

Second-Party Opinion

TIM Sustainability Financing Framework



Evaluation Summary

Sustainalytics is of the opinion that the TIM Sustainability Financing Framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2018. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Energy Efficiency, Renewable Energy, Circular Economy, Digital Inclusion, Response to Health Crises such as COVID-19 – are aligned with those recognized by both the Green Bond Principles, Green Loan Principles and Social Bond Principles. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 8, 9 and 12.



PROJECT EVALUATION / SELECTION Telecom Italia's Sustainability Steering Committee, comprised of representatives from its CSR, Finance and other relevant departments and chaired by the CEO, will evaluate and select projects and ensure they comply with the eligibility criteria in this Sustainability Financing Framework. Sustainalytics considers the project selection process to be in line with market practice.



MANAGEMENT OF PROCEEDS Telecom Italia will manage the net proceeds on a portfolio basis and will establish and maintain a sustainability register to track progress of eligible projects. The Company intends to fully allocate net bond proceeds within 24 months of issuance and has committed to a lookback period of 2 calendar years. Unallocated proceeds may be temporarily invested in accordance with the Company's investment guidelines. This is in line with market practice.



REPORTING Telecom Italia intends to report on allocation of proceeds on its website on an annual basis until full allocation. The Company's allocation reporting will include all relevant details including the amount allocated per category, share of financing versus refinancing and the amount of unallocated proceeds. In addition, Telecom Italia is committed to reporting on relevant impact metrics and the Sustainability Financing Framework lists relevant potential metrics for both the green and social categories. Sustainalytics views Telecom Italia's allocation and impact reporting as aligned with market practice.

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Issuer Location Rome, Italy

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Introduction

Telecom Italia (“TIM”, or the “Company”) is a large telecommunications company based in Italy, serving almost 100 million customers between Italy and Brazil. The Company is based in Rome, Italy and provides a variety of mobile and land-based products and services to its customers, including broadband, ultrabroadband and, increasingly, fibre-optic and 5G offerings.

TIM has developed the TIM Sustainability Financing Framework (the “Framework”) under which it intends to issue one or more green, social and/or sustainability bonds, as well as green loans, and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future projects that aim to make the Company’s telecommunications infrastructure more energy efficient and to provide access to digital tools and services for vulnerable populations currently underserved in Italy. The Framework defines eligibility criteria in five areas:

1. Energy Efficiency
2. Renewable Energy
3. Circular Economy
4. Digital Inclusion
5. Response to Health Crises

TIM engaged Sustainalytics to review the TIM Sustainability Financing Framework, dated September 2020, and provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the Green Bond Principles 2018 (“GBP”), Green Loan Principles 2018 (“GLP”), Social Bond Principles 2020 (“SBP”) and Sustainability Bond Guidelines 2018 (SBG).¹ This Framework has been published in a separate document.²

Scope of work and limitations of Sustainalytics Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent³ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2018, Social Bond Principles 2020, and Sustainability Bond Guidelines 2018, as administered by ICMA, as well as the Green Loan Principles 2018, as administered by the LMA;
- The credibility and anticipated positive impacts of the use of proceeds;
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.5.1, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of TIM’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. TIM representatives have confirmed (1) they understand it is the sole responsibility of TIM to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

¹ The Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>

² The TIM Sustainability Financing Framework is available on Telecom Italia’s website at: www.gruppotim.it

³ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and TIM.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond and/or loan proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the intended allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that TIM has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the TIM Sustainability Financing Framework

Sustainalytics is of the opinion that the TIM Sustainability Financing Framework is credible, impactful and aligns with the four core components of the GBP, GLP, SBP, and SBG. Sustainalytics highlights the following elements of TIM's Sustainability Bond Framework:

- Use of Proceeds:
 - The eligible categories – Energy Efficiency, Renewable Energy, Circular Economy, Digital Inclusion, and Response to Health Crises – are aligned with those recognized by the GBP and SBP.
 - Under the Energy Efficiency category, TIM will finance projects aimed at managing and reducing the energy consumption of its network infrastructure (both mobile and fixed), as well as projects aimed at reducing energy consumption in data centres and other buildings.
 - Energy efficiency projects may include the modernization of TIM's broadband network from copper cable to fibre optic, as well as the expansion of TIM's 5G network.
 - Energy efficiency projects may also focus on network optimization, including software and power storage management.
 - The Company also intends to finance the development of smart products and services that have the primary goal of reducing energy consumption and related emissions, under the banner of Internet of Things ("IoT"). The Issuer has disclosed that it may allocate proceeds both to TIM Ventures, which funds start ups in the IoT energy efficiency space, and TIM Open Labs, which is a research and development initiative.
 - Sustainalytics notes that the expansion of 5G and IoT technologies has the potential to improve the energy efficiency of data transmission and operational efficiency across a range of industries and activities downstream of the network provider (see Section 3 for additional detail). Sustainalytics views positively the potential for energy efficiency gains while also noting that, in aggregate, the expansion of 5G and IoT could increase demand for electricity overall.
 - Sustainalytics views positively that the Issuer has stated its intention to finance IoT-related projects that have energy and/or emission reductions as their primary goal.
 - Regarding research and development expenditures, Sustainalytics has communicated that market practice is for such expenditures to be eligible only if there is a reasonable chance of implementation and the achievement of impact in the near-term.

- For its data centres, TIM intends to construct and/or retrofit data centres to be “industry leading”. Sustainalytics has communicated to TIM that such data centres should operate with a Power Usage Effectiveness (“PUE”) score below 1.5.
 - For its green building projects, TIM has committed to financing buildings which are either certified LEED (Gold or above), or BREEAM (Very Good or above), or HQE (Very Good or above), or which are in the top 15% of the most efficient buildings in their respective country. Sustainalytics considers these certification schemes to be credible and the levels selected to be in line with market practice (see Appendix 1 for a summary of the schemes). TIM has also communicated to Sustainalytics an approach to validate which buildings are operating in the top 15% in each country, and TIM has committed to disclosing its methodology in its reporting should the bond proceeds be allocated to such a project. Finally, under this sub-category, TIM may finance building retrofit projects provided that such projects achieve at least a 30% performance improvement over the building’s baseline.
- Under the Renewable Energy category, TIM will finance solar, wind and other renewable energy projects operating with lifecycle emissions below 100 grams of CO₂e/kWh. Sustainalytics views these technologies and threshold as aligned with market practice.
- Under the Circular Economy category, TIM will finance projects aimed at extending the lifecycle of products and increasing the reuse of raw materials, including devices and packaging.
- Under the Digital Inclusion category, TIM intends to finance projects to improve the connectivity and education of underserved populations. Projects include deploying fibre optic networks in areas of Italy with slower internet speeds, as well as rolling out its digital education project called “Operazione Risorgimento Digitale” which includes a goal to train 100,000 people in Italy on use of digital tools and the Internet.
- Under the Response to Health Crises category, TIM contemplates financing various projects to support vulnerable populations during health crises such as COVID-19. Specifically, the Company has or will deploy new fibre optic infrastructure to support increased demand due to the crisis and to provide faster connectivity to populations who currently have a slower Internet connection. The Company has or will distribute digital tools and equipment to various vulnerable populations.
 - TIM has identified a broad range of vulnerable populations. It supports frontline workers and hospital staff through providing digital training and telemedicine platforms. It supports families with pre-schoolers and young children with digital education platforms. The Company also plans to distribute free digital tools to Italian start-ups and small to medium-sized companies (SMEs).
- Project Evaluation and Selection:
 - TIM has formed a Sustainability Steering Committee that will review and select eligible projects. The Committee will be chaired by the CEO and composed of members from the Company’s CSR and Finance departments, as well as other relevant departments as necessary.
 - The Committee will verify alignment between selected projects and this Framework and has a process in place to remove a project if it no longer meets the eligibility criteria or if the committee identifies a material controversy.
 - Based on the Committee and process in place, Sustainalytics considers the Company’s approach to be in line with market practice.
- Management of Proceeds:
 - TIM will track the net proceeds of financings under this Framework using a portfolio approach. The Company’s Treasury team will establish a sustainability register that will be made up of one green eligible sub-portfolio and one social eligible sub-portfolio.
 - The Company will use its efforts to fully allocate within 24 months following each bond issuance and, pending full allocation, may temporarily invest proceeds in accordance with the Company’s investment guidelines which allow cash, deposits and money market instruments.
 - TIM may refinance projects that have disbursements to eligible projects made in the previous two calendar years.
 - Based on the clear process and delegation of responsibility Sustainalytics considers this process to be in line with market practice.
- Reporting:

- TIM is committed to publishing a Sustainable Financing Report annually until full allocation. The reporting will be made available on the Company's website and will include the following:
 - Allocation reporting will include a list of financings; total amount financed per category; the share of financing and refinancing; and the amount of unallocated proceeds, if any.
 - Impact reporting will be provided at each category level. For green projects, the reporting will estimate annual greenhouse gas emissions avoided and may include a number of other potential impact metrics for each sub-category. For social projects, potential impact metrics include estimated number of beneficiaries, among others.
- Based on TIM's commitment to allocation and impact reporting on an annual basis, Sustainalytics considers this process to be in line with market practice.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the TIM Sustainability Financing Framework aligns to the four core components of the GBP, GLP, SBP and SBG. For detailed information, please refer to Appendix 2: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Performance of TIM/ Sustainability Strategy of TIM

Contribution of Framework to Telecom Italia's sustainability strategy

Sustainalytics is of the opinion that TIM demonstrates a strong commitment to sustainability through a focus on key environmental and social areas such as: (i) emission reduction, (ii) energy efficiency, (iii) environmental product research, and (iv) digital education. TIM has developed a comprehensive plan with quantitative targets to fulfil its environmental and social commitments, as outlined by the initiatives below.

- Recognizing the importance of reducing the negative environmental impacts of its operations, TIM has established an Environmental Policy.⁴ Dated December 2018, this policy applies group-wide and provides general direction on the Group's approach to environmental and sustainability issues, as well as a number of policy commitments. The policy confirms that the Company is a signatory of the United Nations Global Compact and that 86% of TIM's operations are certified with ISO14001 Environmental Management System certification.
- TIM has committed to a number of meaningful environmental targets, including a goal to reduce its scope 1 and 2 greenhouse gas emissions by 33% by 2022, compared to 2019 levels. On renewable energy, TIM also aims to increase the percentage of renewable energy consumed from 21% in 2019 to 36% by 2022.⁵
- TIM actively tracks and reports on its sustainability performance and strategy via annual sustainability reports. The Company's Sustainability Report⁶ elaborates on its ESG performance, including in the areas of corporate responsibility, energy efficiency, IoT research, employee engagement, supply chain, and other stakeholder-related topics. To further contribute to its greenhouse gas emission reduction target, TIM actively engages in energy efficiency improvement projects and has saved 123 gigawatt-hours ("GWh") over the past three years.
- To further demonstrate its commitment to environmental protection as a telecommunications provider, TIM invests in research and development to find efficiencies in the delivery of its products and services. TIM uses an eco-efficiency indicator which measures the relationship between the services provided and impacts on the environment to demonstrate its energy efficiency. The index has increased from 8,877 bit/joule in 2017 to 13,531 bit/joule in 2019, and the Company is targeting 17,400 bit/joule in 2022.⁷
- In addition to its environmental initiatives, the Company also recognizes its responsibility for achieving positive social impacts. Being a leading telecommunications company in

⁴ TIM, "TIM Group commitments to environmental sustainability: Environmental Policy", available at:

https://www.gruppotim.it/content/dam/telecomitalia/documents/Sostenibilita/en/Policies_ENG/TIM-Policy-Ambientale-dic2018ENG-DEF.pdf

⁵ TIM, "Environment BU Domestic", available at: <https://www.gruppotim.it/en/sustainability/reports-targets/performance-targets/BU-domestic-environment.html>

⁶ TIM, TIM Sustainability Report 2019, available at: <https://www.gruppotim.it/content/dam/gt/sostenibilita/C3%A0/doc-bilanci/NFS-TIM-2019.pdf>

⁷ TIM, "Environment BU Domestic", available at: <https://www.gruppotim.it/en/sustainability/reports-targets/performance-targets/BU-domestic-environment.html>

Italy, TIM aims to improve public ICT services as well as to raise digital awareness by providing training and increased access. TIM has launched a digital education program named "Risorgimento Digitale" to provide a total of 20,000 hours of training to vulnerable populations throughout Italy about the Internet and new technology.⁸

Given the above context, Sustainalytics is of the opinion that the TIM Sustainability Financing Framework is aligned with the company's overall sustainability strategy and initiatives and will further the Company's action on its key environmental priorities.

Well positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the use of proceeds from the Framework will be directed towards eligible projects that are recognized by the GBP and SBP to have positive environmental and social impacts, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects could include supply chain environmental impact, cybersecurity, exposure to data privacy and occupational health and safety.

Sustainalytics is of the opinion that TIM is able to manage and/or mitigate potential risks through implementation of the following:

- To manage environmental risks associated with operations, infrastructure and facilities, TIM has adopted both an environmental management system under ISO 14001 which covers 86% of its operations, as well as an energy management system under ISO 50001 for some sites.⁵
- Recognizing the potential impacts of its supply chain, TIM addresses supply chain environmental impact through its new Product and Service Purchasing Policy, which includes the option for TIM to conduct a third-party check on its suppliers and the products they provide to TIM. TIM is also a founding member of the Joint Audit Cooperation initiative, a collective of telecommunication companies aiming to promote responsible environmental and social practices amongst suppliers as well as carrying out third-party audits in the supplier and sub-supplier production plants (suppliers and sub-suppliers, up to the tier 4). This initiative includes guidelines and protocols which TIM can use to bring about corrective measures if suppliers fail to meet environmental and social best practices.⁹
- TIM addresses risks concerning customer data privacy and cybersecurity through its Code of Conduct for Premium Services and the Protection of Minors and Code of Conduct for Protecting OLOS¹⁰ Data.¹¹ The Company commits to respecting and protecting its user's personal data and privacy, limit the access of information system containing confidential data.
- TIM's occupational health and safety activities are guided by its Code of Ethics, Social and Health and Safety Procedures.¹² TIM has set up a Health, Safety and Environment department to manage health, safety and environmental issues through risk identification, prevention and protection measures. Additionally, TIM works with its suppliers to achieve zero safety incidents in all the projects that TIM delivers.¹³

Based on these policies, standards and assessments, Sustainalytics is of the opinion that TIM has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All five use of proceeds categories are aligned with those recognized by GBP or SBP. Sustainalytics has focused on three below where the impact is specifically relevant in the local context.

⁸ TIM, TIM's "Operation Risorgimento Digitale" is underway, a major digital education project for Italy, at: <https://www.gruppotim.it/en/press-archive/corporate/2019/CS-TIM-Progetto-Educazione-Digitale.html> and <https://operazionerisorgimentodigitale.it/>

⁹ TIM, TIM Product and Service Purchasing Policy Abstract, 2020, available at: <https://www.gruppotim.it/content/dam/gt/sostenibilit%C3%A0/doc-fornitori/2020/TIM-Product-and-service-purchasing-policy.pdf>

¹⁰ OLOS is a research data management platform, OLOS, at: <https://www.dlcm.ch/>

¹¹ TIM, "TIM service charter for fixed and mobile services" (website in Italian), available at: <https://www.tim.it/carta-dei-servizi#section2>

¹² TIM, "Policy on Health and Safety", available at:

https://www.gruppotim.it/content/dam/telecomitalia/documents/Sostenibilita/en/Policies_ENG/Policy-health-safety-2019.pdf

¹³ TIM, "TIM Product and Service Purchasing Policy" (abstract), available at: <https://www.gruppotim.it/content/dam/gt/sostenibilit%C3%A0/doc-fornitori/2020/TIM-Product-and-service-purchasing-policy.pdf>

Potential impact of network transformation to 5G

In its 5G for Europe Action Plan, the European Union has noted “5G is seen as a game changer, enabling industrial transformations through wireless broadband services provided at gigabit speeds, the support of new types of applications connecting devices and objects (the Internet of Things), and versatility by way of software virtualization allowing innovative business models across multiple sectors.”¹⁴ In Italy, the launch of 5G commercial services began in 2019, which made it one of the frontrunners in 5G deployment in Europe.¹⁵

In addition to the expected social and economic opportunities coming from the deployment of and enabling technology from 5G networks, there are also some potentially compelling environmental benefits. 5G networks have been modelled to use up to 90% less energy used per bit compared with 4G¹⁶ and experts predict that even if initial versions of 5G networks consume similar amounts of energy compared to their predecessors, this will decline over time as both network optimization and energy efficient hardware is developed further.¹⁷

Given the above, Sustainalytics is of the opinion that TIM’s investment in network transformation to 5G, as well as IoT applications, offers the potential for energy-efficiency savings and encourages TIM to develop and deploy both infrastructure and hardware that will maximize the social, economic and environmental benefits of this new technology.

Enhancing energy efficiency in data centres

Following its ratification of the Paris Climate Agreement, Italy established its National Energy Strategy 2017. The strategy commits the country to multiple targets, including an energy efficiency target of achieving a 30% reduction in energy consumption by 2030.¹⁸ With the need to reduce its energy consumption and to transition towards a low-emission economy, Italy recognizes the importance of research, innovation and investment. The National Energy Strategy aims to create an environment for private investment in research and development of new technologies which contributes to energy efficiency.¹⁸

Data centres are massive consumers of energy and in 2018 accounted for approximately 2% of the global energy consumption.¹⁹ Since the amount of data stored in data centres is expected to increase by 400% by 2021 (compared to 2016), it is essential for data centres to operate energy efficiently.¹⁹ Being the largest telecommunications company in Italy and given its digital inclusion goals which involve expanding the reach of its digital services, including 5G, some business units within the TIM Group could possibly increase their energy needs. Therefore, Sustainalytics notes the importance of TIM using sustainability bond proceeds to finance, among other projects, the construction and retrofitting of data centres to ensure they operate with industry-leading power usage effectiveness. Such projects are expected to both help TIM achieve its electricity and GHG emission reductions goals, as well as those of the Italian government.

Importance of digital inclusion in Italy

As part of its Europe 2020 growth strategy, the European Commission published the Digital Agenda for Europe (“Digital Agenda”).²⁰ The Digital Agenda includes seven priority areas for action – one of which is “enhancing digital literacy, skills and inclusion”.²¹ In 2015, Italy published its next-generation access network strategy, aiming at developing a high-speed ICT network across the country.²² At the same time, the Italian Ministry of Economic Development established an Ultra-Broadband Strategy to ensure that public telecommunication infrastructure is in place to achieve the Digital Agenda objectives.²³ As such, Italy had increased its Next

¹⁴ European Commission, 5G for Europe: An Action Plan, 2016, available at: http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=17131.

¹⁵ GSMA, “Global Launches & Statistics”, online: https://www.gsma.com/futurenetworks/ip_services/understanding-5g/5g-innovation/

¹⁶ DATA Makes Possible by Western Digital, “5G vs. 4G – A Side-by-Side Comparison”, (2019), at: <https://datamakespossible.westerndigital.com/5g-vs-4g-side-by-side-comparison/>

¹⁷ IEEE Spectrum, The 5G Dilemma: More Base Stations, More Antennas—Less Energy?, 2018, at: <https://spectrum.ieee.org/energywise/telecom/wireless/will-increased-energy-consumption-be-the-achilles-heel-of-5g-networks>

¹⁸ Italy’s National Energy Strategy 2017, available at: https://www.mise.gov.it/images/stories/documenti/BROCHURE_ENG_SEN.PDF

¹⁹ PRWeb, “Data Centers Consume 2% of World’s Energy—Hyper-Efficient New Solutions Usher in New Paradigm”, 2018, available at: http://www.prweb.com/releases/data_centers_consume_2_of_worlds_energy_hyper_efficient_new_solutions_usher_in_new_paradigm/prweb15925619.htm

²⁰ Eurostat, Digital Inclusion, at: <https://ec.europa.eu/eurostat/web/employment-and-social-inclusion-indicators/digital-inclusion>

²¹ European Commission, “Digital Agenda for Europe: key initiative”, at: https://ec.europa.eu/commission/presscorner/detail/en/MEMO_10_200

²² European Commission, Shaping Europe’s digital future Country information – Italy, at: <https://ec.europa.eu/digital-single-market/en/country-information-italy>

²³ Ministry of Economic Development, Ultra Broadband Strategy, at: <https://bandaultralarga.italia.it/en/strategia-bul/strategia/>

Generation Access (“NGA”) coverage rate from about 45% in 2015 to 90% in 2018.^{24,25} Despite the significant increase in NGA coverage, Italy still ranked 12th among 28 EU countries, and was below the EU average in rural NGA coverage.²⁶ As population over 65 years old accounts for 23% of the total Italian population,²⁷ the Italian digital transformation team has made digital inclusion plans, especially for the elderly. By providing the elderly with essential digital equipment and necessary education, the digital transformation team provides the elderly opportunities to exercise their civil rights in a digital ecosystem.²⁶

Italy was also one of the countries that were most severely affected by COVID-19. According to WHO, as of October 2020, there are more than 313,000 confirmed cases in Italy.²⁸ Based on OECD data, internet traffic increased by 40% between December 2019 and March 2020 as a result of more Italians staying indoors and working from home. Ensuring a stable and robust internet network across the country is, therefore, a crucial part of ensuring digital inclusion during COVID-19 response and recovery.²⁹

Based on this context, Sustainalytics is of the opinion that TIM’s investments in the improvement of network efficiency, data centre energy efficiency and digital inclusion are expected to provide positive environmental and social impacts in Italy. As such, Sustainalytics views TIM’s investments as contributing to Italy national goals and contributing to the transition towards a low-carbon economy.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This sustainability bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Energy Efficiency	7. Affordable and Clean Energy 9. Industry, Innovation and Infrastructure	7.3 By 2030, double the global rate of improvement in energy efficiency 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
Circular Economy	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Digital Inclusion	9. Industry, Innovation and Infrastructure	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
Response to Health Crises such as COVID-19	8. Decent work and Economic growth	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small and medium-sized enterprises, including through access to financial services

²⁴European Commission, Study on National Broadband Plans in the EU-28: connectivity, targets and measures, 2017, at: <https://ec.europa.eu/digital-single-market/en/news/study-national-broadband-plans-eu-28-connectivity-targets-and-measures>

²⁵ European Commission, Broadband Coverage in Europe, 2018, available at: https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=62760

²⁶ Agency for Digital Italy, Strategy for technological innovation and digitization of the country 2025, at: <https://docs.italia.it/italia/mid/piano-nazionale-innovazione-2025-docs/it/stabile/la-strategia.html>

²⁷ Statista, Percentage of elderly population in Italy from 2009 to 2020, at: <https://www.statista.com/statistics/785104/elderly-population-in-italy/#:~:text=In%202020%2C%2023.1%20percent%20of,growing%20constantly%20in%20recent%20years.>

²⁸ WHO, Coronavirus Disease Dashboard, at:

https://covid19.who.int/?gclid=CjwKCAjw_NX7BRA1EiwA2dpg0uRGzDWOcEF2U4x9KwKvfkPP9s33MJ5eU23sGd63-C9rC5Vm1Lwl2RoC5QAQAvD_BwE

²⁹ OECD, Keeping the Internet up and running in times of crisis, May 2020, at: <https://www.oecd.org/coronavirus/policy-responses/keeping-the-internet-up-and-running-in-times-of-crisis-4017c4c9/>

Conclusion

TIM has developed the TIM Sustainability Financing Framework under which it will issue green, social and/or sustainability bonds and loans and use the proceeds to finance green projects in the areas of energy efficiency, renewable energy, and circular economy, as well as social projects in the areas of digital inclusion and response to health crises such as COVID-19. Sustainalytics considers that the projects funded by the green, social and/or sustainability bonds and loans will provide positive environmental and social impact.

The TIM Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that TIM Sustainability Financing Framework is aligned with the overall sustainability strategy of the company and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7, 8, 9 and 12. Additionally, Sustainalytics is of the opinion that TIM has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.




Based on the above, Sustainalytics is confident that Telecom Italia is well-positioned to issue sustainability bonds and that that TIM Sustainability Financing Framework is robust, transparent, and in alignment with the four core components of the GBP, GLP, SBP and SBG.

Appendices

Appendix 1: Green Building Certification Schemes

	LEED	BREEAM	HQE
Background	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.	The Haute Qualité Environnementale or HQE (High Quality Environmental standard) is a standard for green building in France, based on the principles of sustainable development first set out at the 1992 Earth Summit. The standard was launched in 2005 and is controlled by HQE and certificate is issued by Cerway/ Certivea/ Cerqual.
Certification levels	Certified Silver Gold Platinum	Pass Good Very Good Excellent Outstanding	Pass Good Very good Excellent Exceptional
Areas of Assessment: Environmental Performance of the Building	Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority	Energy Land Use and Ecology Pollution Transport Materials Water Waste Health and Wellbeing Innovation	Energy Environment (Site, Components, Worksite, Water, Waste, Maintenance) Comfort (Hydrothermal, Acoustic, Visual, Olfactory) Health (Spaces quality, Air Quality, Water Quality) Principles of Equivalence
Requirements	Prerequisites (independent of level of certification) + Credits with associated points These points are then added together to obtain the LEED level of certification There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development,	Prerequisites depending on the levels of certification + Credits with associated points This number of points is then weighted by item ³⁰ and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score.	Prerequisites (independent of level of certification) + Points-based performance level: Performing and High Performing The Prerequisite level is obtained when all the minimum requirements for a target are met, while the Performing and High Performing levels are obtained based on a percentage of points given per target, allowing for flexibility.

³⁰ BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item

	<p>Schools-/Retail- /Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>	<p>BREAAAM has two stages/ audit reports: a 'BREAAAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.</p>	<p>Based on the total number of stars obtained per area, an overall HQE level is then given.</p> <p>Environmental certificates are assigned at all stages of the building life cycle, and on- site audits are required.</p>
<p>Performance display</p>			

Appendix 2: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Telecom Italia
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	TIM Sustainability Financing Framework
Review provider's name:	Sustainalytics
Completion date of this form:	October 21, 2020
Publication date of review publication:	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.
The review assessed the following elements and confirmed their alignment with the GBP and SBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (*if applicable*)

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds – Energy Efficiency, Renewable Energy, Circular Economy, Digital Inclusion, Response to Health Crises such as COVID-19 – are aligned with those recognized by both the Green Bond Principles, Green Loan Principles and Social Bond Principles. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 8, 9 and 12.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input checked="" type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (please specify): |

If applicable please specify the environmental taxonomy, if other than GBPs:

Use of proceeds categories as per SBP:

- | | |
|---|---|
| <input type="checkbox"/> Affordable basic infrastructure | <input checked="" type="checkbox"/> Access to essential services |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Employment generation (through SME financing and microfinance) |
| <input type="checkbox"/> Food security | <input type="checkbox"/> Socioeconomic advancement and empowerment |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP | <input checked="" type="checkbox"/> Other (please specify):
Response to Health Crises such as COVID-19 |

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Telecom Italia's Sustainability Steering Committee, comprised of representatives from its CSR, Finance and other relevant departments and chaired by the CEO, will evaluate and select projects and ensure they comply

with the eligibility criteria in this Sustainability Financing Framework. Sustainalytics considers the project selection process to be in line with market practice.

Evaluation and selection

- | | |
|---|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

Telecom Italia will manage the net proceeds on a portfolio basis and will establish and maintain a sustainability register to track progress of eligible projects. The Company intends to fully allocate net bond proceeds within 24 months of issuance and has committed to a lookback period of 2 calendar years. Unallocated proceeds may be temporarily invested in accordance with the Company's investment guidelines. This is in line with market practice.

Tracking of proceeds:

- | |
|---|
| <input checked="" type="checkbox"/> Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify): |

Additional disclosure:

- | | |
|--|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify): |

4. REPORTING

Overall comment on section (if applicable):

Telecom Italia intends to report allocation proceeds on its website on an annual basis until full allocation. The Company's allocation reporting will include all relevant details including the amount allocated per category, share of financing versus refinancing and the amount of unallocated proceeds. In addition, Telecom Italia is committed to reporting on relevant impact metrics and the Sustainability Financing Framework lists relevant potential metrics for both the green and social categories. Sustainalytics views Telecom Italia's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (please specify):

Information reported:

- Allocated amounts
 Sustainability Bond financed share of total investment
- Other (please specify):
 The share of financing and refinancing

Frequency:

- Annual
 Semi-annual
- Other (please specify):

Impact reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (please specify):

Information reported (expected or ex-post):

- GHG Emissions / Savings
 Energy Savings
- Decrease in water use
 Number of beneficiaries
- Target populations
 Other ESG indicators (please specify):

Frequency:

- Annual
 Semi-annual
- Other (please specify):

Means of Disclosure

- | | |
|---|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify):
TIM has reserved the opportunity to include its reporting in existing sustainability reporting, or a standalone report or other document |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

N/A

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**Type(s) of Review provided:**

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Review provider(s):**Date of publication:****ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP**

- i. Second-Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
- iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

-
- iv.** Green, Social and Sustainability Bond Scoring/Rating: An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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In case of discrepancies between the English language and translated versions, the English language version shall prevail.

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Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit www.sustainalytics.com.



Named
2015: Best SRI or Green Bond Research or Rating Firm
2017, 2018, 2019: Most Impressive Second Opinion Provider

