand, and the controlling shareholder or its subsidiaries and associated companies, subject to common control or controlling companies of the latter, or which otherwise constitute associated parties.

The Committees operate for an indeterminate period and are independent. Their composition and activities are subject to the Committee Internal Regulations in the case of the Compensation and Audit and Control Committees, and the Internal Regulations for the ESG Committee.

The members of the Board of Directors and the Committees undergo reviews on an annual basis by means of a self-assessment questionnaire which is responded individually, with the results submitted to the actual governance body. The responses are analyzed and compared with the results from the previous year, when opportunities for improvement are identified. At the end of 2021, the Board of Directors approved the adoption of an independent review process to be implemented in 2023.



For further information on the **members of the committees**, [click here](#)



Compensation Policy GRI 2-19, 2-20

The compensation of the Board of Directors, the Advisory Committees and the Fiscal Council is reviewed annually, by means of comparative analyses with market practices. Based on the result of this analysis, an adjustment is proposed or not. This is presented for review by the Compensation Committee, which is responsible for making recommendations to the Board of Directors.

TIM has an [Administration Compensation Policy](#), which is disclosed transparently to the market and which establishes the rules and principles governing the definition and evolution of the compensation of the members of the Board of Directors, the Advisory Committees, the Fiscal Council and the Statutory Board.

The policy establishes the following forms of payment:

- **Fixed remuneration:** this is aimed at recognizing and reflecting the scope and value of the position internally and externally, as well as the individual performance, experience, educational background and knowledge of the executive, supported by



TIM has an Administration Compensation Policy

market practices. It consists of 12 payments per year, plus a 13th salary and vacations for statutory directors contracted under Brazil's CLT regime.

- **Variable remuneration:** this rewards the achievement and surpassing of company targets, aligned with the budget, strategic planning and market practices. The definition of individual remuneration and periodic readjustments takes into account prior remuneration, the criticality of the position, individual performance and achievement of established targets, the need for shielding, internal equity and comparative analysis with the market, by means of salary surveys conducted by specialized consultancies, as well as the competitive context.



The variable component is divided into three groups: Short-Term Incentives, called Management by Objectives (MBO), which is based on profit share and is linked with strategic indicators for the company's business; Bonus, which can be used to recognize an executive's differentiated performance, as well as rewarding the results of specific projects and initiatives that are important for the company; and Long-Term Incentives, the purpose of which is to align the interests of senior management with those of the shareholders, implement an integrated incentive system, increase the competitiveness of the compensation package and help retain key people in the company.

TIM has clawback clauses in its Short and Long-Term Variable Remuneration programs. These may be imposed when the results of any participant in the program have been totally or partially obtained through fraudulent behavior, bad conduct or error, attributable to the participant, without which the same remuneration would not have been achieved or would have been lower.

- **Benefits:** these are products and services that increase the well-being of an individual and their family in economic and social terms, reflecting on the value received by the executives and aimed at attracting them and retaining them in the company. These benefits evolve in accordance with market practices and collective bargaining agreements and with the evolution of individual needs and expectations. Some examples are: private pension plan, extended maternity and marriage leave, day off on birthday and for length of service, healthcare plan, dental plan, life insurance, nursery allowance, food/meal allowance and medication benefits. TIM also offers executives the opportunity to customize their benefits package to best meet their individual needs by means of a flexible benefits platform.

- **Hiring/retention bonus:** upon analyzing market conditions, context and business challenges and with the goal of ensuring business continuity and fulfillment of the strategic plan, TIM may offer discrete bonus payments to guarantee the hiring and/or

retention of key executives. In the specific case of a hiring bonus, this payment enables the company to make a more attractive offer to external candidates and helps minimize any discrete losses they may incur in the transition between companies.

- **Severance payments:** these are calculated and paid by the company in accordance with legislation and are applicable to each type of termination of employment. Severance payments and conditions are defined based on market practices, taking into account different forms of termination. These payments are also dependent on the position involved, the executive's length of service in the company, the context and the conditions under which the termination is taking place.



In 2022, the Board of Directors met **11** times, with an average attendance rate of **91%**



Organizational structure and compensation strategy

The definition of the compensation structure and amounts is supported by analysis of market practices, mainly in the high technology and telecommunications sectors, as well as in companies of similar size and governance characteristics (such as being listed on the Novo Mercado and/or on the New York stock exchange). These guidelines are updated annually in accordance with changes in the market and the company's strategic planning.

The composition of compensation also takes into account the importance of the individual's function within the company's organizational structure, based on market parameters and surveys supplied by companies specialized in compensation, such as the Korn Ferry Hay Group and Willis Towers Watson, among others. The elements of fixed remuneration, variable remuneration and benefits are weighted in accordance with the grade and matching of positions.

Board of Directors

The compensation of the Board of Directors comprises the payment of fixed monthly fees, with no direct or indirect benefits or short or long-term incentives. The members of the Board of Directors do not have different fee rates for exercising this position, with the exception of the chairman of the Board.

Advisory Committees

Members participating in committees receive fixed monthly remuneration, with is also reassessed annually. The fees are established in accordance with market practices, and may differ between committees and in accordance with the member's role (coordinator or committee member).

Fiscal Council

The compensation of the council members comprises the payment of fixed monthly fees, with no direct or indirect benefits or short or long-term incentives. The members of the Fiscal Council do not have different fee rates for exercising this position, with the exception of the chairman of the Council.

Statutory and Non-Statutory Board

Members receive fixed monthly salaries, direct and indirect benefits, as well as short and long-term variable remuneration.



*The current **composition of the TIM governance bodies** may be encountered on the [Investor Relations website](#)*



Fiscal Council

The Fiscal Council comprises three effective independent members and the same number of alternates, elected by the General Shareholders' Meeting. It oversees TIM management and the company's accountability to shareholders.

Statutory Board of Executive Officers

The Statutory Board, responsible for representation and execution of management, comprises a CEO and another seven statutory directors. Its members are elected by the Board of Directors for a two-year term of office, with re-election permitted for the same period of time. They may be dismissed at any time. The collegiate decision-making body has the mission of protecting and valuing TIM assets and maximizing the return on investment in the long-term, in alignment with the Board of Directors' mission. The compensation of these executives comprises fixed and variable components and is approved by the General Shareholders' Meeting.

Composition

The current term of office began on December 15, 2021. For further information on the composition of the Statutory Board, click [here](#).

Risk & Compliance

Linked with the Board of Directors, this area reports periodically on advances to the Audit and Control and Risks Committees. It is responsible for managing and monitoring the internal controls environment, the Integrity Program, Anti-bribery/Anti-corruption management, Compliance, Information Technology and Security and SOx certification (further information on SOx on [page 51](#)).

Internal Audit area

Also linked with the Board of Directors, this area reports advances periodically to the Audit Committee. It is responsible for complementing the assessment of the effectiveness of internal controls and compliance with policies, standards and procedures to prevent or detect the occurrence of errors, fraud and/or business losses.

Further information about the **profile of the members of the governance bodies** on [page 28](#).



2022 highlights GRI 2-6



Financial

Net revenue:
BRL 21.5 billion
+19.2% (YoY)

Net service revenue:
BRL 20.8 billion
+19% (YoY)

TIM UltraFibra net revenue:
BRL 797 million
+10.7% (YoY)

Normalized net income:
BRL 1.8 million
-18.4% (YoY)

Normalized Ebitda:
BRL 10.2 billion
+17.2% (YoY)
(Ebitda margin **47.4%**)

Operating free cash flow:
R\$ 6.9 billion
+27.8% (YoY)

Provision for doubtful debtors (PDD): **2.1%** of gross revenue (maintains balance)



Leadership in 4G, with **96% of the cities in Brazil** (5,370 municipalities) covered

Expansion of 4.5G coverage to **1,922 new cities**

Growth in FTTH and FTTC fiber optic coverage, with **6.1 million** homes passed - increase of **7.1%** in a total of **42** cities



Infrastructure

5G

With 11 lots acquired (three national and eight regional) in the November 2021 5G Auction in Brazil, the company launched the service in 2022, first in Brasília (DF) in July. By October TIM 5G was present in all the country's 27 state capitals.

The operations obtained included the capacity of 100 MHz in the most important 5G frequency, 3.5 GHz. Also worthy of note was the acquisition of lots in higher frequencies, known as millimeter waves, whose main characteristic is increased internet speed.



2022 highlights GRI 2-6



Products and services

¹ Includes the 8.7 million customers who migrated from Oi Móvel to TIM up to the end of January 2023.

² In addition to the TIM customers, it includes the 6,787 Intelig customers.

3G, 4G and 5G telephony and mobile internet

62 million customers in the mobile base¹ SASB TC-TL-000.A

35.2 million prepaid customers, 31.5% market share

27.2 million postpaid, 19.4% market share

more than 55 million 4G accesses
+18.7% (YoY)

Mobile ARPU **BRL 26.1/month**
-0.9% (YoY)

TIM UltraFibra (fixed ultra broadband) SASB TC-TL-000.C²

716,000 customers

Customer base grew **4.6% (YoY)**

Fixed telephony SASB TC-TL-000.B

738,000 fixed telephony customers
-9% (YoY)

Groundbreaking new B2B businesses and customer platform

12 million hectares of rural area covered by TIM 4G

4G Internet in rural areas with the 700MHz frequency, the same one available in large cities in Brazil

11,600 kilometers of highways connected with IoT projects

Expansion of connectivity and intelligent city projects, such as public lighting management solutions

Strategic partnerships to generate revenue through customer engagement, advertising and data intelligence (TIM Ads, TIM Insights, C6, Ampli, EXA, Cartão de Todos)



Financial results

GRI 201-1



Economic impact: direct economic value generated and distributed (BRL thousands)

	2020	2021	2022
Net revenue ¹	21,249,577	24,902,358	25,375,925
(B) Goods and services acquired from third-parties	5,591,596	7,702,345	7,292,936
Cost of services rendered and merchandise sold	2,641,923	2,676,158	3,482,166
Materials, energy, third-party services and others	2,949,673	5,026,187	3,810,770
(C) Gross added value (A- B)	15,657,981	17,200,013	18,082,989
(D) Retentions (depreciation and amortization)	5,527,012	5,691,696	6,827,175
(E) Net added value (C- D)	10,130,969	11,508,317	11,255,814
(F) Transfers	796,406	1,601,104	1,398,429
(G) Added value for distribution (E + F)	10,927,375	13,109,421	12,654,243
Distribution of added value			
Salaries	422,336	477,746	540,678
Social security charges	97,375	104,735	107,172
Private pension plan	21,451	22,105	16,557
Benefits	162,308	167,051	183,157
Profit share	148,623	151,749	212,237
Taxes, charges and contributions, less subsidies (exemptions)	5,811,993	6,014,887	5,872,837
Interest and rents	2,414,770	3,204,827	4,045,062
Interest on own equity and dividends	1,083,000	1,047,500	1,400,000
Profits/losses in the year	760,690	1,909,674	270,755
Private social investment	4,829	9,147	5,787

¹ Does not take into account losses from doubtful debts, discounts granted, returns and others.

Economic goals

TIM's economic goals are set forth in its Strategic Plan for 2023-25, approved in February 2023. For this new three-year period, the company projects an improvement in the general dynamics of the

businesses, driven by the combination of a larger revenue base with a solid trend towards recovery of margin, better Capex efficiency opportunities and a clear route to the optimization of

spending on leases. These dynamics will drive an expansion in cash flow, generating additional room for shareholder compensation.

2023-25 Projections

Goals	Drivers	Short-term targets (2023)	Medium-term targets (until 2025)
<ul style="list-style-type: none"> Revenue sustainability 	<ul style="list-style-type: none"> Maintain focus on value with trend towards improving customer base; Rational competitive environment; Churn normalization process; Broadband and new initiatives as a complement to the growth dynamic. 	<ul style="list-style-type: none"> Growth in Service Revenue: High single-digit YoY 	<ul style="list-style-type: none"> Growth in Service Revenue: Mid single-digit (above inflation) CAGR 22-25
<ul style="list-style-type: none"> Sustain High Profitability 	<ul style="list-style-type: none"> Manage inflationary pressure with traditional cost control; Contribution margin of former Oi customers; Digital transformation: new opportunities with former Oi customers and new initiatives. 	<ul style="list-style-type: none"> Ebitda Growth: Low double-digit YoY 	<ul style="list-style-type: none"> Ebitda Growth: High single-digit CAGR 22-25
<ul style="list-style-type: none"> Efficient Investments 	<ul style="list-style-type: none"> Synergies from spectrum acquired guaranteed; Offload of 4G traffic after accelerated launch of 5G; Maintenance of asset-light approach for FTTH expansion. 	<ul style="list-style-type: none"> Capex over Revenue: Ratio < 20% 	<ul style="list-style-type: none"> Capex: ~BRL 13.3 b Σ 23-25
<ul style="list-style-type: none"> Expand cash generation 	<ul style="list-style-type: none"> Ebitda contribution as business dynamics evolve; Allocation of Capex: opportunities to “do more with less” in infrastructure; Execute site decommissioning plan: “short-term pain to obtain long-term gain”. 	<ul style="list-style-type: none"> Ebitda Growth-LA less Capex: Double-digit YoY 	<ul style="list-style-type: none"> Ebitda Growth-LA less Capex: Double-digit CAGR 22-25
<ul style="list-style-type: none"> Share Value Creation with Shareholders 	<ul style="list-style-type: none"> Cash generation as main driver of shareholder compensation¹; Net Income is NOT the limit (distributable reserves of ~ BRL 7.5 b). 	<ul style="list-style-type: none"> ~BRL 2.3 b 	<ul style="list-style-type: none"> Continuous evolution

Note: the guidance does not consider tax reforms, regulatory changes and new spectrum auctions;

¹ Refers to total advertisements and for JSCP gross amount is considered.



Taxes GRI 207-1

TIM tax strategy is based on the principles of honesty, accuracy and compliance with legislation, and is characterized by cooperative and transparent conduct. Governance is the responsibility of the CFO - Administrative & Tax Services area, which works towards minimizing risks and material impacts in this question.

The TIM Tax Policy, approved by the Board of Directors, defines the general goals and the guidelines adopted by the company and its subsidiaries in management of this question, in addition to being linked to the sustainable development strategy.

To reinforce commitment to transparency in all its operations, TIM regularly reports on its tax activities and expenditures in its Annual Reports.



See the **TIM**
Tax Policy

Anti-corruption

GRI 2-15, 2-23, 2-24, 3-3, 205-1

Material topic: **Ethics, integrity and compliance**

SDG **16**

It is TIM's understanding that it is necessary to work in strict compliance with laws, constantly promoting the company's Code of Ethics and Conduct in its organizational processes, going beyond legal requirements in the dissemination of anti-corruption practices, accounting transparency and combating anti-competitive conduct and bribery. This is why TIM invests in maintaining a robust corporate governance structure, disseminating its principles and values to stakeholders throughout the value chain in which it operates.

TIM has internal standards to guide employees in compliance with legislation and legal decisions and in ethical conduct and the principles of transparency, honesty and loyalty. The company also has integrity due diligence processes and contract clauses to combat corruption in its value chain. The company has ISO 37001 certification, attesting to the security and effectiveness of its anti-bribery system.

The TIM Integrity Program, applicable to all employees, also known as the Anti-bribery and Anti-corruption Management System, establishes a set of rules and actions to guarantee compliance with Brazilian anti-corruption

legislation. Supervised by the Risk & Compliance area, the program seeks to prevent, identify and mitigate any practices involving bribery and corruption, establishing internal controls and monitoring sensitive activities by means of tests.

The company also has a Conflict of Interest Policy, approved by the Extraordinary General Meeting, which contains the methodology for identifying, preventing and mitigating this kind of situation. The standard applies to all employees, executives and members of committees and governance bodies, as well as to those who have commercial or business relations with or who act on behalf of the TIM Group Brasil.

2022-24 ESG Plan



Target

- Maintain **ISO 37001** certification up to 2023



Result

- Certification obtained one year ahead of target



The TIM Integrity Program applies to all employees



The Board of Directors, the company's highest governance body, is responsible for approving the Code of Ethics and Conduct, the Anti-corruption Policy and the Related Parties Contracting Policy. These documents guide company strategy, its internal procedures and institutional documents.



Institutional documents of the TIM Integrity Program

- Code of Ethics and Conduct;
- Anti-Corruption Policy;
- Organizational Model;
- Conflict of Interest Policy;
- Related Parties Contracting Policy;
- Manual of the Anti-Bribery and Anti-Corruption System.

Anti-corruption Program GRI 2-15, 2-24, 205-1

TIM believes that to combat corruption it is necessary to pay special attention and to continuously monitor activities considered sensitive to this type of practice. The Governance & Integrity Compliance area conducts an annual risk assessment of Sensitive Areas, based on the most relevant processes, also taking into account the areas and functions responsible for them, the stakeholders involved, the risk scenarios and the respective controls, the result of the assessment of the controls and the risk assessment.

Part of the Integrity Program, the TIM Anti-corruption program guarantees continuous monitoring of 20 activities considered more sensitive in terms of exposure to the risk of corruption. This initiative involves the assessment of internal controls, monitoring of an annual sensitive activity risk matrix, action plans and the identification of opportunities for improvements, in addition to the establishment of defense mechanisms.



The activities considered sensitive are the following:

- Agreements;
- Legal, administrative and arbitration processes;
- Authorizations and licenses;
- Relations with public agents, institutions and authorities;
- Gifts;
- Representation expenses;
- Events;
- Commercial and institutional sponsorship;
- Donations/contributions to non-profit organizations;
- Financing and and bonus loans;
- Acquisition of goods and services;
- Sale of goods and services;
- Hiring employees;
- Managing employee variable compensation;
- Health, safety and environment;
- Investments;
- Commercial partners
- Payments;
- Acquisition and sale of stakes and/or the incorporation of companies;
- Operations conducted directly by the TIM CEO.

The Anti-Corruption Policy also addresses the following points to preserve ethical relations:

- **Integrity Due Diligence:** underlies the decision making processes for contracting and/or associating with third-parties, based on analysis of the extent of risks of bribery and corruption;
- **Conflicts of Interest:** for third-parties or service providers an analysis is undertaken in line with a specific procedure to identify possible conflicts of interest by means of Integrity Due Diligence. In the interest of confidentiality and secrecy, conflicts of interest are reported to senior management and the Board and are not widely publicized;
- **Sensitive relations:** this establishes behaviors and actions to be taken in relations with public authorities, with customers and suppliers, in addition to providing guidance on relations with service providers and other private organizations;
- **Sensitive third-parties:** some types of third-parties with whom the company relates are considered sensitive due to the greater risk of bribery and corruption because of the characteristics of the business or specific

activities. This group includes business partners and the beneficiaries of sponsorships and donations, among others;

- **Sensitive positions:** this identifies positions with high, medium and low level of exposure to risk of bribery and corruption. To monitor the level of risk, monitoring includes managerial positions and ones responsible for decision making, as well as functions considered sensitive, such as those responsible for the approval of third-parties.

The Anti-corruption program also determines that the TIM internal standards comprise Policies, Operational Procedures and Operational Instructions that describe the processes and controls for all the company's areas and functions. These instruments establish the responsibilities, guidelines, rules, processes, controls and specific activities of each function and structure.



See the TIM
Anti-corruption Program

Whistleblower Channel

GRI 2-26, 205-3

Based on the principles of transparency and confidentiality, TIM provides its internal and external audiences with the Whistleblower Channel. This is available in Portuguese and English and may be accessed by internet and telephone. For employees the access link is also available on the company intranet. Employees may also access a course on use of this channel on the company's training platform.

The service is for recording reports of actions or behaviors involving corruption, fraud, conflict of interest, discrimination, psychological harassment, sexual harassment, violation of human rights and the Consumer Defense Code, or any other behavior that does not comply with legislation and the TIM Code of Ethics and Conduct.

The Whistleblower Channel is managed by an independent, external company. The service is available 24 hours a day, seven days a week. Those making reports may maintain the confidentiality of their personal information if they wish. They may also track the progress of the investigation by means of a service number, with anonymity guaranteed.

The TIM Whistleblower Channel Policy was updated in 2022. The channel regulates the process of receiving, analyzing, and handling reports sent or transmitted by any person. The process is developed by the Audit function. It fulfills the principles established by international standards, by internal audit professional practice, and by the Code of Ethics published by the Institute of Internal Auditors (IIA).

Also in 2022, TIM developed a plan to publicize the Whistleblower Channel, with the launch of a new training program for employees and material dedicated to third-party workers.

No cases of corruption involving public authorities or agents were identified by TIM in 2022. The company investigated six alleged cases of fraud. Two were considered substantiated, resulting in the dismissal for just cause of those involved. Two are still under investigation and two were considered unsubstantiated. There were also two cases of favoring a supplier (one was considered inconclusive and the other is under investigation). There was one inconclusive case of bribery, which led to the supplier concerned being barred.

In 2022, the Whistleblower Channel received 1,291 reports, of which 635 were anonymous. Of the reports received, 62% were within the scope of the channel, 26% were customer complaints and 12% were deemed outside the scope of the channel

TIM Brazil
Whistleblower
Channel
0800 900 8007



Engagement of **leaders and employees** GRI 2-24, 205-2

TIM employees receive in-company training on the Integrity Program and must commit to adhering to its guidelines. Upon taking office members of the Board of Directors also declare that they are aware of and will comply with the Code of Ethics and Conduct.

To engage directors and employees in anti-corruption measures, TIM conducts mandatory training for new employees and refresher programs throughout the year for existing employees. In 2022, 98% (or 9,312) employees received training in the Code of Conduct and Ethics, 94% (or 8,979) in the Integrity Program and 97% (or 9,264) in anti-corruption. 100% of the members of the governance bodies were trained in this area.



Marketing and **labeling** GRI 417-2, 417-3

In the area of marketing and labeling standards, TIM strives to convey honest, transparent and ethical messages that comply with Brazilian legislation and with the principles of fair competition, indeed, the company has a Competition Defense Policy. The company creates its campaigns and pieces anchored on these principles and, whenever necessary, adjusts or corrects its advertising.

In Brazil, the only body responsible for issuing notifications relative to advertising and marketing communications is the Advertising Self-Regulatory Council Conar (*Conselho Nacional de Autorregulamentação Publicitária*). This is a

non-governmental organization that acts based on the Brazilian Advertising Code of Conduct CBAP (*Código de Conduta Publicitária Brasileiro*) and may recommend alterations, corrections or the suspension of advertising, without imposing financial sanctions.

Since December 2021, TIM has no longer participated in Conar. Accordingly, the company may not initiate processes with Conar, but may still be sued as an advertiser. In 2022, there were no cases of non-conformance with regulations related to the information provided on or the labeling of company services.

Communication and training in anti-corruption policies and procedures						
	2020		2021		2022	
	People trained	%	People trained	%	People trained	%
Directors	64	100	68	97	83	98
Managers	726	99	717	99	734	99
Other employees	8,575	99	8,543	99	8,576	98
Total	9,365	99	9,328	99	9,393	98 ¹

¹ Based on employees active in December 2022.

Cases of non-compliance with laws and regulations GRI 2-27

In 2022, TIM was subject to a total of 106 significant¹ cases of non-compliance with laws and regulations, paying a total of BRL 820,000 in fines.

- 47 cases involved the application of administrative fines related to environmental licensing by municipal and state bodies. There were 14 lawsuits with the potential for an unfavorable impact on TIM. From this total, fines were applied in 59 cases, which are still awaiting a final administrative decision. Two fines totaling BRL 10,000 were paid in 2022, and there were two cases of non-monetary sanctions.
- There were also 21 significant cases brought by Anatel related to non-compliance with regulations. 15 cases resulted in the application of fines, which are being appealed. There were two non-monetary sanctions and four cases finalized during the year, resulting in a total payment of around BRL 810,000.
- In the year there was a total of 24 significant cases related to consumer rights. In 15 of these, which are still *sub judice*, TIM is discussing the application of fines or condemnations involving collective punitive damage. In nine of the significant cases, the discussions involve condemnations related to obligations connected to terms of right to withdrawal, the application of fines for non-observance of contract and top-up terms, among other consumer defense questions.

¹ TIM considers significant cases to be ones impacting the business and fines of over BRL 500,000.





Equipment and infrastructure GRI 416-1, 416-2, 417-1

All telecommunications infrastructure equipment commercialized in Brazil must receive prior approval from the national telecommunication agency Anatel (*Agência Nacional de Telecomunicações*). The agency is responsible for verifying compliance with the electrical and electromagnetic safety parameters established by Brazilian legislation in its laboratories.

In accordance with Anatel determinations, TIM requires its suppliers to guarantee that devices and equipment are approved or certified by the agency. In this way, the company ensures that packaging and manuals contain adequate instructions for the correct and safe assembly and use of the products and the connection sockets.

In 2022, no administrative procedures for non-compliance were brought against TIM by Anatel. Neither were any administrative processes brought by the consumer protection bodies *Secretaria Nacional do Consumidor* or *Conselho Administrativo de Defesa Econômica* (Cade).

Anti-competitive behavior and **non-contribution to political parties**

GRI 206-1, 415-1 | SASB TC-TL-520a.1

The TIM Code of Ethics and Conduct prohibits direct or indirect contributions to political parties, movements, agents or candidates or to unions or related institutions. Accordingly, the company does not make contributions of this type.

TIM has an Anti-Competitive Conduct Policy. The instrument defines the roles and provides employees with guidance with respect to the country's Fair Competition law, to prevent conduct that is harmful to the economy and to ensure alignment with the determinations of the Brazilian Fair Competition Defense System.

In 2022, there were no new suits for unfair competition, neither were the 12 suits reported in 2021 concluded. Thus, the company did not pay any fines or receive any administrative condemnations.

Risk management

GRI 2-23, 201-2



The TIM Group has a Risk Management Policy that was structured based on best market practices and international standards, such as those of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), a US non-profit organization dedicated to preventing fraud and improving financial reports through ethics, effective internal controls and corporate governance.

The processes established in this policy identify, prioritize and define action plans to mitigate risk in the following areas: corporate and operational, financial, ethics and compliance, environment, health and safety and reputation. With this standard and other management mechanisms, TIM monitors short, medium and long-term risks.



The TIM Group has a Risk Management Policy based on **best market practices** and international standards

Business continuity SASB TC-TL-550a.2

The TIM Business Continuity Management Policy establishes guidelines to ensure the effectiveness of strategies and action plans aimed at guaranteeing the continuity of its services in the event of instability or interruptions.

The company uses the following criteria to identify and establish the level of criticality of its activities:

- Assessment parameters that take legal, regulatory, reputational, operational and financial aspects into account, as well as the importance of the product or service for the business;
- For more critical activities, continuity plans are prepared to guarantee the shortest possible response and recovery times in the event of incidents, crises and disasters.

Every quarter, the TIM Operational Crisis team meets to analyze incidents that have occurred and their respective responses, reporting its findings to the executive board.



Highlights of the Operational Continuity Plans

Projected scenarios:

- Unavailability of systems and IT/Network infrastructure due to the total or partial destruction of the website that hosts them, typically caused by natural phenomena, natural wear and tear, operational error, third-party actions, attacks (including cyber) and vandalism;
- Total or partial unavailability of administrative or industrial buildings;
- Total or partial unavailability of people;
- Unavailability of critical supplier.

Mitigation mechanisms:

- Monitoring of TIM Network by ISOC (Intelligent Service Operation Center), with remote or local measures to recuperate the event detected;
- Risk Map and Resilience Plan Routines, an annual survey that consolidates risks, failure probabilities and criticality of services;
- For situations outside the scenarios established in the plans, TIM adopts the Business Continuity Management System (BCMS) – based on the ISO 22301 standard – to deal with any problems.

Interruptions in 2022 SASB TC-TL-550a.1

In 2022, TIM recorded around 147,000 service interruptions lasting at least ten minutes, that affected over 3 million customers. The frequency of interruption events was 0.002 per customer and each affected individual had an average interruption of 0.21 of an hour. Worthy of note is the fact that all the customers were compensated.

In December 2022, TIM had insurance contracts in force to cover operational and cybernetic risks, among others. It is the company's understanding that the policies represent amounts sufficient to cover any losses from these risks, amounting to a total of more than BRL 700 million.



TIM invests in information security and is in the forefront of the introduction of new technologies

Information security

The privacy and security of the data of all TIM stakeholders is a material topic for the company (further information on [page 72](#)). The company develops constant, planned measures to prevent attacks that expose or compromise its network infrastructure or enable third-parties to access confidential information.

TIM invests in information security and is in the forefront of the introduction of new technologies, such as mobile cloud and big data. The goals are to offer customers connectivity and speed, while mitigating risks that could cause business losses, compromise networks and systems, generate equipment failure or result in the loss of consumer and employee data.

Cybernetic attacks can also cause diverse losses in systems, such as unavailability of service, and permit the infiltration of malware – software created to cause damage to a computer, service, customer or a network – in the company's management systems.



TIM cybersecurity measures are based on the ISO 27001:2013 standard. The company conducts continuous improvements in filtering network access; it adopts Anti-DDOS - a protective barrier against all types of denial of service attacks -; it has a threat intelligence service and carries out sweeps to identify vulnerabilities at scale. TIM runs a Bug Bounty platform; it implements control procedures for monitoring and handling incidents and invests in preventive teams.

The company uses CIS Controls (Center for Internet Security Controls) to implant best practices that organize cybernetic security measures. TIM also promotes independent tests for functions at the 2nd control level (Technological Compliance).



In 2022, TIM obtained ISO 27001:2013 information security management certification. In addition to achieving the target in its ESG Plan, the **company reinforces its commitment to protecting its customers and the privacy of their data.**

Climate risks, financial implications and opportunities GRI 3-3, 201-2

The risks associated with climate change could have implications that are physical, economic and regulatory in nature, with repercussions on TIM's finances, image and reputation. To ensure they are monitored, prevented and mitigated, these risks are included in the company's risk matrix, with a view to the proposal of adaptation measures to anticipate and avoid adverse effects.

In 2022, TIM included the risk of climate change in its Corporate Risk Management process to strategically monitor the failure or inadequate execution of services due to extreme climatic events.

The company conducted an assessment of future climatic risks based on a set of existing models and scenarios to define the potential

climatic impacts to which TIM assets are exposed. This took into account the geographical location of most of the company's network equipment and the technical buildings located in Brazil, including infrastructure such as biosites and traditional radio base stations (greenfield and rooftop). The vulnerability of network equipment varies in accordance with location and geographical distribution and in function of what the equipment does.

Among the extreme events caused by climate change that could damage installations/ infrastructure and directly impact TIM business, the company identified water shortage (energy), storms and cyclones. Regarding water shortage, it should be noted that energy generated from water is a major component in the Brazilian energy grid.

Anticipating this possible risk scenario, TIM promotes initiatives aimed at generating energy internally and reducing consumption in its services and installations, with the restructuring of processes and the pursuit of technologies to drive maximum efficiency. The company invests in contracting renewable sources by means of its distributed generation plan with solar, hydroelectric and biogas plants, reducing its dependence on the Brazilian energy grid. TIM also acquires clean energy on the free market and international renewable energy certificates (I-RECs).

In terms of opportunities, it is TIM's understanding that telecommunications enable the reduction of greenhouse gas emissions due to the fact that they permit remote communication and reduce the need for travel that involves burning fossil fuels. This is why TIM invests in offering solutions based on new technologies, stimulating more efficient production models and logistics processes in different sectors, positioning itself as a company that stimulates an economy that is less intensive in greenhouse gas emissions.



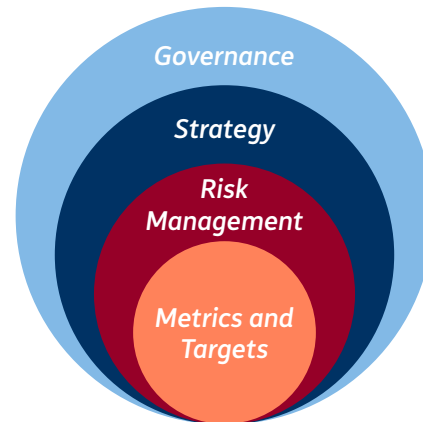
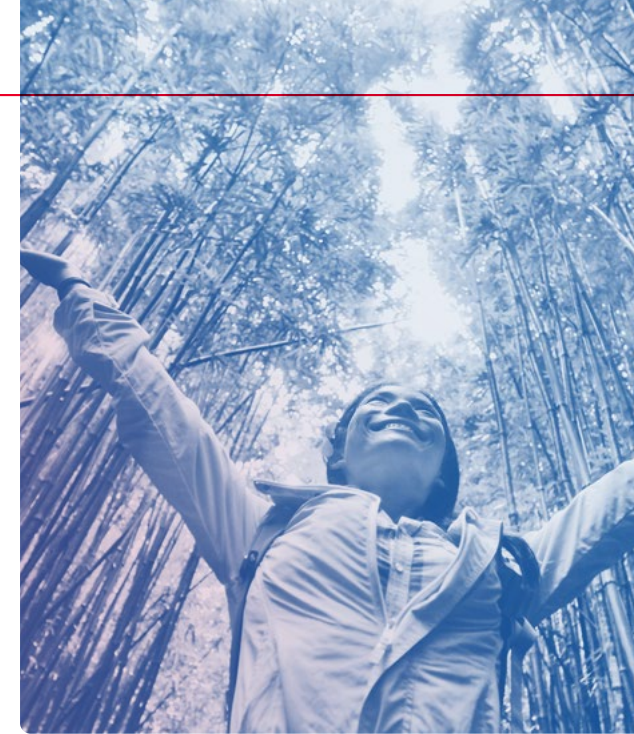
TIM included climate change risk in its Corporate Risk Management process

Alignment with the TCFD

In 2022, TIM aligned its climate risk approach with the recommendations of the Task Force on Climate-related Disclosures (TCFD) – a working group created to encourage companies to inform their investors about climate change-related risks and about how they manage them. This is part of the company's drive to boost transparency in managing this question and disclosing this information to the financial sector.

Since 2010, TIM has participated in the Carbon Disclosure Project (CDP), whose disclosure platform is in line with TCFD recommendations. This dual alignment enables the preparation of reports in a way that is comparable, consistent, relevant and accessible to the global economy.

The thematic report [“Riscos relacionados às Mudanças Climáticas da TIM”](#) (TIM Climate Change-Related Risks), available on the Investor Relations page, presents details about these company initiatives.



Governance

The organization's governance around climate-related risks and opportunities



Strategy

The actual and potential risks and opportunities related to the climate in the organization's businesses, strategy and financial planning



Risk management

The processes used by the organization to identify, assess and manage climate-related risks



Metrics and targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Internal Control & SOx Systems

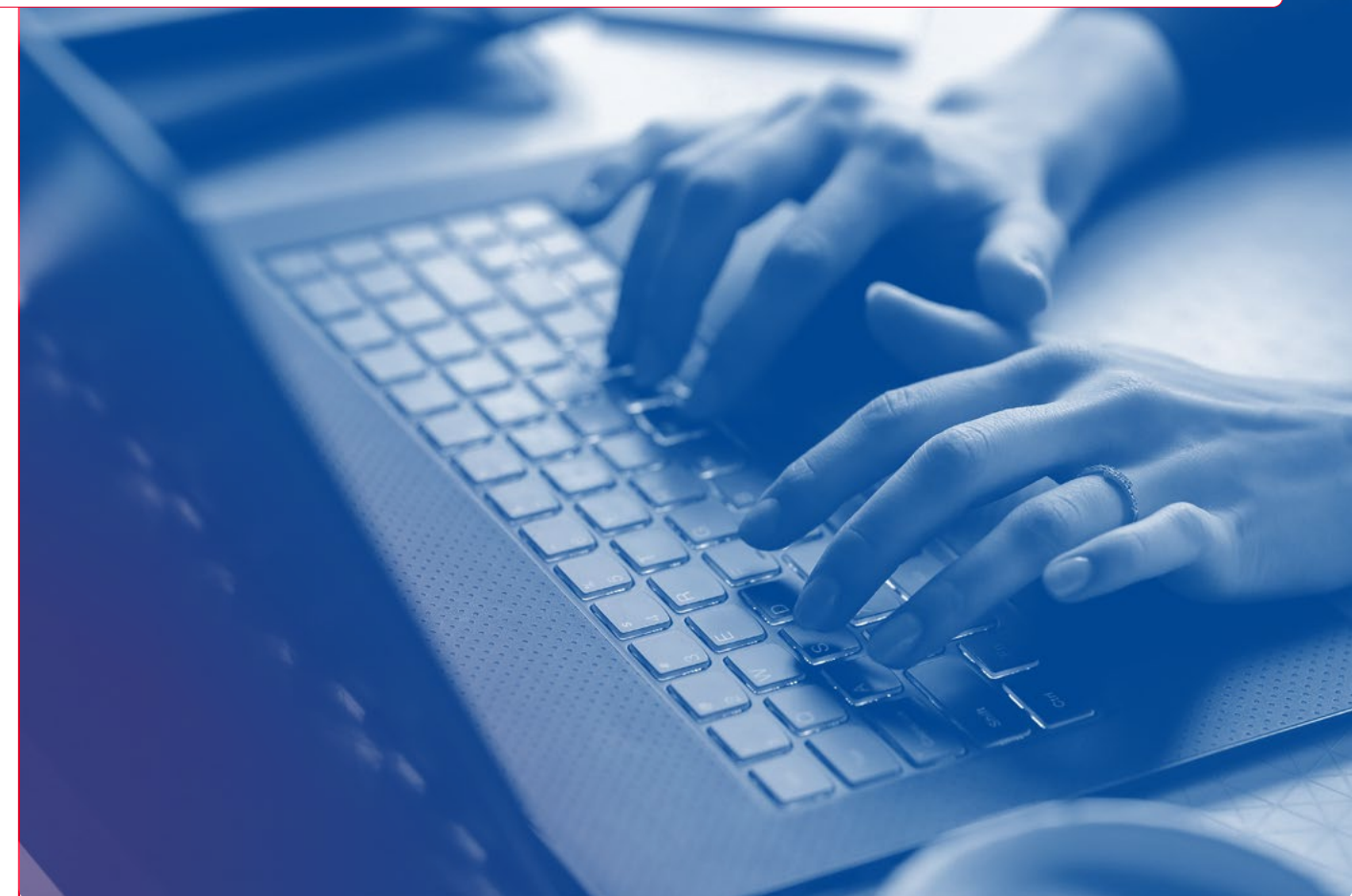
The Risk & Compliance area is responsible for working preventively to mitigate risks by means of managing the TIM Internal Control System, reporting independently to the Audit and Control and Risks Committees. This system employs best market practices and international frameworks, such as COSO. In 2022, TIM received the International Certificate in Excellence in Internal Controls from the US organization Internal Controls Institute. The ICI is a global organization dedicated exclusively to internal controls and corporate governance. The company has more than 800 controls mapped, assessed and monitored, overseen by trained employees.

The system has enabled the company to receive diverse certifications and comply with Brazilian and international capital market legislation, notably the Sarbanes-Oxley Act (SOx). TIM has been compliant with SOx certification since 2006, when this requirement was established for companies listed on the New York Stock Exchange.

The system is guaranteed by an annual audit conducted by an independent company. According to SOx, the company is obliged to assess the efficiency of its internal controls related to financial reports at the end of each fiscal year. The purpose of this procedure is to demonstrate the reliability and transparency of the information disclosed.



TIM received the International Certificate in Excellence in Internal Controls from the US organization Internal Controls Institute (ICI)



Importance of the Internal Control System

- It protects assets;
- It ensures the accuracy of the data used for external and internal financial and non-financial reports;
- It promotes operational efficiency;
- It stimulates adherence to policies, rules, regulations and laws;
- It minimizes losses with penalties;
- It provides CEOs and CFOs with security on which to base decisions;
- It transmits greater trust and credibility to the market and all the other stakeholders.

Operation

GRI 3-3, 203-2

Material topic:
Service quality

SDG **9**

TIM is committed to investing permanently in the high quality and reliability of its services and the telecommunications coverage offered to its customers.



5,370 cities
with 4G coverage,
making TIM market
leader



27 state
capitals in
the country
with active 5G



1,829
active biosites
in the network
(antennas/towers
with low visual
impact)



4.5
million
homes passed
with FTTH

2022-24 ESG Plan



Target

- Extend 4G connectivity to **100%** of the municipalities in Brazil by 2023



Result



The company strives to ensure adequate infrastructure, network stability and expansion to support the growing use of mobile data and offer access to diverse digital services.

For TIM, connectivity and access to telephony and internet are fundamental conditions for social well-being and the development of the most diverse business areas. Investments in infrastructure and network coverage enable user connectivity and, therefore, access to information, considering the main indirect economic impacts generated by TIM.

The company reinforces its commitment to the expansion and improvement of its network infrastructure not only through the directives of its business plan, but also through the creation of the Network Service Quality Committee in 2022. Reporting monthly to the executive board, the purpose of the committee is to identify and coordinate quality improvement initiatives for the network to drive better services for customers. Worthy of note in the year were the evolution in the implantation of 5G (further information on [page 55](#)) and the acquisition of the Oi Móvel assets (more on [page 25](#)).

Investments in Infrastructure and **service support** GRI 203-1

Investments in the telecommunications sector depend on Brazil's regulatory agency and are determined by law. The main regulations to stimulate national infrastructure development and their respective advances in 2022 are addressed ahead.

Tacit authorization for the installation of telecommunications infrastructure

Law nº 14.424/22 authorized the installation of telecommunications infrastructure in the event of the non-manifestation of the competent authority in the time frame established in article 7 of law nº 13.116/2015, which is 60 days. This regulates what is known as "positive silence" (tacit authorization), establishing general standards for the process of licensing, installing and sharing infrastructure in the sector. The new legislation will facilitate the installation and rapid dissemination of 5G antennas and reinforce 4G coverage nationwide, both in large metropolitan regions and smaller cities.

Fust Telecommunications Services Universalization Fund Management Committee

The publication of decree nº 11.004/22 instituted the Management Committee of the Telecommunications Universalization Fund (Fust), responsible for approving policies, standards, guidelines and priorities in the application of Fust funds in programs, projects, plans, activities, initiatives and actions. For 2023, the Fust budget provides for funds for the connection of public schools, expansion projects, network and telecommunications improvement projects, as a subsidy for non-reimbursable projects. The objective is to support the expansion and reinforcement of mobile coverage in the country, mainly in remote areas or ones without coverage, and complete coverage for all public schools by 2024.

Institution of Band Administration Body (*Entidade Administradora de Faixa* - EAF) and implementation of new 5G network

In line with the commitment undertaken in the 5G tender, TIM, together with the other telecommunications operators that won the 5G auction, has already put in place the Band Administration Body (*Entidade Administradora da Faixa* - EAF), responsible for cleaning up the 3.5 GHz band. It is necessary to clean the band to liberate the 5G network in locations in which television signals also operate in the 3.5 GHz band. With the rapid advance in cleaning the band, Brazil already has an active 5G signal in all its 27 state capitals. Brazilian, the federal capital, was the first city to receive the signal on July 4, 2022.





National Incentive Policy for Precision Agriculture and Livestock Production

Instituted by law nº 14.475, dated December 2022, this policy provides incentives for the adoption of technologies and connectivity to drive the implementation of precision and digital agriculture and livestock production. The goal is to boost efficiency in the application of production resources and inputs in order to reduce waste, lower production costs and increase productivity and profitability, as well as ensuring environmental, social and economic sustainability in these activities.

Civil internet framework **SASB TC-TL-520a.3**

In Brazil, the Civil Internet Framework (law nº12.965/2014) and, later, its regulation by decree 8.771/2016, established the main principles, guarantees, rights and duties for the use of the internet. Among the provisions regulated, worthy of note is the principle of network neutrality which, in summary, determines that the body responsible for the transmission, switching or routing must ensure equal treatment for any data package, regardless of its content, origin, destination, service, terminal or application.

Committed to guaranteeing fulfillment of these principles, TIM adopts measures to ensure transparency and equality in its offers with respect to the rules of zero rating applications. The company is available to establish negotiations with applications providers interested in maintaining competitiveness, as well as maintaining access to legal contents (ones that are permitted and have not been barred). The company believes that through zero rating applications it can make offerings better aligned with users' interests.

Regional legislations

In 2022, at least 45 new laws in 14 Brazilian states defined parameters to stimulate the development and expansion of telecommunications infrastructure coverage:

Region	Nº of new laws
North	5
Northeast	4
Midwest	2
Southeast	22
South	12

5G

In 2022, TIM prepared the network infrastructure for the commercial activation of Standalone 5G (SA 5G) - which does not depend on 4G and is also known as “pure 5G” - essential for the provision of fifth generation services within the requirements of the Brazilian government. The approval of Anatel for the liberation of the 3.5 GHz spectrum, the main 5G frequency, and the beginning of operations in the Distrito Federal took place in July. In the following months, the company followed the agency schedule for the implantation in all the other 26 state capitals.

TIM is the leader in 5G coverage in the cities of São Paulo (SP), Curitiba (PR), Rio de Janeiro (RJ) and Recife (PE), and is the only operator with this technology active in 100% of the districts of these cities. The organization of the 5G auction in November 2021 marked the arrival of this technology in Brazil. The company acquired 11 lots, three national and eight regional. Part of

these are on the 3.5 GHz frequency. Furthermore, the company acquired higher frequencies, the so-called millimeter waves, in which the potential speed and quality of connection is even greater.

There are multiple 5G applications. Industrial automation, remote healthcare services, intelligent vehicles and connected homes are some of the possibilities the technology offers society. TIM will maintain its leadership in the development of this network, working with customers and possible partners to continue to make this hyper-connected future a reality.



There are
multiple 5G
applications.

5G characteristics

- Higher data transfer speed (it can reach download peaks of up to 20 gigabits per second in the millimeter waves);
- Data rates from ten to 100 times higher compared with 4G;
- Lower latency (connection response, which can reach 1 millisecond);
- Generation of ecosystem for the Internet of Things (IoT) and new uses in both the B2B and B2C markets;
- Higher number of simultaneous IoT connections (up to 1 million per km²);
- Greater connection stability and reliability (perception of availability of 99.999%);
- Greater energy consumption efficiency in data traffic.

5G applications

- Industry 4.0 (automation technologies in industrial production chains);
- Fixed wireless access (FWA), major opportunity to offer residential broadband through the mobile network;
- Precision agriculture;
- Telemedicine and remote surgery;
- Digital transformation in the financial sector;
- Automotive sector;
- Augmented and virtual reality (AR/VR);
- Public security.



5G outlook

- New systems architectures, with improved communication between machines;
- Cloud Computing model with gains in scale, flexibility and security;
- New generation networks, enabling the convergence of disruptive technologies such as Edge Computing, Artificial Intelligence, Machine Learning and Blockchain, among others;
- Network slicing, permitting an end-to-end isolated 5G network, adapted to meet the diverse requirements necessary for a specific application;
- Open systems for the creation of solutions and applications;
- To be an enabler of digital transformation in diverse industrial segments, boosting the country's efficiency, productivity and competitiveness;
- Positive environmental and social impacts;
- Open laboratory initiatives.

TIM was present with a 5G signal at the largest music event in Brazil in 2022

Infrastructure for 5G

TIM has three frequency bands in 5G technology in Brazil: 3.5 GHz, 2.3 GHz and 26 GHz. To operate in each of them, the company has a series of obligations that should be fulfilled with financial investments or the construction of mobile and fixed network infrastructure. With this, TIM will ensure the spectrum capacity necessary to maintain its growth trajectory in the mobile telephony market nationwide, prepared to meet customer requirements, explore new applications and develop innovative solutions that require connectivity and high speed capacity.

Main commitments associated with each band:

- 2.3 GHz: 4G coverage in some municipalities and locations (southern and southeastern regions, without the state of São Paulo);
- 3.5 GHz: 5G coverage in all municipalities with a population equal to or over 30.000 inhabitants + fiber backhaul obligations in 138 municipalities + additional contributions to the Band Administration Body (EAF) to undertake the following projects: cleaning of 3.5 GHz band, implantation of fiber optic in the Amazon and construction of a private network for the exclusive use of the federal government;

- 26 GHz: contributions to EACE, the school connectivity administration body, for the undertaking of school connectivity projects. The EACE was constituted by TIM and the other operators that won the 5G auction, so that they may execute all the procedures related to projects for the connectivity of basic public education units in an equitable and non-discriminatory manner.

5G at Rock in Rio

TIM was present at the largest music event in Brazil in 2022. In the City of Rock the company installed 35 mobile connection sites - 25 of which offering 5G, with an average speed of 300 Mbps and peaks exceeding 1 Gbps. The use of fifth generation technology corresponded to 20% of the total, double what was expected by the company.

During the seven days of the event, TIM customers used 133 terabytes of data, a volume sufficient to watch videos on YouTube non-stop for 45 years and seven months. Almost 30% of this volume was directed at the upload of photos and videos, as well as sending messages and making real-time video calls and transmissions.



TIM transforms the Maracanã into the first 5G stadium in Brazil

TIM established a partnership with the group that administers the Maracanã stadium for the installation of 5G signal antennas. The infrastructure is sufficient to serve a public greater than the stadium's capacity. The debut of the new technology took place at the Brazilian men's football Cup Final, in October 2022, with 17 antennas.

The areas around the stadium are also served, including the Rio de Janeiro State University and Manguera. The infrastructure installed also improves 4G traffic for customers who do not have 5G compatible devices.

National presence

100% of municipalities covered

TIM was the first operator to achieve 100% national coverage with 2G, 3G or 4G technologies. Additionally, it reached 96% 4G coverage in Brazilian municipalities at the end of 2022.

The target is part of the company's ESG Plan and aligned with the projects scheduled in the 2021 emission of BRL 1.6 billion in Sustainability-Linked Bonds (SLB), which are associated with social and sustainability targets.

Coverage in the Antarctic

TIM signed an agreement with the Brazilian Navy to take its 4G network to the Comandante Ferraz Station (EACF), located on the Keller Peninsula, King George Island, in the South Shetland archipelago on the continent of Antarctica. The infrastructure will enable greater connectivity for Brazilian researchers conducting studies on renewable energy sources, climate change, conservation of marine fauna and other areas of scientific interest.

The company assumed the project after purchasing the Oi mobile assets, with the goal of expanding the 4G signal available to the EACF, which has a system of antennas with intelligent sensors to reduce the risk of service interruptions from the accumulation of ice.



TIM will continue to lead the development of the 5G network

Innovation

GRI 3-3

Material topic: Innovation and technology

SDG **8** **9** **11**

TIM is committed to investing in innovation, technology development and infrastructure capable of supporting the growth and expansion of new data uses and internet connection, collaborating with access to services such as education, healthcare, finance, entertainment, agriculture and the public sector. The company disseminates and fosters the use of disruptive technologies that promote socially relevant products and services.

For TIM, the premise of this effort is engagement and co-creation with stakeholders such as customers, universities, suppliers, consumers, start-ups and the government. To coordinate these initiatives, the company has areas specialized in Technological Architecture and Innovation, comprising telecommunications

personnel, electrical and electronic engineers, computing scientists and other technologists with varied backgrounds and experiences.

TIM Lab

The TIM Innovation Center is a space dedicated to the development of open innovation for the Brazilian telecommunications market. The proposal is to strengthen the capacity to validate new software, functionalities, solutions, technologies, services and devices.

With a strategic role for TIM and its Architecture and Technological Innovation team, it is a multidisciplinary environment suited to the validation of credibility tests and proofs of concept. The Lab enables the company to expand relations with its main suppliers and technology partners through collaborative initiatives that make the company a benchmark in research and development in the Brazilian telecommunications market. It also collaborates with the TIMLab in Italy, which has over 50 years experience in the area.

With the goal of further expanding the laboratory's field of activities and its partnerships, in October 2022 the company initiated a plan to migrate the TIM Lab from Barra da Tijuca to São Cristóvão. In an area of approximately 850 m², the new Lab will have a renewed testing environment with diverse technical characteristics. The Lab will come into operation in the first half of 2023.

During the last two years, the TIM Lab received investments of BRL 10 million, which enabled the development of projects in the following areas:

- next generation network;
- positive impact on the environment and society;
- future internet applications;
- Open Laboratory initiatives.

Innovation Hubs

The TIM Open Innovation program established a network of interchange and partnership between the company, innovation hubs, start-ups and other institutions for the development of new TIM products and business models. The initiative tracks the evolution of exponential technologies that create solutions for social, environmental and business challenges. In this context, worthy of note are the partnership since 2016 with Cubo, the largest technology enterprise development hub in Latin America, and with AgTech Garage, the prime innovation hub focused on agribusiness in the world. In 2022, TIM launched the TIM 5G Hub within the Cubo Itaú and announced its first call for proposals from start-ups to present solutions for agribusiness that could be leveraged with 5G technology.

The Lab permits TIM to **extend relations** with its main suppliers and technology partners





Open Laboratory initiatives

Since 2017, TIM has participated in the Telecom Infra Project (TIP), an initiative of Facebook, SK Telecom, Deutsche Telekom, Nokia, Intel and other companies, aimed at creating a new approach to the construction and implementation of telecommunications systems and network infrastructure.

In this context, the company transformed the TIM Lab into the first TIP Community Lab in Latin America, focusing on the creation of universal standards for transportation network solutions.

In partnership with TIP and Instituto Nacional de Telecomunicações (Inatel), TIM has been working on the Open Field Program, the goal of which is to establish a testing environment on the Inatel campus in Santa Rita do Sapucaí (MG) to foster the study and development of Open RAN in 4G and 5G technologies.

Internally, in 2022 TIM used the open innovation model to launch 24 challenges in diverse company areas focused on increasing revenue, improving the experience and reducing costs or risks. With the participation of start-ups, more than 75 new solutions were indicated, of

which 15 were internalized and are under test at TIM. The main technologies tested are based on Artificial Intelligence (AI), cybersecurity and process automation. The effectiveness of the solutions proposed is assessed, with the monitoring of results and the evaluation of possible improvements.

New generation network projects

TIM is working on expanding the designation of the 1,800 MHz, 850 MHz and 2,100 MHz bands from 2G/3G to 4G. This initiative gives the company three important competitive advantages:

- reduction in costs for the implementation of LTE - Long Term Evolution, which is the communication standard for fourth generation (4G);
- increase in LTE coverage area, enabling Carrier Aggregation strategy and improving the customer experience through greater range;
- better internal coverage. In addition to coverage expansion, the use of the 850/1,800/2,100 MHz bands increases capacity

in the cities already covered by the LTE band at 2.6 GHz, with limited additional cost.

The mobile terminal park is diverse and the devices are compatible with different bands, this is why the implementation of multilayer LTE is considered to be a positive strategy.

In the case of the implementation of the LTE 700 MHz layer, the company continues to improve coverage expansion, promoting the presence of LTE at a national level and consolidating TIM leadership in this communication standard.

The cleaning of the 700 MHz band spectrum was concluded in June 2019 in all Brazilian cities. At the end of December 2022, 4,515 cities had LTE 700 MHz coverage, corresponding to 95% of the urban population.

TIM Guaratiba Valley

Inspired by Silicon Valley, the TIM Guaratiba Valley is an innovation campus for the company's infrastructure solutions. Created in an area of some 10,000 m² in 2018, the space enables the development of network projects focused

on efficiency, agility and low costs. Among the innovations produced, worthy of note is urban furniture such as the Flowerbed and Bench in the Square, biosites, off-grid sites and ELC (Extreme Low Cost) solutions, used in the Sky Coverage project, in addition to remote monitoring initiatives, security solutions, tests and approval of batteries and direct current solutions used in radio base stations.

In 2022, the Container Lab was created. This is a space for testing which operates completely autonomously, using power generated by photovoltaic panels. Another innovation was the TIM Totem, present at events such as Rock in Rio, TIM Noites Cariocas and TIM Music Maranhão. In addition to the visual communication on the outside, the totem is a camouflaged mobile station, containing all the network equipment on the inside. For 2023, the focus is on automation and increasing the security and reliability of network infrastructure.

Energy consumption reduction projects

TIM invests in expanding access network sharing, known as RAN Sharing, with other mobile telephony operators in Brazil, optimizing network resources and costs.

The RAN Sharing agreement also permits TIM to promote the dissemination of 4G in the country. In 2022, TIM estimated that it avoided the consumption of 2,200 MWh with this initiative, considering its RAN Sharing with Vivo¹.



TIM invests in expanding access network sharing

Since 2019, TIM and Vivo have signed new sharing contracts focused on cost efficiencies through the following initiatives:

- **Single Grid:** sharing of 3G and 4G networks in cities with fewer than 30,000 inhabitants where both operators provide services. The main concept is to have a single telecommunication infrastructure in these locations, enabling totally redundant sites to be turned off, resulting in savings in energy, rent and maintenance. This also enables greater efficiency in future investments due to MOCN total spectrum sharing;
- **2G Switch Off:** national sharing of the 2G network using GWCN technology, permitting both operators to switch off around 50% of this network, providing savings in power and maintenance.



¹ TIM and Vivo RAN Sharing contracts considered: MOU (Single Grid - Consolidation, Single Grid - Expansion and 2G Switch Off), Rural Obligation and Vivo RAN Sharing 2600. For the MOU (Single Grid - Consolidation and Switch Off 2G), the estimate of energy consumption avoided was made considering the revenue in the TIM site's active period and inactive period. Regarding the 2600 (4G), Rural Obligation (3G) and MOU (Single Grid - Expansion) contracts, the estimate considered the average consumption of the TIM sites by vendor.

New generation network projects, future internet applications, **positive impacts on the environment and the company**

Internet of Things (IoT)

TIM has continued to invest in the expansion of its commercial NB-IoT (Narrow Band IoT) network, since the pioneering service was launched in Latin America in 2018.

TIM understands that the mass introduction of IoT could change the mobile telephony market considerably since this will leverage the creation of services, with potential uses in agriculture, connection of cars, and solutions in traceability, social assistance and sanitation.

Private networks

During the last two years, TIM Brasil has been developing a new product and service network model offering private networks using 4G and 5G technologies for corporate customers,

principally in industrial sectors such as mining, transportation and logistics, healthcare, public security and industry 4.0.

The service consists basically of the offer of a dedicated, controlled network, guaranteeing that companies have permanent access to the bandwidth and network resources that they need, including low latency time. In 2022, TIM signed a service partnership agreement with a customer in the port segment, making this the first company in Latin America to have a private 5G network. The joint initiative is planning to implement the first fifth generation private mobile internet network at port installations all over Latin America.

Agribusiness

TIM considers connectivity fundamental for the digitalization, gains in productivity and the social inclusion of rural populations. The company is the leader in mobile coverage for this segment, with more than 12 million hectares covered by 4G, 24

million hectares with NB-IoT and more than 1 million people impacted in rural areas.

TIM is the only telephony operator that participates in the [ConectarAgro](#) association with other large companies, references in their field of activity. The organization's mission is to bring connectivity to all of rural Brazil, in support of the country's development.

Within the context of agribusiness, together with partners TIM has identified opportunities for the development of ESG actions that generate value beyond the business. In the environmental pillar, worthy of note is the rational use of resources such as fuel, water, power, among others. In the social area, the connectivity furnished by TIM promotes digital inclusion by expanding access to digital services, contributing to improved quality of life for local populations. In terms of governance, connectivity improves management not only of cultivation, but of agribusiness as a whole, meaning greater control, efficiency, transparency and agility for the company and its processes.

Public lighting in Petrolina (PE)

In 2022, TIM formed a partnership with Engie, a renewable energy generation company, to implement TIM Smart Lighting, a public lighting tele-management solution for the city of Petrolina (PE), which will function by means of NB-IoT technology.



Connected Car

In 2021, TIM developed the solution [Connected Car Telemetry and User Service](#) for FCA (Fiat Chrysler Automotive). This offers advanced telematics, assistance and other added-value services for the owners of FCA vehicles. This is the first fully digital connection service for automobiles in Brazil.

As a result of the project, some 104,000 automobiles with telematics resources have been manufactured, in addition to locations for contracting the WiFi service. The project is considered to be a starting point for the evolution of connected car solutions, such as assisted driving and autonomous vehicles.



TIM's director of Information Technology **won the award** for the most disruptive woman in technology

Hacking.Rio

For the fourth year running TIM participated in Hacking.Rio, a digital culture festival that involves the biggest hackathon (programming marathon) in Latin America and a congress with specialists in technology, innovation and business. The event, aimed at software developers, designers and diverse programming professionals, took place alongside the Blockchain Rio Festival, in the Porto Digital, in Rio de Janeiro (RJ).

As a contribution to the development of Industry 4.0, TIM presented the hackers with a challenge related to SDG 12, that addresses responsible production and consumption, asking them to develop solutions based on the company's technologies, such as 5G and Big Data.

To provide visibility for women in Latin America and the company's technology programs, the Woman in Tech Latam Awards were held during the event. TIM's director of Information Technology won the award for the most disruptive woman in technology in the ID&E Disruptors category.



Digitalization enables the **enhancement of customer service processes**

MetaLoja (Metastore)

Throughout 2022, TIM ran a new concept of a store integrating the real and virtual worlds in a mall in Rio de Janeiro (RJ). The “MetaStore”, is a space in which the store experience and the possibilities of the Metaverse are merged. The aesthetic of the initiative is similar to that of a concept store, but it is also a gamer space, with a portfolio of products from TIM and its partners.

Journey to the Cloud

A pioneer in the process of migrating 100% of its data centers to the cloud, TIM moved forward with its Journey to the Cloud project in 2022, with 85% of the project workload already migrated. In partnership with Oracle and Microsoft, the digitalization of all the processes, including the customer service and relationship platforms, enables enhancement of customer service processes, internal operations, billing, collection and digital platform management with speed, scalability and security.



Customer

GRI 3-3

Material topic:
Service quality

SDG **9**

TIM is committed to investing permanently in the high quality and reliability of its services and the telecommunications coverage offered to its customers. The company strives to ensure adequate infrastructure, stability and network

expansion to support the growing use of mobile data and offer access to diverse digital services.

In 2022, TIM expanded its customer service infrastructure, initiating the operation of 5G (further information on [page 55](#)) in the country. The company also expanded its 4.5G, 4G and fiber optic FTTH coverage, consolidating its leadership in signal availability in Brazilian municipalities. The company has a total of 63 million customers.

2022-24 ESG Plan



Target

- **Halve** personal mobile service customer complaints to Anatel by 2023, compared with 2019.



Result



Market recognition of the effectiveness of company actions, which place the customer experience and satisfaction at the core of its strategy was demonstrated by the awards received during the year:

- **Opensignal Award**¹, winner in the categories “Best 5G availability” and “Best 5G range”
- **2022 Reclame Aqui Award**, winner in the categories “Best Service” and “Company that evolved most”
- **Smart Customer 2022 Company of the Year Award**, with three winning cases
- **Latam 2022 Award**, from the Latin American Alliance of Organizations for Customer Interaction (Aloic), bronze trophy in the “Managing customer expectations” category
- Top 5 in **2022 Era of Dialogue Award**
- **Consumidor Moderno Award for Excellence in Customer Service**, winner in the “Mobile Telephony” category
- **XXII ABT Award** with the case of inclusive language used by Taís, TIM’s audio response unit, which transformed customer service, introducing greater diversity and representativeness in voice channel processes

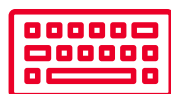
¹ Opensignal Report from January 2023:

<https://www.opensignal.com/pt-br/reports/2023/01/brazil/mobile-network-experience-5g>



Accessibility and inclusion

TIM has a space on its website enabling people with visual, hearing and speech impairment to use accessibility resources with autonomy to request information and services. The tools available are in line with the recommendations of the Web Content Accessibility Guidelines (WCAG) and the Worldwide Web Consortium (W3C), a set of internet accessibility guidelines.



In 2022, the company implemented a new **navigation by keyboard experience**, developed in line with the WCAG accessibility standards. See the [TIM accessibility resources](#).

Relationship and digitalization

TIM offers its customers a 24-hour multiple channel customer service model, in addition to agile and practical self-service solutions on digital platforms. By means of computer, smartphone, or mobile telephone, customers can request services, make complaints, suggestions or queries.

In 2022, the company undertook a series of measures to improve its service channels. On the TIM website, it implemented the first initiatives to deliver personalized content to users by means of a new system, CMS Acquia, which enables better segmentation of offers and tasks.

Moreover, improvements to the website enabled the reduction in the time it takes the most accessed pages to load, improving the user experience and facilitating access to content via online search mechanisms.

The evolution of the Meu TIM app, an application which permits access to the solutions offered by the company, was maintained, focused on improving performance and enriching the service portfolio. In 2022, improvements were implemented also in the areas of operational controls, stability testing and functionalities, in addition to a new approach to boost assessment in the

application stores. The year also saw the launch of the TIM Store for prepaid customers and a new configuration for all the entertainment services.

In 2022, Meu TIM received the best evaluation among the Brazilian operators' customer service applications (score of 4.7 on Play Store). For 2023, the new version of the app is being developed with new resources and functionalities to improve the customer experience.

Contacts beyond the scope of automatic responses are channeled to the Customer Relationship area, where they are handled by the call centers.

Taís, the TIM virtual assistant

The company offers customers a virtual assistant service by means of an audio response unit. This is Taís, TIM's artificial intelligence. In 2022, the company continued the process of transforming people's experience with the use of artificial intelligence, aimed at ensuring journeys that combine voice with natural language, in accordance with the customer context, analysis of feelings, curatorship and proactive approaches employing solutions and corrective measures for the customers. Service by Taís is also available on devices compatible with Alexa and in the TIM stores of the future.



**“@TIMBrasil”**<https://twitter.com/TIMBrasil>**Facebook**<https://facebook.com/timbrasil>**Canal “@TIM_AJUDA”**https://twitter.com/TIM_AJUDA, which permits communication with customers via Twitter.**Instagram**<https://www.instagram.com/timbrasil>

Channels GRI 2-25

One of the company’s service channels is the Call Center: *144, 1056 and 10341. In addition, the company relates to customers via Twitter, Facebook, Instagram, WhatsApp and RCS (Rich Communications Service) in addition to online chats on its website and the Meu TIM application.

Customer experience

TIM maintains open communication with its users by means of surveys and pays close attention to reports made to consumer defense bodies. This monitoring includes complaints made to the Procons, the Consumidor.gov.br website, the Special Civil Courts and Anatel. Furthermore, on its institutional website the company provides information about sector regulations that directly influence tariffs, plans, promotions and services offered to customers, guaranteeing transparency and facilitating access to this type of content.



See all the **TIM customer service channels**

According to official data from Sindec, the national consumer defense information system, TIM is the company in the sector that receives the fewest complaints. TIM has been ranked 5th in the number of complaints for the third year running. This makes it the group with the smallest number of complaints in the telecommunications sector, with approximately 31,700 reports, from January to November 2022.

In 2022, TIM worked on different fronts to improve its results in Procon. It developed preliminary reconciliation channels and reinforced the Ombudsman service, in addition to resuming participation in face to face and conflict resolution events.

On the Consumidor.gov.br conflict mediation platform, in 2022 TIM had an average customer satisfaction rating of 3.98 on a scale from one to five.

Customer experience and satisfaction

TIM conducts at least two types of survey to assess customer experience and satisfaction on a national level, by means of interviews:

- Experience and Net Promoter Score (NPS): relative to the company’s own customers and those of the competition. This has been conducted continuously since June 2017, with quarterly consolidation of the data to assess customer experience, satisfaction and recommendation;
- Transactional survey conducted in the call center: based on the immediate capture of the customer’s assessment after contact with an attendant in the company’s call centers.

Customers may also assess TIM services on an annual basis by means of the Anatel Satisfaction and Perceived Quality of Telecommunications Services survey.

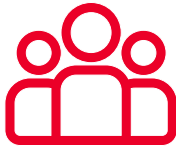
Users’ Council

The Users’ Council is an initiative aimed at bringing the company closer to its customers and members of consumer defense bodies. The council promotes greater social participation in the services rendered by operators, contributing to the construction of a more engaged and participative society in relation to telecommunications matters.

The council is made up of users and bodies that defend consumer interests. It is an advisory organization oriented to assessing the services and the quality of the company’s customer service, with the remit of presenting proposals to improve TIM telecommunications services. It is not a legally constituted organization with administrative, financial and asset autonomy.

There is a council in every region of the country. These have presidents, vice presidents and ten council members with three-year terms of office. In 2022, elections were held to select the members who will form the councils from January 1, 2023 to December 31, 2025. From 2023, the council will follow a new regulation and will be national in scope.

The 7th National Forum of Users’ Councils was held in November 2022. The event was organized online, enabling the participation of all the members of the Users’ Councils. The subjects debated were 5G, telemarketing and the Call Center decree, in addition to management of the Users’ Councils and the TIM Ombudsman service.



There is a **Users’ Council** in every region of the country

Customer satisfaction demonstrated in surveys

	2020	2021	2022
National Mobile Satisfaction Survey– individual customers	7.35	7.46	8.02
Fixed Broadband Satisfaction Survey - individual customers	7.18	7.04	8.52
Call Center transactional survey – Individual customer satisfaction with the call center attendant	7.91	8.11	8.01



More information about the TIM **Users’ Council**

Ombudsman GRI 2-25, 2-26

Reporting directly to the company CEO, the TIM Ombudsman board is engaged in promoting the continuous improvement of the services rendered, overseeing the governance of multidisciplinary groups that work on mitigating the causes of conflicts, reducing customer complaints and ensuring high resolution and consumer satisfaction rates.

Created in August 2020, the TIM Ombudsman is available for customers who have already used other company customer service channels without obtaining a solution for their problem within the established time frame or who are not satisfied with the solution presented. This is a further contact channel of the company aimed

at settling complaints effectively, as well as internalizing the voice of the customer and enabling the organization to continuously improve customer service.

In 2022, the TIM Ombudsman receives over 558,000 calls, a 65% increase over the previous year. This growth was due to intensified dissemination of the service, as well as to the greater engagement of the customers in accessing the channel. Since the implementation of the Ombudsman, the volume of complaints to Anatel has been reduced steadily. In the same period, the monthly average in the satisfaction survey conducted with customers using the channel was 9.3 on a scale from one to ten.



TIM Ombudsman
0800 882 0041

From Monday to Friday, from 8 a.m. to 6 p.m.
No service on weekends or national holidays
[Online access](#)

Customer service

	2020	2021	2022
Total number of calls handled by the call center (SAC)	74,344,021	57,836,544	43,468,175 ¹
Total Ombudsman calls	49,361	338,961	558,854

Complaints received

	2020	2021	2022
In the company	11,274,525	7,798,822	6,022,164
By Anatel ²	468,703	315,189	279,310
In court	52,661	43,731	40,479

Complaints resolved

	2020	2021	2022
In the company	100%	99.32%	99.77%
By Anatel	90.95%	93.6%	94.20%
In court ³	182.58%	163.08%	111.39%

¹Reduction due to the evolution of the TIM digital channels and greater stability of the IT and network platforms.

²2020 and 2021 were adjusted to consider only the mobile service.

³The percentages in excess of 100 take into account cases lodged in the previous year and concluded during the course of the reporting year.

Suppliers

GRI 2-24, 3-3, 308-1, 408-1, 409-1, 414-1



TIM has its Supplier Relations Policy, which establishes the commitments to be followed by these stakeholders, included sub-contractors providing services and partners. The main points of the standard are focused on competitiveness, quality, safety, security, human rights and socioenvironmental responsibility.

Upon signing contracts, suppliers agree to conduct their operations in compliance with legal obligations and the best compliance practices required by TIM. These contracts also require the companies to adhere to the TIM Integrity Program (see more on [page 40](#)) and to the principles of the UN Global Compact. Furthermore, they contain clauses repudiating the use of child or slave labor. In Brazil, 99.22% of the companies in the supply chain have signed such contracts.

Effective or potential TIM suppliers are evaluated based on the labor laws in force, through consultation of the data bases of the Business Pledge for Integrity and Against Corruption and the Brazilian National Pledge for the Eradication of Slave Labor. In the event of breaches of labor legislation, the company is disqualified from providing services or products for TIM. Suppliers at significant risk for the incidence of child, forced or slave labor are not contracted by the company.



TIM contract
clauses expressly
repudiate child and
slave labor

Supply chain

GRI 2-6

TIM purchases essentially occur in the two geographical regions where the group’s activities take place, Italy and Brazil. Whenever possible, the company’s procurement process prioritizes national suppliers. The company’s supply chain comprises mainly the following product and service categories:



telecommunications networks



information technology



energy systems



telecommunications products



technical and professional services

More than 700 suppliers received purchase orders from TIM in Brazil in 2022. There have been no significant changes in the company’s supply chain structure in the last three years.

Proportion of spending on local suppliers ¹ (BRL million) GRI 204-1			
	2020	2021	2022
Amount spent on local suppliers	5,049.486	6,053.353	6,716,692
Local suppliers			
Network infrastructure	2,431	2,715	3,013
Commercial products	934	1,026	1,171
Information technology	720	913	999
Professional technical services	663	1,150	1,239
Real Estate	107	119	135
Others	195	130	159
Subtotal	5,050	6,053	6,717
Overseas suppliers			
Network infrastructure	6	7	4
Information technology	64	21	10
Professional technical services	78	65	69
Subtotal	149	93	83
Total	5,198	6,116	6,800
Percentage of budget spent on local suppliers	97%	98%	99%

¹ Local suppliers are considered to be those located in the same country as TIM’s headquarters (Brazil).

TIM assesses suppliers via a qualification process based on criteria of ethics and conflict of interest, by means of an integrity due diligence questionnaire. For 2023, TIM established the target of submitting 85% of suppliers to the integrity due diligence process.

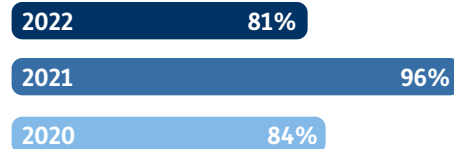
All TIM's current critical suppliers underwent socioenvironmental assessment - criticality is determined by the financial volume of the contract, risks related to security, integrity and socioenvironmental criteria.

Regarding risk management related to suppliers considered critical, in addition to its Supplier Relations Policy, TIM has normative instruments and procedures that guide qualification and monitoring processes. Critical activities are ones that present the potential of socioenvironmental risk, such as risks to the environment, occupational health and safety.

All TIM suppliers classified as critical undergo socio-environmental and health and safety assessment

All suppliers classified as critical undergo a mandatory socioenvironmental and health and safety assessment. In 2022, the company improved this process. For new contracts, only 23% (243) of the potential suppliers were considered critical and had to undergo the assessment. Of these, 70 were approved and proceeded in the contracting process, corresponding to 29% of those assessed. Accordingly, 100% of the critical suppliers contracted were in compliance with the company's socioenvironmental assessment in the year.

Suppliers that underwent the integrity due diligence process (ethical and conflict of interest criteria)



Privacy and data protection

GRI 3-3, 418-1, SASB, TC-TL-220a.1, TC-TL-220a.2, TC-TL-230a.1, TC-TL-230a.2

Material topic: **Privacy
and data security**

SDG **16**

TIM strives to ensure the privacy and security of the data of its customers and other stakeholders, in a situation of intense, growing use of digital services. To guarantee business continuity and satisfaction with the products and solutions it offers, the company operates in compliance with Brazil's General Personal Data Protection Law (LGPD) and with the best global practices in this area.

In 2022, the company received ISO 27001 certification, the international standard that sets forth best practices for managing information security. In the area that oversees management and reduction of cybernetic security risk, the NIST framework (Cybersecurity Framework) is used.

TIM trained its employees to drive awareness of the impacts and modifications brought by this law, approved in 2018. Employees were also oriented to follow the guidelines in the collection, use and protection of the personal data of customers, employees, suppliers and other stakeholders. In 2022, the company received over 600 requests for Owners' Rights, all of which were complied with. The most frequent requests have been: right to access of data handled; requests for exclusion of data; and requests for the suspension of advertising messages.

To undertake digital media campaigns, TIM establishes the base of customers with permitted data using cryptography, to identify the adequate audience for this action. In the channels in which it collects data consensually, the company raised information from 34,286,208 people.

2022-24 ESG Plan



Target

- Obtain **ISO 27001** certification by 2022



Result

- Certification obtained



TIM received ISO 27001 certification, the international standard that sets forth **best practices for managing information security**

TIM did not receive any substantiated complaints related to the violation of privacy and/or loss of customer data. Neither did the company identify any violation of this nature.

The person responsible for managing data privacy and protection in the company, in accordance with the LGPD, is the Data Protection Officer (DPO), appointed in 2018. This individual reports directly to the Board of Directors and coordinates practical actions for promoting the maturity and improving governance of personal data.



TIM did **not receive any substantiated complaints** related to the violation of privacy and/or loss of customer data.

The function of the DPO are:

- maintain an integrated vision of the TIM strategic plan for data protection throughout the company value chain;
- report to the Data Protection Committee on the progress of the company's key activities involving personal data;
- Implement the standardization of policies, methodologies and tools, developing monitoring indicators for data protection in the different areas;
- develop data protection training and awareness projects; receive complaints and communications from owners, providing explanations and taking the appropriate legal steps;
- receive communications from the National Data Protection Authority and adopt measures;
- together with the other TIM areas, establish and adjust the data protection policies and other data governance processes;
- support the implementation of improvements in privacy and data protection processes and controls;
- maintain TIM data protection policies updated; and
- review TIM's privacy and data protection processes and activities, ensuring compliance with applicable laws.



Highlights

There were no cases of violations of privacy or loss of customer data, **registered with Anatel, Senacon and Cade.**

No data leakage incidents in the period.



Governance of information security

TIM has an area dedicated to security controls in internal and external audits of its operations. This team's main attributions are:

- Ensure analysis from the standpoint of the security of the company's Information Technology and Communication (ITC) projects and the management of profiles and logical accesses to systems;
- Ensure the management of vulnerabilities, prevention of information leaks, the execution of cybernetic attack simulations, digital investigation and the monitoring of the evolution and detection of new cybernetic threats and attacks;
- Ensure the monitoring and treatment of cybernetic risks and security events, the mitigation of attacks, as well as the management and response to respective incidents;

- Define the architectural standards of security solutions for the company, analyze and test new security options and strengthen the sales strategy for value added services and products in this area for customer segments, in line with the competent functions;
- Ensure governance activities in the risk prevention process that may affect business continuity, as well as the provision of support for functions in the implementation of security initiatives.



TIM is in full compliance with Brazil's General Personal Data Protection Law (LGPD)

Personal Data Protection (LGPD) Management at TIM

- Creation of the Privacy Committee, coordinated by the CEO with company directors as members;
- Creation of position of **Data Protection Officer** (DPO);
- Updating and provision of the company's Privacy and Cookies policies;
- Compliance with requests for Owners' Rights (the law guarantees a series of personal rights, including the correction, anonymization and review of automated decisions);
- Contracting of a digital tool for compliance with and management of Owners' Rights, ensuring a better experience for customers in the exercise of their rights;
- Assignment of Compliance team to lead the measures necessary for compliance with the new law and management of Owners' Rights requests;
- Receipt of ISO 27001 certification – information security management standard –, as a target for 2022;
- Adaptation of new contracts in relation to treatment of personal data;
- Review and adaptation of existing contracts identified and classified as having an impact on personal data;
- Review and updating of internal documents and rules to regulate and guide the treatment of personal data by employees;
- Creation of Privacy Center on the TIM website;
- Creation of an internal security flow for incidents or cases of leaks involving personal data.

Law suits

GRI 418-1, SASB TC-TL-220a.3, TC-TL-220a.4, TC-TL-230a.1

In 2022, 970 law suits related to chip fraud were filed; 584 were concluded (including cases brought in previous years), 62% were settled in favor of the company. In the suits with unfavorable sentences, fines totaling around BRL 2.3 million were paid.

There were more than 1.5 million court requests for access to private information in the last year. All were granted. Currently it is not possible to calculate the number of customers affected by requests for information with accuracy because different authorities may request the same data on different occasions.



Court requests for access to private information by type (thousands)

Telephone interceptions	Registration data	Telephone statements	Totals
2022 267	2022 403	2022 886	2022 1,556
2021 325	2021 397	2021 839	2021 1,561
2020 367	2020 391	2020 660	2020 1,418

Environmental management system

Climate change

Energy

Circular economy

Waste

04 Environmental

Environmental Management System

GRI 3-3, 304-2



A set of socioenvironmental policies and practices guide TIM corporate practices and projects, reinforcing its commitment to environmental management in its businesses and for the planet. Fundamental for the competitiveness of companies, sustainability is a priority question for the TIM Group. The company's guideline is to always remain ahead of the demands of society and legislation, contributing as a leader to the advance of the telecommunications sector.

TIM's Environmental Policy covers all of the Company's operations and is based on three pillars: environmental protection, compliance with corporate legal and regulatory requirements and promotion of continuous improvement in its Environmental Management System (EMS). The document also strengthens TIM's commitment to other environmental principles, such as adequate waste management, efficient consumption of natural resources and the prevention of pollution, subjects that will be detailed in this report.



Aligned with the company's strategic planning, TIM has a nationwide Environmental Management System, based on ISO 14001 requirements. The **company has had this certification for Network Management and Operation** in the states of Espírito Santo, Rio de Janeiro and São Paulo since 2010

TIM has teams to license and track the compliance of the company's sites, such as Radio Base Stations, technical buildings and data centers.

Radio base stations generate impacts at the time of their construction, due to the local movement of workers and works. In the operational phase, the main impact is associated with non-ionizing radiation emissions, which are the subject of theoretical and practical reports in order to guarantee the safety of the operations for society, in compliance with the limits established by the World Health Organization (WHO). In 2022, the level of electromagnetic emissions at 2,327 sites was measured, as requested by Anatel. TIM also measures the level of noise from its structures upon request. In 2022, 18 requests of this type were answered.

In Brazil, law n° 6.938/1981 and Resolution n° 237/97 of the National Environment Council (Conama) do not consider radio base stations as potential sources of pollution. This is why they are not subject to environmental licensing. However, TIM recognizes that in order to exercise the telecommunications social function of generating digital inclusion, on occasion it is

necessary to install this equipment in areas of interest to biodiversity, such as environmental protection areas (APAs) or permanent protection areas (APPs).

In these cases, the installations are authorized by public authorities, in accordance with the legal and technical rules established to avoid, mitigate or compensate for the environmental impacts they cause.

TIM's asset park comprises more than 30 thousand radio base stations, with 7 thousand coming from the acquisition of Oi's mobile assets, licensed by Anatel, in accordance with local regulations, such as urban and environmental licenses, when applicable. TIM has 152 radio base stations located in areas that are sensitive for biodiversity, such as environmental protection and permanent protection areas, which represent less than 1% of the total base of such stations. **GRI 304-1, GRI 304-2**



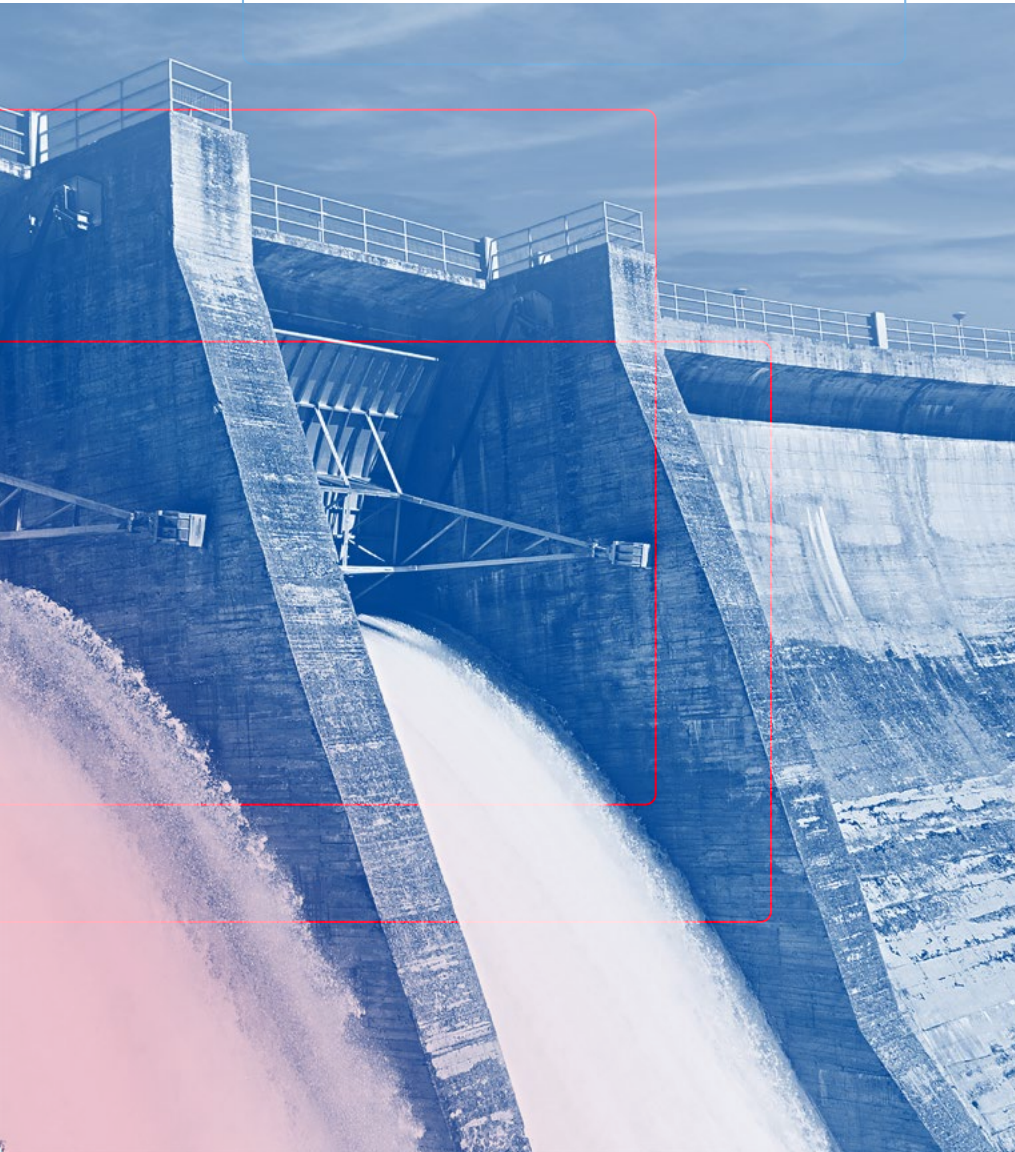
Innovation in the biosites

Applying technology to minimize the impacts of antennas in its network, TIM has 1,829 active biosites. These structures, similar to common posts, accommodate all the telecommunications equipment in their interior, as well as housing other urban furniture, such as public lighting and surveillance cameras. As a result, they have a low visual impact on the landscape, in addition to occupying less physical space.

In 2022, TIM activated the first wind-powered biosite in Brazil. The location chosen for this new equipment was Pipa beach, in Rio

Grande do Norte. Unlike traditional wind towers, the blades are positioned vertically, on top of the metal pole, allowing for a quieter and more efficient movement with less visual impact.

Another innovation was the launch in Salvador of the first biosite developed with a composite that uses glass fiber, carbon and aramid. Compared with the traditional model, the new tower is lighter and more durable. It has the resistance of steel and is not susceptible to corrosion.



Water GRI 3-3, 303-1, 303-2, 303-5

TIM Environmental Policy orientates the company's water and wastewater management. Although the company's activities do not depend on the intensive use of water, indicators related to consumption are monitored and reported transparently. Most of the water used in operations is supplied by local water utilities, with water tanker trucks being contracted in the event of supply failures.

In TIM's administrative buildings, effluents are discharged into public sewage networks, in line with the environmental and urban planning standards for the company's installations in each location. Discharge and treatment are aligned with legislation and are undertaken by the competent utility, with no negative environmental impact on water bodies.

TIM adopts a number of water reutilization initiatives aimed at reducing consumption and demand for this resource. Examples are the harvesting of rainwater in the company's building in São Paulo (SP), with eight tanks having a total capacity of 900,000 liters. TIM also developed a sustainable solution for air conditioning in

the administrative part of the São Cristóvão building, in Rio de Janeiro. The initiative reuses the wastewater from the circulation pump, representing an annual saving of 96 m³.

In the São Cristóvão building a filtering and chemical treatment system was developed to enable the reuse of 2,000 liters of water from the generator cooling system, which was previously contaminated by additives and particulate material. The reused water is also used as an equipment coolant.

Water consumption by source¹ (thousands of m³)

	2020	2021	2022
Ground water and water from other sources (Artesian wells, tanker trucks and reused water)	5	0.9	2 ²
Water supplied by third-parties (municipal utility)	69	39	47 ²
Total	74	40	49

¹ There is no information on water stress since the topic is not material for TIM.

² Increase due to the change in location of the operation in São Paulo and the return to the offices using a hybrid model.

Climate **change**

GRI 3-3, 201-2, 305-1, 305-2, 305-3, 305-4, 305-5

Value creation for TIM involves proactive mitigation of greenhouse gas (GHG) emissions from its operations and the adaptation of these operations to the effects of climate change. The company manages this topic in line with the guidelines in its Climate Change Management Policy, elaborated in accordance with Brazilian and international legislations, the determinations of regulatory authorities and guidance from the TIM Group.

The importance of the topic for TIM is demonstrated in the company's ESG Plan, which has incorporated two new targets: to be a zero carbon company by 2040 and to reduce scope 3 emissions by 47% by 2030. Moreover, in June 2022 the TIM Group received approval for its GHG reduction targets - having 2019 as base year - from the Science Based Target Initiative, SBTi¹:

- **reduce** scope 1 and 2 emissions by **75% by 2030**;
- **achieve 100% renewable energy consumption** by 2025; and
- **reduce emissions in the** value chain² (scope 3) by 47% by 2030.



The TIM Group GHG reduction targets were approved by the SBTi

¹ Initiative created based on the coalition involving the Carbon Disclosure Project (CDP), Global Compact, World Resources Institute (WRI) and World Wildlife Fund for Nature (WWF).

² Categories: (1) Product and service purchases, (2) Capital goods and (11) Use of products sold; in accordance with the commitments assumed by the TIM Group in the SBTi. These emission sources will be accounted for from 2023.

2022-24 ESG Plan



Targets

- Achieve **carbon neutrality** (scopes 1 and 2) by 2030
- **Eliminate** indirect emissions (scope 2) by 2025



Results

Carbon neutrality - scopes 1 and 2 (tCO₂e)



Indirect emissions - scope 2 (tCO₂e)



In relation to the ESG Plan results in 2022, for the carbon neutrality target (scopes 1 and 2), it should be noted that TIM considered the purchase of carbon credits (scope 1), investments in the Distributed Generation project and renewable energy certificates (I-RECs) (scope 2). In addition, the company incorporated Non-Kyoto fugitive emissions into the calculation of scope 1 emissions, making its emissions monitoring even more rigorous. The results of the 2021 and 2022 indirect emissions target presented in the table on the previous page, consider the approach based on choice of purchase for scope 2, with renewable energy certificates (I-REC).

The TIM GHG inventory is part of the company's commitments in this area. It is prepared annually, in line with the principles of the Brazilian GHG Protocol Program (including reporting scope 3) and is audited by a third-party.

The emissions data and governance, strategy and risk and opportunity management in this area are also widely disclosed under the CDP, a global initiative to drive transparency around emissions. TIM's classification in 2022 was B.

The companies that responded to the complete version of the CDP Questionnaire on Climate Change were also evaluated for their performance in engaging suppliers. The result is shown in the Supplier Engagement Rating (SER), which considers the companies' responses to questions of governance, targets, scope 3 emissions and engagement of the value chain. TIM's classification in the SER in 2022 was A-.



Emissions reduction and low carbon GRI 301-1

TIM is attentive to its role in building a low carbon future. The company believes that the telecommunications sector can contribute to the reduction of global emissions with solutions such as videoconferencing platforms, remote working, connected home, education platforms, marketplace, industry 4.0 and internet of things. These are all services that can stimulate more sustainable lifestyles, enabling the performance of activities with less travel and dislocation, reducing greenhouse gas emissions and preserving the environment.

At the end of 2022, TIM had more than 63 million accesses, including postpaid, prepaid, fixed telephony and internet. The emission of bills represented 48% of the total of 352 tons of paper (FSC) consumed by the company, a decrease of 9% compared with the previous year.

The printing and postage of millions of invoices to customers generate costs and a significant consumption of FSC paper. To mitigate part of the impact caused by the company in the climate change area, TIM encourages the adoption of digital billing.

With this initiative, TIM avoided the use of 2,642 tons of paper in 2022 and the corresponding waste generation; it saved BRL 327 million and avoided the emission of the equivalent of 3,144 tCO₂e in scope 3, considering the raw material life cycle analysis method recognized by the GHG Protocol.

Additionally, all the paper acquired by TIM for its operations is monitored in relation to sustainable origin and the emissions generated by its supply chain.

GHG emissions inventory

The direct GHG emissions from TIM's operational activities (scope 1) are associated mainly with stationary emissions from equipment such as generators, which principally use diesel oil as a fuel, and plants that use natural gas and landfill biomass gas -, the fugitive emissions from refrigeration systems and extinguishers from firefighting systems, as well as mobile emissions related to the fuel used in the vehicle fleet controlled by the company.

Currently, the major part of TIM's indirect emissions comes from the consumption of electrical energy (scope 2), whilst the remainder, related to operations in the company's value

chain (scope 3) comes from the purchase of products and services, goods transportation, business trips such as air travel and travel by sales teams that burn fuel in their vehicles.

To map the emissions impact throughout the life cycle of its products, TIM calculated its carbon footprint. The study concluded that for each 1 Mb of data traffic using 4G technology, 1.47 grams of CO₂e are emitted. The main emissions factors are the burning of diesel in generators and the consumption of electricity in the operations. Considering scopes 1 and 2 (location approach), in 2022 TIM had an emissions reduction of 38,000 tCO₂e compared with 2019. **GRI 305-5**



To map the emissions impact throughout the life cycle of its products, **TIM calculated its carbon footprint**



Scope 1 GRI 305-1

Scope 1 includes direct emissions associated with the operation, especially from the burning of fuels and the maintenance of air conditioning and firefighting systems. TIM Brasil and the TIM Group use the same data base which records GHG emissions based on the GHG Protocol, however the results presented may diverge between the two companies due to the use of different regional

parameters. It may be observed that in relation to stationary emissions, from 2021 those generated by burning natural gas and biogas to generate electricity were accounted for in scope 1.

TIM also monitors its Non Kyoto fugitive emissions separately. These correspond to chemical substances whose emissions are not accounted

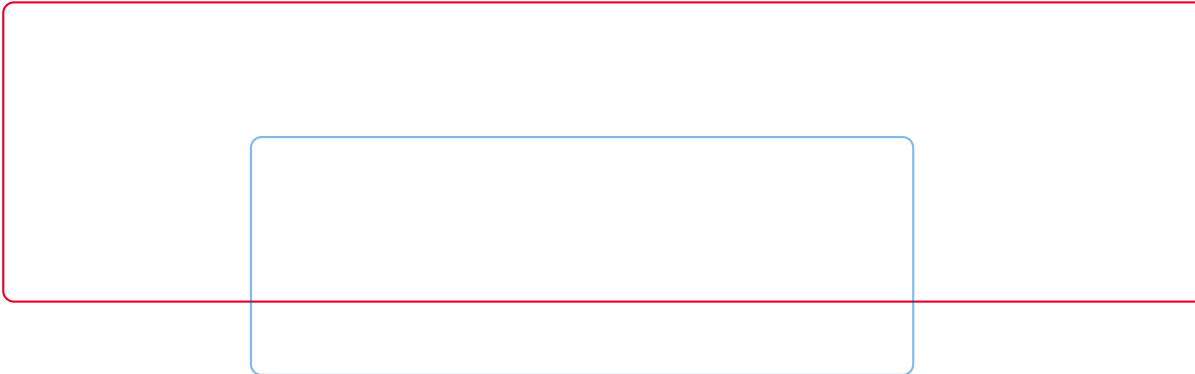
for in GHG inventories elaborated in accordance with the Brazilian GHG Protocol Program. In 2022, the company incorporated its Non Kyoto fugitive emissions into the calculation of its carbon neutrality target (scopes 1 and 2), making its emissions monitoring even more rigorous.

Scope 1 GHG emissions (tCO ₂ e)			
	2020	2021	2022
Emissions of vehicle fleet controlled by TIM	348	335	320
Stationary emissions (generators, machinery and other equipment)	815	1,474	2,194
Fugitive emissions (refrigerant gases and fire extinguishers)	4,309	2,584	4,506 ¹
Effluents	-	2	2
Total Kyoto GHG	5,473	4,395	7,022
Non Kyoto fugitive emissions (refrigerant gases)	3,308	2,122	2,529
Total GHG	8,781	6,517	9,551

¹ Increase due to accidental releases of FM-200, HFC (hydrofluorcarbon) gas used in firefighting, which has high global warming potential (GWP).

Scope 1 biogenic emissions (tCO ₂ e)			
	2020	2021	2022
Biogenic emissions ¹	200	46,834	54,132

¹ From 2021, biogenic emissions from the biogas plants in the Distributed Generation project were included, in addition to emissions from biofuels such as ethanol and biodiesel, in addition to fossil fuels.



Scope 2 GRI 305-2

Scope 2 covers indirect emissions from the acquisition of electrical energy. For the location-based approach, the emissions are calculated using the average emission factor of Brazil's SIN National Interconnected System. For the purchase choice approach, the renewable energy acquired with proven traceability is considered (via renewable energy certificates - I-RECs).

Since 2021, emissions related to the distributed generation project are not counted because TIM considers the acquisition of energy via distributed generation as self-generation. The emissions relative to the operational activities of the generating ventures are classified in scope 1 (emissions from the operational activities of the plants).

Scope 2 GHG emissions (tCO ₂ e)			
	2020	2021	2022
Location approach	38,717	51,355	15,346 ¹
Purchase choice approach	-	0	0

¹ Significant reduction due to the decrease in the emission factor released by the Brazilian government.

Scope 3 GRI 305-3

Indirect emissions in the TIM value chain, including business travel, fuel consumption by freight transporters, waste treatment, logistics activities and materials purchases.

Scope 3 GHG emissions (tCO ₂ e)			
	2020	2021	2022
	9,668	8,199	4,354 ¹

Scope 3 biogenic emissions (tCO ₂ e)			
	2020	2021	2022
	844	2,021	553 ¹

¹ The reduction was due to improved fuel consumption control in third-party freight providers.

The full TIM GHG Emissions Inventories are available in the public emissions registry of the Brazilian Greenhouse Gas Protocol Program (PBGHG), conducted by the Fundação Getúlio Vargas FGVces, and developed in partnership with the World Resources Institute (WRI), the Ministry of the Environment, the Brazilian Business Council

for Sustainable Development (Cebds), the World Business Council for Sustainable Development (WBCSD) and companies.

Emissions intensity GRI 305-4

Intensity of scope 1 and 2 emissions from data traffic (kg CO ₂ e/Terabits)			
	2020	2021	2022
	1.20	1.23	0.41 ²

² Variation due to the reduction in scope 1 and 2 emissions (location approach) and increase in data traffic.



The full TIM GHG Emissions Inventories are available in the public emissions registry of the Brazilian Greenhouse Gas Protocol Program. [Click here to access them](#)

Preserving biodiversity

In 2022, TIM invested in the neutralization of part of the GHG emissions released into the atmosphere by its operations through the acquisition of carbon credits from the Envira Amazônia REDD+ (Reducing Emissions from Deforestation and Forest Degradation) forestry preservation project, in partnership with Carbonext.

The company's goal is the neutralize its emissions, combating climate change and, as a direct effect of this initiative, support the protection of threatened species and increase the resilience of ecosystems. Furthermore, the action provides benefits for the communities in and around the project area, with the generation of employment opportunities, increased access to healthcare and education, support in obtaining land title deeds and resources to protect traditional cultures.

The project is being developed in the state of Acre, on a property in which the right to suppress vegetation for livestock breeding was transformed into the conservation of 200,000 hectares of tropical forest. With the initiative, Envira Amazônia will simultaneously preserve the biodiversity of the biome and a broad range of ecosystem services, providing direct benefits

for the local communities, who may develop sustainable initiatives in the location.

As a guarantee of effectiveness, the program is certified by the Verified Carbon Standard (VCS) - the most widely used greenhouse gas credit initiative in the world. The VCS finances the emissions reduction and removal activities directly, improving local livelihoods and protecting nature.

Envira Amazônia also has the CCBS (Climate, Community & Biodiversity Standard) seal, which certifies that the project generates tangible benefits for the climate, the community and biodiversity.

Furthermore, the project generates the following benefits:

- Protection of 45 bird species, 18 of which are endemic and two at threat of extinction;
- Implementation of complementary activities such as: monitoring of working conditions, installation of community bathrooms with sanitation infrastructure, training in sustainable agriculture and implantation of a health and dental care center.



Energy

GRI 3-3, 302-3, 302-4, SASB TC-TL-130a.1

Material topic:
Energy efficiency

SDG **7** **12** **13**

The telecommunications sector is highly dependent on the continuous supply of electricity to ensure the functioning of its operations. In this context, TIM works to prioritize the use of renewable energy, reduce consumption in general and optimize management of the operation, decreasing greenhouse gas emissions.

One of the company's main actions is its Distributed Generation project, which supplies the power grid through generation by small power plants. At the end of 2022, TIM had 53 active power plants, which together with the purchase of energy from the free market enabled the company to achieve a renewable energy consumption rate of 70% of the total (70% of the annual average) in December. With the acquisition of renewable energy certificates (I-RECs), TIM reached the mark of 100% renewable electrical energy in its operation.

The I-REC certificates come with the guarantee of being of renewal origin and offset all the electricity acquired by the company in the captive and free market (the latter constitutes proof for the Brazilian GHG Protocol Program).

Another project that uses renewable energy and contributes towards the expansion of TIM's 4G coverage in areas of difficult access is Sky Coverage. Initiated in 2021, initially in partnership with Highline and later with IHS and Winity, connectivity is generated by means of antennas powered by solar energy provided by photovoltaic panels connected via satellite. TIM ended the year with 45 active off-grid sites.

In 2022, **100% of TIM's electrical energy consumption (667,294 MWh) came directly or indirectly from renewable sources**. The ESG Plan target is to maintain this achievement until 2025.

2022-24 ESG Plan



Targets

- Maintain **100%** energy consumption from **renewable sources** until 2025
- Maintain the **80% increase** in energy efficiency in data traffic until 2025, in comparison with 2019



Results

Renewable energy consumption

2022	100%
2021	100%
2020	64%

Eco-efficiency

2022	127%
2021	96%
2020	64%

Total energy consumed SASB TC-TL-130a.1

Energy consumption within the organization by source (GJ) ¹ GRI 302-1			
	2020	2021	2022
Fuels	19,126	20,106	22,293
Gasoline	5,989	5,945	6,168
Ethanol (renewable source)	349	582	740 ²
Diesel – Vehicles	525	353	193 ³
Diesel – Generators	12,263	13,226	15,192 ⁴
Electricity	2,259,822	2,339,113	2,402,260⁵
Total	2,278,948	2,359,219	2,424,553⁶

¹ Takes into account consumption of sites acquired from Oi and migrated to TIM.

² Increase in circulation of executive fleet (more than 80% flexible fuel) and external maintenance.

³ The company has reduced its fleet of diesel-powered vehicles.

⁴ Increase due to need to activate generators because of power cuts and also because of maintenance.

⁵ Considers the captive market, free market, distributed generation project and Sky Coverage project.

⁶ The conversion to GJ is done based on National Energy Balance factors.

Electrical energy		
Source	Consumption (MWh)	Share (%)
Self-generation ¹	316,912	47
Captive market (grid)	197,561	30
Free market	152,821	23
Total electrical energy from renewable sources	469,734	70
Total	667,294	100

¹ Distributed Generation Project of energy from renewable sources, such as hydro, solar and biogas.

Energy efficiency GRI 302-3, 302-4, SASB TC-TL-000.D

TIM's objective is to reduce energy consumption while maintaining product and service quality. The 2023-25 strategic plan reflects this premise with the target of increasing eco-efficiency in data traffic by 110% by 2025. This was also a commitment assumed by the company in the 2021 issue of BRL 1.6 billion in Sustainability-Linked Bonds (SLB), bonds linked with social and sustainability targets.

Monitoring is undertaken by means of the eco-efficiency indicator calculated based on the relationship between the data service offered to customers (bits) and the company's impact on the environment (joules of energy consumed).

Compared with 2019, TIM improved its energy efficiency (bit/joule) in data traffic by 127%. Even though data traffic grew 19% compared with 2021 and the radio base stations increased by 5.6% in this period, corresponding energy consumption increased only 3%, the result of increased eco-efficiency measures.

TIM also measures the efficiency of its data centers using the Power Usage Efficiency (PUE) measure, which considers the total energy of the installations and the energy of the equipment. For further information about the methodology proposed by The Green Grid, [click here](#).

The variation in PUE is small between the years and reflects the improvement in efficiency due to the virtualization of the network. Check the [Technical Report](#) published on this question.

Average PUE

2022	1.57
2021	1.90
2020	1.87

Network eco-efficiency¹

2022	22,323
2021	19,271
2020	16,146

¹ Indicator measured in bits trafficked by joule consumed, reflecting the company's efficiency in increasing voice and data traffic on the fixed and mobile networks in comparison with energy consumption (the higher, the better). TIM network traffic in 2022 was 6,009 PB. **SASB TC-TL-000.D**

Circular economy

GRI 3-3, 306-1, 306-2, SASB TC-TL-440a.1

The circular economy is a production and consumption model that involves the sharing, reuse, repair, renewal and recycling of existing materials and products whenever possible. This extends the life cycle of materials, avoiding wastage and pollution from the generation of waste, and reducing the demand for raw materials.

TIM Environmental Policy provides guidance on the efficient and responsible management of solid waste, one of the goals assumed by the company in its ESG plan.



TIM promotes circular economy incentive measures for its customers

External audience and customers

TIM promotes circular economy incentive measures for its customers. This is the TIM Smart Exchange initiative, a program run in partnership with Trocafone – a Brazilian company specially in used smartphones – with the exchange of used cellular telephones or smart watches in the purchase of new ones at a discounted price in the company's own stores.

All the devices are submitted to a detailed maintenance process to ensure they work well. If any component needs to be replaced, the device is recycled and returns to the industrial process. Equipment which is no longer of any use is disposed of in an environmentally correct manner.

In 2022, TIM collected almost 6,000 cellular phones with this measure, of which around 90% were in condition to be reused.

Another activity front available for the external audience is incentives and the promotion of reverse logistics for domestic electrical and electronic products. TIM recognizes the importance of helping to foster a circular economy, extending the life cycle of electronic products and promoting the economic and social development of the reverse logistics chain, by means of drop off stations in the company's own stores nationwide. The company reviewed decree nº 10.240/20 which stipulates the provision of drop off or collection stations. For this reason, TIM discontinued its target of collecting 3% of this kind of waste (having the volume commercialized in its stores in 2018 as base year) and established a new goal of having collection urns in 100% of its own stores.

These collection stations in the stores are for the use of the whole population, whether they are employees, third-parties, customers of TIM or not. The spaces for the disposal and storage of post-consumer domestic electrical and electronic products were projected in accordance with the principles of environmental sustainability, with reforested wood and are suitable for the storage of hazardous waste.

TIM also assesses the possibility of reusing CPE (Customer Premises Equipment)¹ from individual or business customers who have requested the cancellation or have stopped paying for the company's services. Around 93% of the modems that have been returned from customers have been overhauled and reused, while only 7% were disposed of, in accordance with legislation and the company's rules.

¹ Equipment used by individual (cellular phones, batteries, modems and other electronic accessories collected in stores) or business (modems, power units, cables and other accessories) customers.

Waste

GRI 3-3, 306-1, 306-2, SASB TC-TL-440a.1

TIM Environmental Policy provides guidance on the efficient and responsible management of solid waste, one of the goals assumed by the company in its ESG plan.

In 2022, TIM started accounting for civil construction waste as part of its continuous improvement process. In parallel, work was resumed in the Renew TIM project in the company's stores and buildings in the country, increasing waste generation. These factors impacted the company's target, resulting in 73% solid waste recycled in the year. In view of the improvements implanted by the company for its waste management (expansion of control and

coverage of analysis), the time limit in the ESG Plan was extended to 2025.

In compliance with Brazil's national solid waste policy (law 12.305/2010), the company shares responsibility for the receipt and the environmentally adequate disposal of post-consumer electronic equipment (such as smartphones, modems, batteries and accessories) with its business partners. Moreover, the company also considers that the digitalization of services is an important driver in the reduction of waste generation. This reduces the volume of paper necessary for invoices and bills.

2022-24 ESG Plan

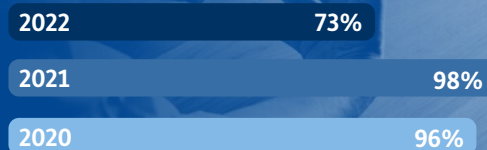


Target

- Recycle at least **95%** of solid waste by 2023



Result



Eco Rating

In 2022, the TIM Group joined the international Eco Rating project, a system that measures and evaluates the level of environmental sustainability of smartphones, promoting more conscious and sustainable purchase choices on the part of customers.

The project is in place in 35 countries and was created in a collaborative action involving some of the main international telephony operators.

The methodology analyzes the main environmental parameters in the phases of production, transportation, use and disposal of the equipment, attributing a sustainability score on a scale from 1 to 100. The Eco Rating label contains the score obtained by the product and its ratings in five factors: durability, reparability, recyclability, climate efficiency and resource efficiency.

From 2023, TIM will apply the Eco Rating seal to specific smartphones in Italy and Brazil.



Waste disposed of by method (t)			
	2020	2021	2022
Total waste directed to disposal	2,031	1,595	2,313
Total waste diverted from disposal (recycling or reuse) GRI 306-4	1,957	1,568	1,682
Hazardous	485	560	576
Recycling	485	560	576
Network batteries	485	553	568
Electronic devices (cellular phones, batteries and accessories)	0	0.3	0.3
CPE (modems, repeaters and customer accessories)	-	6	7
Customer cellular telephones (TIM Smart Exchange)	-	-	0.2
Oil contaminated waste	0	0	0
Preparation for reuse	0	0	0
Non-hazardous	1,472	1,008	1,106
Recycling	1,455	921	1,014
Electric and electronic scrap, cables and metals	1,455	921	1,014
Preparation for reuse	17	87	92
CPE (modems, repeaters and customer accessories)	17	87	90
Customer cellular telephones (TIM Smart Exchange)	-	-	2
Total waste directed to disposal (landfill) GRI 306-5	74	27	631
Hazardous	0	0	0
Confinement in landfill	0	0	0
Non-hazardous	74	27	631
Confinement in landfill	74	27	631
Civil Construction Waste	-	-	440
Organic, paper and plastic	74	27	191
Electronic devices (cellular phones, batteries and accessories)	0	0	0

Recycled or reclaimed

GRI 301-3, SASB TC-TL-440a.1



350 kg of electronic waste (cellular telephones, batteries, accessories etc.)



97 tons of customer electrical and electronic equipment (modems, repeaters and accessories)



Almost 6 thousand cellular telephones, or around 1.8 tons, reclaimed in TIM Smart Exchange

05 Social

*Social inclusion
Employees
Diversity and inclusion
Human rights
Instituto TIM*

Digital inclusion

GRI 3-3, 203-1, 203-2, 419-1

Material topic: **Digital inclusion and access to connectivity**

SDG **1** **5** **9** **10** **11**

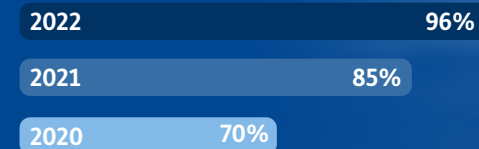
TIM telecommunications activities generate positive impacts beyond the business. Access to mobile telephony and broadband internet enables the creation of opportunities for people and companies, acting as a powerful tool for digital inclusion based on the offer of services and the guarantee of access to connectivity for the entire country. This is why the company works at offering quality solutions in every region of Brazil, including remote communities, supporting digital literacy and ensuring access to digitalized public services.

2022-24 ESG Plan

Target

- Extend 4G connectivity to **100%** of the municipalities of Brazil by 2023

Result



Two fronts have greater potential impact in promoting broad digital inclusion in the country: the expansion of the 5G and 4G networks and the initiatives to provide coverage in rural areas. TIM is active on both these fronts.

Conduct Adjustment Agreement with Anatel

TIM was the first operator to enter into the Conduct Adjustment Agreement (TAC) with Anatel. The agreement provides for investments until 2024 to improve quality and the customer experience, with the enhancement of digital customer service channels and the reduction of complaint rates, as well as an increase in network infrastructure in more than 2 thousand cities. In exchange, lawsuits against the company totaling around BRL 639 million were withdrawn.

Worthy of note among the commitments assumed was the implantation and/or expansion of the 4G network in 1,837 municipalities. In addition, it is estimated that 3 million people will benefit from the Additional Commitments, which aim to expand

mobile broadband technology to around 350 municipalities with fewer than 30 thousand inhabitants, especially in the Northeast, North, Midwest regions and the north of the state of Minas Gerais that still do not have access to 4G and have a Human Development Index (HDI) below the national average. The projects prioritized in this regulatory instrument are in line with the public telecommunications policies, regulated by [decree 9.612/2018](#), which provides for an increase in the coverage of mobile broadband access networks, prioritizing services in cities, towns, isolated urban areas, and clusters that do not have this structure. In 2022, TIM concluded 30 months of the agreement, installing coverage in 100% of the municipalities covered in the commitments.



Rural Schools Connectivity Program

The Rural Schools Connectivity Program, an Anatel requirement for the operators that acquired the frequencies auctioned in the tender nº 004/2012, is aimed at ensuring coverage in rural areas of Brazil, including public schools.

Within the division undertaken among the telecommunications operators in the country, TIM guarantees this service in the states of Rio de Janeiro, Espírito Santo, Paraná and Santa Catarina. Currently, the company is engaged in delivering coverage to 4,222 public schools, in accordance with the list updated by Anatel in November, 2022. TIM already delivered 24% of this commitment, according to the agency's latest inspection report in 2020.



TIM created the Roadshow program at universities to provide students with information on innovation, careers and employability

Interaction with universities and **innovation centers**

In 2022, TIM conducted a series of measures to forge closer relations with universities and research centers. To promote interaction with students, the company created its Roadshow program at universities, providing students with information on innovation, careers and employability.

The program promotes rounds of conversation between TIM staff and students, enabling students to hear about professions, exchange experiences and learn more about the careers they intend to follow. The initiative presents information about the telecommunications sector and about how TIM operates.

Furthermore, students are invited to participate in the TIM Intern Program and gain practical experience by means of the presentation of company cases in the areas of connectivity, innovation, technology and new businesses. Worthy of note among the subjects presented are 5G, Data Science, TIM Lab research and Internet of Things.

Another key form of interaction with the academic milieu is the TIM Open Innovation Program. Through this program, the company supports the development of technology partnerships for initiatives focused on social applications and business. This involves the acquisition and exchange of knowledge with universities.

Employees

GRI 3-3, 404-3

Material topic: **Health, well-being and safety**

SDG **3** **5** **8**

TIM strives to ensure employee well-being and health through the humanized management of cordial environments, caring for mental health with flexible and adequate working conditions and promoting diversity. The company values its talent and recognizes the importance of training and development activities for its employees.

TIM's purpose, values and strategic goals define its challenges and shape the mindsets of employees throughout the year. This is why the company sought to reinforce a culture of innovation, high performance, inclusion and well being among its professionals on a daily basis, aimed at promoting a favorable environment for developing its people and achieving corporate goals.



Recognized by employees and the market, **TIM received the Great Place to Work and Top Employers Award** in 2022

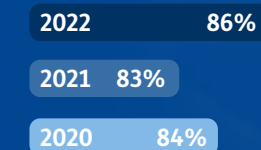
2022-24 ESG Plan

Targets

- Maintain employee engagement at the level of at least **80%** by 2023
- Train **99%** of company employees in the ESG culture by 2023
- Train **5,000** or more employees in digital capabilities by 2023

Results

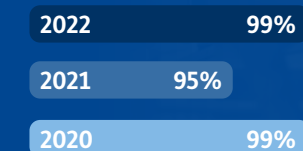
Employee engagement



Trained in digital capabilities



Trained in ESG culture



Employees by type of work contract and gender GRI 2-7

Type of contact	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent	4,745	4,673	9,418	4,638	4,696	9,334	4,652	4,753	9,405
Temporary	115	190	305	132	215	347	158	221	379
Total	4,860	4,863	9,723	4,770	4,911	9,681	4,810	4,974	9,784

Employees by type of employment and gender GRI 2-7

Type of employment	2020			2021			2022		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Full-time ¹	4,317	3,337	7,654	4,213	3,400	7,613	4,263	3,391	7,654
Part-time ²	543	1,526	2,069	557	1,511	2,068	547	1,583	2,130
Total	4,860	4,863	9,723	4,770	4,911	9,681	4,810	4,974	9,784

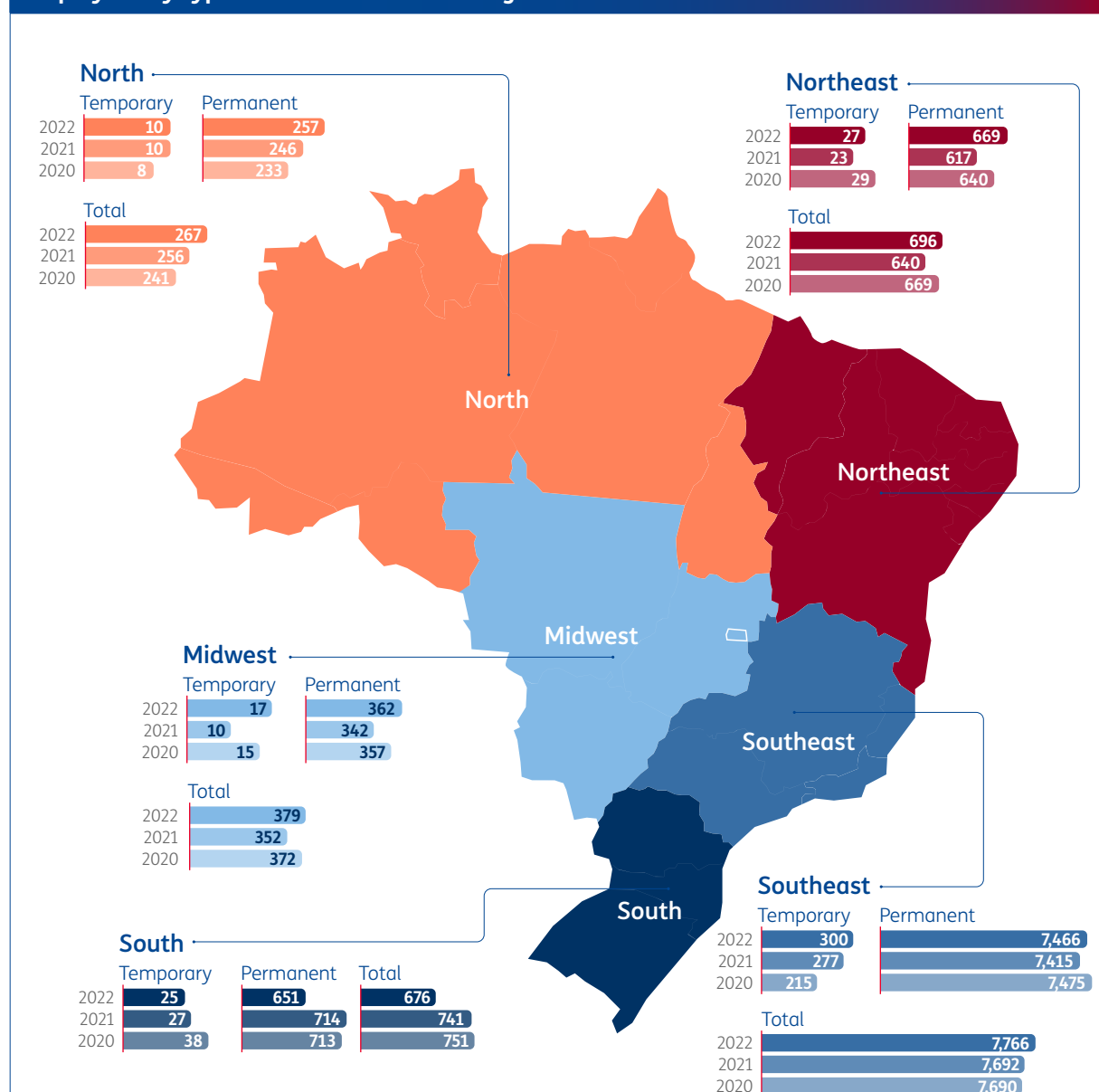
Employees by type of employment and region GRI 2-7

Region	2020			2021			2022		
	Full-time ¹	Part-time ²	Total	Full-time ¹	Part-time ²	Total	Full-time ¹	Part-time ²	Total
North	222	19	241	246	10	256	257	10	267
Northeast	613	56	669	599	41	640	628	68	696
Midwest	350	22	372	343	9	352	362	17	379
Southeast	5,769	1,921	7,690	5,722	1,970	7,692	5,789	1,977	7,766
South	700	51	751	703	38	741	618	58	676
Total	7,654	2,069	9,723	7,613	2,068	9,681	7,654	2,130	9,784

¹ Employees with workload of 200 or 220 hours per month.

² Employees with workload of under 200 hours per month. Interns, apprentices and call center employees work part-time, in addition to other CLT regime functions.

Employees by type of work contract and region GRI 2-7



Organizational structure

Always connected with sociocultural and corporate trends, TIM is attentive to the digital transformation in the work environment. In a situation in constant change, the company's organizational structure is evolving continuously. TIM undertakes constant studies and maintains its job architecture system updated in order to understand current and to project future needs, aligned with market trends in innovation and technology.

In 2022, even with the easing of the Covid-19 pandemic, TIM continued to operate in a highly dynamic labor market and very competitive business environment. The situation led the company to update HR policies such as compensation and recruitment.



The company's organizational structure is **evolving continuously**

Work models

In 2022, TIM formally established the company's work models, opting for four different types:

- Full home office (applied mainly to the call center areas);
- Full in situ (applied mainly to company-owned stores, as well as the medical and safety areas);
- Off-site (applied mainly to sales staff); and
- Hybrid (applied mainly to the corporate and technical areas).

To determine these new models, TIM conducted surveys to understand the employee's experience with these new ways of working, taking into account the different professional profiles, as well as factors such as engagement, productivity and leadership. Offering greater flexibility, the hybrid model permits the employee to opt for one, two or three days on site, according to the eligibility criteria for each area, without giving up any benefits. Moreover, mothers-to-be and the disabled may work exclusively on a remote basis if they want to.



Training and education

GRI 2-17, 404-1, 404-2

To support the digital learning process and meet development needs given the business challenges, the TIM education model evolved and the company launched **TIM + Conhecimento (TIM + Knowledge)**. In addition to leveraging the education value proposition for employees, this new online knowledge hub is integral to the internal and external ecosystem and is divided into the following areas:

- **You + TIM:** provides information about TIM, strategy and business evolution, ESG commitments, company values and guidelines;
- **You in Front:** comprises diverse contents to enable employees to prepare for the future and leverage their career development;
- **You + TECH:** this presents everything the employee needs to develop the necessary competencies and work with technical excellence in their area, driving digital acceleration.

In 2022, the knowledge multiplication program Plural was also reinforced. This is aimed at developing the technical and behavioral competencies essential for the business through internal multiplication in a democratic, customized, digital and flexible manner, connecting people in a learning environment and generating value for individuals and for the business.

The measures focused on supporting the company's evolution and transformation to a digital model were maintained. During the year new competency development initiatives and trials were conducted by means of upskilling programs - aimed at teaching new competencies to optimize performance - and reskilling - professional requalification in areas such as the Cloud, 5G technology and Agile working, among others.

It should be noted that all employees took part in courses on the main institutional matters and on compliance, encompassing ethics, human rights, sustainability and environmental policies, safety, protection and anti-corruption, always aligned with Group guidelines, as well as international and Brazilian legislations.

The digitalization of TIM educational assets has enabled broader employee access



The company also invests in developing its Board of Directors in matters related to the three ESG pillars, through training programs, meetings, forums and events, among others. All employees take mandatory institutional courses related to ESG in their onboarding.

In 2022, the company invested over BRL 11 million in training and education programs and diversity and development initiatives, a 10% increase over the previous year. On average, this corresponds to BRL 1,151 per employee. In addition, the company invested around BRL 200,000 in formal education, mainly in the English Time program, totaling 4,470 hours for 998 participants. As a priority, TIM seeks to prepare employees to meet business requirements and to face contemporary challenges in the telecommunications sector.

A description of the main TIM training and education initiatives:

- **Conecta:** an onboarding program for the induction of new employees aimed at instilling pride in belonging to the company. Employing a dynamic structured approach, it offers pleasant and collaborative learning activities, addressing subjects such as ethical conduct, anti-corruption, the company's business context and competitive scene, among others.
- **Institutional training courses:** that facilitate employee integration into corporate policies and culture, helping to acculturate them.
- **Specific technical training:** focused on technical qualification and requalification so that employees can execute the tasks required in their respective functions.
- **Transversal programs:** addressing subjects common to diverse areas. These courses promote comprehension and preparation to overcome business challenges and contribute to corporate performance.

- **Interns and Apprentices:** these groups receive specific integration activities, classroom and digital training, in addition to a special development journey for people at the beginning of their careers.
- **TIM Talks:** an annual TIM Training, Development and Communication course, for the internal audiences, include members of the Board of Directors, and external audiences. The program began in August with an opening event, and was extended until the end of November. It involved a series of debates on strategic subjects for the company, such as ESG, technology, customer experience, new working models and people.

In addition to these initiatives, TIM conducted personalized learning journeys for diverse internal areas, based on the different needs of each one:

- **Evolution Program:** a learning trail for the sales and customer service areas. This is aimed at promoting technical competencies focused on processes, systems, tools, leadership and the TIM businesses.

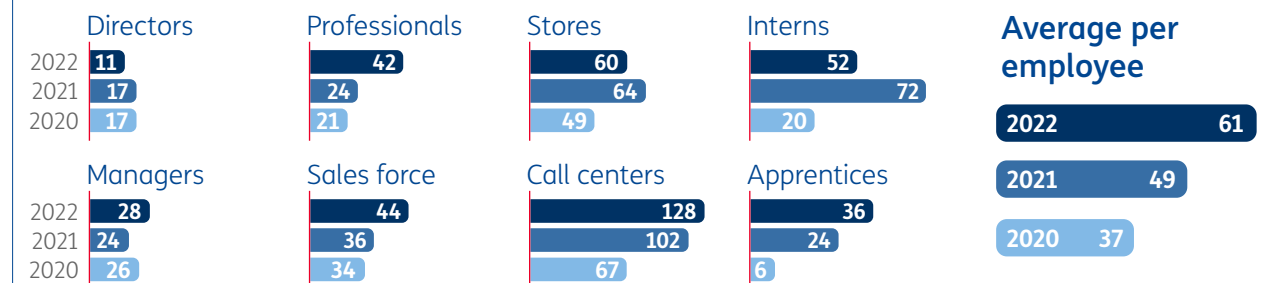
- **Journey to the Cloud:** a structured retraining plan for all employees involved in the migration of infrastructure to the virtual environment. These are learning journeys undertaken by employees who work with new data technologies and analyses.
- **New digital competencies:** training program to disseminate the fundamentals and tools of different technologies for implementation in the company's routines. This initiative involves teams from different areas, with a view to driving gains for the business, reducing risks, driving continuous improvement and boosting knowledge in new areas, such as 5G, Internet of Things and/or Agile Working.

To support the Digital Learning education model, in 2022 TIM implemented its **new Portal TIM + Conhecimento**, an online training platform that includes individual and collective routes for digital learning. The courses available address strategic subjects, such as digital mentality, innovation, customer experience, collaborative network and change management, among others.



In 2022, the average number of hours training for women was 56 and for men, 42

Average number of hours training, by functional category¹ GRI 404-1



¹ The calculation considers the total hours of training done by the average of active employees.



Innovation ecosystem, **talent attraction and people development**

TIM increased its presence in the innovation ecosystem and launched initiatives to boost the attractiveness of the company to people with knowledge of technology and digital competencies. Through participation in important events and innovation fairs, the company sought to identify recruitment and hiring opportunities.

Initiatives such as roadshows and talks were conducted in ten universities for more than 890 students, sharing technical knowledge and tips related to the company business and careers, resulting in 40% of the students visiting the Intern Program website.

To support the qualification of technology professionals, TIM formed partnerships with big techs, such as Google Cloud and Microsoft and offered free vocational courses. The company also undertook a knowledge sharing journey for students and researchers in 5 Girls, a project organized by the Fluminense Federal University (UFF) that fosters the study of 5G technology and female participation in technology careers.

At the SciBiz Conference, a global science and business event, TIM offered 5G experiences and promoted conferences on 5G technology, cloud computing, agribusiness and data science.



TIM launched initiatives to develop **digital competencies and skills** in the technology area

People development

TIM continues to evolve in people development practices, with a focus on digitalization, customization and inclusion. Through research, benchmarking and conversations with stakeholders, the performance management process was enhanced to add even further value for employees, promoting important results in individual and collective development plans.

Up to September 2022, more than 5,600 employees had been involved in two competency assessment and delivery capacity cycles. In December, a new cycle was launched, introducing new elements to ensure a broader vision of people - motivation and social reputation - reinforcing a new development and feedforward culture, with a 100% customized, focused and agile process.

Leadership development

The enhancement of the leadership learning plan is a strategic HR priority for TIM. The company invests in the development of leadership skills and digital competencies. This involves the use of tools such as live transmissions, microlearning, coaching and mentoring.

In 2022, new editions of the E-Coaching and Intercompany Mentoring programs were launched. In the E-Coaching program around 85 new leaders took a five-session digital coaching course, with a coach certified by the ICF, an international non-profit organization specialized in this area, to accelerate their growth and address management challenges. Since 2020, more than 340 leaders have participated in this program.

Incorporated into the “Positive Women” initiative, a new group of the Intercompany Mentoring program was formed with 193 women from 23 different companies, with the objective of accelerating development and career progress for women.



Talent management

In 2022, TIM defined and validated its new Talent Management model, which prioritizes four clusters: Leadership talents; Professional talents; Strategic leaders; and New talents/critical knowledge talents.

More than 300 people were mapped for this last group. Also retention, recognition and education measures were established, contributing to reduced turnover in competencies critical for the future of the business.

Succession management

To guarantee business continuity, TIM has an annual succession planning process aimed at identifying and prioritizing critical positions and identifying potential successors for them. This process is implemented with support from an external consultancy which works together with TIM to build a succession map and individual development plans to accelerate the preparation of senior executives.

Health and safety GRI 3-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10

TIM has an Occupational Health and Safety system which encompasses processes and initiatives to ensure a safe work environment and promote employee health. The pillars of the system are:

- Legal compliance and other requirements;
- Risk management
- Training, education and awareness;
- Health, safety and emergency programs;
- Prevention and mitigation of accidents and incidents;
- Continuous improvement process.

These efforts are driven by the company's Health and Safety Policy aimed at promoting best market practices and full compliance with the regulations established by the Brazilian Ministry of Labor and Employment, as well as the continuous improvement of the organization in this area.

The policy covers the company's own employees, service providers, interns, apprentices and visitors to TIM Group premises in Brazil. The standard establishes three basic commitments:

- Prevention of workplace accidents and the preservation of health;
- Compliance with legal requirements and other organizational requirements;
- Continuous improvement of the management system with a view to boosting health and safety performance.



*See the TIM
Occupational Health
and Safety Policy*

Risk monitoring

TIM identifies the hazards, risks and impacts of its activities, products and services from a life cycle perspective through the direct observation of activities and operations, the analysis of documents, including applicable legislation, OHS inspections, the reading of procedures, instructions, records, process flowcharts and the results of internal and external audits.

The company has internal standards that guide these measures, including the following policies: Survey of Environmental Aspects and Impacts, Occupational Health and Safety Hazards and Risks; Chemical Product Management; and HSE (health, safety and environment) Management for Service Providers. Moreover, employing specific instruments TIM establishes control over access to company areas and installations presenting

potential risks, authorizing only the entry of employees and service providers prepared and qualified for the activities in these areas.

Health and safety risks are reviewed and analyzed periodically, in accordance with internal company procedure. This management approach also guarantees TIM's legal compliance in relation to the elaboration of the Risk Management Program (PGR-Portuguese acronym), the Occupational Health Control Program (PCMSO) and the Labor Ergonomics Analysis (AET). By means of periodic audits and inspections, conducted by qualified professionals from the occupational health and safety area, all work processes and environments are subject to assessments to guarantee the effectiveness of preventive procedures for health and safety risks.

Whenever there are changes in standards in Brazil, TIM adapts its internal processes

and rules to these legal changes, ensuring ongoing legal compliance. The company also participates on thematic committees with other telecommunications companies contributing to the review of laws and rules that impact the sector, such as those related to electrical energy, works and the appropriate sizes of health and safety teams.

The Internal Accident Prevention Committee (CIPAs in the Portuguese acronym), established where legally required in the TIM branches, meet on a monthly basis to discuss questions related to accident prevention, unsafe conditions identified in inspections and process improvement suggestions. These teams also reinforce communication and awareness initiatives in the safety area, such as the Internal Accident Prevention Week (Sipat).

Currently, 97% of the TIM work force is represented on formal OHS teams. In the branches where the number of employees does not reach the minimum required for the formation of an accident prevention committee, the company assigns at least one employee to perform this function.



TIM has internal standards that guide risk monitoring measures

Training and education

In 2022, the Accident Prevention Week included actions aimed at employees, service providers and society in general, by means of live transmissions with external specialists and TIM staff broadcast via YouTube, covering subjects such as well-being, risk perception and physical activities. Moreover, the company's internal communication channels are always used to disseminate information, helping to ensure that the question of health and safety is always born in mind.

In TIM People, a knowledge portal for employees, a diverse series of contents related to OHS, such as ergonomics, is available for employees to learn and refresh their knowledge.

TIM monitors the provision of training for service providers by means of a specific management platform. When an activity is conducted by contracted providers, TIM establishes an analysis of the risks of the activities as a prerequisite before work begins.

This management structure is complemented by periodic emergency drills and emergency response plans. The emergency response plans include the measures necessary for critical situations based on: the identification of hazards and risks, observation of operations, analyses of documentation and legislation, inspections, assessment of procedures and process maps and internal and external audits.

Recording incidents

TIM provides a channel for all employees to record incidents on the company intranet. Risk situations may be reported in line with the company's confidentiality policy. For third-party employees, the Whistleblower Channel is the official means of formalizing incident reports.

All reports are investigated by an internal team of OHS professionals. In addition to identifying the causes, the team elaborates action plans aimed at preventing the recurrence of these types of incidents.

During the reporting period, six accidents were reported involving TIM employees. A total of 49 days was lost out of 15,539,121 man/hours worked. The main types of employee ill-health at TIM are emotional.

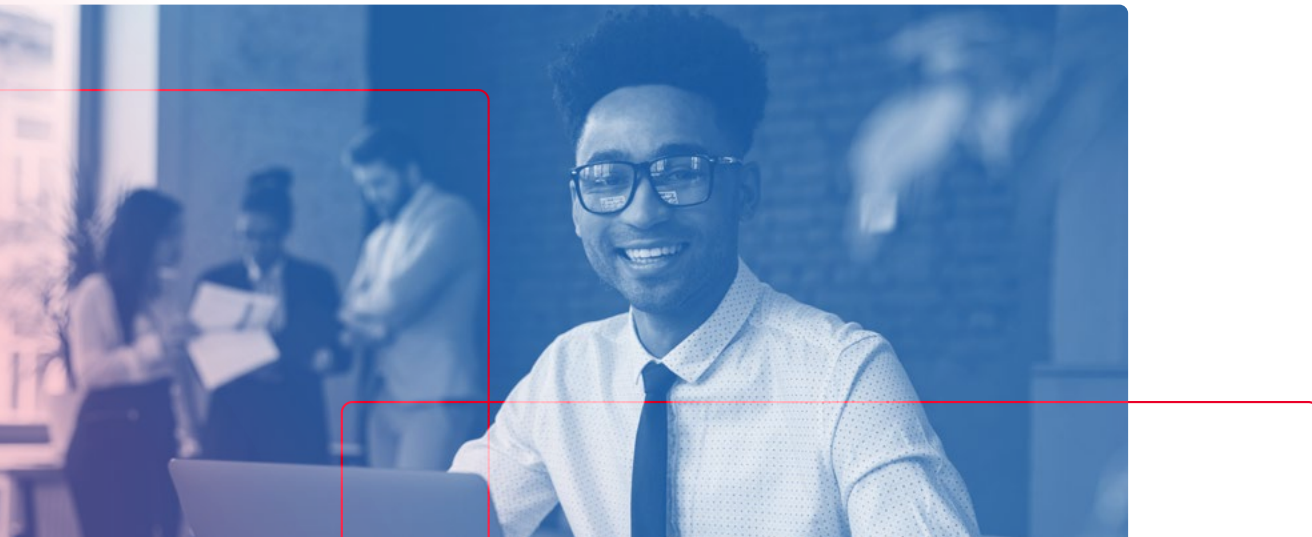
In 2022, there were no cases requiring mandatory reporting in the company's work force. However, there was one fatality involving a worker employed by a sub-contractor in São José dos Pinhais (PR). The individual was working on the ground when other employees from the same sub-contractor were deactivating equipment. One piece of equipment was dropped and hit the worker on the head, killing him immediately. All the measures possible to avoid the recurrence of this type of incident are being taken.

Work-related injuries (own employees) GRI 403-9

	2020	2021	2022
Work accidents	4	6	6
Frequency rate ¹	0.32	0.40	0.38
Severity rate ²	1.82	2.79	3.15

¹ Calculated as the total accidents for each 1 million man/hours worked.

² Calculated as the total days lost for each 1 million man/hours worked.



Promoting **health** GRI 403-3, 403-6

Occupational medical examinations are part of the occupational health management routine. Employees receive an occupational health certificate whenever they are admitted, change function, return to work (after leave), or dismissed. Periodic monitoring is also undertaken. All these procedures are set forth in the company's Occupational Health Examination Program (PCMSO).

Going beyond aspects of occupational health, TIM promotes measures that contribute to its employees well-being and quality of life. The company has offered the possibility of remote working (Flex Office) and flexible starting and finishing times (Flex Time) since 2017. All employees are entitled to a day off on their birthday (Happy Day), and those with more than five years length of service to the company are entitled to one paid day off per year.

As an *Empresa Cidadã* (Citizen Company), TIM offers all employees hired under Brazil's CLT labor regime extended maternity and paternity leave – 180 days for women and 20 days for men – and a monthly allowance for expenditures on a nurse, nursery, preschool and the purchase of children's products in drugstores and supermarkets (My First Benefit). TIM also provides assistance for employees with children who are unable to care for themselves, that is, with disabilities that require permanent supervision. Another advantage provided by the company is a platform of partnerships and an Advantage Club with promotions and discounts on various products and services.

Parental leave GRI 401-3				
		2020	2021	2022
Employees entitled to leave	men	4,746	4,639	4,653
	women	4,675	4,698	4,753
Employees who took leave	men	124	96	90
	women	215	258	222
Employees who effectively returned to work after the leave ¹	men	126	93	90
	women	222	203	186
Employees who remained in the company for at least 12 months after their return ²	men	121	94	76
	women	168	167	144
Return after leave rate	men	99%	99%	100%
	women	99%	99%	100%
Retention rate 12 months after return from leave	men	78%	74%	81%
	women	74%	75%	70%

¹ This considers employees who concluded the leave in the current year.
² This considers employees who concluded the leave in the previous year, in 2021, and completed 12 months of work in 2022.

Benefits

The company seeks to offer a broad range of benefits capable of covering the different dimensions of well-being, with eligibility criteria that may be specific or related to the individual's grade or position. The benefits evolve in accordance with market practices and collective bargaining agreements, as well as people's expectations and needs.

Some examples of the benefits offered by the company are: private pension plan, extension of paternity and marriage leave, day off on birthday and for length of service, healthcare plan, dental plan, life insurance, funeral allowance, nursery allowance, food/meal vouchers, social and emotional programs (Pass support, with social, legal, financial and psychological support from specialists, which is free and confidential and is available 24 hours a day, seven days a week, by telephone or email) and a physical exercise plan (Gympass).

TIM also grants a "Complementation of Sickness Allowance" for up to 12 months for employees diagnosed with Aids/HIV, Parkinson's and serious heart disease, among other illnesses, or who have suffered work-related injuries, to guarantee receipt of full salary.

The company also offers executives the opportunity to customize their benefits package to best meet their individual needs by means of a flexible benefits platform. In 2022 the company implemented a medication assistance plan for all employees.

On its intranet and information channels, TIM provides measures and campaigns related to quality of life, accident prevention, health promotion and the environment.

Well-Being Connection

TIM offers all its employees the Well-Being Connection Program, created to reinforce company care of the work force and their families. This is part of a series of practices and benefits aimed at increasing physical and mental well-being and promoting balance between employees' professional and personal lives.

Well-Being Connection is divided into four pillars:

Body and Mind in harmony: actions and benefits to promote self-care in physical and mental health.

The power of your future: actions and benefits aimed at financial security, development and career.

You being you: actions and benefits aimed at diversity and inclusion and customization according to needs (flexible benefits).

More balanced daily routine: actions and benefits aimed at a more flexible working model (remote working and flexible working hours), modernization of environments, days off for length of service and birthday, among other initiatives to promote balance between employees' personal and professional lives.

TIM offers benefits and practices aimed at improving employees' physical and mental well-being

Collective Agreements GRI 2-30

In 2022, TIM Brazil maintained close relations with unions, valuing collective bargaining, worker representation and freedom of participation in unions. The company held 16 meetings with the union representatives commission, which represents the 27 unions to which company employees belong.

In the first semester, the goals and targets of the profit share program (PLR 2022) and the executive program (MBO) were agreed on with a round of negotiations with each union.

Four meetings were held with two union groups to establish differentiated conditions for the termination of the work contract of around 200 Business Process Outsourcing (BPO) employees in the risk/anti-fraud area. A similar process took place in May in the billing area, involving around 20 employees.

In September, negotiations for the 2022/2024 Collective Bargaining Agreement were concluded, resulting in adjustments in salaries, benefits and bonuses. There were widespread renewals in social and renovation clauses and in the regulation of the hybrid working model. This reform also brought forward the profit share programs for 2023 and 2024.

At TIM, 6% of the employees are unionized, but the collective bargaining agreements cover 100% of the employees. There were no employee strikes during the period.

There is a clause in employee collective bargaining agreements whereby employees with less than 24 months to go until acquiring the right to retirement may be indemnified, receiving the amount the employee would have to pay during the period to acquire the right to retirement.



Diversity and Inclusion

GRI 3-3

TIM believes in workforce diversity as a fundamental pillar in promoting a positive experience for people. The company maintains efforts to disseminate a culture of respect and inclusion among employees and Brazilian society and reinforces its commitment through the targets of its ESG Plan.

In line with these strategies, in 2022 TIM maintained the five D&I pillars:

- **Gender:** TIM continued to focus on gender equality, maintaining the target of having 35% women in leadership positions. In this content, the program TODAS Group was launched for women leaders, with knowledge trails and female leadership career development initiatives. Another activity during the year was Intercompany Mentoring. This is now

in its third group, with 193 new women being mentored in the different companies participating in the Positive Women Project, led by TIM.

The partnership with the Positive Women project, focused on driving the employability, empowerment and personal and professional development of women, continued in 2022. With more than 140 companies participating,

the Positive Women app offers over 200 free courses and 80,000 work opportunities for Brazilian women.

In March, the campaign “Imagine it is possible to be heard” was run, focused on combating violence against women. This involved communication actions on the social networks addressing the silencing of women. Moreover, in partnership with companies in the Positive Women Project, TIM

organized the Employability Week, offering over 500 work opportunities and ten hours of training on subjects to support female employability all over Brazil. As a result of this initiative, there were 350 views and more than 5,000 participations in live transmissions and applications.

Actions in the “Respect generates respect” program, launched in November 2021, were intensified. Created with a view to preventing and

2022-24 ESG Plan



Targets

- To have **35%** women occupying leadership positions by 2023
- To reach **40%** black people in the work force by 2023



Results

Women in leadership positions

2022	34.4%
2021	33.6%
2020	32.8%

Black people in work force

2022	37.3%
2021	35.7%
2020	33.9%



prohibiting psychological and sexual harassment, bullying and any type of gender discrimination and violence, the program maintained continuous communication and training activities for all audiences during the year, aimed at promoting a safer and freer work environment free from any type of discrimination.

Female employees received support in the form of a specific social assistance service in this area. In addition, the company maintained its partnership with the Avon Institute, backing initiatives to support vulnerable women and the dissemination of the virtual assistant Angela in the Positive Women app. This resource enables victims of violence to request help rapidly and discretely via WhatsApp, without using their voice.

In 2022, the company continued to be a signatory to UN Women and the Business Coalition for Ending Violence Against Women and Girls.

- **LGBTI+ Pillar:** the company maintained its activities to ensure an inclusive work environment in terms of sexual and gender diversity, avoiding all forms of discrimination. The Transforma TIM program was launched

offering work opportunities for trans persons in operational positions with 100% study grants for undergraduate courses. The company also permits and encourages persons to use their chosen name in all its systems - even if it has not been changed in other instances or on their personal documents.

To reinforce TIM's positioning and commitment to respect and include LGBTI+ persons, The "Proud to Be" campaign was held in June. This involved diverse actions, such as sponsorships, partnerships and educational transmissions addressing the importance of psychological security for LGBTI+ persons.

TIM was the first Brazilian telecommunications company to sponsor the application Somos+, which offers work opportunities and contents and/or guidance on questions related to rights, health and social impact actions for the LGBTI+ community.

In 2022, the company maintained its participation in the Companies and LGBTI Rights Forum +.



- **Race/Ethnic origin pillar:** This continues to be a priority pillar for TIM in its diversity and inclusion program, together with the target to reach 40% black people in its work force. To achieve this, in addition to the routine organic hiring of black people, the company established the target of hiring 50% black people in its intern and apprentice programs.

In November, the month in which Black Consciousness Day is held, the company leveraged its racial initiatives with the campaign “Get out of Silent Mode”. The actions included the launch of a song in partnership with Brazilian musicians, affirmative action vacancies for black people and educational live transmissions about the importance of combating racism and conducting inclusion programs in companies.

Aimed at supporting and accelerating careers for black people, TIM launched its Black Pearls Program. Divided into three phases, the first encompasses communication and awareness measures about race for the entire work force. The second is focused on training, with specific courses for all the black employees in the

company. The third, scheduled for 2023 will work on career acceleration for black employees showing the potential to assume leadership positions in the company in the future.

In 2022, TIM maintained its participation in the Business Coalition for Racial and Gender Equality.

- **Generations Pillar:** at TIM, generational diversity is valued, and people of all ages are brought together in a context of mutual exchange and learning. To boost the inclusion of mature persons in the labor market, the company developed TIM 50+, a program that offers work opportunities in its stores for people aged over 50 years.

In 2022, initiatives focused on awareness and combating ageism – discrimination against people of a certain age or age group, in particular the elderly – were maintained, worthy of note being the partnership with the Hub 50+ and the company Deloitte, for the creation and dissemination of a longevity glossary, a document that offers concepts and examples on how to combat ageism in society.

October was used to intensify actions in the generational pillar. In a campaign, affirmative action vacancies and a talent bank for people aged 50 and over were disseminated, in conjunction with educational transmissions to combat ageism and promote inclusion, as well as discounts on graduate courses for all employees of over 50 years.

In 2022, the company maintained its participation in the Generations and Future of Work Forum.

- **Disabled Persons Pillar:** TIM organizes diverse initiatives to hire, develop and retain disabled people in the company. Continuous communication and awareness actions on ableism – discrimination against the disabled – are conducted to rupture paradigms and cultural and physical barriers to ensure equality of opportunity.



*See more about the
company's initiatives
in the TIM Diversity and
Inclusion website*

In 2022, a program was created to accelerate the hiring of disabled people in the company. By means of awareness measures on this question, aimed at all employees, training activities to prepare our teams and to offer affirmative action vacancies in operational areas, a total of 119 disabled persons were hired. Most of these were in the call center area, which employs a model involving 100% remote teleworking. In the year, TIM had approximately 3% of people with disabilities in its workforce, representing 61% of its quota of hiring disabled people. This corresponds to 5% of the total work force stipulated for the period in the Conduct Adjustment Agreement established with the State Public Prosecution department (law nº 8.213/91).

The company maintained its participation in the Business Social Inclusion Network (Reis).

Anti-discrimination

Reports on discrimination are received by the TIM Whistleblower Channel, with the adoption of disciplinary measures in accordance with the company's internal standards. 13 reports were received in 2022, of which seven were related to LGBTI+, two to fatphobia, two to race, one to ageism and one to physical appearance. Of these cases, five resulted in an inconclusive investigation, five were deemed substantiated, two unsubstantiated and one is still under analysis.

For the five substantiated cases, the measures taken were: feedback, warning, notification to the commercial partner, and training in the Code of Ethics and Conduct and in diversity and inclusion.

GRI 406-1

In addition to these cases, another six received in 2021 were finalized in 2022. Of these, four were unsubstantiated, one was substantiated and one did not have enough elements for analysis. In the substantiated case, the person reported resigned during the course of the investigation.



2022 Highlights

In 2022, TIM was recognized in diversity awards and rankings:



- **B3 GPTW Index:** listed on the index of companies with shares traded on the Brazilian stock exchange having the best environment to work in;

- **Refinitiv Diversity & Inclusion Index 2022:** global distinction, occupying 1st place globally among telecommunications companies, 10th globally, and 1st among Brazilian companies;

- **Teva Indexes:** 12th place in the Teva Women in Leadership Index, a Brazilian index that studies female representation in the leadership of Brazilian companies;

- **Bloomberg (GEI):** 1st company in Latin America in the Bloomberg Gender Equality Index and 7th in the world among the 484 companies listed. TIM obtained a score of 88.38, an increase of eight points compared with the previous result;

- **WOB:** recognition in Women on Board (WOB), a Brazilian initiative that certifies companies having at least two women on their board of directors. TIM, in addition to being recognized by WOB, has 30% women on its board;

- **One of the five most sustainable companies in Latin America** from the Latin Trade Index Americas Sustainability Award 2022;

- **São Paulo Diversity seal:** recognition in the São Paulo Diversity Seal, a São Paulo state government initiative that awards Brazilian companies committed to inclusion;

- **Ethos:** one of the 72 companies recognized in the Diversity and Inclusion Survey, an initiative of the Instituto Ethos and the magazine “Época Negócios”, which recognizes Brazilian companies committed to inclusion;

- **Recognized as Innovative HR for D&I initiatives:** a **Think Work** initiative that recognizes companies with innovative HR projects;

- **Diversity in Practice Award:** first place in the “Representativeness” category. The award, promoted by Blend Edu, a start-up specialized in innovation for diversity, recognizes innovative measures that build more inclusive work environments.

During 2022, TIM developed the following additional initiatives:

- **Educational and communication campaigns** aligned with the annual Diversity & Inclusion calendar, which includes the main global dates on the UN calendar and more representative dates in Brazil;

- **TIM Invites:** a series of digital events open to the whole of society aimed at discussing current D&I questions, with renowned speakers and guests. The events in 2022 had more than 48,000 views on the TIM Brazil YouTube platform;

- **Project “Call to TEAM”:** all employees are invited to recommend candidates from minority groups for open work posts in TIM.

Furthermore, the company sponsored events to promote the employability of minority groups, such as Afro Presence (for the third year running), aimed at including black students in the labor market and promoted by the Ministry of Labor and the UN; Black Women Powerhouses, focused on including black women in technology areas; and the Diverse Fair, aimed at including the LGBTI+ community in the labor market.

Individuals in the organization's governance¹ bodies, by age group and gender GRI 405-1

	Age	Number		Percentage (%)	
		Men	Women	Men	Women
2020	Under 30 years	0	0	0	0
	Between 30 and 50 years	0	2	0	75
	Over 50 years	16	1	100	25
	Total	16	3	80	20
2021	Under 30 years	0	0	0	0
	Between 30 and 50 years	0	3	0	60
	Over 50 years	15	2	100	40
	Total	15	5	75	25
2022	Under 30 years	0	0	0	0
	Between 30 and 50 years	1	1	8	14
	Over 50 years	12	6	92	86
	Total	13	7	65	35

¹ Takes into account the Board of Directors, the Advisory Committees and the Statutory Board of Executive Officers.

Considering only the Board of Directors, in December 2022 there were ten members, of whom seven were men and three, women (all aged over 50 years).

Employees by functional category and age group GRI 405-1

	2020			2021			2022		
	<30	30-50	>50	<30	30-50	>50	<30	30-50	>50
Director level	0 (0%)	45 (70%)	19 (30%)	0 (0%)	48 (68%)	23 (32%)	0 (0%)	57 (67%)	28 (33%)
Management	5 (1%)	627 (85%)	107 (14%)	4 (1%)	622 (85%)	107 (14%)	4 (1%)	637 (85%)	111 (14%)
Professionals	571 (13%)	3,241 (78%)	367 (9%)	526 (13%)	3,182 (78%)	377 (9%)	511 (12%)	3,228 (78%)	401 (10%)
Sales force	29 (6%)	437 (88%)	33 (6%)	27 (5%)	430 (87%)	40 (8%)	25 (5%)	445 (85%)	50 (10%)
Stores	730 (38%)	1,172 (61%)	10 (1%)	673 (35%)	1,230 (64%)	7 (1%)	661 (32%)	1,368 (67%)	15 (1%)
Call centers	713 (35%)	1,232 (61%)	83 (4%)	648 (32%)	1,288 (63%)	105 (5%)	463 (25%)	1,277 (68%)	125 (7%)
Interns	61 (90%)	7 (10%)	0 (0%)	180 (83%)	36 (17%)	0 (0%)	196 (83%)	41 (17%)	0 (0%)
Apprentices	234 (100%)	0 (0%)	0 (0%)	128 (100%)	0 (0%)	0 (0%)	141 (100%)	0 (0%)	0 (0%)
Total	2,343 (24%)	6,761 (70%)	619 (6%)	2,186 (22%)	6,836 (71%)	659 (7%)	2,001 (20%)	7,053 (72%)	730 (8%)

Employees by functional level and gender GRI 405-1

	2020		2021		2022	
	Men	Women	Men	Women	Men	Women
Director level	52 (81%)	12 (19%)	58 (82%)	13 (18%)	65 (76%)	20 (24%)
Management	488 (66%)	251 (34%)	476 (65%)	257 (35%)	484 (64%)	268 (36%)
Professionals	2,568 (61%)	1,611 (39%)	2,465 (60%)	1,620 (40%)	2,493 (60%)	1,647 (40%)
Sales force	301 (60%)	198 (40%)	289 (58%)	208 (42%)	296 (57%)	224 (43%)
Stores	845 (44%)	1,067 (56%)	849 (44%)	1,061 (56%)	902 (44%)	1,142 (56%)
Call centers	492 (24%)	1,536 (76%)	502 (25%)	1,539 (75%)	413 (22%)	1,452 (78%)
Interns	37 (54%)	31 (46%)	98 (45%)	118 (55%)	111 (47%)	126 (53%)
Apprentices	77 (33%)	157 (67%)	33 (26%)	95 (74%)	46 (33%)	95 (67%)
Total	4,860 (50%)	4,863 (50%)	4,770 (49%)	4,911 (51%)	4,810 (49%)	4,974 (51%)

Employees by functional level and race GRI 405-1																		
	White			Black			Mixed race			Oriental			Indigenous			Not informed		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Director level	61 (95.3%)	67 (94.4%)	79 (92.9%)	0	0	0	3 (4.7%)	4 (5.6%)	6 (7.1%)	0	0	0	0	0	0	0	0	0
Management	620 (83.9%)	610 (83.2%)	620 (82.5%)	15 (2.0%)	18 (2.5%)	21 (2.8%)	94 (12.7%)	96 (13.1%)	98 (13.0%)	6 (0.8%)	6 (0.8%)	9 (1.2%)	0	0	0	4 (0.6%)	3 (0.4%)	4 (0.5%)
Professionals	2,903 (69.5%)	2,818 (69.0%)	2,808 (67.8%)	236 (5.7%)	244 (6.0%)	283 (6.9%)	949 (22.7%)	933 (22.8%)	949 (22.9%)	52 (1.2%)	52 (1.2%)	55 (1.3%)	6 (0.1%)	7 (0.2%)	6 (0.2%)	33 (0.8%)	31 (0.8%)	39 (0.9%)
Sales force	353 (70.7%)	342 (68.8%)	353 (67.9%)	20 (4.0%)	25 (5.0%)	32 (6.1%)	117 (23.5%)	118 (23.8%)	127 (24.4%)	3 (0.6%)	4 (0.8%)	2 (0.4%)	0	1 (0.2%)	1 (0.2%)	6 (1.2%)	7 (1.4%)	5 (1.0%)
Stores	891 (46.6%)	852 (44.6%)	859 (42.0%)	167 (8.7%)	186 (9.7%)	236 (11.5%)	746 (39.0%)	774 (40.5%)	842 (41.2%)	40 (2.1%)	34 (1.8%)	38 (1.9%)	7 (0.4%)	8 (0.4%)	6 (0.3%)	61 (3.2%)	56 (3.0%)	63 (3.1%)
Call centers	1,127 (55.6%)	1,130 (55.4%)	984 (52.8%)	240 (11.8%)	250 (12.2%)	260 (13.9%)	598 (29.5%)	594 (29.1%)	566 (30.4%)	20 (1.0%)	19 (0.9%)	12 (0.6%)	5 (0.2%)	1 (0.1%)	0	38 (1.9%)	47 (2.3%)	43 (2.3%)
Interns	49 (72.0%)	75 (34.7%)	94 (39.7%)	8 (11.8%)	48 (22.2%)	42 (17.7%)	10 (14.7%)	84 (39.0%)	95 (40.1%)	1 (1.5%)	2 (0.9%)	2 (0.8%)	0	0	0	0	7 (3.2%)	4 (1.7%)
Apprentices	117 (50%)	43 (33.6%)	45 (31.9%)	22 (9.4%)	30 (23.4%)	26 (18.5%)	71 (30.3%)	54 (42.2%)	66 (46.8%)	4 (1.7%)	0	3 (2.1%)	0	0	0	20 (8.6%)	1 (0.8%)	1 (0.7%)
Total	6,121 (62.9%)	5,937 (61.3%)	5,842 (59.7%)	708 (7.3%)	801 (8.3%)	900 (9.2%)	2,588 (26.6%)	2,657 (27.4%)	2,749 (28.1%)	126 (1.3%)	117 (1.2%)	121 (1.2%)	18 (0.2%)	17 (0.2%)	13 (0.2%)	162 (1.7%)	152 (1.6%)	159 (1.6%)

Understanding the proportion tables by functional level:

- For each level, the ratio of the average base salary or total remuneration of women to the average base salary or total remuneration of men was calculated.
- When the ratio is equal to 1, it means the two averages are equal.
- When the ratio is lower than 1, the women earn, on average at the functional level, less than the men.
- Decimal values show how much higher or lower this proportion is: for a result of 0.97, the women earn 3% less on average than the men in the functional category.

The criteria used for the calculation of the proportion between the base salary and total remuneration received by the women and by the men were aligned with Management by Objectives (MBO) in 2022 and the amounts for the previous years (2020/2021) were recalculated.

The weighted average between the salaries and remuneration of women over men active in December was considered, taking into account the combination of cargo and state. The positions of CEO, statutory directors and combinations without a representative of one of the genders were not considered. **GRI 2-4**

Ratio of women’s basic salary and remuneration to men’s GRI 405-2

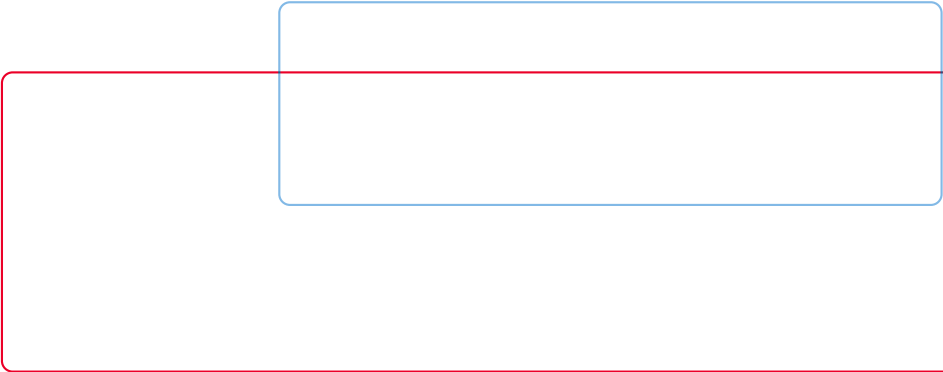
	2020		2021		2022	
	Base salary ¹	Remuneration ²	Base salary ¹	Remuneration ²	Base salary ¹	Remuneration ²
Director level	0.97	0.97	1.04	1.04	0.93 ²	0.92 ²
Leaders	0.95	0.95	0.98	0.98	0.97	0.97
Stores	1.00	1.00	1.00	1.00	1.00	1.00
Call centers	1.01	1.01	1.00	1.00	1.00	1.00
Other professionals	0.98	0.98	0.98	0.98	0.98	0.98

¹ Variation due to turnover and financial recognition at director level. Due to the low number of directors, such movements, however small they are, significantly alter the indicator.

² Takes salaries and main bonuses, such as remuneration linked with sales (target per position) and profit share (PPR/MBO) into account.



54 times is the ratio of the highest compensation paid by TIM (CEO) to the average remuneration of the other employees (excluding the CEO) **GRI 2-21**



Understanding the hiring and turnover tables:

- The total number of employees hired/terminated and the hiring/turnover rate are shown.
 - These rates are calculated considering as the denominator the average total number of employees in each category throughout the year (December 2021 to November 2022).
 - Interns and apprentices are not counted.
 - Voluntary and involuntary terminations are considered.
- In 2022, the turnover rate at TIM, considering the average between admissions and terminations, was 24% and the voluntary termination rate was 11%.

Employees hired, by region GRI 401-1

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
North	34	14%	92	40%	88	35%
Northeast	83	13%	133	22%	155	25%
Midwest	69	19%	110	32%	115	33%
Southeast	873	12%	1,514	20%	1,631	22%
South	145	19%	295	42%	301	47%
Total	1,204	13%	2,144	23%	2,290	25%

Employees hired, by age group GRI 401-1

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
Under 30 years	533	19%	969	42%	802	46%
From 30 to 50 years	648	10%	1,135	18%	1,424	21%
Over 50 years	23	4%	40	5%	64	9%
Total	1,204	13%	2,144	23%	2,290	25%

Employees who left the company, by age group

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
Under 30 years	614	23%	792	34%	686	40%
From 30 to 50 years	810	13%	1,329	21%	1,426	21%
Over 50 years	59	10%	105	14%	109	16%
Total	1,483	16%	2,226	24%	2,221	24%

Employees hired, by gender

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
Men	629	13%	1,077	23%	1,133	25%
Women	575	12%	1,067	23%	1,157	25%
Total	1,204	13%	2,144	23%	2,290	25%

Employees who left the company, by gender

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
Men	804	17%	1,185	25%	1,119	24%
Women	679	14%	1,041	23%	1,102	24%
Total	1,483	15%	2,226	24%	2,221	24%

Employees who left the company, by region

	2020		2021		2022	
	N°	Rate	N°	Rate	N°	Rate
North	48	20%	78	34%	75	30%
Northeast	118	18%	161	26%	103	16%
Midwest	75	20%	121	35%	101	29%
Southeast	1,027	14%	1,571	21%	1,580	22%
South	215	28%	295	42%	362	57%
Total	1,483	15%	2,226	24%	2,221	24%

In 2022, the activities of two TIM areas - Anti-fraud and Billing - were outsourced, which affected the company headcount, with the lay off of 244 employees. This decision was discussed with the unions, and TIM sought to reallocate all the employees affected in other functions in the company, to help them with outplacement or to allocate them with the third-party provider (in this case, the employees were reallocated to a function other than providing services for TIM, which would be prohibited by law).



Human **rights**

GRI 2-23, 2-24, 2-25, 410-1

It is a TIM principle to treat everyone with dignity, respecting and ensuring the non-violation of internationally recognized rights, including those related to work and non-discrimination. The company seeks to promote respect for human rights in its operations and in its value chain.

The company has participated in the Human Rights Working Group in the Brazilian Global Compact Network since 2015 and has established internal regulations on the subject. Among them, worthy of note are the Policy on the Prevention, Prohibition and Management of Psychological and Sexual Harassment and Bullying, the Code of Ethics and Conduct, the TIM Group's Human Rights Policy, the Relationship Policy with Suppliers, and the Social Responsibility Policy.

All these standards guide the daily conduct of employees and are publicly available on the institutional website and cover, among other matters, the prohibition of child, forced or slave-like labor, the repudiation of discrimination and sexual or psychological harassment, the guaranteed freedom of union association and collective bargaining and the valuing and promotion of diversity.



The company **promotes respect for human rights** in its operations and in its value chain



On the TIM training platform, a specific course on Human Rights is available to all employees. The content provides training on the subject and promotes a culture of respect for human rights. For security staff, was applied formal training in the specific policies and procedures in this area. In 2022, 100% of these workers were trained.

Any deviations that disrespect human rights can be reported on TIM's Whistleblower Channel. In 2022, 12 reports related to this area were received, eight of which were related to threats or coercion (five substantiated, two without elements for analysis and one under evaluation) and one relative to privacy (inconclusive) and three referring to physical aggression (two substantiated and one unsubstantiated). Disciplinary measures were applied, including dismissal, feedback; support was provided for the victims.

Periodically, TIM carries out a self-assessment of its activities in relation to possible impacts on human rights, such as those related to diversity, discrimination, equal opportunities, freedom of union association, labor practices and privacy in the use of customer data. This due diligence process is based on the Global Compact Human

Rights Capacity Diagnostic (HRCDD) questionnaire, involving key areas of the Company. This methodology is based on the United Nations Guiding Principles on Business and Human Rights (John Ruggie Principles).

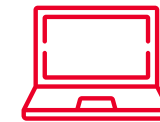
The last assessment cycle was conducted in 2021, in which grade 3 was maintained (scale from 1 to 6), which represents an efficient management maturity level. The most vulnerable audiences identified were children and adolescents, women, people with disabilities and the elderly. No corrective measures were identified as necessary.

In December 2022, a broader human rights due diligence process was initiated by TIM, based on reference documents for the telecommunications sector, legislation on human rights and internal company standards. With support from a consultancy specialized in this area, a risk matrix was elaborated for TIM. This involved a preliminary assessment which enabled the identification of the main dimensions, categories of impact and exposure to human rights risks. In 2023, TIM will develop measures related to the risks identified and their possible impacts.

Adult content

All the agents in the production chain are engaged in combating pedophilia on the internet and access to and consumption of adult content. Aware of the relevance of this question, TIM supports SaferNet (an entity focused on the safe consumption of online content), together with other companies in the sector and government agencies, to prevent this type of crime and encourage reporting.

Access to adult content services made available by TIM is only open to customers with the use of a password and a declaration that the user is of legal age. In addition, the Company limits its portfolio to classification 3.2 (international code). Appropriate filtering and abuse prevention systems are also activated in TIM services, including services provided nationally, such as image downloads, video streaming and podcasts. The revenue associated with access to adult content totaled around BRL 15 million in 2022; revenue from gambling was around BRL 150,000.



See the *TIM human rights standards and policies*

68% of the internal audience was **engaged in** human rights training

Instituto TIM

GRI 203-2



The Instituto TIM strengthens and directs the Company's social investment in the promotion of human development, contributing to corporate ESG strategy and the company's indirect economic impacts on society.

Founded in 2013, the institute believes and works towards the democratization of knowledge, science, and technology, with innovation as a lever for transformation. The projects developed are guided by four principles and have already benefited more than 700 thousand people in around 500 cities, in all the Brazilian states.



The Instituto TIM uses **innovation as a lever** for social transformation

The institute focuses on four areas of activity:

- **Teaching:** development and democratization of educational approaches and resources that contribute towards education in Brazil;
- **Technological applications:** investment in technological solutions that contribute to human development;
- **Work:** creation and democratization of teaching strategies that promote the productive technological inclusion of young people;
- **Social inclusion:** promotion of civic awareness and the diffusion of knowledge.

Key projects

Instituto TIM scholarships – OBMEP

The program offers scholarships for medalists in the Brazilian Public School Mathematics Olympiad (OBMEP) who have entered public universities and come from low-income families.

90 students from **52 public higher education institutions** benefited in 2022

Since 2014, **more than 300 students** have benefited

BRL 1,000 was the average monthly scholarship offered, for up to four years

172 scholarship holders finished university; **57 were women** and **115, men**

Academic Working Capital (AWC)

Entrepreneurial education program that supports university students determined to transform course conclusion work (TCC) into technology-based businesses; students receive training, mentoring and financial support to purchase materials for the development of prototypes. Created in 2015, this project has achieved the following results:

486 university students benefited

189 projects supported

54 universities nationwide involved

83 start-ups launched;

NextCam, created by three participants in the 2018 edition of the program, **won the Engie Brasil Innovation Award**. The students Guilherme Cordeiro Vogt, Adriano Peniche dos Santos and Luis Guilherme Dias de Souza, on the Electrical Engineering course at the Federal University of Paraná, created the start-up with the goal of reducing work-related accidents by means of computational vision and artificial intelligence. In March 2022, the start-up merged with Monuv, a cloud monitoring company.





TIM TEC

Platform that offers free courses in open software aimed at professional and ICT – information and communication technologies – education; there are also training courses on the subject for basic education teachers.

32 free courses
available

**more than
145,000** users
registered on the
platform

Bateria do Instituto TIM (Drum Group)

An initiative for children, youths, and adults, with and without disabilities, residents of Rio de Janeiro, to promote social inclusion through music education; the band is supported professionally by a conductor, musician monitors and a sign language (Libra) interpreter.

50
members

**Singing and
dancing classes
with psychological
support.**

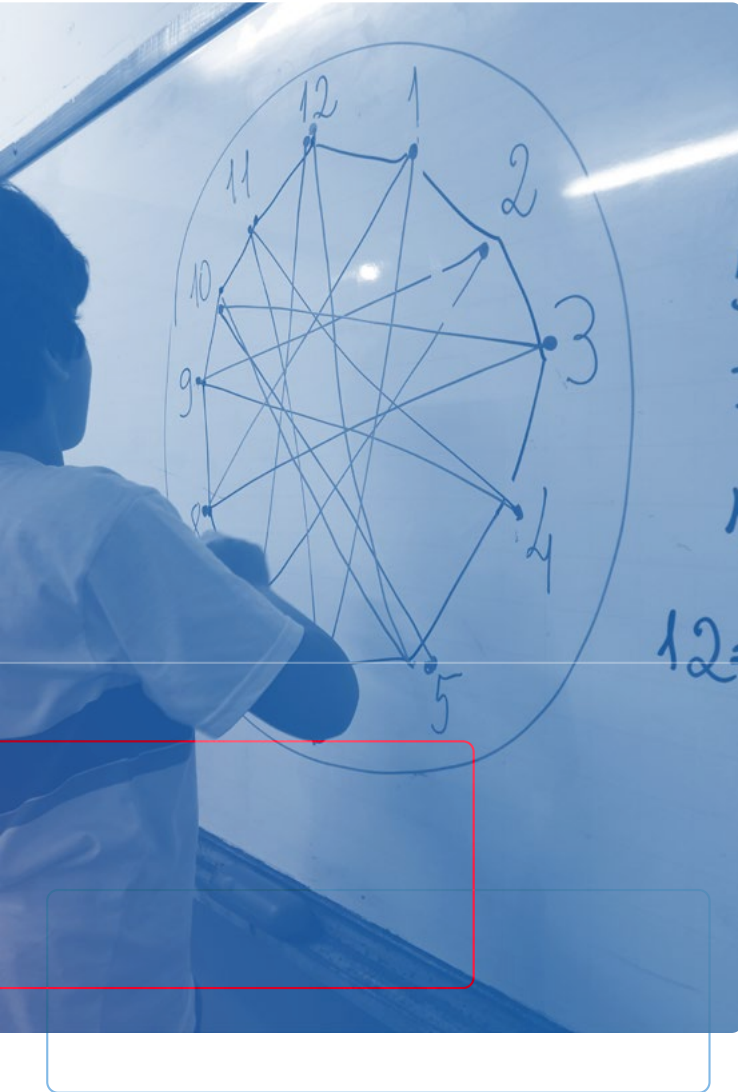
One by One Partnership

The Exponential Education initiative is aimed at preparing people for the labor market, stimulating enterprise in a playful, interactive way. The program is oriented to children, adolescents and young people supported by One by One - a body that promotes social inclusion for families that have children with physical, motor or neurological impairments or that are socially vulnerable.

- In 2022, 70 students, 63% of whom are women, concluded the course;
- With the goal of providing graduates with their first professional experience, three students with distinguished performance in the first group became monitors in the current semester and the remaining students were sent on other courses to continue their professional development.



Further information
about the [**Instituto
TIM projects**](#)



Brazil Math Circle

In May 2022, the Instituto TIM, in collaboration with Unesco Brazil, launched the book “Matemática é Liberdade (Mathematics is Freedom): The Math Circle and O Círculo da Matemática do Brasil”, which presents the accumulated experiences of the Brazilian Math Circle in schools in every region of the country.

Focused on the first years of basic education, the O Círculo da Matemática do Brasil project introduced the Math Circle approach, idealized by the lecturers Bob and Ellen Kaplan, from Harvard University (USA), in the country, adapting it and the content to the Brazilian context. The project stimulates student participation and reflection so that they may acquire knowledge of maths.

The book presents the results of the project which, since 2013 has involved 25,000 students and 4,500 teachers from 29 cities. The work showcases the richness of classroom activities, the children’s amazement with their new discoveries, and the challenges faced by educators in implementing this new methodology.

Private social investment

TIM [Private Social Investment Policy](#) sets forth the strategic guidelines for the company’s corporate citizenship actions. The company’s social investments are made through donations to Instituto TIM projects and sponsorships that drive social benefits. In 2022, more than BRL 24

million was invested, 77% of which related to tax incentives. An integral part of TIM brand strategy, the post-pandemic face to face events were resumed. The company plans to invest more in community initiatives, especially free ones linked with music.

Social investments (BRL thousands)			
	2020	2021	2022 ¹
Donations²	265	1,402	2,160
Instituto TIM projects	4,173	3,233	3,496
Education	2,880	1,545	1,185
Investments	0	0	0
Work	600	116	708
Inclusion	230	632	814
Others	463	940	789
Community initiatives	8,058	6,043	19,029
Sports sponsorship	0	3,480	1,680
Cultural sponsorship	8,058	1,860	16,619
Others	0	703	730
Total	12,496	10,679	24,684

¹ Social investment management expenses totaled BRL 460,000. The financial equivalent of volunteer hours performed by employees in 2022 was BRL 3,246.

² In 2022, the difference was due mainly to the allocation of funds to the BNDES Novos Rumos Program.

06

Attachments

Certifications

GRI content index

SASB content index

Assurance Report

Credits

Certifications

Certification	Area certified	Scope
ISO 37001:2016 Anti-Bribery Certification Acquisition: since 2021	National Telecommunications Service: mobile (SMP), fixed (STFC) and broadband (SCM) TIM S.A.	National
ISO 9001:2015 Quality Certification Acquisition: since 2000	TIM S.A. Network Management	National. Operating units where processes are executed: Minas Gerais, Rio de Janeiro, São Paulo, Pará, Paraná, Pernambuco and Brasília.
ISO 9001:2015 Quality Certification Acquisition: since 2005	TIM S/A Postpaid and Prepaid billing management	National. Operating units where processes are executed: Rio de Janeiro and São Paulo.
ISO 14001:2015 Environmental Certification Acquisition: since 2010	TIM S.A. network management and operation	Rio de Janeiro, São Paulo and Espírito Santo.
ISO 27001:2013 Information Security Certification Acquisition: since 2022	Information Security Management System that supports the monitoring of events and the handling of security incidents by the Cybersecurity Operations Center (CSOC)	National. Operating units where processes are executed: Rio de Janeiro and São Paulo.
ANATEL Portability Regulatory certification Acquisition: since 2018	Provision of Portability Service (RGP General Portability Regulation - Attachment to Ordinance 460/2007).	National. Operating units where processes are executed: Rio de Janeiro and São Paulo.
SOx Certification Mandatory certification for companies listed on the NYSE: since 2006	TIM S.A. Internal Control System	International
ICI Internal Control Excellence Award	TIM S.A. Internal Control System	International

GRI content index

Declaration of use	TIM S.A. reported in accordance with the GRI Standards for the period from January to December 2022.
GRI 1 used	GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 2: General disclosures 2021	2-1 Organizational details	25			
	2-2 Entities included in the organization’s sustainability reporting	6			
	2-3 Reporting period, frequency and contact point	6			
	2-4 Restatements of information	113			
	2-5 External assurance	138			
	2-6 Activities, value chain and other business relationships	25, 35, 36, 70			
	2-7 Employees	95	2-7-b-iii	Not applicable.	There are no employees with this type of contract.

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 2: General disclosures 2021	2-8 Workers who are not employees			Information unavailable/incomplete.	The company has sought to enhance monitoring mechanisms for its third-party workers.
	2-9 Governance structure and composition	27			
	2-10 Nomination and selection of the highest governance body	29			
	2-11 Chair of the highest governance body	28			
	2-12 Role of the highest governance body in overseeing the management of impacts	30			
	2-13 Delegation of responsibility for managing impacts	30			
	2-14 Role of the highest governance body in sustainability reporting	28, 30			
	2-15 Conflicts of interest	40, 41			
	2-16 Communication of critical concerns	28			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 2: General disclosures 2021	2-17 Collective knowledge of the highest governance body	97			
	2-18 Evaluation of the performance of the highest governance body	30			
	2-19 Remuneration policies	31			
	2-20 Process to determine remuneration	30, 31			
	2-21 Annual total compensation ratio	113			
	2-22 Statement on sustainable development strategy	3			
	2-23 Policy commitments	13, 20, 26, 40, 47, 116			
	2-24 Embedding policy commitments	40, 41, 44, 69, 116			
	2-25 Processes to remediate negative impacts	17, 66, 68, 116			
	2-26 Mechanisms for seeking advice and raising concerns	43, 68			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 2: General disclosures 2021	2-27 Compliance with laws and regulations	45			
	2-28 Membership associations	22 In 2022, TIM association membership costs totaled BRL 31.7 million. The main association costs were: - GSMA: BRL 552,294.00; - ABR: BRL 29,829,609.74; - Conexis: BRL 367,500.00 - Telebrasil: BRL 21,556.00; and - ConectarAgro: BRL 140,000.00.			
	2-29 Approach to stakeholder engagement	7, 17			
	2-30 Collective bargaining agreements	105			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	7			
	3-2 List of material topics	6, 7, 9, 10			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
Innovation and technology					
GRI 3: Material Topics 2021	3-3 Management of material topics	58			
GRI 203: Indirect economic impacts 2016	GRI 203-1 Investments in infrastructure and services supported	53, 92			
Digital inclusion and connectivity					
GRI 3: Material Topics 2021	3-3 Management of material topics	92			
GRI 203: Indirect economic impacts 2016	GRI 203-2 Significant indirect economic impacts	52, 92, 118			
Privacy and data security					
GRI 3: Material Topics 2021	3-3 Management of material topics	72			
GRI 418: Customer privacy	GRI 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	72, 75			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
Energy efficiency					
GRI 3: Material Topics 2021	3-3 Management of material topics	86			
GRI 302: Energy 2016	GRI 302-1 Energy consumption within the organization	87			
	GRI 302-3 Energy intensity	86, 87			
	GRI 302-4 Reduction of energy consumption	86, 87			
GRI 305: Emissions 2016	GRI 305-1 Direct (Scope 1) GHG emissions	80, 83			
	GRI 305-2 Energy Indirect (Scope 2) GHG emissions from the acquisition of energy	80, 84			
	GRI 305-3 Other indirect (Scope 3) GHG emissions	80, 84			
	GRI 305-4 GHG emissions intensity	80, 84			
	GRI 305-5 Reduction of GHG emissions	80, 82			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
Service quality					
GRI 3: Material Topics 2021	3-3 Management of material topics	52			
GRI 417: Marketing and Labeling 2016	GRI 417-1 Requirements for product and service information and labeling	46			
	GRI 417-2 Incidents of non-compliance concerning product and service information and labeling	44			
	GRI 417-3 Incidents of non-compliance concerning marketing communications	44			
Health, well-being and safety					
GRI 3: Material Topics 2021	3-3 Management of material topics	94			
GRI 401: Employment 2016	GRI 401-1 New employee hires and employee turnover	114			
	GRI 401-3 Parental leave	103			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 403: Occupational health and safety 2018	GRI 403-1 Occupational health and safety management system	100			
	GRI 403-2 Hazard identification, risk assessment and incident investigation	100			
	GRI 403-3 Occupational health services	100, 103			
	GRI 403-4 4 Worker participation, consultation, and communication on occupational health and safety.	100			
	GRI 403-5 Worker training on occupational health and safety	100			
	GRI 403-6 Promotion of worker health	100, 103			
	GRI 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	100			
	GRI 403-8 Workers covered by an occupational health and safety management system	100			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 403: Occupational health and safety 2018	GRI 403-9 Work-related injuries	100, 102		Information unavailable/incomplete	At this moment, TIM is unable to calculate the hours worked by non-employees but is working on obtaining this information for the next report.
	GRI 403-10 Work-related ill health	100			
GRI 416: Customer health and safety 2016	GRI 416-1 Assessment of the health and safety impacts of product and service categories	46			
	GRI 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	46			
Ethics, integrity and compliance					
GRI 3: Material Topics 2021	3-3 Management of material topics	40			
GRI 205: Anti-corruption 2016	GRI 205-1 Operations assessed for risks related to corruption	40, 41			
	GRI 205-2 Communication and training in anti-corruption policies and procedures	44			
	GRI 205-3 Confirmed incidents of corruption and actions taken	43			

GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 206: Anti-competitive behavior 2016	GRI 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	46			
GRI 406: Non-discrimination 2016	GRI 406-1 Incidents of discrimination and corrective actions taken	109			
GRI 408: Child labor 2016	GRI 408-1 Operations and suppliers at significant risk for incidents of child labor	69			
GRI 409: Forced or compulsory labor 2016	GRI 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	69			
GRI 410: Security practices	GRI 410-1 Security personnel trained in human rights policies or procedures	116			
Transparency and relations with priority audiences					
GRI 3: Material Topics 2021	3-3 Management of material topics	17			
GRI 201: Economic performance 2016	GRI 201-1 Direct economic value generated and distributed	37			
	GRI 201-2 Financial implications and other risks and opportunities due to climate change	47, 49, 80			
	GRI 201-4 Financial assistance received from government	19			



GRI STANDARD	DISCLOSURE	PAGE/ANSWER	OMISSION		
			REQUIREMENTS OMITTED	REASON	EXPLANATION
GRI 204: Procurement practices 2016	GRI 204-1 Proportion of spending on local suppliers	70			
GRI 207: Tax 2019	GRI 207-1 Approach to tax	39			
GRI 308: Supplier environmental assessment 2016	GRI 308-1 New suppliers that were screened using environmental criteria	69			
GRI 405: Diversity and equal opportunity 2016	GRI 405-1 Diversity of governance bodies and employees	111, 112			
	GRI 405-2 Ratio of basic salary and remuneration of women to men	113			
GRI 414: Supplier social assessment 2016	GRI 414-1 New suppliers that were screened using social criteria	69			
GRI 415: Public policy 2016	GRI 415-1 Political contributions	46			

GRI STANDARDS	INDICATORS NOT ASSOCIATED WITH THE MATERIAL TOPICS	PAGE/ANSWER
GRI 301-1	Materials used by weight or volume	81
GRI 301-3	Reclaimed products and their packaging materials	90
GRI 303-1	Interactions with water as a shared resource	79
GRI 303-2	Management of water discharge-related impacts	79
GRI 303-5	Water consumption	79
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	78
GRI 304-2	Significant impacts of activities, products and services on biodiversity	77, 78
GRI 306-1	Waste generation and significant waste-related impacts	88, 89
GRI 306-2	Management of significant waste-related impacts	88, 89
GRI 306-4	Waste diverted from disposal	90
GRI 306-5	Waste directed to disposal	90
GRI 404-1	Average hours of training per year per employee	97, 98
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	97
GRI 404-3	Percentage of employees receiving regular performance and career development reviews	94

SASB content summary

SASB STANDARD	DISCLOSURE	PAGE/ANSWER
Innovation and technology		
SASB TC-TL-520a.2	Actual average download speed	The methodology used in calculating the measure, in accordance with the standard adopted in Brazil by Anatel, is different from the one suggested. The disclosure of absolute amounts is not possible due to strategic questions of confidentiality.
SASB TC-TL-520a.3	Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practices	54
Digital inclusion and connectivity		
SASB TC-TL-000.A	Number of wireless subscribers	36
SASB TC-TL-000.B	Number of wireline subscribers	36
SASB TC-TL-000.C	Number of broadband subscribers	36
SASB TC-TL-000.D	Network traffic (Petabytes)	87
Privacy and data security		
SASB TC-TL-220a.1	Description of policies and practices relating to behavioral advertising and customer privacy	72
SASB TC-TL-220a.2	Number of customers whose information is used for secondary purposes (number)	72
SASB TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customers (local currency, BRL)	75

SASB STANDARD	DISCLOSURE	PAGE/ANSWER
SASB TC-TL-220a.4	Data privacy	75
SASB TC-TL-230a.1	Data security	72, 75
SASB TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	72
Energy efficiency		
SASB TC-TL-130a.1	Environmental footprint of operations	86, 87
Service quality		
SASB TC-TL-550a.1	Managing systemic risks from technology interruptions	48
SASB TC-TL-550a.2	Discussions of systems to provide unimpeded supply during service interruptions	47
Ethics, integrity and compliance		
SASB TC-TL-520a.1	Competitive behavior and open internet	46

SASB STANDARDS	INDICATORS NOT ASSOCIATED WITH THE MATERIAL TOPICS	PAGE/ANSWER
SASB TC-TL-440a.1	Product end-of-life management	88, 89, 90

Assurance report

GRI 2-5

Independent auditors limited assurance report on sustainability indicators contained in TIM S/A's ESG Report and the Greenhouse Gas Emissions Inventory, base year 2022

To
Shareholders, Directors and Management of
TIM S/A
Rio de Janeiro - RJ

Introduction

We have been engaged by TIM S/A ("TIM") to present our limited assurance report on the sustainability indicators ("indicators") contained in TIM's 2022 ESG Report ("Report") and TIM's 2022 the Greenhouse Gas Emissions Inventory ("GHG Inventory"), for the year ended December 31, 2022.

Our limited assurance does not extend to prior period information or any other information disclosed in conjunction with the Report or GHG Inventory, including any embedded images, audio files or videos.

Responsibilities of TIM's management

TIM's management is responsible for:

- Select and establish appropriate criteria for preparing the information contained in the Report and GHG Inventory;
- Prepare information in accordance with the criteria and guidelines of the Global Reporting Initiative ("GRI Standards"), the Sustainability Accounting Standards Board - Telecommunication ("SASB") and for the preparation of the GHG Inventory, TIM adopted the specifications of the Brazilian GHG Protocol Program;
- Design, implement and maintain internal control over the relevant information for the preparation of the indicators contained in the Report and GHG Inventory, which are free from material distortion, regardless of whether caused by fraud or error.

Responsibility of the independent auditors

Our responsibility is to express a conclusion on the indicators contained in the Report and GHG Inventory, based on the limited assurance work carried out in accordance with Technical Communication CTO 07 - 2022 issued by the CFC, and based on NBC TO 3000 - Non-Audit Assurance Work and Review, also issued by the CFC, which is equivalent to the international standard ISAE 3000 Assurance engagements other than audits or reviews of historical financial information, issued by the International Auditing and Assurance Standards Board (IAASB) and ISAE 3410 Assurance Engagements on Greenhouse Gas Statements also issued by the IAASB. These standards require the auditor to comply with ethical requirements, independence and other responsibilities related to it, including the application of the Brazilian Quality Control Standard (NBC PA 01) and, therefore, the maintenance of a comprehensive quality control system, including documented policies and procedures on meeting ethical requirements, professional standards, and applicable legal and regulatory requirements.

Additionally, the aforementioned standards require that the work be planned and executed with the objective of obtaining limited assurance that the indicators contained in the Report and GHG Inventory, taken as a whole, are free of material distortions.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) and ISAE 3410 consists primarily of inquiries to TIM's management and other TIM's professionals who are involved in preparing the information, as well as the application of analytical procedures to obtain evidence that make it possible to conclude, in the form of a limited assurance, on the information taken as a whole. A limited assurance work also requires the execution of additional procedures, when the independent auditor becomes aware of matters that lead him to believe that the indicators disclosed in the Report and GHG Inventory, taken as a whole, may present material distortions.

The selected procedures were based on our understanding of the aspects related to the compilation, materiality and presentation of

the indicators contained in the Report and GHG Inventory, other circumstances of the work and our consideration of areas and processes associated with the material information disclosed in the Report, in what material misstatements could exist. The procedures comprised, among others:

- a) the planning of the work, considering the relevance, the volume of quantitative and qualitative information and the operational systems and internal controls that served as a basis for the preparation of indicators contained in the Report and GHG Inventory;
- b) understanding the calculation methodology and procedures for compiling indicators and GHG Inventory through inquiries with the managers responsible for preparing the information;
- c) the application of analytical procedures on the quantitative information and inquiries about the qualitative information and its correlation with the indicators contained in the Report and GHG Inventory;
- d) for cases in which the indicators and GHG Inventory correlate with indicators of a financial nature, the confrontation of these indicators with the financial statements and/or accounting records.

The limited assurance work also included adherence to the guidelines and criteria of the GRI Standards, SASB and specifications of the Brazilian GHG Protocol Program applicable in the preparation of the indicators contained in the Report and GHG Inventory.

We believe that the evidence obtained in our work is sufficient and appropriate to support our limited conclusion.

Scope and limitations

Procedures performed in limited assurance engagements vary in nature and timing and are less extensive than in reasonable assurance engagements. Consequently, the level of assurance obtained in a limited assurance engagement is substantially less than that which would have been obtained if a reasonable assurance engagement had been performed. If we had carried out a reasonable assurance work, we could have identified other matters and possible distortions that may exist in the indicators contained in the Report and GHG Inventory. Accordingly, we do not express an opinion on this information.

Non-financial data are subject to more inherent limitations than financial data, given the nature

and diversity of methods used to determine, calculate or estimate such data. Qualitative interpretations of data materiality, relevance and accuracy are subject to individual assumptions and judgments. Additionally, we did not carry out any work on data reported for previous periods, nor in relation to future projections and targets.

The preparation and presentation of the indicators and GHG Inventory followed the GRI Standards, SASB and specifications of the Brazilian GHG Protocol Program and, therefore, do not have the objective of ensuring compliance with social, economic, environmental or engineering laws and regulations. The aforementioned standards provide, however, for the presentation and disclosure of any non-compliance with such regulations when sanction or significant fines occur. Our assurance report must be read and understood in this context, inherent to the selected criteria (GRI Standards, SASB and specifications of the Brazilian GHG Protocol Program).

Conclusion


Based on the procedures carried out, described in this report and on the evidence obtained, nothing has come to our attention that leads us to believe that the indicators contained in TIM's Report and

GHG Inventory for the year ended December 31, 2022, were not prepared, in all relevant aspects, in accordance with the criteria and guidelines of the GRI Standards, SASB and specifications of the Brazilian GHG Protocol Program.

Rio de Janeiro (RJ), March 27th, 2023.

Ernst & Young

Auditores Independentes S/S Ltda.
CRC SP- 034519/O



Leonardo Masseli Dutra
Sustainability Partner



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Credits

TIM Brasil

TIM Coordination
**Regulatory, Institutional and Press
Relations – Environmental, Social
& Governance – Corporate Social
Responsibility**

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