Greening Digital Companies

2025

Monitoring emissions and climate commitments

ITU
World Benchmarking Alliance

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Design: Strategic Agenda | www.strategicagenda.com

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Acronyms and abbreviations

AI	Artificial intelligence
Arcep	French Regulatory Authority for Electronic Communications, Posts and Distribution of Print Media (Autorité de régulation des communications électroniques, des postes et de la distribution de la presse)
CDP	Carbon Disclosure Project
CO_2e	Carbon dioxide equivalent
CSRD	Corporate Sustainability Reporting Directive
CSDDD	Corporate Sustainability Due Diligence Directive
CTAP	Climate transition action plan
ESG	Environmental, social and governance
GeSI	Global enabling Sustainability Initiative
GDP	Gross domestic product
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GSMA	Global System for Mobile Communications Association
ICT	Information and communication technology

IEA	International Energy Agency
IT	Information technology
IoT	Internet of Things
ITU	International Telecommunication Union
ITU-D	ITU Telecommunication Development Sector
ITU-T	ITU Telecommunication Standardization Sector
kW, kWh	Kilowatt, kilowatt-hours
MW, MWh	Megawatt, megawatt-hours
PPAs	Power purchase agreements
RE100	Initiative for 100 per cent renewable electricity
REC	Renewable energy certificate
SBT	Science-based target
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goal
SDG2000	Sustainable Development Goals 2000 list (WBA list of influential companies)
SEC	United States Securities and Exchange Commission
TCFD	Task Force on Climate-related Financial Disclosures
TPU	Tensor processing unit
tCO_2e	Tonnes of carbon dioxide equivalent
TW, TWh	Terawatt, terawatt-hour
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
WBA	World Benchmarking Alliance

Foreword

The Greening Digital Companies: Monitoring Emissions and Climate Commitments report, now in its fourth edition, tracks greenhouse gas (GHG) emissions, energy use and climate commitments of 200 leading digital companies. It provides a reference for climate ambition and accountability across the ICT sector and supports companies, regulators, and other stakeholders in aligning digital transformation with global climate goals.

The report uses publicly available data and evaluates companies based on their data disclosure, targets and climate performance. This year, more companies are setting emissions targets, sourcing renewable energy, and aligning with science-based frameworks – clear signs the sector is stepping up its climate action. The report shows that 8 companies scored 90% or higher in this year's climate commitment assessment (five companies more than last year's edition). More companies are showing progress: 94 now score above 50%, up from 70 last year.

Despite these positive trends in ambition and commitment, GHG emissions are on the rise: Scope 1 and 2 operational emissions from the companies grew by 1.4% compared to last year, highlighting that progress on disclosure and target-setting has yet to fully translate into emissions reductions. European and North American companies lead in transparency, while others, particularly in East Asia, Africa, and Latin America, lag due to weaker regulations and limited green energy infrastructure.

Gaps in full emissions reporting persist, especially for Scope 3, which account for most emissions. As a result, the full extent of emissions remains unknown. Only 102 of 200 companies disclosed complete inventories across all scopes, and just 106 covered all relevant Scope 3 categories.

The rapid growth of artificial intelligence (AI) is driving a sharp rise in global electricity demand, with electricity use by data centres increasing four times faster than the overall rise in electricity consumption. The digital companies assessed in this year's report consumed an estimated 581 TWh of electricity (2.1% of global demand) with AI being one probable driver of this growth.

To deliver on their part, digital companies must adopt absolute, time-bound emission targets across all scopes and fully disclose all relevant Scope 3 emissions, especially in hardware and electronics. Governments and investors should incentivise third-party verification and comprehensive climate reporting in accordance with mandatory corporate GHG reporting schemes. Tools like the ITU Green Digital Dashboard help track progress and highlight gaps, while the ACT Initiative and ATP-Col framework can support companies to develop credible transition plans. ATP-Col framework and guidance also helps compagnies to better understand what make their transition plans credible.

Cross-scale action and collaboration are essential for digital companies to align their climate plans with national strategies. Findings from this report will be used to monitor ICT sector commitments towards net-zero and progress on ITU's Green Digital Action. In addition, the ITU has launched a new Sub-group on National GHG Emission Monitoring Indicators under the ITU-D Expert Group on Telecommunication/ICT Indicators (EGTI), aiming to strengthen national-level tracking of digital sector emissions. Complementing this, the World Benchmarking Alliance (WBA) evaluates the credibility of corporate emissions disclosures

and climate commitments. Initiatives of both organisations represent an important step towards monitoring and improving the environmental impact of the digital sector at both corporate and national levels.

The ICT sector has the innovation and influence to drive the global climate transition, but only if ambition is matched by action.

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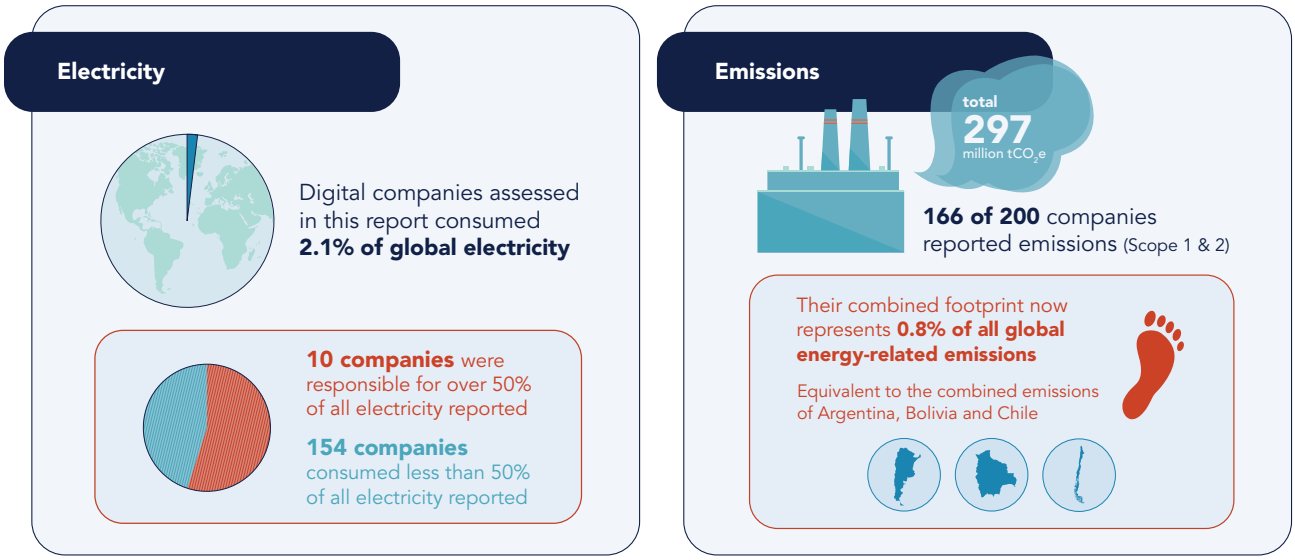
Executive summary

The fourth edition of the Greening Digital Companies: Monitoring Emissions and Climate Commitments report continues to track greenhouse gas (GHG) emissions, energy use and climate commitments of 200 digital companies. It provides a critical foundation for setting science-based targets (SBTs), measuring progress over time and addressing the International Telecommunication Union (ITU) role in tracking the environmental impact of the digital sector. As a driver of global innovation and economic growth, the digital sector is increasingly stepping up to its responsibilities in the low-carbon transition. Climate ambition is on the rise, with more companies setting emission reduction targets, increasing use of renewable energy and aligning with SBT frameworks. However, to fully realize this potential, persistent gaps in transparency, reporting and accountability must still be addressed as outlined in this report. The Greening Digital Companies report is based on the most recent full fiscal year for which consistent data can be obtained across all companies—currently 2023.



Digital companies assessed in this report consumed an estimated 581 TWh of electricity in 2023, or 2.1 per cent of global electricity consumption. Of the 164 companies reporting electricity data, just 10 were responsible for over half of this use.

Despite increasing ambition and action, overall emissions are still rising. Emissions are categorized into three types under the GHG Protocol: Scope 1 direct emissions from owned or controlled sources (e.g. company facilities); Scope 2 indirect emissions from purchased electricity; and Scope 3 emissions, which are all other indirect emissions across a company value chain, such as supply chains and product use. In 2023, 166 of 200 companies reported Scope 1 and 2 operational emissions, totalling 297 million tCO_2e — a 1.4 per cent increase from the previous year. Their combined footprint now represents approximately 0.8 per cent of all global energy-related emissions, equivalent to the combined annual emissions of Argentina, Bolivia and Chile. Data centres, in particular those powering artificial intelligence (AI), are major contributors.

The rapid growth of AI is expected to shape energy demand and emission trajectories, increasing the urgency for the sector to adopt robust, science-aligned climate strategies. According to the International Energy Agency (IEA), global data centres consumed 415 TWh of electricity in 2024 (1.5 per cent of global

use) and are projected to more than double consumption by 2030.[1] Digital companies assessed in this report that are heavily investing in AI saw their operational emissions in 2023 rise to 150 per cent of their 2020 levels. Some companies are advancing bold strategies to green AI operations, including long-term nuclear power purchase and AI-optimized efficiency.

Renewable energy adoption

Digital companies continue to rank among the world's leading corporate buyers of clean energy, accounting for five of the top ten globally. A growing number of companies in the information technology software and services and electronics sectors are sourcing more than 70 per cent of their electricity from renewable energy, but telecommunication operators are further behind. However, only 23 digital companies reported sourcing 100 per cent renewable electricity, underscoring a gap between corporate pledges and actual renewable availability, in particular in regions such as East Asia where fossil fuels dominate the grid.

Scope 1 and 2 emissions

Nearly 90 per cent of reported Scope 1 and 2 emissions are concentrated among 50 companies, with the top 10 alone responsible for 53 per cent of total reported emissions. Reliance on market-based instruments such as renewable energy certificates (RECs), which allow companies to claim renewable energy use, can mask actual increases in location-based Scope 2 emissions, which reflect the real emissions of the local electricity grid. Of these major emitting companies, 27 have set absolute reduction targets for their Scope 1 and 2 emissions, and none of the top 10 emitters have targets validated by the Science Based Targets initiative (SBTi) that align with the 1.5°C global warming limit.

Scope 3 emissions: the hidden majority

Scope 3 emissions make up 84 per cent of total emissions for companies with full disclosures (more than five times higher than the combined total of Scope 1 and 2 emissions) but are not universally reported: 106 companies disclosed all relevant GHG Protocol categories of Scope 3 emission in 2023, an increase from 75 companies in 2022. Supply chain and product use dominate Scope 3 emissions. In 2023, 110 companies submitted Scope 3 emission targets (an increase of 73 compared to 2022) with 100 receiving validation by SBTi. Some 82 companies have set absolute Scope 3 reduction targets, and only 65 use them across all relevant categories. However, many of these targets are either limited in scope or based on intensity metrics, which track emissions per unit of revenue or product, rather than total reductions.

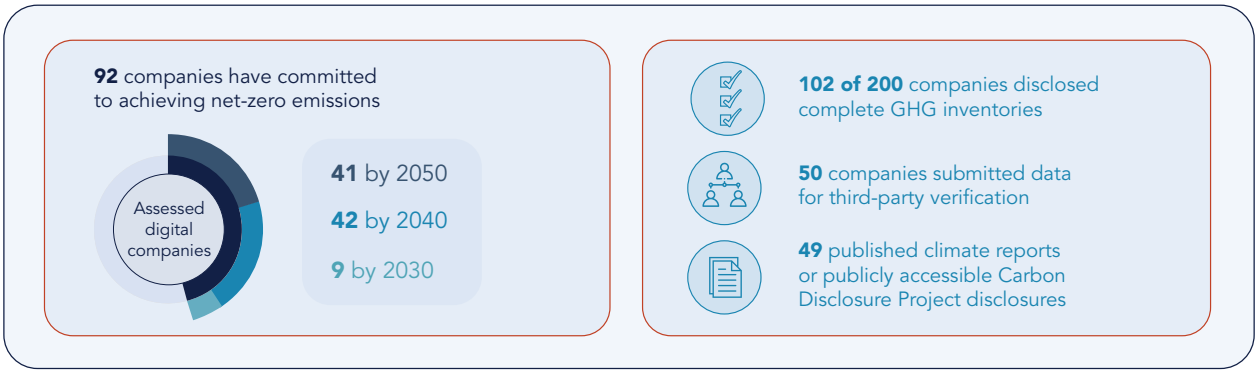
Net-zero and climate targets

Nearly half (92) of the assessed digital companies have committed to achieving net-zero emissions, including 41 companies by 2050, 42 by 2040 and 9 by 2030[2]. These long-term pledges must be paired with concrete short-term actions to ensure meaningful progress. SBTs remain limited in reach: of the top seven largest Scope 1 and 2 emitters, none have SBTi-approved targets; and, of the top 15 highest

1 IEA. 2025. **Energy and AI**, https://www.iea.org/reports/energy-and-ai

2 Of the nine companies that report net-zero targets for 2030, only one, SAP, has a net-zero target validated by SBTi.

emitters, only four have committed to SBTs. As a result, only 18 per cent of the digital sector emissions are covered by SBTs that are on track to be achieved. Although more companies are now setting Scope 3 targets, many overstate progress by omitting major sources of emission or relying on intensity-based metrics. This highlights the need for digital companies to improve engagement with SBTi to ensure climate commitments are both rigorous and transparent.



Data quality and transparency

The digital sector continues to lag in transparency and third-party verification: 102 of 200 digital companies disclosed complete GHG inventories – reporting all Scope 1, Scope 2 (market- or location-based) and all relevant Scope 3 emission categories. Only 50 companies submitted data for third-party verification, while 49 published climate reports or publicly accessible Carbon Disclosure Project disclosures which outline their impact on the environment and are typically part of a company environmental, social and governance (ESG) efforts focused on transparency around emissions, energy use and sustainability goals. Regional disparities persist, with companies based in Europe and the United States of America leading in transparency and ambition owing to stronger regulatory frameworks, investor pressure and established ESG reporting ecosystems.

Performance assessment

Each year, the Greening Digital Companies report assesses companies on their climate commitments, focusing on three key areas: targets — the existence of an emission reduction target and quality and ambition of emission reduction goals; data — availability, clarity and verification; and performance — progress on reducing emissions. Digital companies are awarded up to three points in each area, with a maximum possible overall score of nine across all three areas. This score is then aggregated and expressed as a percentage of the highest possible score. In 2023, eight companies scored 90 per cent or higher in the climate assessment, five more companies than in 2022. Overall, 94 companies scored at least 50 per cent, up from 70 in 2023, an encouraging trend in climate disclosure and ambition.

Looking ahead

With the rapid growth of AI and data infrastructure, the need for digital companies to adopt science-aligned, transparent and accountable climate strategies has never been greater. A small group of 10 digital companies have an outsized influence on the sector footprint, holding the key to accelerated impact. Addressing gaps in Scope 3 reporting, moving beyond market instruments such as RECs and scaling up renewable sourcing, especially in lagging regions, will be essential for turning climate ambition into climate action. The digital sector has the ambition, tools and financial power to play a leading role in the global transition to a low-carbon economy.

About ITU and WBA

This is the fourth edition of the Greening Digital Companies report produced by the International Telecommunication Union (ITU) and the World Benchmarking Alliance (WBA).

ITU is the United Nations specialized agency in the field of telecommunications and information and communication technologies (ICTs). ITU has been given the mandate to develop a programme in response to the challenges of climate change and the growing quantities of e-waste globally. It is involved in climate change activities including research, capacity building and development of international standards. In the ITU strategic plan for 2024-2027, target 2.5 is significant improvement of ICT contribution to climate and environment action, as measured by concrete indicators including the global e-waste recycling rate and the contribution of telecommunications/ICTs to global greenhouse gas (GHG) emissions. ITU also develops standards under the activities of the ITU Telecommunication Standardization Sector (ITU-T) in Study Group 5 (SG5) on issues related to electromagnetic fields, the environment, climate action, sustainable digitalization and circular economy. For more information on the work of ITU-T SG5, please visit: https://www.itu.int/en/ITU-T/studygroups/2022-2024/05/Pages/default.aspx. The present report has been developed by the ITU Telecommunication Development Sector (ITU-D), for more information on ITU-D environment work, please visit: https://www.itu.int/itu-d/sites/environment.

WBA is an independent, non-profit organisation measuring how the 2 000 most influential companies impact people and planet. It does this so that everyone – including governments, financial institutions, civil society organisations and the media – can hold companies accountable for contributing to sustainable development. Data in this report were collected as part of WBA's Digital Inclusion Benchmark, which assesses the world's leading technology companies on their performance in enhancing access to digital technologies, improving digital skills, fostering trustworthy use, and innovating openly, inclusively and ethically. In addition, in January 2026, WBA's Climate Benchmark will assess the 2 000 most influential companies on the credibility and integrity of their transition plans, including their efforts to ensure that people, communities and other affected stakeholders are not left behind. Learn more, here: https://www.worldbenchmarkingalliance.org/.

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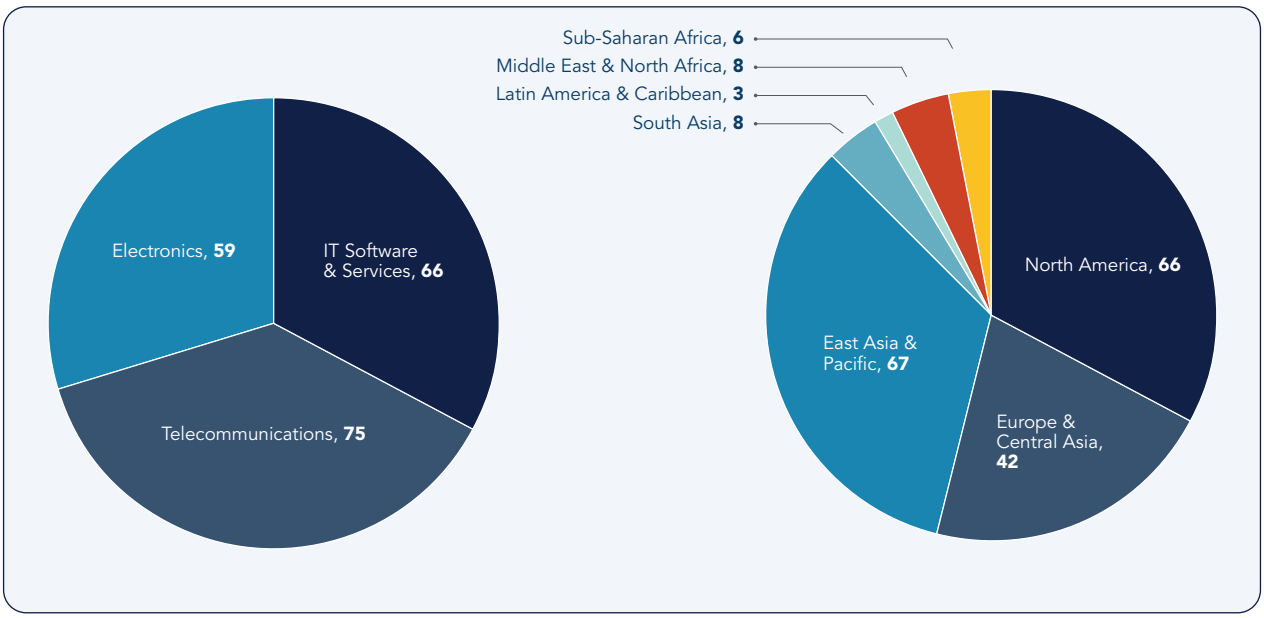
Introduction

The climate impact of digital companies is a complex, multifaceted challenge, where the benefits of rapid technological advancement must be carefully balanced against increasing environmental responsibilities. As global digital transformation continues to accelerate — driven by innovations such as the Internet of Things (IoT), robotics and artificial intelligence (AI) — these technologies are reshaping industries, societies and economies. They offer opportunities to enhance climate change monitoring, optimize energy efficiency and promote the adoption of low-emission technologies across sectors. However, the environmental footprint of the digital economy is growing and cannot be overlooked. From greenhouse gas (GHG) emissions and raw material depletion to rising energy and water consumption, pollution and the accumulation of e-waste, the sector expansion presents environmental sustainability challenges. Addressing these impacts is critical to ensuring that the digital revolution supports, rather than undermines, global efforts to combat climate change.

This fourth edition of the Greening Digital Companies report is a collaboration between the International Telecommunication Union (ITU) and the World Benchmarking Alliance (WBA). It assesses the GHG emissions and energy use of 200 leading digital companies (see Figure 1, and Annex 1 for the full list). By analysing climate-related data, targets and performance, the report offers crucial insights for policy-makers, investors and industry leaders committed to accelerating the digital sector transition toward low-carbon operations. Digital companies hold potential to lead decarbonization efforts as their technologies have the potential to drive system-wide efficiencies and enable innovative solutions to climate challenges. However, this is contingent upon the sector ability to address its own environmental impacts transparently and effectively. Reliable, standardized and comprehensive data reporting is essential to building accountability, setting meaningful targets and tracking progress toward sustainability goals. This report aims to contribute to that effort by providing a clear, data-driven overview of the climate performance of 200 digital companies, highlighting best practices, gaps and recommendations for improvement. By doing so, it seeks to inspire stronger climate action across the sector and to support a greener, more climate resilient digital future.

Figure 1: Distribution of the 200 companies by industry subsector and headquarters per region, 2023



Explanatory Box 1. Selection of the 200 digital companies, methodology and data filtering

WBA identifies the 2 000 most influential companies worldwide through its annually updated SDG2000 list. These companies, headquartered across 83 economies, have operations spanning 221 economies across the globe. They provide the vital food, energy, housing, Internet, transportation and financial systems that societies depend on and had collective revenues of USD 48 trillion in 2023, equivalent to 46 per cent of global GDP. Moreover, they directly employ 99 million people and hundreds of millions more through their supply chains.[3]

As part of this effort, the WBA Digital Inclusion Benchmark assesses 200 key digital companies drawn from the broader SDG2000. This alignment allows for consistent data collection across companies that shape the digital economy. A total of 200 digital companies were assessed in both the 2024 and 2025 editions of the Greening Digital Companies report; however, there are 14 companies in the 2025 edition that are different from those in the 2024 edition (see Table 1). This sample enables direct year-on-year comparisons, such as percentage changes referenced throughout the report. The 2025 edition uses digital company data reported from year 2023, and the 2024 edition uses data reported from 2022. All data presented relate to the 200 digital companies unless otherwise stated. Changes in emissions boundaries may occur at the company level due to acquisitions, divestitures, or methodological adjustments. The data is not retroactively corrected and any republished emissions figures by a company are not reflected in our data.

Table 1: Differences in digital companies featured in the Greening Digital Companies reports 2024 vs. 2025

Companies no longer in the Greening Digital Companies 2025 report compared to the 2024 edition	Reason for removal from the WBA Digital Inclusion Benchmark	New companies in the Greening Digital Companies 2025 report	Criteria for inclusion in the WBA Digital Inclusion Benchmark
Activision Blizzard	Acquired by Microsoft in October 2023	Accenture	Revenue
ATH	Does not meet keystone criteria	Atos	Employees
China Satcom	Not a keystone company	Coupang	Employees
EchoStar	Does not meet keystone criteria	Fiserv	Employees
iFlytek	Does not meet keystone criteria	Kakao	Activity metrics
Inmarsat	Acquired by Viasat	Kuaishou	Activity metrics
Largan Precision	Does not meet keystone criteria	Oppo	Industry market share smartphones

3 World Benchmarking Alliance. 2025. Shaping tomorrow: The 2,000 most influential companies for the SDGs. https://assets.worldbenchmarkingalliance.org/app/uploads/2025/01/WBA-Shaping-Tomorrow-SDG2000-January-2025.pdf

Companies no longer in the Greening Digital Companies 2025 report compared to the 2024 edition	Reason for removal from the WBA Digital Inclusion Benchmark	New companies in the Greening Digital Companies 2025 report	Criteria for inclusion in the WBA Digital Inclusion Benchmark
Ola	Does not meet keystone criteria	Quanta Computer	Revenue
OTE	Majority owned by Deutsche Telekom; outside scope	Shopify	Industry market share GMV
Rogers	Does not meet keystone criteria	STMicroelectronics	Industry market share semi-conductors
Sonatel	Subsidiary of Orange	TCS	Employees
Telkom	Does not meet keystone criteria	Viasat	Activity metrics
United Internet	Does not meet keystone criteria	VK	Industry market share smartphones
VMWare	Acquired by Broadcom in November 2023	Wipro	Employees

For the purposes of this report, the 200 digital companies have been grouped into three main industry sectors: information technology (IT) software and services; telecommunications; and electronics. For companies with no clear cut industry sector, those have been grouped based on core digital activities, with sectors such as real estate (data centres), transport (ride-hailing), retail (e-commerce), payments, food retail, entertainment and alternative asset management classified under IT software and services and digital hardware manufacturing classified under electronics.

When the results reference companies disclosing Scope 3 emissions across "all relevant categories", relevant categories are determined per company within their Scope 3 disclosure. Companies should provide rationale for not disclosing their Scope 3 categories. This approach ensures consistency while recognizing that the significance of Scope 3 categories can vary by business model (e.g. device manufacturers vs. cloud service providers).

Unless otherwise specified, market-based Scope 2 emissions, which reflect purchased renewable energy and contractual agreements, were used. Where market-based Scope 2 emissions were not reported, location-based Scope 2 emissions, which reflect the average emission intensity of the local grid, were used instead. This distinction is important, as market-based emissions can appear lower owing to renewable energy credits and power purchase agreements (PPAs), whereas location-based emissions provide a clearer picture of actual grid dependency.

Companies do not always report both energy and electricity usage, nor the percentage share of renewable electricity. Where energy was not reported, but electricity was, it is assumed that electricity is the sole (or at least dominant) source of energy use. Where the percentage share of renewable electricity was not reported, it is assumed to be 0 per cent.

Explanatory Box 2. Understanding Scope 1, 2 and 3 emissions and PPAs

Most digital companies use the GHG Protocol Corporate Accounting and Reporting Standard to calculate their carbon dioxide equivalent (CO_2e) emissions.[4] The protocol divides emissions into three scopes (see Figure 2):

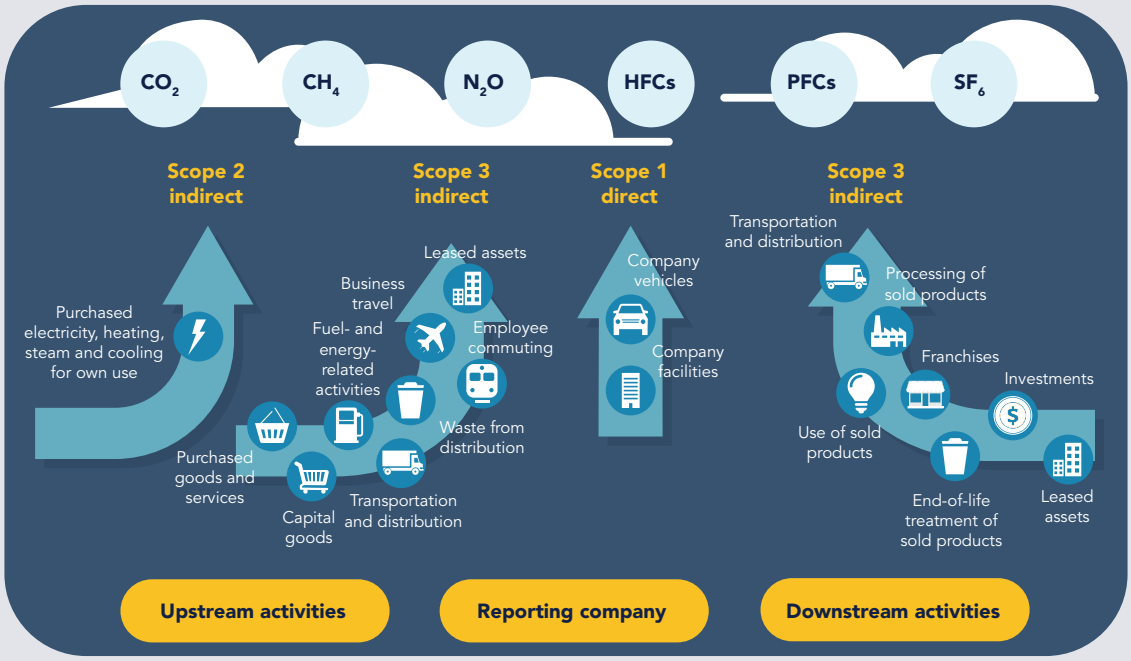
Scope 1 (direct operational emissions): These are emissions from sources that a company owns or directly controls. For digital companies, this typically includes on-site fuel combustion, such as diesel used in backup generators at data centres or corporate facilities.

Scope 2 (purchased energy emissions): These are indirect emissions from the generation of purchased electricity, heat or steam. For digital companies, Scope 2 emissions are primarily driven by electricity use, in particular from energy-intensive operations such as data centres, telecommunication networks and office buildings. Since 2015, Scope 2 reporting distinguishes between: i) location-based emissions, which are based on the average emission intensity of the local grid; and ii) market-based emissions, which reflect electricity a company chooses to purchase, such as renewable energy via PPAs or certificates. Companies must disclose location-based emissions and report market-based emissions when available, which allows them to account for their clean energy procurement strategies even if grid emissions remain high.

Scope 3 (corporate value-chain emissions): These are all other indirect emissions, both upstream and downstream in the value chain. For digital companies, this typically includes emissions from suppliers (e.g. semiconductor fabrication, device assembly) and emissions from product use (e.g. energy consumed by smartphones, laptops or network hardware sold by the company). Other categories such as employee commuting, business travel and end-of-life product disposal are also commonly reported. There are 15 categories under Scope 3, and reporting varies widely. Some companies disclose only easily measurable categories, such as travel, while others provide a full account of their value chain emissions, which can represent the majority of their overall carbon footprint. The relevance of certain categories can depend on a company business model, in particular for those in franchise or leasing industries (e.g. may see greater emphasis on emissions related to the use of leased products or assets by their customers) where specific Scope 3 emissions categories may be more or less significant.

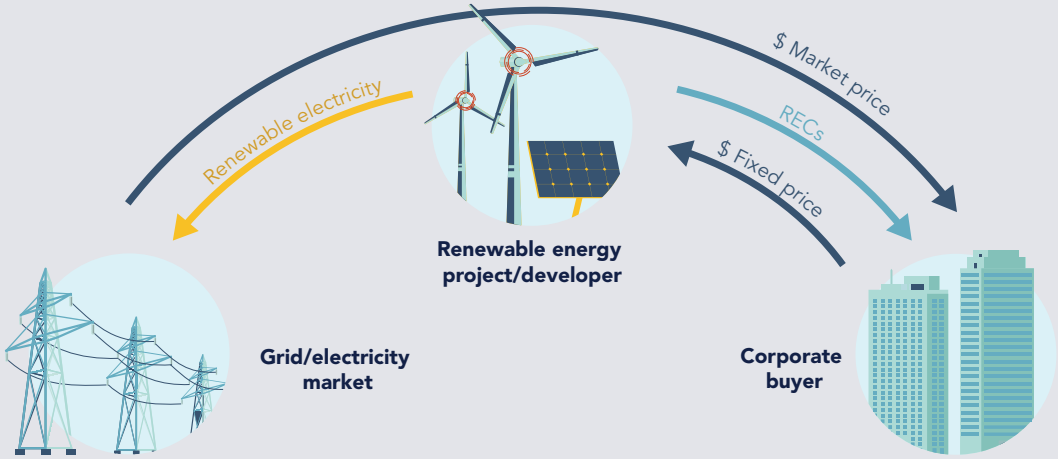
4 World Business Council for Sustainable Development and World Resources Institute, 2004. **A Corporate Accounting and Reporting Standard** (Revised Edition), https://ghgprotocol.org/corporate-standard

Figure 2: Greenhouse gas emission scopes



PPAs are long-term contracts under which a company buys renewable electricity, such as wind, solar or hydroelectric power, directly from an energy producer (see Figure 3).[5] They are a market-based instrument* as they directly influence the type of electricity being bought. PPAs show that the company made an intentional choice to source renewable energy, which allows the company to claim lower market-based Scope 2 emissions. For digital companies, in particular cloud providers, telecommunication and data centre operators, PPAs are critical for meeting sustainability goals, given the companies' large electricity needs. By securing clean energy through PPAs, companies reduce their market-based Scope 2 emissions and help finance new renewable energy projects, rather than relying on the local grid energy mix. Digital companies such as Microsoft, Alphabet (Google), Amazon and Vodafone have signed major PPAs to drive their transition to 100 per cent renewable energy.

Figure 3: Overview of how PPAs work



5 https://www.wbcsd.org/corporate-renewable-power-purchase-agreements-ppas/

*Market-based solutions for GHG emission reduction typically leverage economic incentives and market mechanisms to encourage emission reductions. Other key approaches include renewable energy certificates (RECs), which allow companies to meet targets or offset emissions by purchasing renewable energy credits. Offsets and carbon credits are bought from projects, such as those for reforestation, to reduce emissions. Green bonds fund sustainable projects, while sector-specific emission trading schemes, such as in aviation, regulate emissions. Tax credits and subsidies incentivize renewable energy adoption and internal carbon pricing motivates businesses to reduce emissions. Performance-based contracts reward verified emission reductions, while green certificates and eco-labels promote sustainability. Climate risk disclosure and environmental, social and governance (ESG) reporting enhance transparency, attracting investors and reducing costs.

Spotlight Box 1

Addressing the energy and emission impact of AI rapid expansion

A 2025 report by the International Energy Agency (IEA) showed that global data centre electricity use reached 415 TWh in 2024, or 1.5 per cent of global electricity consumption.[6] The United States accounted for the largest share of global data-centre electricity consumption at 45 per cent, followed by China at 25 per cent and Europe at 15 per cent. While these figures include all types of data centres, the growing subset of data centres focused on AI are particularly energy intensive. AI-focused data centres can consume as much electricity as aluminium smelters but are more geographically concentrated. The rapid expansion of AI is driving a significant surge in global electricity demand, posing new challenges for sustainability. Data centre electricity consumption has been growing at 12 per cent per year since 2017, outpacing total electricity consumption by a factor of four. According to the Ember 2025 Global Electricity Review, low-carbon sources (renewables and nuclear power) supplied 40.9 per cent of global electricity, passing a major milestone where clean generation is now growing fast enough to meet or exceed projected electricity demand increases, signalling a likely decline in fossil fuel use.[7]

IEA projects that by 2030, global data centre electricity use will more than double to 945 TWh, surpassing Japan's current consumption. The United States alone will use more power for data centres than for producing all energy-intensive goods (e.g. steel, cement). By 2035, demand could reach between 700 TWh and 1 700 TWh, depending on uptake and efficiency.[8] IEA also estimates that half of additional demand will be met by renewables (+450 TWh by 2035), with natural gas and nuclear power each contributing ~175 TWh more to meet the demand.[9]

Greenpeace Southeast Asia estimates that between 2023 and 2024, electricity consumption from AI chip manufacturing surged by over 350 per cent globally, with production centred in Taiwan, Province of China, the Republic of Korea and Japan. This growth has led to an increase in carbon emissions, largely fuelled by fossil-based electricity generation.[10] By 2030, this demand could increase 170-fold from the 2023 levels, surpassing the entire electricity consumption of Ireland. AI hardware companies need to work to reduce supply-chain emissions in East Asia, where there is a growing need to commit to 100 per cent renewable energy by 2030 through direct investment in renewables and long-term clean energy PPAs. Across the industry, there is recognition that traditional approaches (e.g. grid power mixes or small-scale renewables) may not suffice. Policy and regulation are needed to support AI integration, innovation and resilience in energy systems. To ensure accountability, digital companies must adopt standardized and transparent reporting, covering both direct and indirect emissions, including data centres and supply chains. There is also growing recognition of the potential of AI itself to reduce energy consumption through optimization and AI-based systems.

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6 IEA, 2025. **Energy and AI**, https://www.iea.org/reports/energy-and-ai
7 EMBER, 2025. **Global Electricity Review 2025**, https://ember-energy.org/latest-insights/global-electricity-review-2025/
8 IEA, 2025. **Energy and AI**, https://www.iea.org/reports/energy-and-ai
9 IEA, 2025. **Energy and AI**, https://www.iea.org/reports/energy-and-ai
10 Greenpeace Southeast Asia. 2025. **Chipping Point: Tracking Electricity Consumption and Emissions from AI Chip Manufacturing**, https://www.greenpeace.org/static/planet4-eastasia-stateless/2025/04/5011514f-greenpeace_chipping_point.pdf

Other research is increasingly highlighting how tech giants have been pioneers in devising comprehensive strategies to green AI infrastructure, focusing on efficiency, clean energy and leveraging AI itself to drive sustainability. Some are even turning to nuclear energy to ensure reliable, carbon-free power for future data centres. For example, Microsoft recently signed a 20-year PPA for the entire power output of Three Mile Island nuclear plant in Pennsylvania, United States, i.e. 837 MW, equivalent to 800 000 United States households, in order to fuel its AI data centres, starting in 2028.[11] While nuclear power offers a low-carbon solution, the 1979 partial meltdown at Three Mile Island — the worst accident in United States commercial nuclear history — highlights the risks.[12] As digital companies increasingly tap into nuclear power for AI growth, they must manage the complex challenges of safety, regulation and community acceptance. OpenAI, in partnership with Microsoft, has reportedly discussed plans for a linked network of AI supercomputing centres.[13] In 2023, Google data centre electricity use grew by 17 per cent, leading to a 13 per cent rise in GHG emissions. To address this, Google has developed more efficient AI infrastructure, such as the sixth-generation tensor processing unit (TPU), which is 67 per cent more energy-efficient. Google data centres are 1.8 times more energy-efficient than the industry average, and the company aims for 24/7 carbon-free energy by 2030. In 2023, 64 per cent of its energy came from carbon-free sources, with ten major sites already run on over 90 per cent carbon-free power.[14] Regional disparities emphasize the need for digital companies to take a more proactive role in addressing the environmental impacts of their supply chains, in particular in regions where fossil fuel reliance is still dominant.

11 Data Center Dynamics, 2024. "Three Mile Island nuclear power plant to return as Microsoft signs 20-year 835MW AI data center PPA." March 28, 2024. https://www.datacenterdynamics.com/en/news/three-mile-island-nuclear-power-plant-to-return-as-microsoft-signs-20-year-835mw-ai-data-center-ppa/#:~:text=Microsoft%20plans%20to%20take%20up,its%20AI%20data%20center%20ambitions

12 World Nuclear Association, 2022. **Three Mile Island Accident**, https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/three-mile-island-accident

13 The Bulletin of the Atomic Scientists. 2024. "AI goes nuclear." **Bulletin of the Atomic Scientists**, December 2024, https://thebulletin.org/2024/12/ai-goes-nuclear/

14 Google, 2024. **Google 2024 Environmental Report**, https://sustainability.google/reports/google-2024-environmental-report/

2

Assessment

2.1. Data disclosure

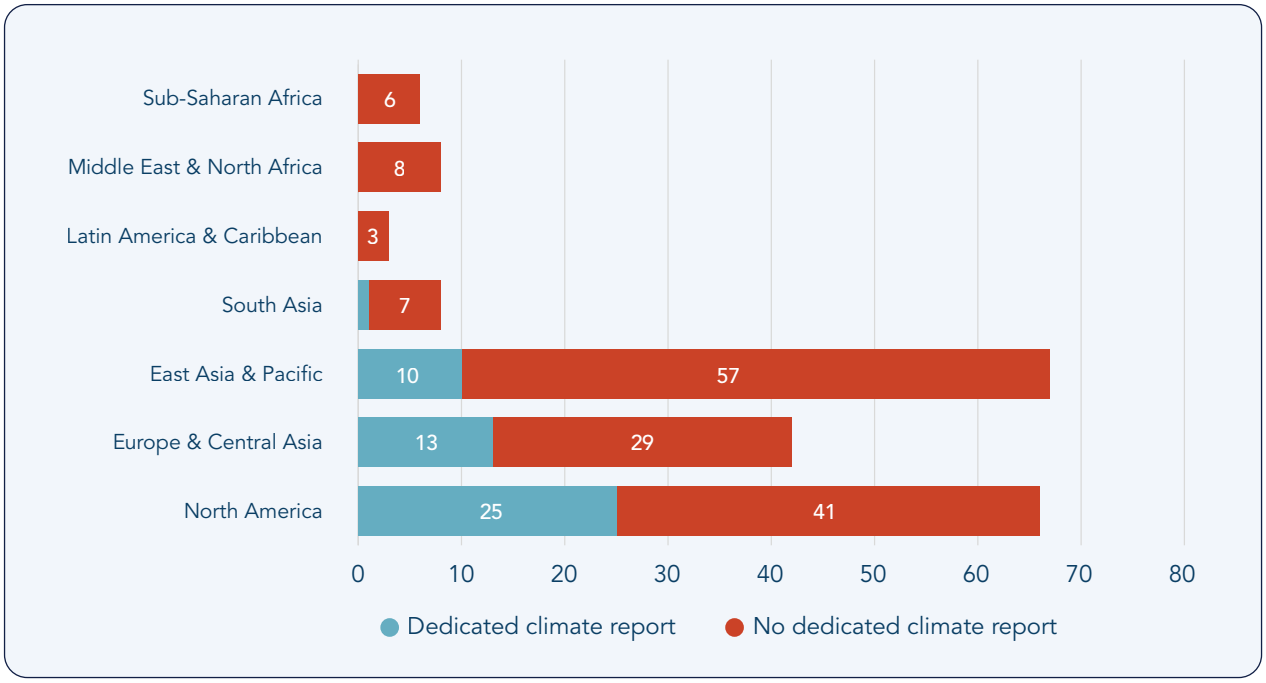
Despite growing pressure for corporate climate accountability, gaps remain in the transparency of emission data, in particular for Scope 3 emissions, which often represent the greater share of a company carbon footprint. Of the 200 companies assessed, only 102 provided a complete GHG inventory covering all three scopes of emission. Among these, Scope 3 emissions accounted for 84 per cent of total emissions, which highlights the importance of reporting them as they often make up the majority of a company footprint. In contrast, Scope 1 and 2 emissions accounted for 3 per cent and 13 per cent, respectively. Overall, 106 of 200 companies disclosed all relevant Scope 3 emission categories, while 166 disclosed Scope 1 and 2 emissions. This underscores a critical transparency gap in climate reporting, as Scope 3 emissions are often the most difficult to quantify yet the most material for many sectors.

Only 50 companies submitted their GHG inventories for third-party verification, and 49 published comprehensive climate reports or made climate-related data publicly accessible through the CDP platform. The lack of consistent, verified disclosures raises concerns about data reliability and the credibility of climate commitments.

Dedicated climate reporting practices vary by region (see Figure 4). European and United States-based companies demonstrate stronger climate disclosure practices, with dedicated climate reports more prevalent amongst these companies than among their counterparts in other regions; however, note that some of these counterparts nonetheless report emissions through different means. European countries have robust regulatory frameworks that mandate climate-related disclosures. The European Union Corporate Sustainability Reporting Directive (CSRD) has made sustainability reporting a legal requirement for many companies. Similarly, the United States Securities and Exchange Commission (SEC) has been advancing climate disclosure rules, prompting United States-based companies to prepare for more standardized reporting. There is also a developed ecosystem for voluntary reporting frameworks, such as the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosures (TCFD) and CDP. Institutional investors in Europe and North America are increasingly integrating ESG factors into their decision-making, motivated primarily by risk consideration and client demand,[15] so companies in these regions face stronger shareholder activism and investor expectations around transparency.

15 McCahery, J. A., Pudschedl, P. C. and Steindl, M. 2023. Institutional Investors, Alternative Asset Managers and ESG Preferences. European Business Organization Law Review, Vol 23, pp. 821-868. https://link.springer.com/article/10.1007/s40804-022-00264-0

Figure 4: Regional variation in availability of dedicated climate reports, 2023



2.2. Scope 1 and 2 operational emissions

In 2023, 166 of 200 companies, representing a 94 per cent share of all companies' revenue, reported their operational emissions, i.e. Scopes 1 and 2, totalling 297 million tCO_2e. This represents approximately 0.8 per cent of global energy-related emissions,[16] marking a 1.4 per cent increase from 2022. Notably, the number of companies reporting remained unchanged between 2022 and 2023, indicating no progress in disclosure coverage, yet the operational emissions reported have continued to rise. The rise aligns closely with the overall growth in global emissions.[17] To put this in perspective, the carbon footprint of these assessed digital companies in 2023 exceeded the combined national emissions of Argentina, Bolivia and Chile.[18] In addition, ITU, SBTi, the Global enabling Sustainability Initiative (GeSI) and the Global System for Mobile Communications Association (GSMA) have developed a science-based emission reduction trajectory for the ICT sector, aligned with the goals of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).[19] As outlined in ITU-T Recommendation L.1470, this trajectory calls for a 45 per cent reduction in GHG emissions from 2020 to 2030.[20] The data from the 200 digital companies assessed here suggest that progress toward this target is falling short.

16 IEA. 2023. Using 37.4 billion tCO_2 from energy related emissions, https://www.iea.org/reports/co2-emissions-in-2023/executive-summary

17 IEA, 2023. CO_2 Emissions in 2023, https://iea.blob.core.windows.net/assets/33e2badc-b839-4c18-84ce-f6387b3c008f/CO2Emissionsin2023.pdf

18 Global Carbon Budget (2024) – with major processing by Our World in Data, https://ourworldindata.org/co2-emissions

19 ITU, GESI, GSMA, SBTi, 2022. Guidance for ICT Companies Setting Science Based Targets. Mobile Networks Operators, Fixed Networks Operators and Data Centres Operators. https://www.itu.int/en/mediacentre/Documents/Documents/GSMA_IP_SBT-report_WEB-SINGLE.pdf

20 ITU, 2020. Recommendation ITU-T L.1470: Greenhouse gas emissions trajectories for the information and communication technology sector compatible with the UNFCCC Paris Agreement. Geneva, Switzerland. https://www.itu.int/rec/T-REC-L.1470-202001-I

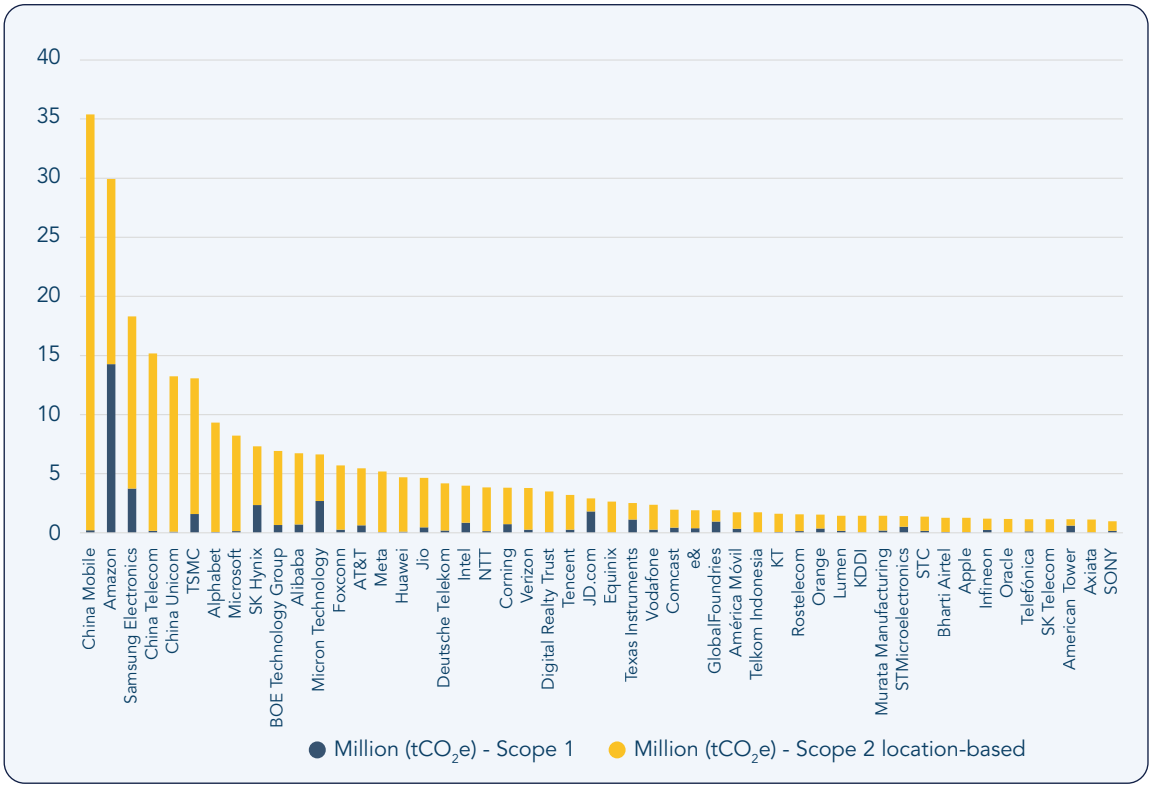
Of the total emissions, Scope 1 emissions accounted for 46 million tCO_2e, as reported by 174 of the 200 companies assessed. Location-based Scope 2 emissions stood at 244 million tCO_2e, based on disclosures from 149 companies. Market-based Scope 2 emissions were significantly lower at 79 million tCO_2e, reported by 126 companies (see Figure 5). Nearly 90 per cent of all Scope 1 and 2 emissions are concentrated among the top 50 emitting companies. Despite this concentration, only 27 of these high-emitting companies, have set absolute (non-intensity-based) reduction targets for their Scope 1 and 2 emissions. This highlights a gap between emission concentration and climate ambition. The majority of these heavy emitters are based in East Asia and the Pacific and North America, reinforcing the regional imbalance in both emission responsibility and mitigation commitments.

Emissions from the top 50 digital companies dominate the sector operational carbon footprint, with the top 10 emitters alone responsible for just over half (53 per cent) of all Scope 1 and location-based Scope 2 emissions reported in 2023. This concentration underscores the outsized influence a small group of companies holds in shaping the sector overall climate impact.

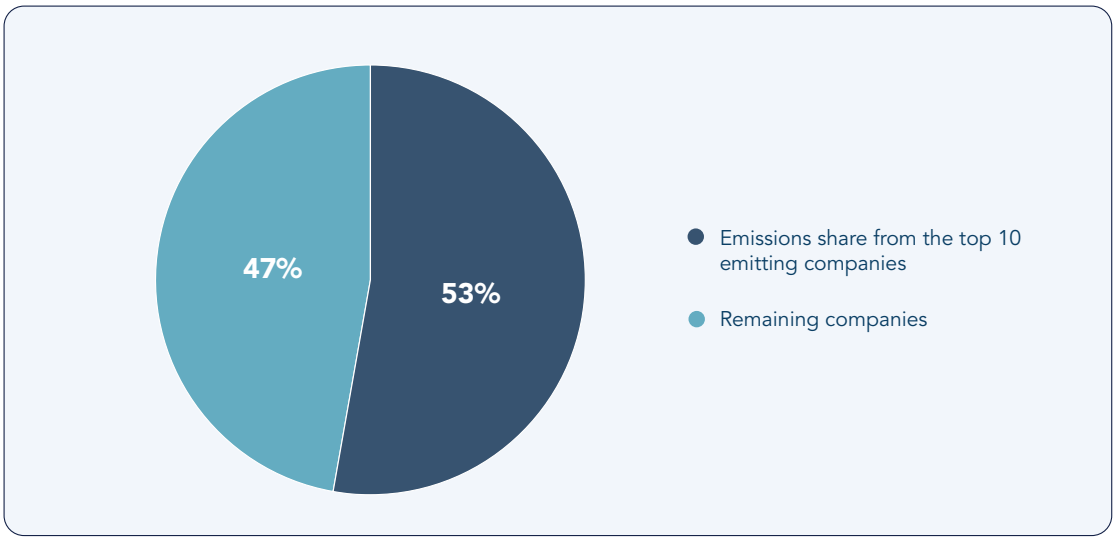
The top 10 emitting companies for Scope 1 and 2 emissions are predominantly headquartered in East Asia and the Pacific and North America, with Chinese and United States-based firms dominating the list. Despite their significant contribution to total emissions, progress on setting ambitious climate targets among these firms remains inadequate. Notably, SBTi has not validated the emission reduction target of any of the top 10 emitters as aligned with the trajectory for limiting global warming to 1.5°C, as outlined in the Paris Agreement.

Figure 5: a) Top 50 digital companies producing Scope 1 and 2 emissions, where b) the top 10 emitters making up almost 50% of the total. c) Breakdown of Scope 2 LB and MB emissions, showing LB is most of the Scope 2 across all sub-sectors, 2023

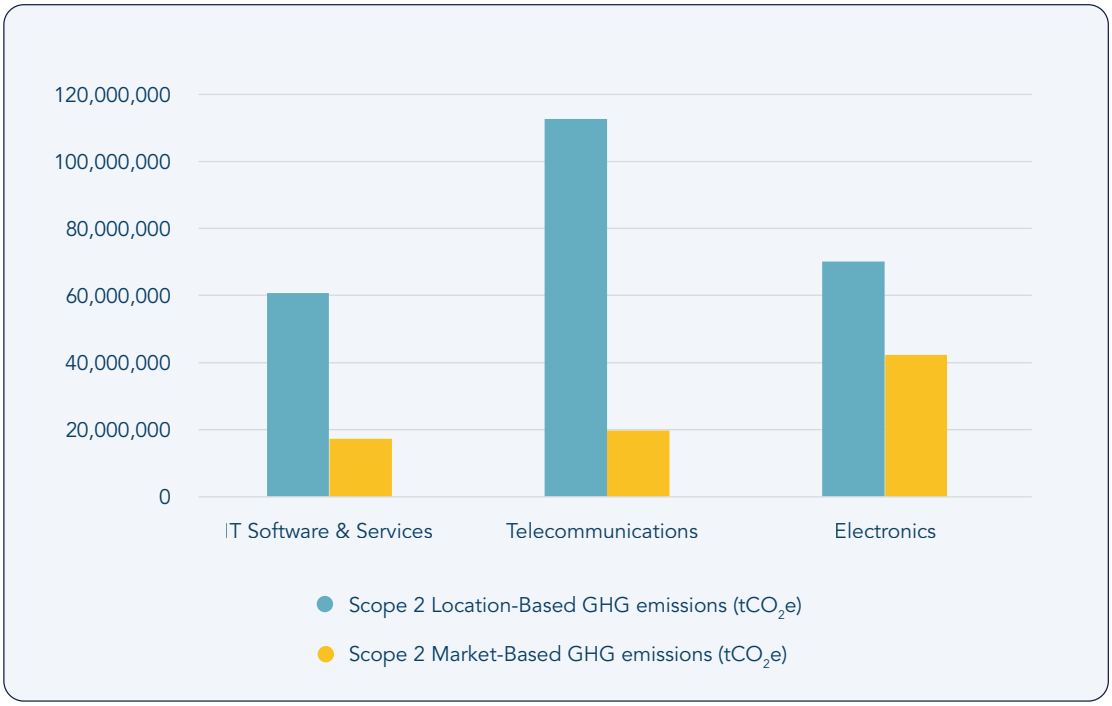
a) Scope 1 & 2 location-based (million tCO2e)



b) Share of digital company emissions



c) Scope 2 location-based and market-based emissions (tCO2e)

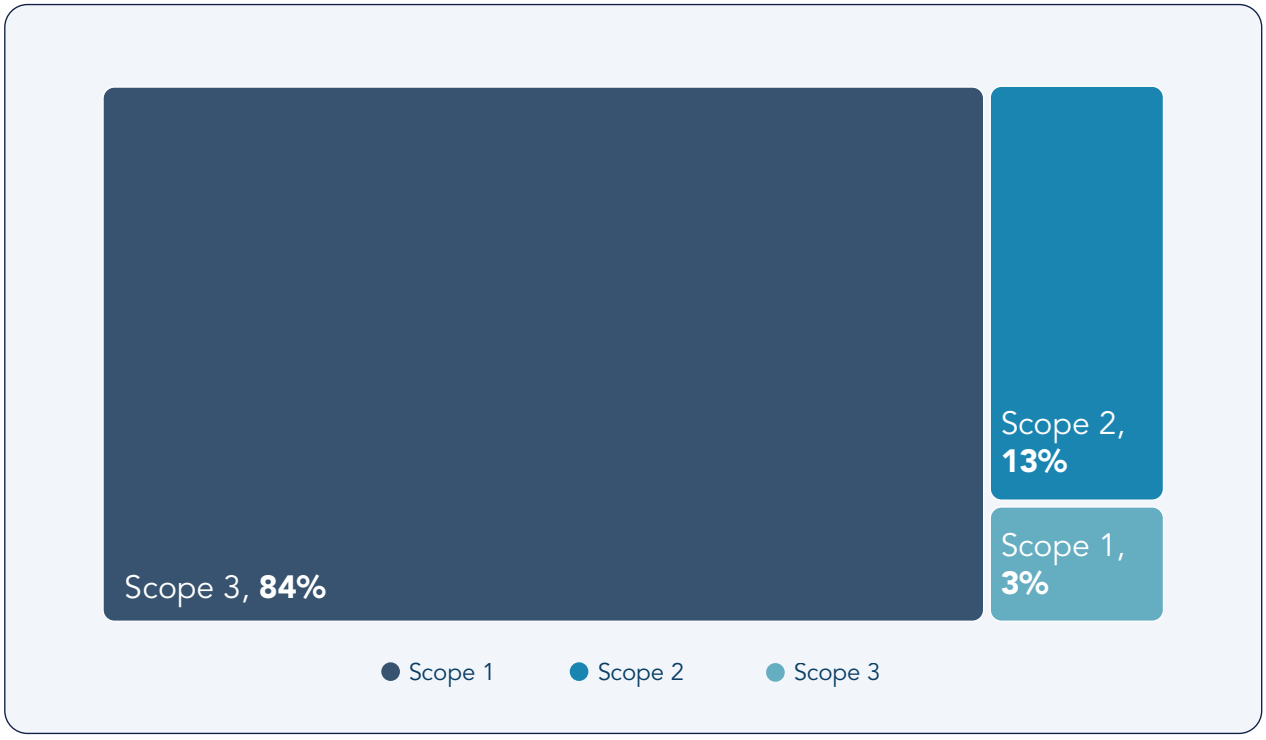


2.3. Scope 3 emissions

Scope 3 emissions represent the indirect greenhouse gas emissions that arise from a company value chain, both upstream and downstream. These include emissions from outsourced suppliers in ICT manufacturing, as well as from the use of products such as computers, smartphones and other digital devices. While these emissions lie outside a company direct operational control, they are not beyond its influence. Companies can shape their Scope 3 footprint through strategic decisions, such as selecting lower-carbon-footprint suppliers and designing more energy-efficient products and services.

Despite their significance, Scope 3 emissions remain the most challenging to measure and report and would typically rely on modelling and assumptions regarding, for example, expected lifetime and usage profiles. Many companies face persistent gaps in supplier data, limited transparency and inconsistencies in calculation methodologies. These barriers continue to hinder comprehensive and comparable disclosures across the sector. However, there are signs of progress. In 2023, 106 companies disclosed all relevant Scope 3 categories, compared to, 75 of the 200 assessed companies in 2022 (a 41 per cent increase). This increase in disclosure reflects growing awareness of value chain emissions. A total of 102 companies provided a complete GHG inventory, where Scope 3 accounted for, on average, approximately 84 per cent of total reported emissions, compared to just 3 per cent for Scope 1 and 13 per cent for Scope 2 (see Figure 6). This means reported Scope 3 emissions were more than five times greater than the combined total of Scope 1 and 2 emissions, underscoring the need for companies to broaden their climate strategies beyond operational boundaries. Without continued improvements in data transparency, supplier engagement and comprehensive Scope 3 methodologies, a full understanding of the sector climate impact will remain out of reach, and critical opportunities for emission reduction may be missed.

Figure 6: Breakdown of 102 companies disclosing both operational (Scope 1 and 2) and indirect (Scope 3) emissions, 2023



Note: When available, market-based Scope 2 emissions, which reflect purchased renewable energy and contractual agreements, were used. If market-based data were not reported, location-based Scope 2 emissions, which reflect the average emission intensity of the local grid, were used instead. This distinction is important, as market-based emissions can appear lower owing to renewable energy credits and power purchase agreements, whereas location-based emissions provide a clearer picture of actual grid dependency.

Despite growing attention on value-chain emissions, comprehensive Scope 3 reporting is still limited (see Table 2). These categories span the full range of company indirect emissions, including purchased goods and services, upstream transportation and distribution, waste generated in operations, business

travel, use of sold products and downstream leased assets. This limited level of full-category disclosure highlights a transparency gap. An analysis of reported Scope 3 emissions shows a concentration in three categories: Category 11 (use of sold products), Category 1 (purchased goods and services) and Category 2 (capital goods) (see Figure 7). Together, they account for 87 per cent of disclosed emissions, reflecting the carbon intensity of both the production and use of digital products.

However, there are important boundary complexities to consider when interpreting these data. Categories 1 and 2 cover the cradle-to-gate emissions of all purchased products and capital goods that are not separately reported under Categories 3 to 8 or listed under specific exclusions. For instance, in the procurement of goods, emissions are included up to the point when the goods leave the supplier factory (if the operator arranges delivery) or when the goods are received by the operator (if the supplier delivers). While Categories 3 to 8, such as business travel, leased assets and waste, are intended to be mutually exclusive and separately reported to avoid double counting, in practice companies often initially include all upstream emissions in Categories 1 and 2, only later reallocating material items as reporting systems improve. There are further inconsistencies: in some cases, companies may include transport-related emissions within their Category 1 or 2 boundaries rather than separately under Category 4 (upstream transportation and distribution); and the boundary between Category 1 (purchased goods and services) and Category 2 (capital goods) is not always applied consistently. For ICT operators, major infrastructure purchases, such as network equipment, are generally considered capital goods, but in some cases are reported under purchased goods and services.[21] These inconsistencies can impact comparability and suggest the need for clearer boundary definitions across the sector. While some companies are reporting selectively across a few categories, the fragmented nature of these data makes it difficult to evaluate sector-wide risks, hotspots or opportunities for decarbonization. This breakdown also highlights data blind spots, often in downstream activities such as product use and end-of-life treatment and in their modelling.

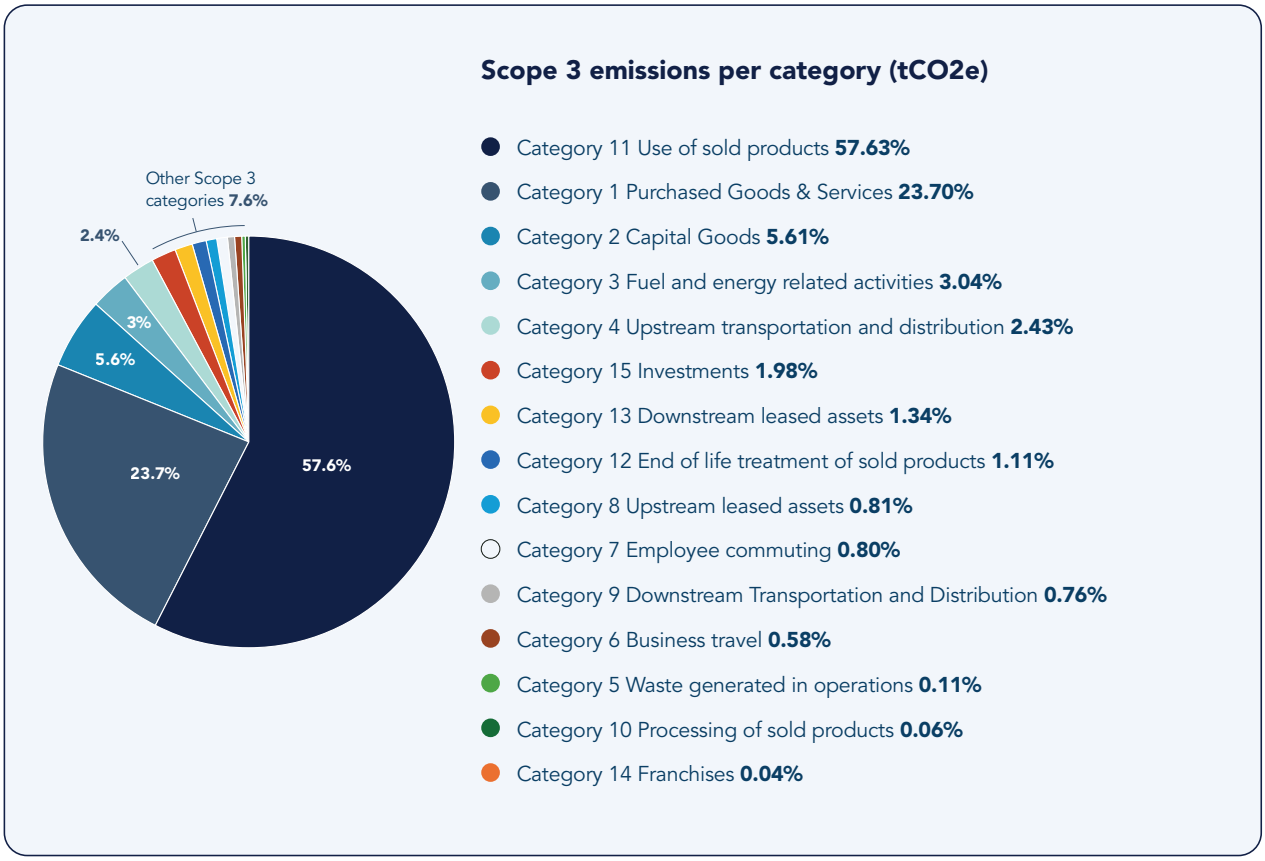
A total of 82 companies set absolute targets (interim) for reducing their Scope 3 emissions. Of the companies setting Scope 3 targets, a sizable majority (65) does so for all the relevant Scope 3 categories, implying that the traditional data challenges associated with Scope 3 emissions are not insurmountable. Many companies struggle with supplier data gaps, inconsistent methodologies and unclear allocation principles, which complicate efforts to track emissions comprehensively and set meaningful reduction targets. As a result, while more companies are beginning to address their indirect emissions, the lack of robust, end-to-end strategies continues to undermine the credibility and effectiveness of their overall climate goals.

21 ITU, GSMA, GeSI. 2023. Scope 3 Guidance for Telecommunication Operators, https://www.gsma.com/solutions-and-impact/connectivity-for-good/external-affairs/wp-content/uploads/2023/07/Scope-3-Guidance-2023.pdf

Table 2: Number of companies reporting within each of the 15 Scope 3 categories, along with the total tonnes of CO_2e reported per category, 2023

Scope 3 category	Number of companies reporting out of 200	Total emissions (tCO_2e)
1. Purchased goods and services	119	251 623 153
2. Capital goods	101	59 574 680
3. Fuel and energy-related activities	114	32 331 667
4. Upstream transportation and distribution	94	25 803 272
5. Waste generated in operations	98	1 138 288
6. Business travel	130	6 204 877
7. Employee commuting	117	8 526 729
8. Upstream leased assets	56	8 630 979
9. Downstream transportation and distribution	50	8 039 548
10. Processing of sold products	20	643 591
11. Use of sold products	90	611 954 700
12. End-of-Life treatment of sold products	68	11 769 869
13. Downstream leased assets	39	14 198 798
14. Franchises	16	406 360
15. Investments	42	21 001 604

Figure 7: Breakdown of total Scope 3 emission reporting per category, with the majority of companies' Scope 3 emissions coming from category 11, 1 and 2, 2023



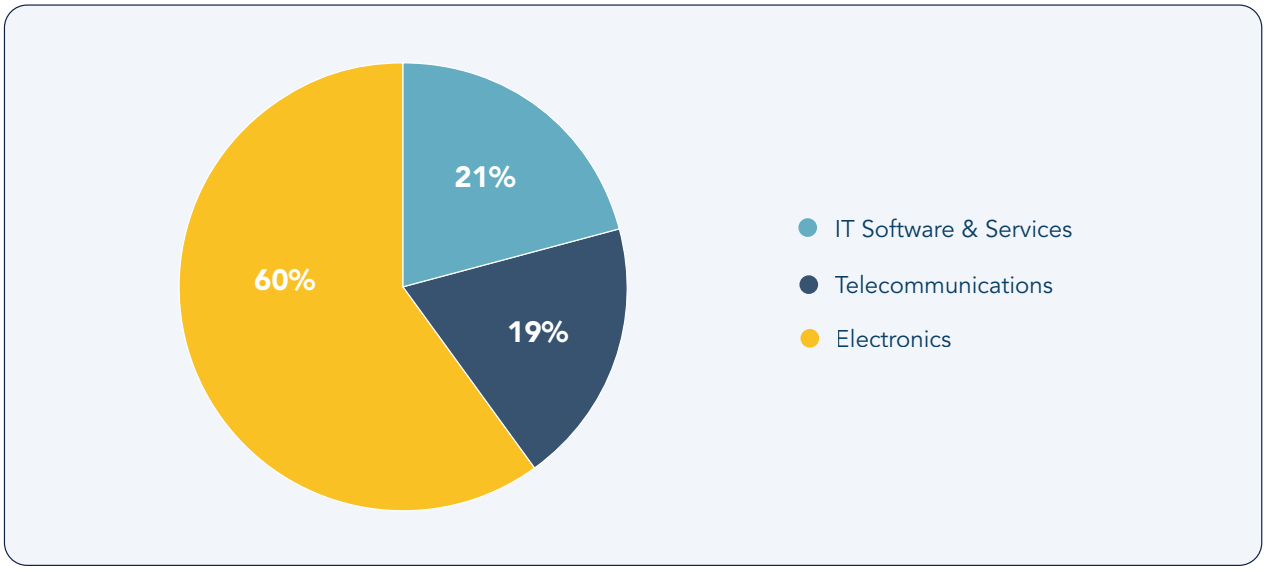
2.3.1. Emission summary

A breakdown of emissions by ICT subsector (see Table 3) highlights differences in emission profiles. In the electronics subsector, Scope 1 emissions (19.5 million tCO_2e) and location-based Scope 2 emissions (70 million tCO_2e) reflect the direct emissions from manufacturing processes and energy use in factories. However, Scope 3 emissions (768.6 million tCO_2e) account for the vast majority of the subsector total 900.4 million tCO_2e footprint. This weighting toward Scope 3 emissions highlights the carbon-intensive nature of global hardware supply chains, from raw material extraction to component manufacturing and logistics. For IT software and services, operational emissions are lower, with Scope 1 emissions at 19.3 million tCO_2e and location-based Scope 2 emissions at 60.8 million tCO_2e. Here too, Scope 3 emissions dominate at 222 million tCO_2e, representing nearly 70 per cent of the total 319.5 million tCO_2e footprint. This reflects the sector dependence on outsourced IT infrastructure (e.g. cloud services, colocation centres) and the downstream energy use associated with software and digital product consumption by users. In the telecommunication subsector, Scope 1 emissions (6.9 million tCO_2e) are relatively low, but location-based Scope 2 emissions are particularly high at 112.5 million tCO_2e, the highest among the three subsectors. This is due to the significant amount of electricity required to operate network infrastructure, including mobile networks, fixed-line broadband and data centres. Scope 3 emissions (140.5 million tCO_2e) are still substantial but more balanced relative to operational emissions compared to the electronics and IT software and services subsections. Overall, emission footprints

vary by subsector: electronics are driven by upstream Scope 3 emissions from hardware production; IT software and services by outsourced infrastructure and user emissions; and telecommunications by high Scope 2 emissions from network electricity use. Tailored decarbonization strategies are needed to address these distinct profiles.

Table 3: Breakdown of Scope 1, 2 and 3 emissions by ICT subsector, 2023

ICT subsector	Scope 1 GHG emissions (tCO_2e)	Scope 2 location-based GHG emissions (tCO_2e)	Scope 2 market-based GHG emissions (tCO_2e)	Scope 3 GHG emissions (tCO_2e)	Total
IT software and services	19 291 937	60 810 464	17 370 432	222 039 287	319 512 120
Telecommunications	6 860 028	112 458 575	19 736 330	140 497 716	279 552 649
Electronics	19 506 964	70 044 010	42 254 314	768 572 515	900 377 802



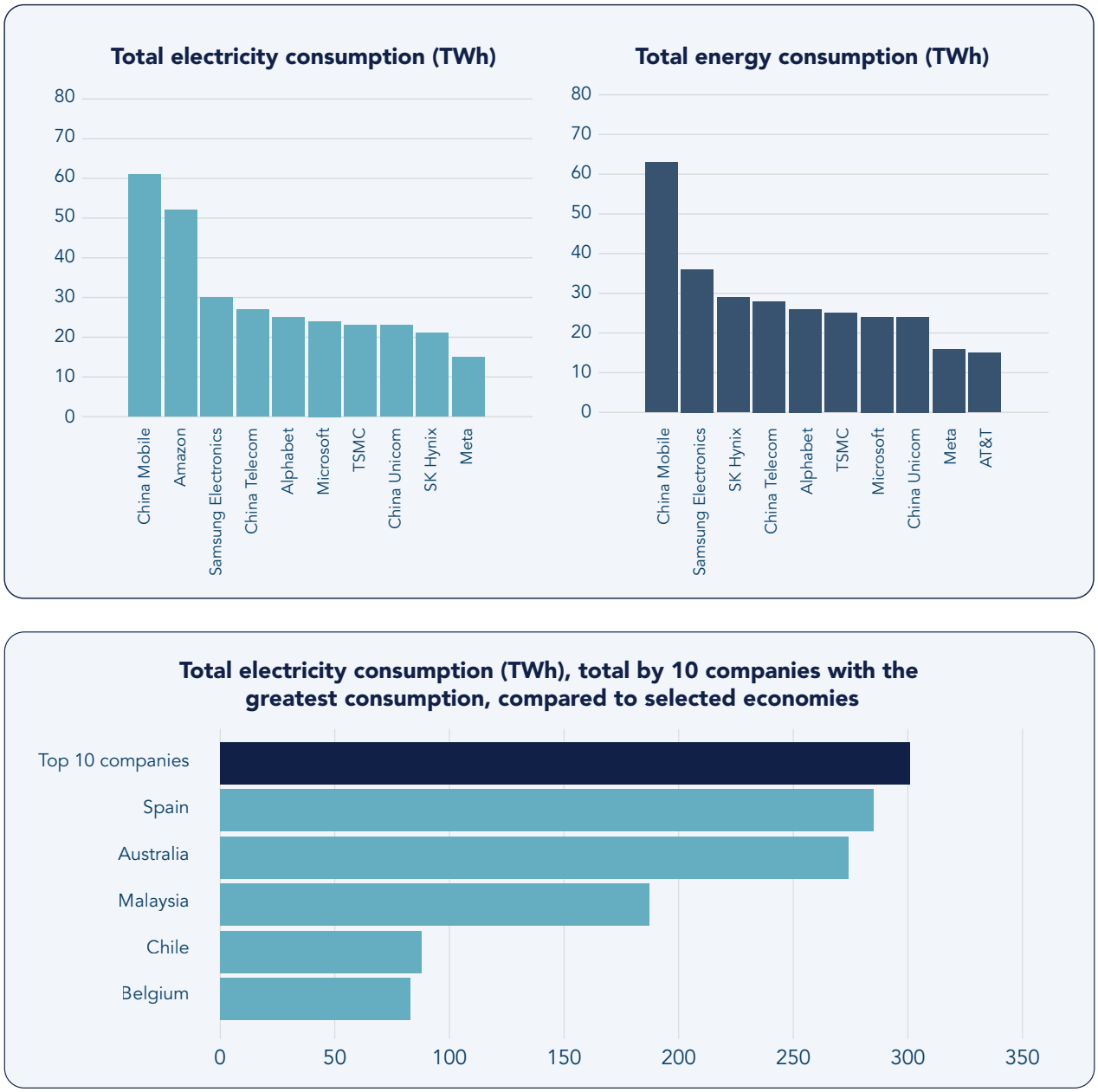
2.4. Electricity, energy and renewables

In 2023, 164 digital companies reported electricity consumption data, accounting for 581 TWh of electricity in 2023 (2.1 per cent of the global total[22]). A total of 173 companies reported data on energy consumption (inclusive of electricity, but also other possible sources), which totalled 681 TWh of energy in 2023. Energy demand is highly concentrated: just 10 companies were responsible for 51.9 per cent of total electricity use, and these companies also rank among the top 10 highest GHG emitters, underscoring the direct link between energy consumption and emissions within the sector (see Figure 8).

22 Based on global net electricity consumption of 27 081 billion kWh from the United States Energy Information Administration, 2025. https://www.eia.gov/international/data/world/electricity/electricity-consumption

To put this in perspective, the combined electricity consumption (301 TWh) of the top 10 companies exceeded the 2023 annual national electricity consumption of countries such as Belgium (83 TWh), Chile (88 TWh), Malaysia (187 TWh), Australia (274 TWh) and Spain (285 TWh). This comparison underlines the role that a relatively small group of digital companies now play in global electricity demand. East Asia-based digital companies lead in total energy consumption, driven by large-scale electronics manufacturing and major telecommunication and Internet infrastructure. North American companies follow, with use concentrated in companies with hyperscale data centres and cloud services.

Figure 8: The top 10 digital companies consuming electricity (left) and energy (right). The bottom chart shows the electricity consumption of the top 10 companies compared to that of Belgium,[23] Chile,[24] Malaysia, Australia and Spain in 2023



23 IEA, 2023. **Electricity generation in Belgium**. Retrieved from https://www.iea.org/countries/belgium/electricity
24 IEA, 2023. **Electricity generation in Chile**. Retrieved from https://www.iea.org/countries/chile/electricity

Energy consumption of the 200 companies across regions reveals significant differences in both scale and renewable energy adoption (see Table 4). Companies headquartered in the East Asia and the Pacific region consumed the most energy (334 TWh), but only 12 per cent of their electricity came from renewable sources. In contrast, companies in North America and Europe and Central Asia reported renewable electricity shares of 70 per cent and 67 per cent, respectively. South Asia, Latin America, the Middle East and Africa lagged both in total consumption and renewable integration. This highlights a dual challenge: while East Asia leads in energy use, limited renewable uptake intensifies climate impact. Similarly, companies in developing regions face barriers in accessing clean energy, complicating decarbonization efforts.

Table 4: Breakdown of total energy, electricity and renewable electricity consumption of the 200 companies by region; note that some companies report total electricity but not total energy, 2023

Regions	Total energy consumption (TWh)	Total electricity consumption (TWh)	Renewable electricity used (TWh)	Renewable electricity share (%)
North America	246	218	152	70
Europe and Central Asia	67	60	40	67
East Asia and Pacific	334	285	34	12
South Asia	11	3	1	32
Latin America and Caribbean	10	7	0	0
Middle East and North Africa	11	7	0	2
Sub-Saharan Africa	2	1	0	0

Note: Region is assigned based on company's headquarters location.

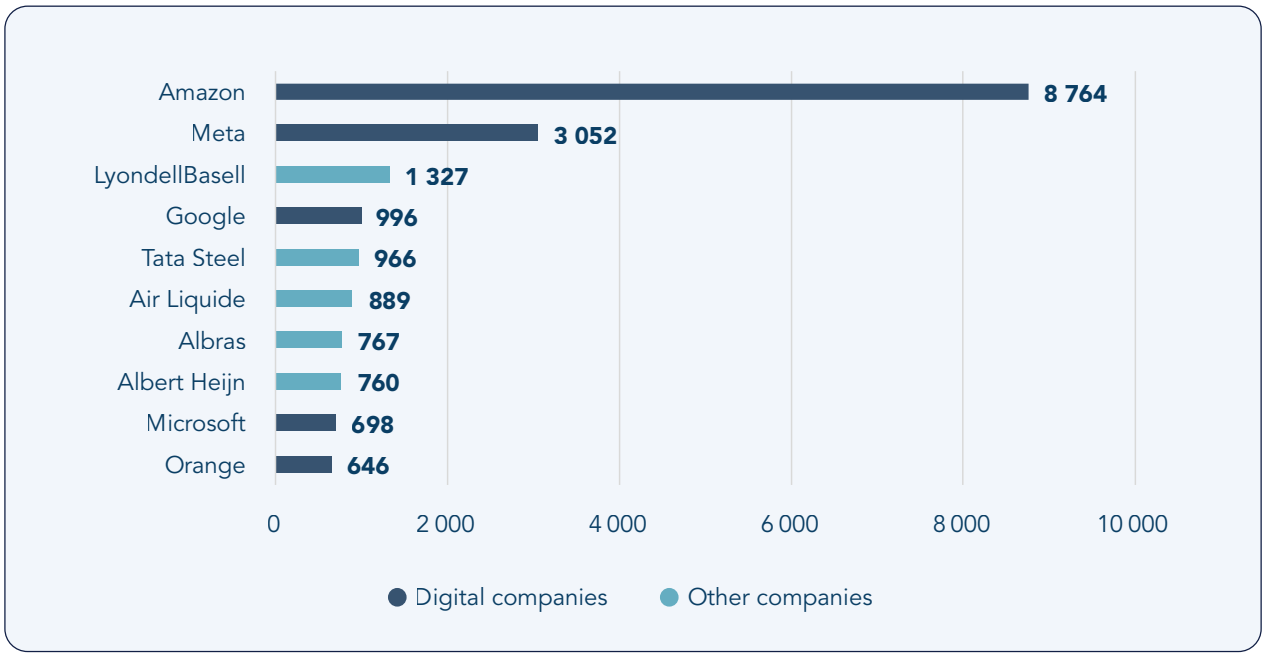
Energy consumption patterns across ICT subsectors show differences in both scale and reliance on renewable sources (see Table 5). For renewable electricity use, the IT software and services subsector leads, with renewable sources representing an 80 per cent share of its electricity consumption. Telecommunications and electronics' shares are 18 per cent and 29 per cent, respectively.

Table 5: Breakdown of total energy, electricity and renewable electricity consumption by ICT subsector; note that some companies report total electricity but not total energy, 2023

Sector	Total energy consumption (TWh)	Total electricity consumption (TWh)	Renewable electricity used (TWh)	Renewable electricity share (%)
IT software and services	186	165	132	80
Telecommunications	276	239	44	18
Electronics	218	177	51	29

Digital companies remain among the top global corporate buyers of clean energy. In 2023, Amazon, Meta, Alphabet, Microsoft and Orange led clean energy procurement (see Figure 9), signalling strong momentum toward the decarbonization of electricity supply, in particular among European and United States-based companies. However, it is important to note that current market-based models, in particular the use of RECs over PPAs, remain a subject of debate, especially with regard to additionality.[25]
There are also broader challenges, including the risk of insufficient guardrails and the emerging social consequences in low-carbon countries. While digital companies aim to move faster than national grids toward decarbonization, there is an increasing need to strengthen and align market-based mechanisms to ensure genuine, systemic change.

Figure 9: Top global corporate buyers of clean energy, MW, 2023



Source: BloombergNEF. 2024. "Corporate Clean Power Buying Grew 12% to New Record in 2023, According to BloombergNEF." 13 February. https://about.bnef.com/blog/corporate-clean-power-buying-grew-12-to-new-record-in-2023-according-to-bloombergnef

Despite corporate ambition, only 23 assessed companies reported sourcing 100 per cent renewable electricity sources in 2023 (see Figure 10). However, several companies acknowledged that despite purchasing renewable electricity, it is not always physically available in the regions where their consumption is located, or the local grid may not consistently supply renewable energy. This highlights an important gap between contractual commitments and on-the-ground delivery.

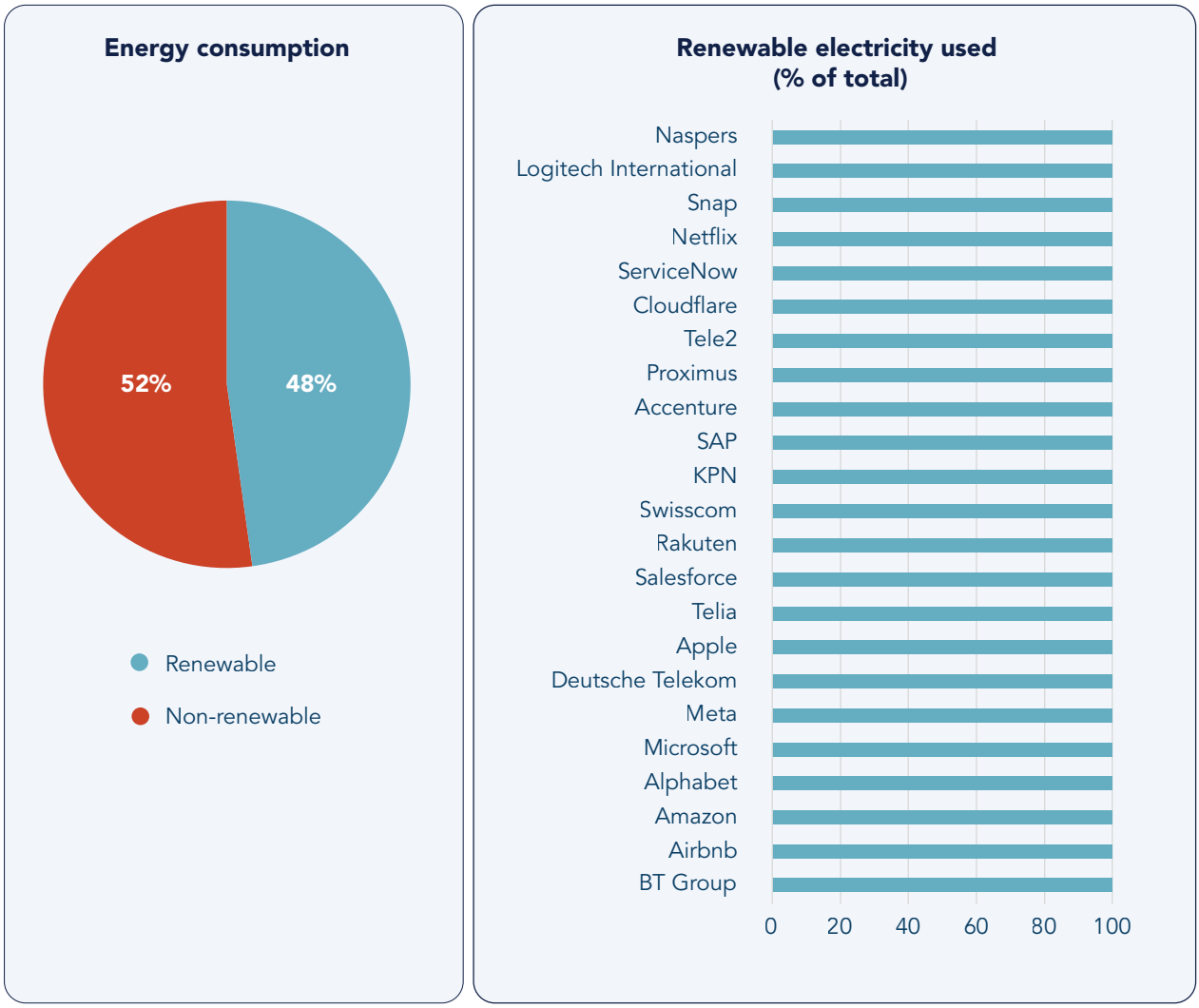
Among the top 10 electricity-consuming companies, only three — Amazon, Alphabet and Microsoft — have made public commitments to achieving 100 per cent renewable electricity use across global operations by 2030. Of these, only the Microsoft target has been approved by SBTi, lending it added

25 New Climate Institute. 2024. Navigating the nuances of corporate renewable electricity procurement: spotlight on fashion and tech. A special edition of the corporate climate responsibility monitor, https://newclimate.org/sites/default/files/2024-01/NewClimate_RenewableElectricityReport_%20Jan24.pdf

credibility. Samsung Electronics and the Taiwan Semiconductor Manufacturing Company (TSMC) have also made 100 per cent renewable electricity pledges, targeting 2025 and 2040, respectively; however, none of the Chinese telecommunication operators, despite ranking among the top electricity consumers, have set similar commitments.

Membership in global initiatives, such as the 24/7 Carbon-Free Energy Compact, further reflects efforts of some companies to match energy consumption with clean energy production in real time. Still, regional disparities in grid availability, market structure and policy support continue to constrain progress. Companies operating in regions with less developed renewable infrastructure face greater challenges in meeting clean energy goals. These regional differences also shape the decarbonization strategies of digital industries differently: for example, electronics manufacturers concentrated in East Asia will have to navigate fossil fuel-heavy grids, while IT software and cloud providers headquartered in North America and Europe can more readily access cleaner energy sources.

Figure 10: 23 digital companies reported using 100 per cent renewable electricity (right) and total renewable vs. non-renewable energy consumption of the companies (left), 2023



2.5. Target setting

Explanatory Box 3. Science Based Targets Initiative (SBTi)

The SBTi Corporate Net-Zero Standard[26] is a globally recognized framework developed by SBTi to guide companies in setting science-based net-zero targets. Launched in 2021, it provides a clear, consistent and science-aligned definition and guidelines for companies to reduce their GHG emissions in line with efforts to limit global warming to 1.5°C. Companies can submit detailed documentation, including emission data and proposed targets, which SBTi reviews for ambition, scope coverage, methodology and time-frame. Targets must cover Scope 1 and 2 emissions and also Scope 3 if they represent a significant share of total emissions. Following the framework, companies must set both near-term and long-term SBTs. Near-term targets focus on rapid emission reduction that covers a time horizon of 5 to 10 years. Long-term targets require companies to reduce at least 90 per cent of their emissions by 2050. After an iterative review process, SBTi approves and publishes validated targets, which must be disclosed publicly and reviewed every five years or after significant business changes.

SBTi discloses company commitments that have been submitted to the organization alongside a status based on the guidelines.[27] Company commitments can be labelled as committed, target set or removed. Active commitments refer to companies that have pledged to set SBTs and are awaiting validation after submission. A commitment is labelled as a set target once a company submits targets within the time-frame and receives approval from SBTi. Removed commitments occur when a company fails to submit or validate targets in time, voluntarily withdraws or undergoes structural changes that affect the boundaries of the commitments.

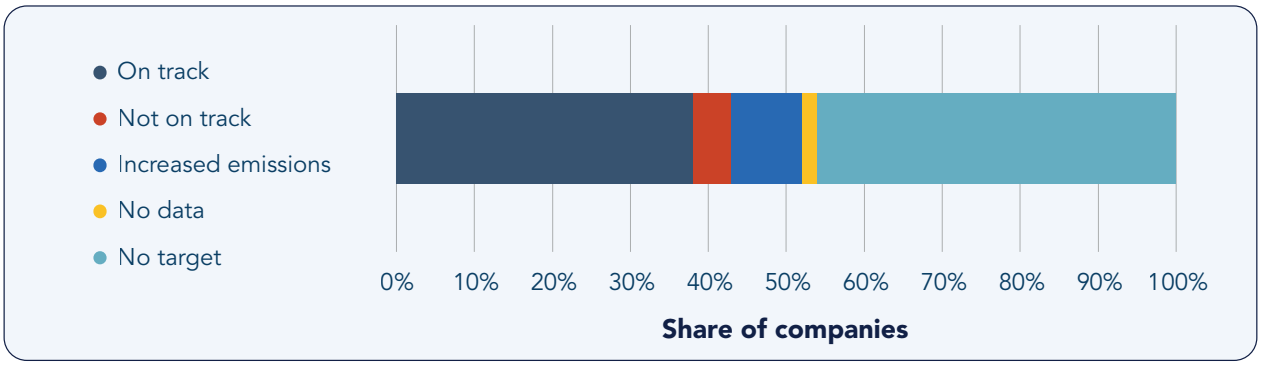
To set appropriate targets, companies should follow the parameters considered in the jointly developed ITU, GeSI, GSMA and SBTi **Guidance for ICT companies setting science based targets**,[28] which provides guidance for ICT companies in setting GHG emission SBTs. It is based on the decarbonization pathways outlined in Recommendation ITU-T L.1470, which aligns with the UNFCCC Paris Agreement and the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C. These pathways are intended to help companies set targets in line with science-based initiatives. To set a recognized target, companies must account for Scope 1 and 2 emissions as per the GHG Protocol Corporate Standard. If Scope 3 emissions represent more than 40 per cent of total emissions, companies must also set a Scope 3 target, which should be ambitious, measurable and aligned with best practices for addressing major value-chain GHG sources. The guide primarily applies to ICT companies operating in mobile networks, fixed networks and data centres.

26 SBTi, 2024. SBTi Corporate Net-Zero Standard Criteria, https://sciencebasedtargets.org/resources/files/Net-Zero-Standard-Criteria.pdf
27 SBTi, 2024. Commitment Compliance Policy, https://docs.sbtiservices.com/resources/CommitmentCompliancePolicy.pdf
28 SBTi and ITU, 2020. Guidance for ICT companies setting science-based targets, https://sciencebasedtargets.org/resources/legacy/2020/04/GSMA_IP_SBT-report_WEB-SINGLE.pdf

2.5.1. Operational emissions (Scope 1 and 2 near-term targets)

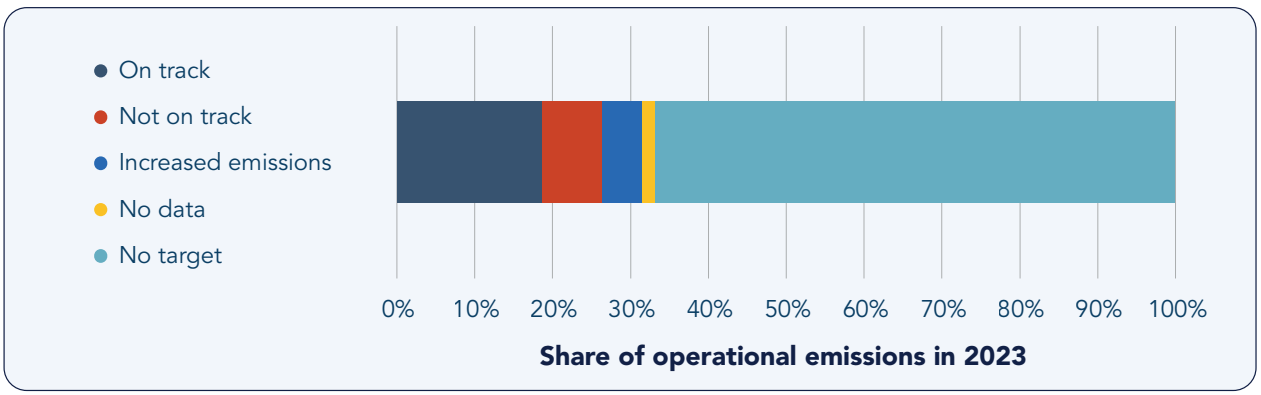
Most companies (75 per cent, 149 companies, see Figure 11) have disclosed having Scope 1 and 2 emission near-term reduction targets; however, only 108 have had their targets validated by SBTi. This results in only a third of the sectoral emissions being covered by an SBT (33 per cent or 99 million tCO_2e). To determine the performance of company progress toward emission reduction targets, emission data from the base - and reporting years were analysed. From the data, the observed annual reduction rate of company emissions were calculated. In parallel, the required annual reduction rate that the company needs to meet in order to achieve its target were computed. Companies were classified as on track if their observed reduction rate was equal to or greater than the required reduction. Conversely, companies were deemed not on track if their observed reduction rate fell below the required reduction to meet their target. In some instances, company emissions remained unchanged or had increased relative to their base year. More information on the scoring approach can be found in Annex 4.1. Of the 108 companies with validated targets, 76 are on track to achieve the set targets; 10 are deemed not on track, reducing emissions too slowly; and 18 have seen emissions rise or stay the same since their base year (see Figure 12). The four remaining companies did not disclose enough or sufficiently consistent data for the assessment of performance against their targets.

Figure 11: Breakdown of companies by Scope 1 and 2 near-term target performance (n=149), 2023



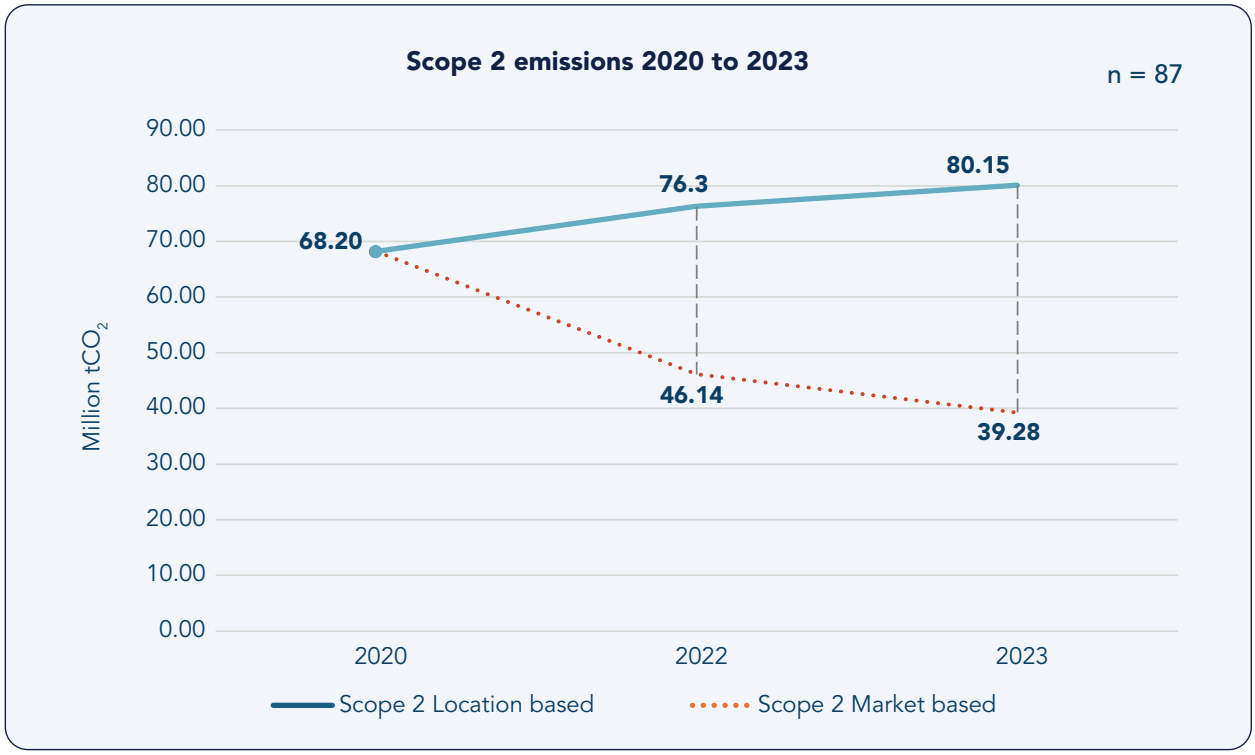
Over half of the assessed companies have committed to science-based reduction targets for their operational emissions. While this is a positive step, and more companies are following this practice, the industry outlook paints a less optimistic picture. Of the top seven largest emitters, none of them have SBTi-validated targets. Furthermore, only four of the top 15 emitters have committed to SBTs, meaning that only 18 per cent of digital sector emissions are covered by an SBT that is on track to be achieved.

Figure 12: Breakdown of emissions by Scope 1 and 2 near-term target performance, 2023



The current standards for setting targets allow companies to claim RECs toward their emission reduction. However, using different accounting methods to report Scope 2 emissions could lead to companies claiming inflated emission reduction rates. This discrepancy is particularly significant since the evidence suggest that RECs do not contribute to the generation of more renewable energy.[29] To illustrate the importance of the Scope 2 accounting method, companies that had both SBTs and a complete inventory of their market-based and location-based Scope 2 emissions were considered (Figure 13). For this subset of 87 companies, there is a decreasing trend in location-based Scope 2 emissions. Emissions for these companies were 46 million tCO_2e in 2022 and decreased to 39 million tCO_2e in 2023. Only taking market-based Scope 2 emissions as a reference, companies reduced their emissions by 42 per cent from 2020 to 2023. In contrast, values for location-based Scope 2 emissions kept increasing and reached 80 million tCO_2e in 2023, which means companies' energy consumption led to an increase of 18 per cent in energy related emissions for the same period (see Explanatory Box 2 for further discussion of emission accounting methodologies and considerations). Considering that most of the difference between the two accounting methods derives from the purchases of RECs[30] and that digital companies are large purchasers of renewable energy credits, using only market-based Scope 2 emissions to inform target performance could lead to an overestimation of real emission reduction. SBTi is taking steps to close this loophole with its current Corporate Net-Zero Standard undergoing revision. The new standard could require companies to set both location-based and market-based targets for Scope 2 emissions. Companies that only consider a market-based approach to track emission reductions might fall short of future, stricter standards.

Figure 13: Scope 2 emissions trajectory for companies with SBTi validated targets that report location-based and market-based emissions, 2023



29 Gillenwater, Lu and Fischlein, 2014. Additionality of wind energy investment in the U.S. voluntary green power market, https://doi.org/10.1016/j.renene.2013.10.003

30 Bjørn, A., Lloyd, S.M., Brander, M. et al., 2022. Renewable energy certificates threaten the integrity of corporate science-based targets, https://doi.org/10.1038/s41558-022-01379-5

2.5.2. Indirect emissions (Scope 3 near-term targets)

For Scope 3 emissions, an increasing number of the companies assessed submitted Scope 3 near-term targets in 2023 compared to 2022 (110 and 73, respectively). Of the 110 companies that submitted Scope 3 targets, 100 companies had their targets validated by SBTi. However, these targets are subject to similar limitations described in the previous edition of this report:[31] some companies restrict their commitments to only certain categories of Scope 3 emission; moreover, 19 per cent of the Scope 3 targets used intensity-based metrics to track progress. Emission intensity targets are designed to encourage companies to improve efficiency by reducing emissions per unit of output; however, they can also allow companies to report progress without lowering total or absolute emissions. Moreover, financial intensity targets do not necessarily reflect efficiency in product emissions, as financial metrics are subject to other factors that can have an impact. See Annex Table A4 for a complete list of company commitments.

Explanatory Box 4: The difference between net-zero and carbon-neutral targets

The terms "carbon neutral" and "net zero" are frequently used in discussions around climate action to describe a company's long-term targets. These terms are sometimes used interchangeably or without a clear distinction in the corporate sector, which can make it challenging to understand the distinction between the two concepts.

"Carbon neutral" refers to the use of carbon offsets to compensate for emissions generated by the company.[32] Carbon offsets are generated by funding activities that reduce or remove emissions from the atmosphere. This means that carbon neutrality does not necessarily indicate that the company has reduced its emissions directly. Additionally, carbon neutrality focuses on CO_2 emissions and may not include other GHGs. SBTi does not validate carbon-neutral targets, since they find they don't align with the urgent action required to limit global warming to 1.5°C.

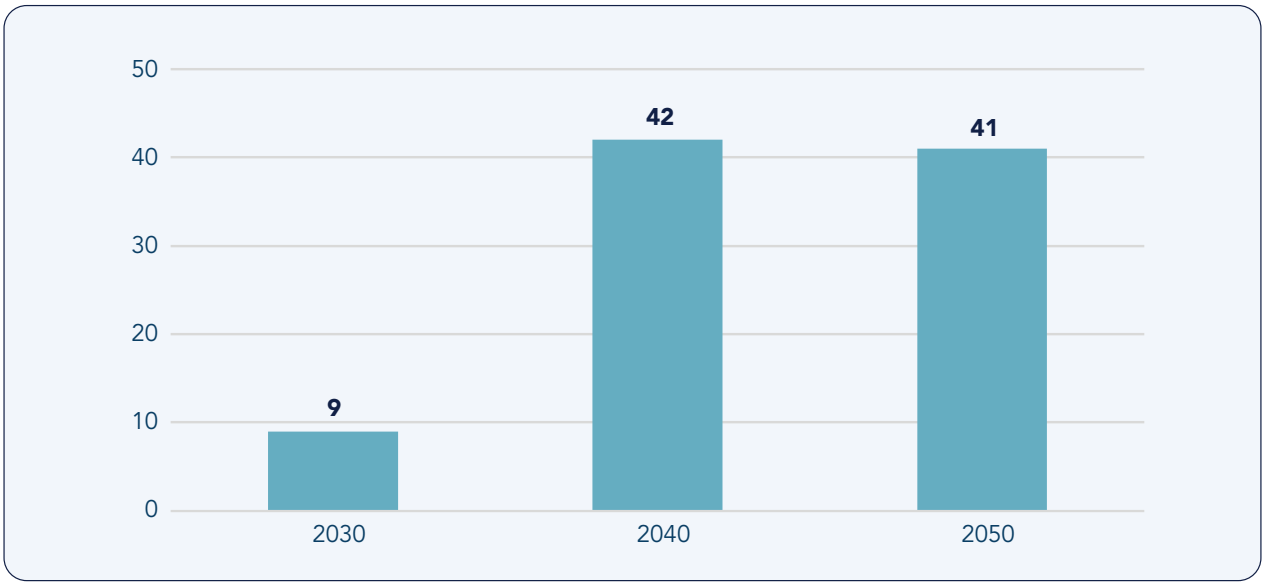
On the other hand, net-zero emissions are achieved when the total amount of GHG emissions from a company's activity is balanced by removing the same quantity of emissions from the atmosphere over a defined period.[33] According to the SBTi Corporate Net-Zero Standard, companies must reduce emissions typically by at least 90 per cent to be considered net zero. Any remaining emissions must then be neutralized through permanent carbon removal methods. As opposed to carbon offsetting, neutralizing emissions involves permanently removing CO_2 from the atmosphere.

31 ITU and WBA, 2024. Greening Digital Companies Report 2024, https://www.itu.int/hub/publication/d-str-digital-04-2024/
32 SBTi, 2024. Net-zero jargon buster- a guide to common terms, https://sciencebasedtargets.org/blog/net-zero-jargon-buster-a-guide-to-common-terms
33 SBTi, 2024. Net-zero jargon buster- a guide to common terms, https://sciencebasedtargets.org/blog/net-zero-jargon-buster-a-guide-to-common-terms

2.5.3. Net-zero and carbon-neutral targets

Under the SBTi Corporate Net-Zero Standard,[34] corporate target setting in line with climate science identifies targets as short term and long term. To comply with a science-based approach companies need to establish both. Companies will set net-zero or carbon-neutral targets as their long-term goals. Among digital companies with net-zero targets, almost half commit to being net zero by 2050. Of those companies, nine aim to be net zero by 2030, 42 by 2040 and 41 by 2050 (see Figure 14).

Figure 14: Number of companies with net-zero commitments by target year, 2023



2.6. Assessment results

Explanatory Box 5: Methodology note

The climate assessment looks at three areas: targets, data and performance. Each area is scored up to three points, allowing for a maximum overall score of nine points. The assessment is based on information collected for the fiscal year 2023.

Targets (3 points): Companies must have emission reduction targets validated by SBTi. Points are awarded for: submitting a target (1 point); ensuring it is not intensity based (0.5 points); covering Scope 3 emissions (1 point); and aiming for net zero across all relevant scopes by 2040 (0.5 points).

34 SBTi, 2024. SBTi Net-Zero Corporate Standard Criteria, https://sciencebasedtargets.org/resources/files/Net-Zero-Standard-Criteria.pdf

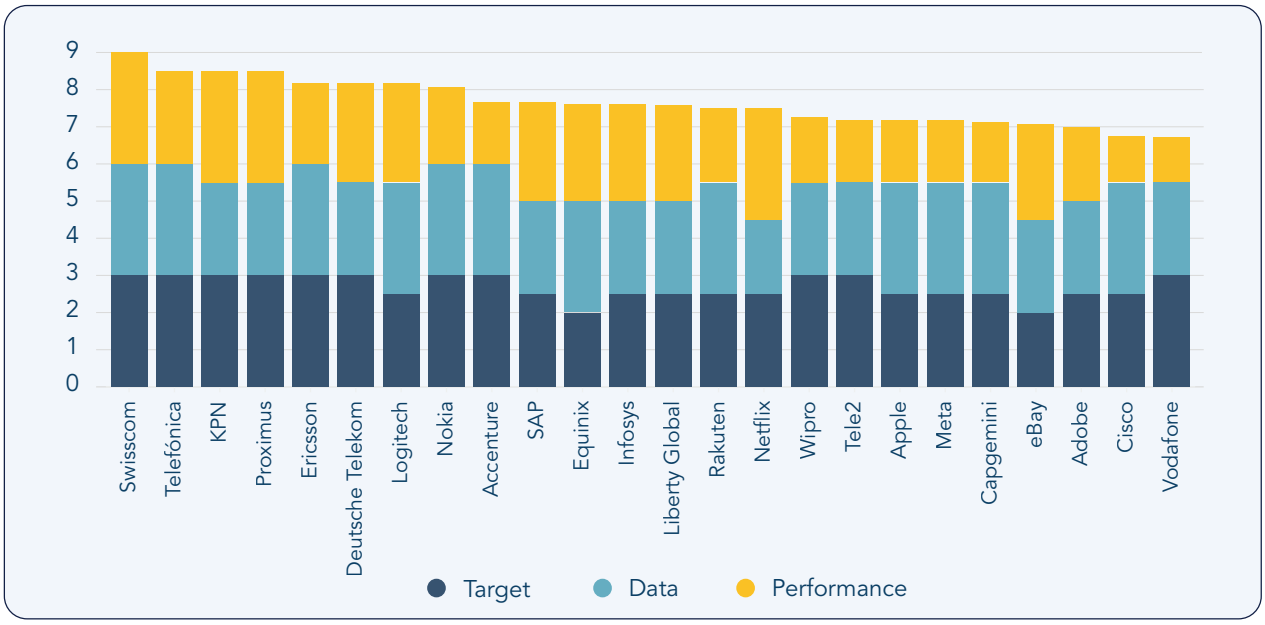
Data (3 points): Points are awarded for: availability of data on Scope 1, 2 and 3 emissions (0.5 points each) and on electricity consumption (0.5 points); publication of a standalone environmental report or its CDP climate questionnaire (0.5 points); verification of emission data by a third party (0.5 points).

Performance (3 points): Performance is assessed based on: the share of renewable energy sources in electricity consumption (1 point); GHG emission intensity per USD revenue compared to previous year (1 point); and market-based GHG emissions relative to electricity use (1 point).

Each edition of the Greening Digital Companies report assesses companies on their data disclosure, targets and performance. This year, one company — Swisscom — achieved the highest score possible, while seven others — Logitech, Proximus, Telefonica, KPN, Ericsson, Deutsche Telekom and Nokia — achieved climate performance scores of 90 per cent or higher, five more companies than in the previous year. These companies set the benchmark for transparency, emission reduction and renewable energy adoption. In addition, 24 companies scored 75 per cent or higher, two fewer than did so in the 2024 edition of the report (see Figure 15). It is worth noting that this year's top performers differ from last year's, with some companies seeing declines in performance due to scaling back their climate ambitions.

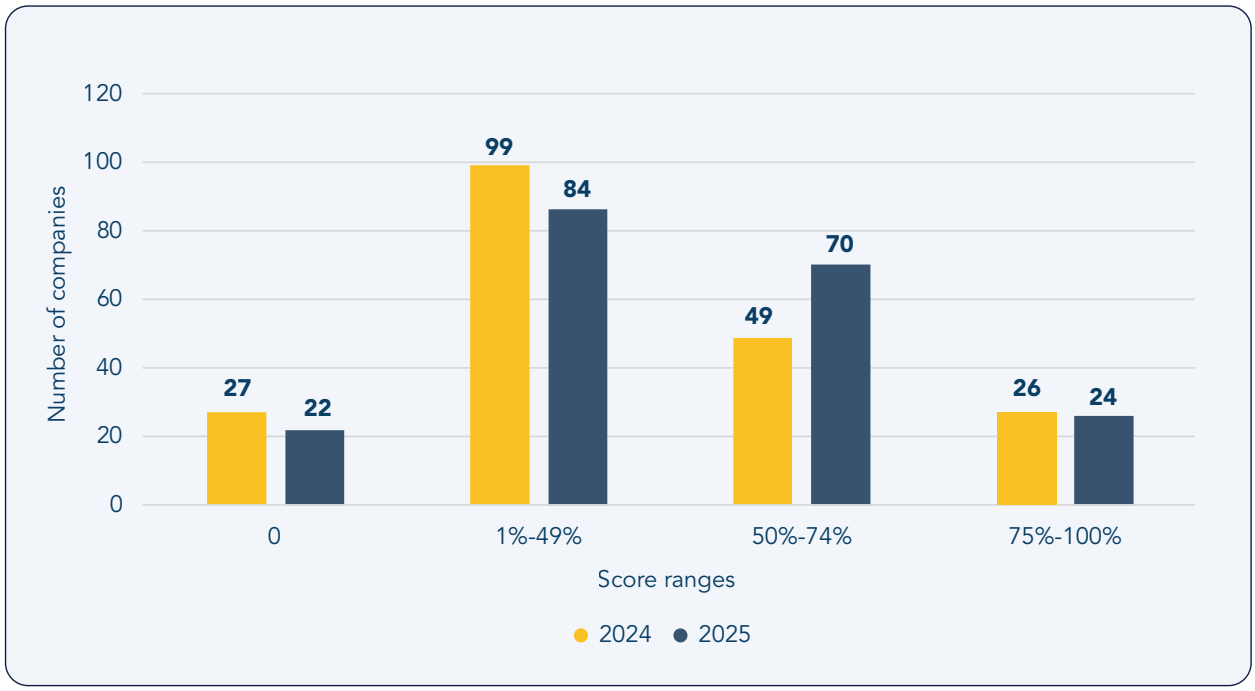
Climate performance varies by region: the top performers are primarily headquartered in Europe (14 companies) and North America (7 companies), suggesting a regional divide in climate ambition and achievement. Companies headquartered in other regions have historically tended to score lower. However, for the first time, companies from other regions — notably Infosys and Wipro from India and Rakuten from Japan — have also achieved performance scores above 75 per cent, signalling a shift with different regions entering the top spots.

Figure 15: Companies scoring at least 75 per cent on the climate assessment (n=24), 2023



A greater number of companies are now achieving a passing grade of 50 per cent or higher (94 vs. 70 last year), while the number of companies with a score of zero has decreased (22 vs. 27 last year) (see Figure 16). This is mainly due to companies placing a higher importance on the reporting of their climate ambitions and, to a lesser extent, more companies setting emission reduction targets. Overall, low-scoring companies remain those with poor disclosure.

Figure 16: Climate performance score distribution (2024 vs. 2025)



2.6.1. The influence of AI in emission performance

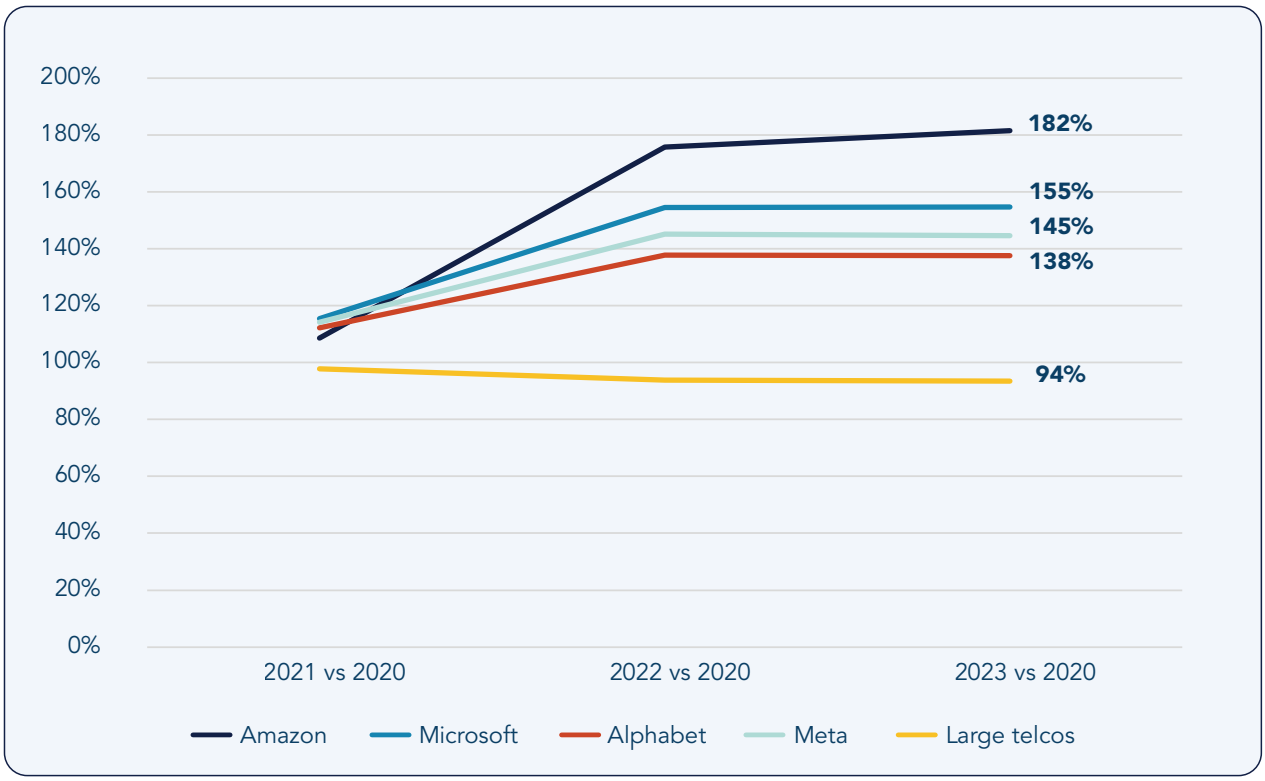
A recent study estimates that carbon emissions from the top-emitting AI systems could reach up to 102.6 million tCO_2e per year.[35] With how ubiquitous AI has become and how it has been increasingly integrated into various services, it is a challenge to estimate the direct impact of AI use. Due to this, defining and setting emissions boundaries for the use of AI comes with important challenges. AI data-centre data may be easy to track, while an AI-based algorithm inside a specific network function would be hard to define and track separately. Currently, there are no standards or legislative requirements for companies to disclose their AI emissions or energy consumption, which makes understanding the impact of AI on company-level energy use less straightforward. However, data from company reports show an increasing trend in operational emissions for companies with a high level of AI adoption. This evidence coincides with a larger demand for and investment in data centres.[36] Figure 17 shows the share of operational emissions (using location-based Scope 2 emissions) from 2021 to 2023 as a proportion of 2020 emissions for Amazon, Microsoft, Alphabet (Google) and Meta, all significant suppliers or users of AI. In 2023, operational emissions from these companies were, on average, 150 per cent of what they had been in 2020.

35 Yu, Y., Wang, J., Liu. et al., 2024. Revisit the environmental impact of artificial intelligence: the overlooked carbon emissions source? https://doi.org/10.1007/s11783-024-1918-y

36 IEA, 2025. Artificial Intelligence, https://www.iea.org/topics/artificial-intelligence

Large telecommunication companies[37] did not experience an increase within the same period, though AI is likely to be integrated into their software. AI is not only data hungry but also energy hungry, and, as the AI expansion continues, increased energy demand could put pressure on the existing energy infrastructure and jeopardize energy transition targets.

Figure 17: Trajectory of operational emissions of companies compared to 2020 values



37 This is a list of 14 largest telecommunication companies by number of wireless users, including: China Mobile, China Telecom, China Unicom, Jio, Orange, Verizon, AT&T, Deutsche Telekom, Vodafone, Bharti Airtel, América Movil, Telenor, Telefónica and Telecom Italia.

3

Recommendations

Strengthen data verification, target ambition and climate reporting. All companies should publish dedicated climate reports and detailed Scope 1, 2 and 3 data, targets and performance metrics. Full Scope 3 reporting, with a breakdown by Scope 3 category is especially needed. Without more granular and consistent category-level disclosures, companies risk underestimating their climate impact and overlooking key levers for change within their value chains. Encourage suppliers to provide emission data through targeted capacity-building and supplier engagement programmes.

Companies should move beyond intensity-based targets and commit to absolute, time-bound, science-aligned emission reduction plans for all scopes of emission. There should also be alignment with the SBTi Corporate Net-Zero Standard, requiring both near- and long-term targets, including Scope 3 emissions, and consider sector-specific recommendations and guidelines developed by ITU in this process.[38] This includes guidance for ICT companies to achieve the target of limiting global warming to 1.5°C, as outlined in the Paris Agreement (Recommendation ITU-T L.1470), including decarbonization pathways for mobile networks, data centres and manufacturers, which was developed in cooperation with SBTi, GeSI and GSMA. Specific net-zero guidance for ICT companies (Recommendation ITU-T L.1471) aligns with initiatives such as the Race to Zero campaign. ITU also provides technical standards for assessing energy consumption and GHG emissions for ICT organizations (Recommendation ITU-T L.1420) and methodologies for assessing the environmental impact of the ICT sector (ITU-T L1450) and for enabling the net-zero transition and assessing how the use of ICT solutions impact GHG gas emissions in other sectors (Recommendation ITU-T L.1480).

SBTi is revising its Corporate Net-Zero Standard, with a draft revision released in March 2025, introducing important updates to improve target credibility and transparency.[39] These include setting separate SBTs for Scope 1 and 2 emissions and meeting a 90 per cent absolute reduction in Scope 3 emissions by 2050. The draft also introduces stricter timelines for target verification, in particular for large companies in high-income countries, and clarifies the role of carbon removals, allowing their use only to neutralize residual emissions through high quality carbon removals (e.g. afforestation, direct air capture, soil carbon sequestration), which should be no more than 10 per cent of a company's total baseline emissions. Digital companies should proactively prepare for these changes by disaggregating Scope 1 and 2 targets and tracking progress, and also by expanding Scope 3 coverage and transitioning from intensity-based to absolute reduction targets. The ITU Greening Digital Dashboard, powered by data from the Greening Digital Companies report series, enables further monitoring of climate reporting.

Address regional disparities in climate ambition with tailored policy approaches. To accelerate digital sector decarbonization globally, climate policies must reflect regional differences in infrastructure, energy markets and corporate maturity, while also considering the distinct needs of different subsectors. In Europe and North America, where regulatory ecosystems and disclosure rates are more advanced, public investments (e.g. the United States government's USD 500 billion investment in AI infrastructure[40]) should be made contingent on companies having robust transition plans and commitments to 24/7 carbon-free energy matching. Here, both Scope 1 and 2 emissions and Scope 3 emissions should be

38 https://www.gsma.com/solutions-and-impact/connectivity-for-good/external-affairs/gsma_resources/scope-3-guidance/

39 ISS ESG, 2025. The Future of Carbon Credits and Other Aspects of the SBTi Revised Corporate Net-Zero Standard, https://insights.issgovernance.com/posts/the-future-of-carbon-credits-and-other-aspects-of-the-sbti-revised-corporate-net-zero-standard/

40 Medium, 2025. The U.S. Government's Bold $500 Billion Investment in AI Infrastructure, https://medium.com/@sagarsangwan/the-u-s-governments-bold-500-billion-investment-in-ai-infrastructure-4b8af7bd8577#:~:text=The%20%24500%20billion%20AI%20infrastructure,redefine%20how%20AI%20shapes%20society.

closely aligned to these commitments. In East Asia, where corporate climate ambition is growing but the grid remains carbon-intensive, governments should prioritize cleaning the grid and incentivizing long-term PPAs, focusing on Scope 2 emissions (indirect emissions from purchased electricity), while also encouraging companies to take responsibility for Scope 3 emissions through stronger supplier engagement. For Latin America and Africa, where climate target setting and emission disclosures are less developed, international cooperation and policy support should focus on capacity building, improving reporting frameworks and enhancing corporate climate accountability. Policies should help these regions build the necessary infrastructure to tackle both Scope 1 and 2 and Scope 3 emissions effectively, while promoting local solutions that support renewable energy and emission reductions at the grid level.

Across all regions, policies should discourage overreliance on market-based accounting and unbundled RECs and instead promote energy procurement strategies that deliver verifiable emission reductions and grid-level additionality, including onsite generation, PPAs and 24/7 renewable energy strategies. This multi-layered approach will ensure more effective decarbonization in the digital sector across varying regional contexts and subsectors.

Accelerate publication and standardization of climate transition action plans (CTAPs) across the digital sector. To turn long-term climate pledges into measurable, near-term progress, digital companies should scale up the publication of CTAPs. These plans provide a structured, transparent framework to guide internal decision-making and communicate credible decarbonization strategies to stakeholders. Despite emerging guidance, globally only a small fraction of companies currently meet disclosure criteria for credible plans.[41] However, recent momentum in the digital sector is promising, with companies such as Telia,[42] BT Group[43] and Vodafone[44] having published detailed transition plans. BT Group and Vodafone are also aligned with the United Kingdom's Transition Plan Taskforce (TPT) guidance, demonstrating how government-backed frameworks can support meaningful corporate action. Governments in other regions should adopt or adapt similar national frameworks. In the European Union, the Corporate Sustainability Reporting Directive (CSRD) and Corporate Sustainability Due Diligence Directive (CSDDD) will soon move transition plans into a mandatory context, raising the bar for disclosure. To prepare, companies should proactively publish CTAPs aligned with recognized frameworks.

Address AI-driven emissions and energy growth. Companies should disclose the full energy and emission footprints related to their AI operations, and there is a growing need for specific AI standards to ensure that data are consistent and comparable across companies. This includes emissions from the energy consumed during the training and operation of AI models, as well as the associated environmental impact of data centres, servers and cloud infrastructure used in these processes. Industry standards need to be developed to support reporting and pre-empt regulation. There could be a move to establish efficiency benchmarks for data centres supporting AI development and operations, which can

41 We Mean Business Coalition, 2022. Climate Transition Action Plans: Activate Your Journey to Climate Leadership, https://www.wemeanbusinesscoalition.org/wp-content/uploads/2022/10/WMBC-Climate-Transition-Action-Plans.pdf

42 Telia Company, 2025. Telia Company launches Climate Transition Plan, https://www.teliacompany.com/en/news/telia-company-launches-climate-transition-plan-2025-03-20-07-30-00

43 BT Group, 2025. Climate Transition Plan 2025, https://www.bt.com/bt-plc/assets/documents/digital-impact-and-sustainability/our-approach/our-policies-and-reports/bt-group-climate-transition-plan.pdf

44 Vodafone, 2024. Vodafone publishes its Climate Transition Plan, https://www.vodafone.com/news/protecting-the-planet/vodafone-publishes-its-climate-transition-plan

serve as targets for energy efficiency and emission reduction, helping to drive industry-wide improvements. For example, establishing performance standards for energy consumption per unit of computation or emissions per AI model training cycle would allow companies to measure their efficiency and adopt more sustainable practices. There could also be a shift for companies investing heavily in AI to validate only absolute emission reduction targets rather than intensity-based targets. While intensity-based targets can appear to show progress without addressing the underlying increase in emissions, absolute targets focus on reducing overall emissions in a concrete, measurable way. This approach ensures that companies are committed to genuine emission reductions, regardless of growth in AI deployment, thus preventing the risk of emissions growth being masked by efficiency improvements or increased output. Requiring absolute emission targets would align with global climate frameworks, such as the Paris Agreement, and ensure that companies remain on track toward achieving net-zero emissions.

Promote cross-sector collaboration and industry initiatives. Cooperation between ICT, energy and environmental sectors are essential for sustainable digital growth and to accelerate decarbonization across digital sector value chains. Digital companies could expand participation in initiatives such as the 24/7 Carbon Energy Compact, RE100 and First Movers Coalition. By collecting and assessing country-level climate data, ICT regulators can help inform policy decisions that drive sustainability. An ITU and World Bank 2025 best practice case study showed how the French Regulatory Authority for Electronic Communications, Posts and Distribution of Print Media (Arcep) is the first regulator to regularly publish environmental data, which have helped the French Government embed digital and environmental strategies in national policy-making. This serves as a blueprint for other regulators worldwide.[45] As the digital sector's climate footprint grows, coordinated action across companies, governments and regulators is critical to achieving meaningful decarbonization. Figure 18 outlines key areas where stakeholders can drive faster, more transparent and more impactful climate progress. The combined efforts of these stakeholders will be essential for delivering a resilient, low-carbon digital economy and aligning the sector's growth with global climate goals.

45 ITU and World Bank, 2025. **Measuring National ICT Sector Climate Impact: Arcep Case Study**, https://www.itu.int/en/ITU-D/Environment/Pages/Publications/Measuring-National-ICT-Sector-Climate-Impact-Arcep-Case-Study.aspx

Figure 18: Decarbonizing the digital sector: role of companies, governments and regulators

	Digital companies	Governments	Regulators
Improve data reporting and transparency	• Publish dedicated climate reports with full Scope 1, 2 and 3 data • Shift from intensity to absolute, science-aligned targets • Disclose AI-related emissions (training and operation) and support the development of AI-specific standards to ensure consistent, transparent and comparable data • Prepare for SBTi Corporate Net-Zero Standard updates (Scope 1 and 2 separation, Scope 3 90% reduction) and implement ITU-T sector-specific recommendations and guidelines	• Mandate full Scope 3 reporting in high-emitting digital companies • Incentivize third-party verification through financing/procurement • Make CTAP publication a condition for public funding (e.g. AI infrastructure)	• Enforce CSRD, the ESRS E1 standard and CSDDD transition plan requirements (European Union) • Promote country-level emission reporting (e.g. Arcep (France) model)
Accelerate renewable energy adoption	• Prioritize additionality through PPAs, onsite generation, 24/7 carbon-free strategies • Avoid overreliance on RECs and market-based accounting • Commit to long-term clean energy sourcing aligned with emission targets	• Encourage 24/7 carbon-free energy and robust CTAPs • Prioritize grid decarbonization and incentivize PPAs • Support clean infrastructure and capacity-building	• Develop AI-specific energy efficiency benchmarks (e.g. emissions per training cycle) • Require efficiency reporting standards for data centres
Advance Scope 3 strategies and cross-sector collaboration	• Engage suppliers for GHG reporting and transparency, in particular for upstream emissions • For companies with larger downstream emissions, prioritize designing lower-carbon products, enhancing energy efficiency and promoting sustainable use among customers • Integrate Scope 3 targets into CTAPs, in line with SBTi guidance • Join multi-sector coalitions (e.g. RE100, 24/7 Carbon-Free Compact) and develop common standards e.g. through activities with ITU-T	• Facilitate international technical cooperation for digital sector emission tracking • Support Scope 3 monitoring in developing economies	• Encourage collaborative decarbonization strategies across ICT, energy and manufacturing sectors • Harmonized data collection of indicators

4

Annexes

Table A1: Company overview

Company	WBA ID	Corporate name	HQ	Region	Industry
Accenture	PT_00012	Accenture plc	Ireland	Europe & Central Asia	IT Software & Services
Acer	PT_00017	Acer Incorporated	Taiwan, China	East Asia & Pacific	Electronics
Adobe	PT_00024	Adobe, Inc.	United States	North America	IT Software & Services
Airbnb	PT_00055	Airbnb, Inc.	United States	North America	IT Software & Services
AIS	PT_00026	Advanced Info Service Plc	Thailand	East Asia & Pacific	Telecommunications
Akamai	PT_00058	Akamai Technologies Inc	United States	North America	Telecommunications
Alibaba	PT_00069	Alibaba Group Holding Ltd	China	East Asia & Pacific	IT Software & Services
Alphabet	PT_00075	Alphabet Inc.	United States	North America	IT Software & Services
Altice	PT_00078	Altice France Holding SA	Luxembourg	Europe & Central Asia	Telecommunications
Amazon	PT_00081	Amazon.Com, Inc.	United States	North America	IT Software & Services
AMD	PT_00027	Advanced Micro Devices, Inc.	United States	North America	Electronics
América Móvil	PT_00085	América Móvil, S.A.B. De C.V.	Mexico	Latin America & Caribbean	Telecommunications
American Tower	PT_00094	American Tower Corporation	United States	North America	IT Software & Services
Amphenol	PT_00100	Amphenol Corporation	United States	North America	Electronics
Analog Devices	PT_00105	Analog Devices, Inc.	United States	North America	Electronics
Ant	PT_02052	Ant Group Co., Ltd.	China	East Asia & Pacific	IT Software & Services
Apple	PT_00125	Apple Inc.	United States	North America	Electronics
Applied Materials	PT_00126	Applied Materials, Inc.	United States	North America	Electronics
ASML	PT_00146	ASML Holding NV	Netherlands	Europe & Central Asia	Electronics
Asus	PT_00153	AsusTek Computer Inc.	Taiwan, China	East Asia & Pacific	Electronics
AT&T	PT_00154	AT&T Inc.	United States	North America	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	Industry
Atos	PT_02133	Atos SE	France	Europe & Central Asia	IT Software & Services
Axiata	PT_00173	Axiata Group Berhad	Malaysia	East Asia & Pacific	Telecommunications
Baidu	PT_00179	Baidu, Inc.	China	East Asia & Pacific	IT Software & Services
BCE	PT_00230	BCE Inc.	Canada	North America	Telecommunications
Bezeq	PT_02065	Bezeq The Israeli Telecommunication Corp Ltd	Israel	Middle East & North Africa	Telecommunications
Bharti Airtel	PT_00250	Bharti Airtel Limited	India	South Asia	Telecommunications
Block	PT_02549	Block, Inc.	United States	North America	IT Software & Services
BOE Technology Group	PT_00264	BOE Technology Group Co Ltd	China	East Asia & Pacific	Electronics
Booking Holdings	PT_00268	Booking Holdings Inc.	United States	North America	IT Software & Services
Broadcom	PT_00282	Broadcom Inc.	United States	North America	Electronics
BT Group	PT_00284	BT Group plc	United Kingdom	Europe & Central Asia	Telecommunications
Bytedance	PT_00291	ByteDance Ltd	China	East Asia & Pacific	IT Software & Services
Canon	PT_00312	Canon Inc.	Japan	East Asia & Pacific	Electronics
Capgemini	PT_02156	Capgemini SE	France	Europe & Central Asia	IT Software & Services
China Mobile	PT_00379	China Mobile Limited	China	East Asia & Pacific	Telecommunications
China Telecom	PT_00402	China Telecom Corporation Limited	China	East Asia & Pacific	Telecommunications
China Unicom	PT_00405	China Unicom (Hong Kong) Limited	China	East Asia & Pacific	Telecommunications
Chunghwa Telecom	PT_00420	Chunghwa Telecom Co., Ltd.	Taiwan, China	East Asia & Pacific	Telecommunications
Cisco	PT_00427	Cisco Systems, Inc.	United States	North America	Electronics
Citrix	PT_00431	Citrix Systems, Inc.	United States	North America	IT Software & Services
Cloudflare	PT_00439	Cloudflare, Inc.	United States	North America	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	Industry
Cogent Communications	PT_00449	Cogent Communications Holdings, Inc.	United States	North America	Telecommunications
Cognizant	PT_02155	Cognizant Technology Solutions Corporation	United States	North America	IT Software & Services
Comcast	PT_00454	Comcast	United States	North America	Telecommunications
Corning	PT_00478	Corning Incorporated	United States	North America	Electronics
Coupang	PT_02818	COUPANG, INC.	United States	North America	IT Software & Services
Delivery Hero	PT_00538	Delivery Hero Group	Germany	Europe & Central Asia	IT Software & Services
Dell	PT_00539	Dell Technologies Inc.	United States	North America	Electronics
Deutsche Telekom	PT_00550	Deutsche Telekom AG	Germany	Europe & Central Asia	Telecommunications
DiDi Chuxing	PT_00554	DiDi Global Inc.	China	East Asia & Pacific	IT Software & Services
Digicel	PT_00556	Digicel Group Ltd.	Jamaica	Latin America & Caribbean	Telecommunications
Digital Realty Trust	PT_00558	Digital Realty Trust, Inc.	United States	North America	IT Software & Services
e&	PT_00623	Emirates Telecommunications Group Company PJSC	United Arab Emirates	Middle East & North Africa	Telecommunications
eBay	PT_00594	eBay Inc.	United States	North America	IT Software & Services
Elisa	PT_00616	Elisa Corporation	Finland	Europe & Central Asia	Telecommunications
Equinix	PT_00634	Equinix, Inc.	United States	North America	IT Software & Services
Ericsson	PT_00637	Telefonaktiebolaget LM Ericsson	Sweden	Europe & Central Asia	Electronics
Ethio Telecom	PT_00643	Ethio Telecom	Ethiopia	Sub-Saharan Africa	Telecommunications
Eutelsat	PT_00649	Eutelsat Communications	France	Europe & Central Asia	Telecommunications
Far EasTone	PT_00665	Far EasTone Telecommunications Co Ltd	Taiwan, China	East Asia & Pacific	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	Industry
Fiserv	PT_02823	Fiserv, Inc.	United States	North America	IT Software & Services
Foxconn	PT_00854	Hon Hai Precision Industry Co., Ltd	Taiwan, China	East Asia & Pacific	Electronics
GlobalFoundries	PT_00755	GLOBALFOUNDRIES, Inc.	United States	North America	Electronics
Globe Telecom	PT_00756	Globe Telecom, Inc.	Philippines	East Asia & Pacific	Telecommunications
GoTo	PT_02535	PT GoTo Gojek Tokopedia	Indonesia	East Asia & Pacific	IT Software & Services
Grab	PT_00765	Grab Holdings Inc.	Singapore	East Asia & Pacific	IT Software & Services
GTT	PT_00799	GTT Communications, Inc.	United States	North America	Telecommunications
HCL	PT_00824	HCL Technologies Ltd.	India	South Asia	IT Software & Services
HP	PT_00863	HP Inc.	United States	North America	Electronics
HPE	PT_02166	Hewlett Packard Enterprise Company	United States	North America	IT Software & Services
Huawei	PT_00867	Huawei Investment & Holding Co., Ltd.	China	East Asia & Pacific	Electronics
IBM	PT_00883	International Business Machines Corporation	United States	North America	IT Software & Services
Iliad	PT_00890	iliad S.A.	France	Europe & Central Asia	Telecommunications
Infineon	PT_02128	Infineon Technologies AG	Germany	Europe & Central Asia	Electronics
Infosys	PT_00905	Infosys Limited	India	South Asia	IT Software & Services
Intel	PT_00913	Intel Corporation	United States	North America	Electronics
Iridium Communications	PT_00930	Iridium Communications Inc.	United States	North America	Telecommunications
JD.com	PT_00956	JD.com, Inc.	China	East Asia & Pacific	IT Software & Services
Jio	PT_02039	Reliance Jio Infocomm Limited	India	South Asia	Telecommunications
JOYY	PT_00977	JOYY Inc	Singapore	East Asia & Pacific	IT Software & Services
Jumia	PT_00982	Jumia Technologies AG	Nigeria	Sub-Saharan Africa	IT Software & Services
Juniper Networks	PT_00983	Juniper Networks, Inc.	United States	North America	Electronics

Company	WBA ID	Corporate name	HQ	Region	Industry
Kakao	PT_02821	Kakao Corp.	Korea, Rep.	East Asia & Pacific	IT Software & Services
KDDI	PT_00157	KDDI Corporation	Japan	East Asia & Pacific	Telecommunications
Keyence Corporation	PT_01005	Keyence Corp	Japan	East Asia & Pacific	Electronics
KPN	PT_01029	Koninklijke KPN N.V.	Netherlands	Europe & Central Asia	Telecommunications
KT	PT_02044	KT Corporation	Korea, Rep.	East Asia & Pacific	Telecommunications
Kuaishou	PT_02824	Kuaishou Technology	China	East Asia & Pacific	IT Software & Services
Kyocera	PT_01042	Kyocera Corporation	Japan	East Asia & Pacific	Electronics
Lam Research	PT_01051	Lam Research Corporation	United States	North America	Electronics
Lenovo	PT_02040	Lenovo Group Limited	China	East Asia & Pacific	Electronics
LG Electronics	PT_02042	LG Electronics, Inc.	Korea, Rep.	East Asia & Pacific	Electronics
Liberty Global	PT_01073	Liberty Global plc	United Kingdom	Europe & Central Asia	Telecommunications
Liquid Telecom	PT_02066	Liquid Intelligent Technologies	United Kingdom	Europe & Central Asia	Telecommunications
Logitech International	PT_01087	Logitech International S.A.	Switzerland	Europe & Central Asia	Electronics
Lumen	PT_00337	Lumen Technologies, Inc.	United States	North America	Telecommunications
Lyft	PT_01107	Lyft Inc	United States	North America	IT Software & Services
MediaTek	PT_01145	MediaTek Inc	Taiwan, China	East Asia & Pacific	Electronics
MegaFon	PT_01147	JSC MegaFon	Russian Federation	Europe & Central Asia	Telecommunications
Meituan	PT_01151	Meituan Dianping	China	East Asia & Pacific	IT Software & Services
MercadoLibre	PT_01153	Mercado Libre, Inc.	Argentina	Latin America & Caribbean	IT Software & Services
Meta	PT_00662	Meta Platforms, Inc.	United States	North America	IT Software & Services
Microchip Technology	PT_01170	Microchip Technology Inc	United States	North America	Electronics

Company	WBA ID	Corporate name	HQ	Region	Industry
Micron Technology	PT_01171	Micron Technology, Inc.	United States	North America	Electronics
Microsoft	PT_01172	Microsoft Corporation	United States	North America	IT Software & Services
Millicom	PT_01175	Millicom International Cellular S.A.	Luxembourg	Europe & Central Asia	Telecommunications
MTN	PT_01208	MTN Group Limited	South Africa	Sub-Saharan Africa	Telecommunications
MTS	PT_01191	Mobile Telesystems Public Joint Stock Company	Russian Federation	Europe & Central Asia	Telecommunications
Murata Manufacturing	PT_01213	Murata Manufacturing Co Ltd	Japan	East Asia & Pacific	Electronics
Naspers	PT_01221	Naspers Limited	South Africa	Sub-Saharan Africa	IT Software & Services
Naver	PT_01239	NAVER Corporation	Korea, Rep.	East Asia & Pacific	IT Software & Services
NEC	PT_01241	NEC Corporation	Japan	East Asia & Pacific	Electronics
Nepal Telecom	PT_01243	Nepal Doorsanchar Company Ltd.	Nepal	South Asia	Telecommunications
NetApp	PT_01246	Netapp, Inc.	United States	North America	Electronics
NetEase	PT_01247	NETEASE, INC.	China	East Asia & Pacific	IT Software & Services
Netflix	PT_01248	Netflix, Inc.	United States	North America	IT Software & Services
Nintendo	PT_02043	Nintendo Co., Ltd.	Japan	East Asia & Pacific	Electronics
Nokia	PT_01286	Nokia Corporation	Finland	Europe & Central Asia	Electronics
NTT	PT_01278	Nippon Telegraph and Telephone Corporation	Japan	East Asia & Pacific	Telecommunications
Nvidia	PT_01317	Nvidia Corporation	United States	North America	Electronics
NXP Semiconductors	PT_01319	Nxp Semiconductors NV	Netherlands	Europe & Central Asia	Electronics
Omantel	PT_01336	Oman Telecommunications Company (S.A.O.G)	Oman	Middle East & North Africa	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	Industry
Ooredoo	PT_01341	Ooredoo Q.P.S.C.	Qatar	Middle East & North Africa	Telecommunications
Oppo	PT_00802	Guangdong OPPO Mobile Telecommunications Corp., Ltd	China	East Asia & Pacific	Electronics
Oracle	PT_01343	Oracle Corporation	United States	North America	IT Software & Services
Orange	PT_01344	Orange SA	France	Europe & Central Asia	Telecommunications
Palantir	PT_02045	Palantir Technologies Inc.	United States	North America	IT Software & Services
PalTel	PT_01368	Palestine Telecommunications Company P.L.C.	West Bank and Gaza	Middle East & North Africa	Telecommunications
Panasonic Group	PT_01369	Panasonic Holdings Corporation	Japan	East Asia & Pacific	Electronics
PayPal	PT_01373	PayPal Holdings, Inc.	United States	North America	IT Software & Services
PCCW	PT_01375	PCCW Limited	Hong Kong SAR, China	East Asia & Pacific	Telecommunications
Pinduoduo	PT_01406	Pinduoduo Inc.	China	East Asia & Pacific	IT Software & Services
PLDT	PT_01411	PLDT Inc.	Philippines	East Asia & Pacific	Telecommunications
Proximus	PT_01435	Proximus Group	Belgium	Europe & Central Asia	Telecommunications
Qualcomm	PT_01454	QUALCOMM Incorporated	United States	North America	Electronics
Quanta Computer	PT_01455	Quanta Computer Inc.	Taiwan, China	East Asia & Pacific	Electronics
Rakuten	PT_01460	Rakuten, Inc.	Japan	East Asia & Pacific	IT Software & Services
Rostelecom	PT_01502	Rostelecom PJSC	Russian Federation	Europe & Central Asia	Telecommunications
Safaricom	PT_01515	Safaricom PLC	Kenya	Sub-Saharan Africa	Telecommunications
Salesforce	PT_01521	salesforce.com, inc.	United States	North America	IT Software & Services
Samsung Electronics	PT_01528	Samsung Electronics Co., Ltd.	Korea, Rep.	East Asia & Pacific	Electronics

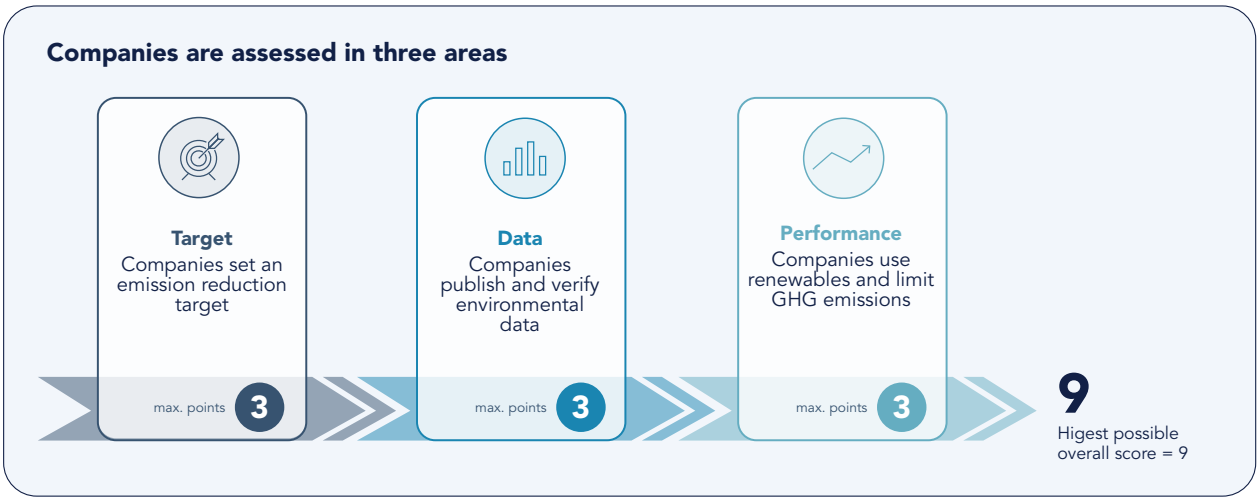
Company	WBA ID	Corporate name	HQ	Region	Industry
SAP	PT_01536	SAP SE	Germany	Europe & Central Asia	IT Software & Services
Seagate	PT_01556	Seagate Technology Public Limited Company	Ireland	Europe & Central Asia	Electronics
ServiceNow	PT_02046	ServiceNow, Inc.	United States	North America	IT Software & Services
SES	PT_01564	SES S.A.	Luxembourg	Europe & Central Asia	Telecommunications
Shopify	PT_02820	SHOPIFY INC.	Canada	North America	IT Software & Services
Singtel	PT_01611	Singapore Telecommunications Limited	Singapore	East Asia & Pacific	Telecommunications
SK Telecom	PT_02006	SK Telecom Co., Ltd.	Korea, Rep.	East Asia & Pacific	Telecommunications
SK Hynix	PT_02005	SK hynix Inc.	Korea, Rep.	East Asia & Pacific	Electronics
Skyworks	PT_02160	Skyworks Solutions, Inc.	United States	North America	Electronics
Snap	PT_01625	Snap Inc.	United States	North America	IT Software & Services
SoftBank	PT_01632	SoftBank Group Corp.	Japan	East Asia & Pacific	Telecommunications
SONY	PT_01636	Sony Corporation	Japan	East Asia & Pacific	Electronics
SpaceX	PT_01644	Space Exploration Technologies Corp.	United States	North America	Telecommunications
Spark New Zealand	PT_01645	Spark New Zealand Limited	New Zealand	East Asia & Pacific	Telecommunications
Spotify	PT_01648	Spotify Technology S.A.	Sweden	Europe & Central Asia	IT Software & Services
STC	PT_01543	Saudi Telecom Company	Saudi Arabia	Middle East & North Africa	Telecommunications
STMicroelectronics	PT_02178	STMicroelectronics N.V.	Switzerland	Europe & Central Asia	Electronics
Stripe	PT_02067	Stripe	United States	North America	IT Software & Services
Sudatel	PT_01681	Sudatel Telecommunications Group Ltd	Sudan	Sub-Saharan Africa	Telecommunications
Swisscom	PT_01711	Swisscom Ltd	Switzerland	Europe & Central Asia	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	Industry
Tata Communications	PT_02041	Tata Communications Limited	India	South Asia	Telecommunications
TCL	PT_01737	TCL Electronics Holdings Limited	China	East Asia & Pacific	Electronics
TCS	PT_02817	Tata Consultancy Services Limited	India	South Asia	IT Software & Services
TE Connectivity	PT_01740	TE Connectivity Ltd	Switzerland	Europe & Central Asia	Electronics
Tele2	PT_01744	Tele2 AB	Sweden	Europe & Central Asia	Telecommunications
Telecom Egypt	PT_01746	Telecom Egypt Company SAE	Egypt, Arab Rep.	Middle East & North Africa	Telecommunications
Telecom Italia	PT_01747	Telecom Italia S.P.A.	Italy	Europe & Central Asia	Telecommunications
Telefónica	PT_01748	Telefónica, S.A.	Spain	Europe & Central Asia	Telecommunications
Telenor	PT_01751	Telenor ASA	Norway	Europe & Central Asia	Telecommunications
Telia	PT_01753	Telia Company AB	Sweden	Europe & Central Asia	Telecommunications
Telkom Indonesia	PT_01750	Telecommunications Indonesia	Indonesia	East Asia & Pacific	Telecommunications
Telstra	PT_01756	Telstra Corporation Limited	Australia	East Asia & Pacific	Telecommunications
Tencent	PT_01760	Tencent Holdings Limited	China	East Asia & Pacific	IT Software & Services
Texas Instruments	PT_01769	Texas Instruments Incorporated	United States	North America	Electronics
Tokyo Electron	PT_01793	Tokyo Electron Ltd	Japan	East Asia & Pacific	Electronics
Toshiba TEC	PT_02154	Toshiba TEC Corp	Japan	East Asia & Pacific	Electronics
Transsion	PT_01818	Shenzhen Transsion Holdings Co Ltd	China	East Asia & Pacific	Electronics
TSMC	PT_01722	Taiwan Semiconductor Manufacturing Company Limited	Taiwan, China	East Asia & Pacific	Electronics
Türk Telekom	PT_01825	Turk Telekomunikasyon AS	Türkiye	Europe & Central Asia	Telecommunications
Twilio	PT_02048	Twilio Inc.	United States	North America	IT Software & Services

Company	WBA ID	Corporate name	HQ	Region	Industry
Uber	PT_01831	Uber Technologies, Inc.	United States	North America	IT Software & Services
Veon	PT_01877	VEON Ltd.	Netherlands	Europe & Central Asia	Telecommunications
Verizon	PT_01878	Verizon Communications Inc	United States	North America	Telecommunications
Viasat	PT_02816	VIASAT, INC.	United States	North America	Telecommunications
Viettel	PT_01884	Viettel Group	Vietnam	East Asia & Pacific	Telecommunications
Vivo	PT_00228	Vivo Mobile Communications Co., Ltd.	China	East Asia & Pacific	Electronics
VK	PT_02822	VK Company Limited	Russian Federation	Europe & Central Asia	IT Software & Services
Vodafone	PT_01896	Vodafone Group Plc	United Kingdom	Europe & Central Asia	Telecommunications
Weibo	PT_01608	Weibo Corporation	China	East Asia & Pacific	IT Software & Services
Western Digital	PT_01925	Western Digital Corporation	United States	North America	Electronics
Wipro	PT_02819	WIPRO LIMITED	India	South Asia	IT Software & Services
X	PT_01828	X Corp.	United States	North America	IT Software & Services
Xiaomi	PT_01961	Xiaomi Corporation	China	East Asia & Pacific	Electronics
Yandex	PT_01970	Yandex NV	The Netherlands	Europe & Central Asia	IT Software & Services
Yunji	PT_01984	Yunji Inc.	China	East Asia & Pacific	IT Software & Services
Zain	PT_01986	Mobile Telecommunications Company K.S.C.P.	Kuwait	Middle East & North Africa	Telecommunications
Zoom	PT_02049	Zoom Video Communications, Inc.	United States	North America	IT Software & Services
ZTE	PT_01998	ZTE Corporation	China	East Asia & Pacific	Electronics

4.1 Assessment methodology

Companies were assessed in three areas: target – existence of an emission reduction target, target quality and target ambition; data – availability, clarity and verification; and performance. Each of the three assessment areas were awarded a maximum of three points, making the highest possible overall score nine. Note that the assessment was made on information collected by WBA for fiscal year 2023.



4.1.1 Target

This year, the assessment criteria only accept emission reduction targets that have been submitted to the Science Based Target initiative (SBTi) and validated. Note that the quality and ambition information about the target is only available if it has been validated. **Target:** the company has submitted a target to SBTi (1 point). **Quality:** the target is not intensity-based (0.5 points); the target includes Scope 3 (0.5 points); the target includes all relevant categories of Scope 3 (0.5 points). **Ambition:** the company aims to achieve net zero for its full footprint (i.e. Scope 1, Scope 2 and all relevant Scope 3 categories) by 2040 (0.5 points).

4.1.2 Data

Availability: the company discloses Scope 1 and location-based Scope 2 emissions (0.5); the company discloses Scope 3 emissions (0.5 points), including all relevant Scope 3 categories (0.5 points); and the company discloses electricity consumption (0.5 points). **Reporting:** the company has a dedicated environmental report or makes its CDP climate report publicly available (0.5 points). To qualify as an environmental report, all emission scopes must be disclosed in detail, including location-based Scope 2 emissions and all applicable Scope 3 categories, with justification for those which are not considered relevant. In addition, the report must be solely dedicated to environmental issues. **Verification:** evidence of third-party verification of emission data (0.5 points). The verification statement must restate the emissions.

4.1.3 Performance

The company discloses the share of renewable-energy sources in its total electricity consumption, as a fraction (maximum 1 point). The company discloses the proportion of (location-based) GHG emissions to USD revenue in fiscal year 2023 compared to the proportion in fiscal year 2022, normalized to a one-point scale (maximum 1 point). The company discloses the proportion of (market-based) GHG emissions to electricity use, normalized to a one-point scale (maximum 1 point).

4.1.4 Assessment Example

The example below shows how the assessment was calculated for Accenture.

Table A2: Assessment calculations for Accenture

	Max points	Score	Evidence
Target*	**3.0**	**3.0**	
Target submitted to SBTi	1.0	1.0	Yes. See: https://sciencebasedtargets.org/target-dashboard
For targets that have been validated by SBTi			
Target is non-intensity for Scope 1 and 2	0.5	0.5	"Accenture commits to reduce absolute Scope 1 and 2 GHG emissions 80% by FY2030 from a FY2019 base year. Accenture also commits to reduce Scope 3 GHG emissions 55% per unit of revenue within the same time-frame."
Aims for net zero by 2040	0.5	0.5	"Overall Net-Zero Target: Accenture commits to reach net-zero greenhouse gas emissions across the value chain by FY2040."
Target includes Scope 3	0.5	0.5	Yes, see text above
Scope 3 target includes all relevant categories	0.5	0.5	Yes, there is no qualification in the text above
Data	**3.0**	**3.0**	
Data availability	**2.0**	**2.0**	
Scope 1 (tCO_2e)	0.5	0.5	22 038.0
Scope 2 Location-based (tCO_2e)			180 510.0
Scope 3 (tCO_2e)	0.5	0.5	515 371.0
Scope 3 - All relevant categories (tCO_2e)	0.5	0.5	Categories 4-5 and 8-15 are not relevant for Accenture
Electricity (MWh)	0.5	0.5	338 729.0

	Max points	Score	Evidence
Reporting:	**0.5**	**0.5**	
Company has dedicated climate report	0.5	0.5	Climate Transition Plan 2024. Also makes CDP disclosure publicly available on the company website
Verification:	**0.5**	**0.5**	
Third-party verification of emission data	0.5	0.5	KPMG Independent Accountants' Review Report
Performance	**3.0**	**1.7**	
Share of renewables in electricity, scaled to a maximum of 1	1.0	1.0	Value 100, normalized to 100/100 = 1. The higher the better.
Proportion of Scope 1 and Scope 2 (location-based) GHG emissions to USD revenue in FY 2023 compared to FY2022	1.0	0.0	FY 2022: GHG/USD Revenue = 2.67/ FY 2023: GHG/USD Revenue = 3.16. Increased ratio from 2022 to 2023 assigned score of 0.
Proportion of (market-based) Scope 2 emissions to electricity use, normalized to one-point scale	1.0	0.7	Value 0.014. The lower, the better.
TOTAL POINTS	**9.0**	**7.7**	

Sources: Accenture. 2023. 360° Value Report.
https://www.accenture.com/content/dam/accenture/final/corporate/company-information/document/Accenture-360-Value-Report-2024.pdf

Table A3: Assessment score

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Swisscom	9.00	100%	3.00	3.00	3.00
Proximus	8.50	94%	3.00	2.50	3.00
Telefónica	8.50	94%	3.00	3.00	2.50
KPN	8.50	94%	3.00	2.50	3.00
Ericsson	8.17	91%	3.00	3.00	2.17
Logitech International	8.16	91%	2.50	3.00	2.66
Deutsche Telekom	8.16	91%	3.00	2.50	2.66
Nokia	8.08	90%	3.00	3.00	2.08
SAP	7.66	85%	2.50	2.50	2.66
Accenture	7.66	85%	3.00	3.00	1.66
Equinix	7.62	85%	2.00	3.00	2.62
Infosys	7.61	85%	2.50	2.50	2.61
Liberty Global	7.58	84%	2.50	2.50	2.58
Netflix	7.50	83%	2.50	2.00	3.00
Rakuten	7.50	83%	2.50	3.00	2.00
Wipro	7.26	81%	3.00	2.50	1.76
Meta	7.16	80%	2.50	3.00	1.66
Tele2	7.16	80%	3.00	2.50	1.66
Apple	7.16	80%	2.50	3.00	1.66
Capgemini	7.12	79%	2.50	3.00	1.62
eBay	7.07	79%	2.00	2.50	2.57
Adobe	6.99	78%	2.50	2.50	1.99
Cisco	6.74	75%	2.50	3.00	1.24
Vodafone	6.71	75%	3.00	2.50	1.21

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Microsoft	6.66	74%	2.50	2.50	1.66
PayPal	6.64	74%	2.50	2.25	1.89
Telecom Italia	6.59	73%	2.50	2.00	2.09
HP	6.59	73%	3.00	3.00	0.59
ASML	6.57	73%	3.00	2.00	1.57
BCE	6.56	73%	2.00	3.00	1.56
HPE	6.52	72%	3.00	3.00	0.52
NEC	6.34	70%	3.00	3.00	0.34
Tata Communications	6.28	70%	3.00	3.00	0.28
ServiceNow	6.16	68%	2.50	2.00	1.66
Telia	6.16	68%	2.50	2.00	1.66
BT Group	6.16	68%	1.50	3.00	1.66
TE Connectivity	6.10	68%	2.00	3.00	1.10
Qualcomm	6.05	67%	3.00	2.50	0.55
Applied Materials	6.03	67%	2.50	2.50	1.03
Telenor	5.94	66%	2.00	2.50	1.44
Juniper Networks	5.84	65%	2.50	3.00	0.34
Seagate	5.83	65%	2.50	3.00	0.33
Salesforce	5.83	65%	2.00	2.50	1.33
Cognizant	5.77	64%	3.00	2.25	0.52
Lenovo	5.75	64%	2.00	2.50	1.25
Airbnb	5.75	64%	3.00	1.75	1.00
Safaricom	5.75	64%	2.50	2.25	1.00
América Móvil	5.75	64%	2.50	2.25	1.00
Zain	5.75	64%	2.50	2.25	1.00

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Uber	5.73	64%	2.50	1.50	1.73
Tokyo Electron	5.73	64%	2.50	2.00	1.23
Globe Telecom	5.68	63%	2.00	2.50	1.18
Singtel	5.59	62%	2.00	2.50	1.09
Millicom	5.59	62%	2.50	2.00	1.09
SK Telecom	5.59	62%	2.50	3.00	0.09
Chunghwa Telecom	5.55	62%	2.50	3.00	0.05
Lumen	5.51	61%	2.50	3.00	0.01
Eutelsat	5.51	61%	2.50	2.00	1.01
Telstra	5.51	61%	2.50	3.00	0.01
Acer	5.47	61%	2.50	2.50	0.47
Iliad	5.46	61%	2.50	2.00	0.96
Dell	5.45	61%	2.00	2.50	0.95
NTT	5.42	60%	2.50	2.50	0.42
Murata Manufacturing	5.37	60%	2.50	2.50	0.37
Verizon	5.34	59%	2.50	2.50	0.34
KDDI	5.29	59%	2.50	2.50	0.29
TCS	5.27	59%	2.50	2.00	0.77
SONY	5.18	58%	2.50	2.00	0.68
Intel	5.15	57%	0.00	2.50	2.65
Canon	5.13	57%	2.00	3.00	0.13
Tencent	5.12	57%	2.50	2.50	0.12
Digital Realty Trust	5.08	56%	1.50	2.25	1.33
IBM	5.04	56%	0.50	2.50	2.04
Atos	5.01	56%	2.00	2.00	1.01

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Far EasTone	5.01	56%	2.50	2.50	0.01
ZTE	5.01	56%	2.00	3.00	0.01
Block	4.91	55%	3.00	1.25	0.66
NXP Semiconductors	4.89	54%	2.50	2.00	0.39
Twilio	4.84	54%	2.00	2.50	0.34
Quanta Computer	4.83	54%	2.50	2.00	0.33
Asus	4.80	53%	2.00	2.50	0.30
AT&T	4.75	53%	1.50	2.25	1.00
Kyocera	4.75	53%	2.50	2.25	0.00
LG Electronics	4.75	53%	2.00	1.75	1.00
STC	4.75	53%	2.50	2.25	0.00
GoTo	4.75	53%	2.50	2.25	0.00
Panasonic Group	4.73	53%	2.00	2.50	0.23
HCL	4.69	52%	3.00	1.50	0.19
Snap	4.66	52%	2.00	1.00	1.66
Bharti Airtel	4.63	51%	2.50	2.00	0.13
Spark New Zealand	4.58	51%	1.50	1.75	1.33
STMicroelectronics	4.54	50%	1.50	2.00	1.04
Naspers	4.50	50%	2.00	1.50	1.00
Elisa	4.41	49%	2.00	1.75	0.66
Alphabet	4.33	48%	1.00	2.00	1.33
Türk Telekom	4.27	47%	0.50	2.50	1.27
MTN	4.25	47%	2.50	1.75	0.00
Orange	4.12	46%	2.50	1.00	0.62
Comcast	4.10	46%	0.50	2.50	1.10

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Nvidia	4.09	45%	0.00	2.00	2.09
American Tower	4.05	45%	2.00	2.00	0.05
SoftBank	4.00	44%	2.50	1.50	0.00
Lam Research	4.00	44%	1.50	2.00	0.50
Booking Holdings	4.00	44%	2.50	1.50	0.00
Amazon	3.83	43%	0.50	2.00	1.33
Samsung Electronics	3.81	42%	0.00	2.50	1.31
GlobalFoundries	3.77	42%	0.00	2.50	1.27
Axiata	3.75	42%	2.50	1.25	0.00
Foxconn	3.75	42%	2.50	1.25	0.00
Infineon	3.65	41%	0.50	2.00	1.15
Delivery Hero	3.61	40%	2.50	1.00	0.11
Analog Devices	3.58	40%	1.50	1.50	0.58
Cloudflare	3.50	39%	0.50	1.00	2.00
Jio	3.50	39%	2.50	1.00	0.00
Ant	3.34	37%	0.50	1.50	1.34
Western Digital	3.31	37%	2.00	1.00	0.31
AMD	3.29	37%	0.00	2.50	0.79
Broadcom	3.22	36%	0.50	1.50	1.22
e&	3.05	34%	2.00	1.00	0.05
Naver	3.01	33%	0.00	2.00	1.01
Zoom	3.00	33%	0.50	1.50	1.00
Akamai	2.89	32%	0.00	2.00	0.89
Corning	2.75	31%	2.00	0.75	0.00
Microchip Technology	2.69	30%	0.50	2.00	0.19

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
China Telecom	2.54	28%	0.50	1.00	1.04
Lyft	2.50	28%	2.50	0.00	0.00
Kakao	2.36	26%	0.50	1.50	0.36
SK Hynix	2.30	26%	0.00	2.00	0.30
Iridium Communications	2.25	25%	0.00	1.25	1.00
TSMC	2.11	23%	0.00	2.00	0.11
TCL	2.10	23%	0.00	1.00	1.10
Altice	2.08	23%	0.00	2.00	0.08
Viasat	2.07	23%	0.00	2.00	0.07
Liquid Telecom	2.05	23%	0.00	2.00	0.05
PLDT	2.02	22%	0.00	2.00	0.02
Telkom Indonesia	2.00	22%	0.00	1.00	1.00
Veon	2.00	22%	0.00	1.00	1.00
Nintendo	1.94	22%	0.00	1.50	0.44
Shopify	1.75	19%	0.00	1.75	0.00
China Unicom	1.75	19%	0.00	0.75	1.00
Yandex	1.75	19%	0.00	0.75	1.00
Amphenol	1.70	19%	0.00	1.50	0.20
Texas Instruments	1.69	19%	0.50	1.00	0.19
NetEase	1.67	19%	0.00	1.50	0.17
Huawei	1.63	18%	0.00	1.50	0.13
Oppo	1.54	17%	0.50	1.00	0.04
Vivo	1.54	17%	0.00	1.50	0.04
KT	1.51	17%	0.00	1.50	0.01
China Mobile	1.50	17%	0.00	1.50	0.00

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Xiaomi	1.50	17%	0.00	1.50	0.00
GTT	1.50	17%	0.00	1.50	0.00
MediaTek	1.50	17%	0.50	1.00	0.00
SES	1.50	17%	1.50	0.00	0.00
Palantir	1.50	17%	0.00	1.50	0.00
Bezeq	1.50	17%	0.00	1.50	0.00
AIS	1.25	14%	0.00	1.25	0.00
MercadoLibre	1.25	14%	0.00	1.25	0.00
JD.com	1.25	14%	0.00	1.25	0.00
Alibaba	1.25	14%	0.00	1.25	0.00
Grab	1.25	14%	0.00	1.25	0.00
Ooredoo	1.25	14%	0.00	1.25	0.00
Weibo	1.25	14%	0.00	1.25	0.00
Rostelecom	1.25	14%	0.00	1.25	0.00
PCCW	1.25	14%	0.00	1.25	0.00
Baidu	1.25	14%	0.00	1.25	0.00
Toshiba TEC	1.25	14%	0.00	1.25	0.00
BOE Technology Group	1.25	14%	0.50	0.75	0.00
Kuaishou	1.09	12%	0.00	1.00	0.09
Micron Technology	1.04	12%	0.00	1.00	0.04
Oracle	1.00	11%	0.00	1.00	0.00
Spotify	1.00	11%	0.50	0.50	0.00
VK	0.75	8%	0.00	0.75	0.00
DiDi Chuxing	0.75	8%	0.00	0.75	0.00
Keyence Corporation	0.75	8%	0.00	0.75	0.00

Company	Total score (out of 9 points)	TOTAL score (%)	Target score (out of 3 points)	Data score (out of 3 points)	Performance score (out of 3 points)
Digicel	0.52	6%	0.00	0.50	0.02
Skyworks	0.50	6%	0.00	0.50	0.00
Transsion	0.25	3%	0.00	0.25	0.00
Omantel	0.25	3%	0.00	0.25	0.00
Bytedance	0.00	0%	0.00	0.00	0.00
Citrix	0.00	0%	0.00	0.00	0.00
Cogent Communications	0.00	0%	0.00	0.00	0.00
Ethio Telecom	0.00	0%	0.00	0.00	0.00
JOYY	0.00	0%	0.00	0.00	0.00
Jumia	0.00	0%	0.00	0.00	0.00
MegaFon	0.00	0%	0.00	0.00	0.00
Meituan	0.00	0%	0.00	0.00	0.00
MTS	0.00	0%	0.00	0.00	0.00
Nepal Telecom	0.00	0%	0.00	0.00	0.00
NetApp	0.00	0%	0.00	0.00	0.00
PalTel	0.00	0%	0.00	0.00	0.00
Pinduoduo	0.00	0%	0.00	0.00	0.00
SpaceX	0.00	0%	0.00	0.00	0.00
Sudatel	0.00	0%	0.00	0.00	0.00
Telecom Egypt	0.00	0%	0.00	0.00	0.00
X	0.00	0%	0.00	0.00	0.00
Viettel	0.00	0%	0.00	0.00	0.00
Yunji	0.00	0%	0.00	0.00	0.00
Stripe	0.00	0%	0.00	0.00	0.00
Coupang	0.00	0%	0.00	0.00	0.00
Fiserv	0.00	0%	0.00	0.00	0.00

Table A4: Emission reduction commitments

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Accenture	Yes	Yes	1.5°C by FY2030	2040	Accenture commits to reduce absolute scope 1 and 2 GHG emissions 80% by FY2030 from a FY2019 base year. Accenture also commits to reduce scope 3 GHG emissions 55% per unit of revenue within the same timeframe.
Acer	Yes	Yes	1.5°C by FY2030	2050	Acer Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.
Adobe	Yes	Yes	1.5°C by FY2030		Adobe Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by FY2030 from a FY2022 base year.
Airbnb	Yes	Yes	1.5°C by FY2030	2030	Airbnb, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 78.4% by 2030 from a 2019 base year. Airbnb, Inc. also commits to increase annual sourcing of renewable electricity from 0% in 2019 to 100% by 2030. Airbnb, Inc. further commits to reduce scope 3 GHG emissions 55% per M USD of gross profit by 2030 from a 2019 base year.
Akamai	Yes	No			We aim to mitigate 100% of our Scope 1 and Scope 2 greenhouse gas emissions related to Akamai Connected Cloud.
Alibaba	Yes	No	Commitment removed	2050	Decarbonizing Alibaba (Scope 1 & 2): We will achieve carbon neutrality in our own operations by 2030.
Alphabet	Yes	No	Committed	2030	Net-zero carbon Target Carbon reduction Reduce 50% of our combined Scope 1, 2 (market-based), and 3 absolute emissions (compared to our 2019 base year) by 2030.
Altice	Yes	No		2050	Reduce Scope 1 and 2 GHG emissions by 100% by 2040.
Amazon	Yes	No	Commitment removed	2040	Reach net-zero carbon emissions by 2040.
AMD	Yes	No			50% absolute reduction in greenhouse gas emissions from AMD operations (Scope 1 and 2) by 2030 (base year 2020).

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
América Móvil	Yes	Yes	1.5°C by 2030	2050	America Movil, S.A.B. de C.V. commits to reduce absolute scope 1 and 2 GHG emissions 52% by 2030 from a 2019 base year. America Movil also commits to reduce absolute scope 3 GHG emissions 14% by 2030 from a 2019 base year.
American Tower	Yes	Yes	Well-below 2°C by 2035		American Tower Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 40% by 2035 from a 2019 base year.
Amphenol	Yes	No			By the end of 2025, Amphenol will reduce revenue-normalized Scope 1 and 2 GHG emissions by 15% compared to our 2021 levels.
Analog Devices	Yes	Yes	1.5°C by 2030, 2025	2050	Analog Devices Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.
Ant	Yes	No		2030	By 2025 the absolute Scope 1 and Scope 2 GHG emissions will be reduced by 30% as compared with the baseline year of 2020.
Apple	Yes	Yes	1.5°C by 2030		Apple, Inc. commits to reduce absolute combined scope 1, 2 and 3 GHG emissions 62% by FY2030 from a FY2019 base year. Apple also commits to continue annually sourcing 100% renewable electricity through FY2030.* *The target boundary includes biogenic emissions and removals from bioenergy feedstocks.
Applied Materials	Yes	Yes	1.5°C by FY2030	2040	Applied Materials Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2019 base year.
ASML	Yes	Yes	1.5°C by 2025	2040	ASML commits to reduce absolute scope 1 and 2 GHG emissions 25.2% by 2025 from a 2019 base year.
Asus	Yes	Yes	1.5°C by 2030	2050	ASUSTeK Computer Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2021 base year. ASUSTeK Computer Inc. also commits to reduce absolute scope 3 GHG emissions covering purchased goods and services and use of sold products 30% within the same timeframe.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
AT&T	Yes	Yes	1.5°C by 2030		AT&T commits* to reduce absolute scope 1 and scope 2 GHG emissions 63% by 2030 from a 2015 base year. AT&T also commits that 50% of its suppliers by spend covering purchased goods and services, capital goods, and downstream leased assets will set science-based scope 1 and scope 2 targets by 2024. *The target boundary includes biogenic emissions and removals from bioenergy feedstocks.
Atos	Yes	Yes	1.5°C by 2025	2039	Atos commits to reduce absolute scope 1, 2 and 3 GHG emissions by 50% by 2025 from a 2019 base year.
Axiata	Yes	Yes	1.5°C by 2030	2050	Axiata Group Berhad commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2022 base year.
Baidu	Yes	No			Since we released the environmental goal of achieving carbon neutrality by 2030 in 2021,
BCE	Yes	Yes	1.5°C by 2030		BCE Inc. commits to reduce absolute scope 1 and 2 GHG emissions 58% by FY2030 from a FY2020 base year.* BCE Inc. also commits to reduce absolute scope 3 GHG emissions from capital goods, fuel-and energy-related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, use of sold products, end-of-life treatment of sold products, franchises and investments 42% within the same timeframe. BCE Inc. further commits that 64% of its suppliers by spend covering purchased goods and services will have science-based targets by FY2026. *The target boundary includes land-related emissions and removals from bioenergy feedstocks.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Bharti Airtel	Yes	Yes	1.5°C by 2031	2050	Indian telecommunication company Bharti Airtel commits to reduce absolute scope 1 and 2 GHG emissions 50.2% by FY2031 from a FY2021 base year. Bharti Airtel also commits to reduce absolute scope 3 GHG emissions 42% over the same timeframe.
Block	Yes	Yes	1.5°C by 2030	2030	Block, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by 2030 from a 2019 base year. Block, Inc. also commits to increase active annual sourcing of renewable electricity from 0% in 2019 to 100% by 2030. Block, Inc. further commits to reduce scope 3 GHG emissions 55% per million USD gross profit by 2030 from a 2019 base year.
BOE Technology Group	Yes	No	Committed		BOE promised to achieve carbon neutral operation by 2050.
Booking Holdings	Yes	Yes	1.5°C by 2030	2040	Booking Holdings Inc. commits to reduce absolute scope 1 and 2 GHG emissions 95% by 2030 from a 2019 base year.
Broadcom	Yes	No	Committed		We committed to reduce our Scope 1 and Scope 2 GHG emissions by 38% by 2030 from our 2021 baseline and are on track to meet this goal.
BT Group	Yes	Yes	1.5°C by 2030		Multinational communications company BT commits to reduce GHG emissions* by 87% in tons of CO_2e per unit of gross value added by 2030 from a 2016/2017 base-year. This is in line with current international policy and climate science, being BT's share of the global emissions reductions needed to limit global warming to 1.5Â°C. The company also commits to reduce supply chain GHG emissions** by 29% over the same time-period.*Here GHG emissions refer to Scope 1 and 2 emissions, as defined in the Greenhouse Gas Protocol, expressed as tonnes carbon dioxide equivalent (t CO_2e) per unit of gross value added (GVA). **Supply chain emissions refer to all upstream Scope 3 emissions (categories 1-8), as defined in the Greenhouse Gas Protocol Scope 3 Standard.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Bytedance	Yes	No			We announce our commitment to operational carbon neutrality by 2030.
Canon	Yes	Yes	1.5°C by 2030	2050	CANON INC. commits to reduce absolute scope 1 and 2 GHG emissions 42.0% by 2030 from a 2022 base year. CANON INC. also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, and use of sold products 25.0% within the same timeframe.
Capgemini	Yes	Yes	1.5°C by 2030	2040	Capgemini SE commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2019 base year. Capgemini SE also commits to increase annual sourcing of renewable electricity from 38% in 2019 to 100% by 2025 and to maintain 100% renewable electricity through 2030. Capgemini SE commits to reduce absolute scope 3 purchased goods and services GHG emissions 50% by 2030 from a 2019 base year. Capgemini SE further commits to reduce scope 3 business travel and employee commuting GHG emissions 55% per employee within the same timeframe.
Chunghwa Telecom	Yes	Yes	1.5°C by 2030	2045	Chunghwa Telecom commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2020 base year. Chunghwa Telecom also commits to reduce absolute scope 3 GHG emissions 25% by 2030 from a 2021 base year. Long-Term Targets: Chunghwa Telecom commits to reduce absolute scope 1 and 2 GHG emissions 95% by 2040 from a 2020 base year. Chunghwa Telecom also commits to reduce absolute scope 3 GHG emissions 90% by 2045 from a 2021 base year.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Cisco	Yes	Yes	1.5°C by 2030	2040	Cisco commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2019 base year. Cisco commits to reduce absolute scope 3 GHG emissions from purchased goods and services, upstream transportation and distribution, and use of sold products 30% by FY2030 from a FY2019 base year. Long-Term Targets Cisco commits to reduce absolute scope 1, 2, and 3 GHG emissions 90% by FY2040 from a FY2019 base year.
Cognizant	Yes	Yes	1.5°C by 2030	2040	Cognizant commits to reduce absolute scope 1 and 2 GHG emissions 77% by 2030 from a 2019 base year.
Comcast	Yes	No	Committed		Comcast has set a goal to be carbon neutral in our Scope 1 and 2 emissions by 2035, has integrated this goal into our strategy and developed an internal plan to achieve this goal, and already is and will continue to work towards this goal.
Corning	Yes	Yes	1.5°C by 2028		Corning Incorporated commits to reduce absolute scope 1 and 2 GHG emissions 30% by 2028 from a 2021 base year.
Delivery Hero	Yes	Yes	1.5°C by 2032		Delivery Hero commits to reduce absolute scope 1 and 2 GHG emissions 50.4% by 2032 from a 2022 base year. Delivery Hero commits to reduce scope 3 GHG emissions 58.1% per million euros of gross profit by 2032 from a 2022 base year.
Dell	Yes	Yes	1.5°C by FY2031	2051	Dell Technologies commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2031 from a FY2020 base year. Dell Technologies also commits to reduce absolute scope 3 GHG emissions from purchased goods and services 45% within the same timeframe. Dell Technologies further commits to reduce absolute scope 3 GHG emissions from use of sold products 30% within the same timeframe.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Deutsche Telekom	Yes	Yes	1.5°C by 2030	2040	Deutsche Telekom AG commits to reduce absolute scope 1 and 2 GHG emissions 94% by 2030 from a 2020 base year. Deutsche Telekom AG also commits to reduce absolute scope 3 GHG emissions 47% within the same timeframe.
Digital Realty Trust	Yes	Yes	1.5°C by 2030		Digital Realty commits to reduce scope 1 and 2 GHG emissions 68% per square foot by 2030 from a 2018 base year and commits to reduce scope 3 GHG emissions from purchased goods and services and fuel- and energy-related activities 24% per square foot within the same timeframe.
e&	Yes	Yes	1.5°C by 2030	2050	EMIRATES TELECOMMUNICATIONS GROUP COMPANY PJSC (ETISALAT GROUP, e&) commits to reduce absolute scope 1 and 2 GHG emissions 43% by 2030 from a 2022 base year. EMIRATES TELECOMMUNICATIONS GROUP COMPANY PJSC (ETISALAT GROUP, e&) also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy related activities, upstream leased assets, and investments 25% within the same timeframe.
eBay	Yes	Yes	1.5°C by 2030		eBay commits to reduce absolute scope 1 and scope 2 GHG emissions 90% by 2030 from a 2019 base year. eBay also commits to reduce absolute scope 3 emissions from downstream transportation and distribution 20% within the same timeframe.
Elisa	Yes	Yes	1.5°C by 2030	2040	Elisa Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 42% by 2030 from a 2021 base year.
Equinix	Yes	Yes	1.5°C by 2030, 2025		Equinix, Inc. commits to reduce absolute scope 1 and scope 2 GHG emissions 50% by FY2030 from a FY2019 base year.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Ericsson	Yes	Yes	1.5°C by 2030	2040	Ericsson commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by FY2030 from a FY2020 base year. Within this target, Ericsson commits to reduce absolute scope 1 and 2 GHG emissions 90.0% and absolute scope 3 GHG emissions 50.0% within the same timeframe.
Eutelsat	Yes	Yes	1.5°C by 2030		Absolute carbon reduction of Scope 1 & 2 of 50% by 2030 from a baseline of 2021.
Far EasTone	Yes	Yes	1.5°C by 2030	2048	Far EasTone Telecommunications Co. Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.
Fiserv	Yes	No			While we continue to consider a net-zero GHG goal, we are taking the interim step of implementing a near-term goal of a 50% absolute reduction in scope 1 and scope 2 GHG emissions by 2030, compared to our 2019 baseline.
Foxconn	Yes	Yes	1.5°C by 2030	2050	HON HAI PRECISION INDUSTRY CO., LTD. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2020 base year. HON HAI PRECISION INDUSTRY CO., LTD. also commits to reduce absolute scope 3 GHG emissions 42% within the same timeframe.
GlobalFoundries	Yes	No			GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030.
Globe Telecom	Yes	Yes	1.5°C by 2030	2050	Globe Telecom, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.
GoTo	Yes	Yes	1.5°C by 2030	2050	GoTo commits to reduce absolute scope 1 and 2 GHG emissions 83% by 2030 from a 2022 base year.
GTT	Yes	No			GTT has established a net zero goal by 2035 for Scope 1 and Scope 2 emissions, a target that we believe is ambitious, yet achievable, for those emissions within our direct control. Our Scope 3 emissions are outside the scope of our current target.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
HCL	Yes	Yes	1.5°C by 2030	2040	HCL Technologies commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2020 base year.
HP	Yes	Yes	1.5°C by 2030	2040	Reduce Scope 1 and Scope 2 GHG emissions from global operations by 65% by 2025, compared to 2015.
HPE	Yes	Yes	1.5°C by FY2030	2040	Hewlett Packard Enterprise commits to reduce absolute scope 1 and 2 GHG emissions 70% by FY2030 from a FY2020 base year. Hewlett Packard Enterprise also commits to reduce absolute scope 3 GHG emissions 42% within the same timeframe.
Huawei	Yes	No			Reduce the GHG emissions (Scope 1 and Scope 2) per million CNY of sales revenue by 16% by 2025 compared with 2019. In 2023, Huawei's GHG emissions intensity (i.e., Scope 1 and Scope 2 GHG emissions per million CNY of sales revenue) reached 1.95.
IBM	Yes	No		2030	(7.53.1.83) Target objective The referenced target, set by IBM in 2021 is IBM's fifth-generation goal which calls for IBM to reduce its operational GHG emissions 65 percent by 2025 against base year 2010, adjusted for acquisitions and divestitures. This goal covers our Scope 1 and Scope 2 emissions, as well as Scope 3 emissions associated with IBM's electricity consumption at co-location data centers.
Iliad	Yes	Yes	1.5°C by 2030	2050	Iliad commits to reduce absolute scope 1 and 2 GHG emissions 60% by 2030 from a 2022 base year.
Infineon	Yes	No	Committed		[...] our interim target by the end of the 2025 fiscal year of a 70 percent reduction in emissions compared with the base year 2019.
Infosys	Yes	Yes	Well-below 2°C by 2025		Infosys Limited commits to reduce absolute scope 1 and 2 GHG emissions 12.5% by FY2025 and 37.5% by FY2035 from a FY2020 base year. Infosys Limited also commits to reduce absolute scope 3 GHG emissions 12.5% by FY2025 and 37.5% by FY2035 from a FY2020 base year.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Intel	Yes	No			2030 and 2040 Goals: Net-Zero Scope 1 and 2 GHG Emissions Description. Achieve a 10% reduction in our absolute Scope 1 and 2 GHG emissions by 2030 and reach net-zero Scope 1 and 2 GHG emissions by 2040. Baseline. Progress measured as percent reduction from our calendar year 2019 emissions. Our combined Scope 1 and Scope 2 GHG emissions in 2019 were approximately 1.57 million metric tons of carbon dioxide equivalent (CO_2e).
Jio	Yes	Yes	1.5°C by FY2028	2035	Reliance Jio Infocomm Limited commits to reduce absolute scope 1 and scope 2 GHG emissions 76% by FY2028 from a FY2020 base year.
Juniper Networks	Yes	Yes	1.5°C by 2030	2040	Juniper Networks commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2022 base year. Juniper Networks also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, upstream transportation and distribution and use of sold products 25% within the same timeframe.
Kakao	Yes	No	Commitment removed	2040	By 2030, Kakao aims to reduce Scope 1+2 emissions by 40% compared to 2021 levels and Scope 3 emissions by 17%.
KDDI	Yes	Yes	1.5°C by FY2030	2040	KDDI commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2019 base year.
Keyence Corporation	Yes	No			We intend to reduce greenhouse gas emissions from business activities (Scope 1 + 2) by 43% in FY 2030 compared to FY 2016 levels.
KPN	Yes	Yes	1.5°C by 2030	2040	KPN commits to reduce absolute scope 1 GHG emissions 84% by 2030 from a 2015 base year.* KPN also commits to continue active annual sourcing of 100% renewable electricity through 2030. KPN further commits to reduce absolute scope 3 GHG emissions 75.6% by 2033 from a 2015 base year. *

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Kyocera	Yes	Yes	1.5°C by FY2030/31		KYOCERA Corporation commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by FY2030/31 from a FY2019/20 base year. KYOCERA Corporation also commits to reduce absolute scope 3 GHG emissions 46.2% within the same timeframe.
Lam Research	Yes	Yes	1.5°C by 2030	2050	Lam Research Corporation commits to reduce absolute scope 1 and 2 GHG emissions 60.6% by 2030 from a 2019 base year.
Lenovo	Yes	Yes	1.5°C by 2030	2050	Lenovo commits to reduce absolute scope 1 and scope 2 GHG emissions 50% by FY2029/2030 from a FY2018/2019 base year.
LG Electronics	Yes	Yes	1.5°C by 2030		LG Electronics Inc. commits to reduce absolute scope 1 and scope 2 GHG emissions 54.6% by 2030 from a 2017 base year.
Liberty Global	Yes	Yes	1.5°C by 2030		Liberty Global commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 and 80% by 2050 from a 2019 base year. Liberty Global also commits to reduce absolute scope 3 GHG emissions from the manufacture and use of customer premises equipment 50% by 2030 from a 2019 base year. In addition, Liberty Global commits to reduce scope 3 GHG emissions 50% per home passed over the same target period.
Logitech International	Yes	Yes	1.5°C by 2030	2047	Logitech International S.A. commits to reduce absolute scope 1 and 2 GHG emissions 85% by 2030 from a 2019 base year.
Lumen	Yes	Yes	Well-below 2°C by 2025		American multinational telecommunications and Internet service provider Lumen Technologies, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 18% by 2025 from a 2018 base year.
Lyft	Yes	Yes	1.5°C by 2030		Lyft, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 56.5% by 2030 from a 2018 base year. Lyft, Inc. also commits to reduce absolute scope 3 GHG emissions 85% per million USD value added within the same timeframe.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
MediaTek	Yes	No	Committed	2050	In 2030, the GHG emission under Scope 1 and Scope 2 will reduce by 40% from the record year, 2020.
Meta	Yes	Yes	1.5°C by 2031	2030	Meta commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2031 from a 2021 base year. Meta also commits to continue annually sourcing 100% renewable electricity through 2030. Meta further commits that 76% of its suppliers by emissions covering purchased goods and services and capital goods, will have science-based targets by 2026.
Microchip Technology	Yes	No		2040	Our commitments to reduce Scope 1 and 2 emissions by 50% by 2030, and be Net Zero by 2040.
Micron Technology	Yes	No			Net zero scope 1 and 2 emissions by calendar year 2050.
Microsoft	Yes	Yes	1.5°C by 2030		We will reduce our Scope 1 and 2 emissions to near zero by increasing energy efficiency, decarbonization of our operations, and reaching 100% renewable energy by 2025. (BY 2020)
Millicom	Yes	Yes	1.5°C by FY2030	2050	Millicom International Cellular S.A. commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2020 base year. Millicom International Cellular S.A. also commits to reduce absolute scope 3 GHG emissions 20% by FY2035 from a FY2020 base year.
MTN	Yes	Yes	1.5°C by FY2030	2040	MTN Group Limited commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2021 base year. MTN Group Limited also commits to reduce absolute scope 3 GHG emissions from fuel and energy related activities 50% by 2030 from a 2021 base year. MTN Group Limited commits that 80% of its suppliers by spend covering purchased goods and services and capital goods will have science based targets by 2026.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Murata Manufacturing	Yes	Yes	1.5°C by FY2030		Murata Manufacturing Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 46% by FY2030 from a FY2019 base year. Murata Manufacturing Co., Ltd. also commits to reduce absolute scope 3 GHG emissions 28% within the same timeframe.
Naspers	Yes	Yes	1.5°C by 2030		Naspers Scope 1 and 2: Naspers commits to reduce absolute scope 1 and 2 GHG emissions 100% by FY2028 from a FY2020 base year.
Naver	Yes	No			2040 Carbon Negative Implementation Strategy 60% Compared to expected GHG emissions (Scope 1 & 2) based on the BAU.
NEC	Yes	Yes	1.5°C by 2030	2040	NEC Corporation commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2020 base year. NEC Corporation also commits to reduce absolute scope 3 GHG emissions 50% within the same timeframe.
NetApp	Yes	No			Reduce Scope 1 and Scope 2 absolute emissions by approximately 42% by 2030: We have achieved significant carbon emissions reductions, decreasing our Scope 1 and Scope 2 emissions by 37% from our baseline (FY20).
Netflix	Yes	Yes	1.5°C by 2030		Netflix commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by 2030 from a 2019 base year.
Nokia	Yes	Yes	1.5°C by 2030	2040	GHG emission reduction of 65% from scope 1 and 2 market-based emissions, including 85% reduction of our facilities' GHG emissions compared to 2019.
NTT	Yes	Yes	1.5°C by FY2030/31	2040	NTT Group commits to reduce absolute scope 1 and 2 GHG emissions 80% by FY2030/31 from a FY2018/19 base year. NTT Group also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, and use of sold products 15% within the same timeframe.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
NXP Semiconductors	Yes	Yes	1.5°C by 2030		NXP Semiconductors commits to reduce absolute scope 1 and 2 GHG emissions 55% by 2030 from a 2021 base year.
Oppo	Yes	No	Committed		In February 2023, we unveiled our inaugural OPPO Climate Action Report, outlining our commitment to achieve carbon neutrality in operations by 2050.
Oracle	Yes	No		2050	Oracle has set a target to achieve net zero emissions by 2050 and to halve our greenhouse gas emissions (operational and supply chain) by 2030 relative to a 2020 baseline.
Orange	Yes	Yes	1.5°C by 2030	2040	Orange commits to reduce absolute scope 1, 2 and 3 GHG emissions 45% by 2030 from a 2021 base year.
Panasonic Group	Yes	Yes	1.5°C by 2030	2050	Panasonic Holdings Corporation commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2019 base year.
PayPal	Yes	Yes	1.5°C by 2025	2040	PayPal Holdings, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 25% by 2025 from a 2019 base year.
PCCW	Yes	No			Reduce absolute Scope 1 and 2 GHG emissions by 34.3% 2025 Target, with 2018 as base year.
PLDT	Yes	No			Reduce greenhouse gas (GHG) emissions from Scopes 1 and 2 by 40% compared to the 2019 baseline year.
Proximus	Yes	Yes	1.5°C by 2030	2040	Proximus commits to reduce absolute scope 1 and 2 emissions 66% by 2030 from a 2020 base year. Proximus also commits to continue active annual sourcing of 100% renewable electricity through 2030. Proximus further commits to reduce absolute scope 3 GHG emissions 42% by 2030 from a 2020 base year.
Qualcomm	Yes	Yes	1.5°C by 2030	2040	Qualcomm Incorporated commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2020 base year.
Quanta Computer	Yes	Yes	1.5°C by 2030	2050	QUANTA COMPUTER INC. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from 2022 base year.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Rakuten	Yes	Yes	1.5°C by FY2032		Rakuten Group, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 99.7% by FY2032 from a FY2022 base year.
Safaricom	Yes	Yes	Well-below 2°C by 2030		Kenyan mobile network operator Safaricom PLC commits to reduce absolute scope 1 and 2 GHG emissions 43% by 2030 and 74% by 2050 from a 2017 base year.
Salesforce	Yes	Yes	1.5°C by 2030	2050	Salesforce.com, Inc. commits to reduce absolute scope 1 and scope 2 GHG emissions by 50% by 2030 from a 2018 base year.
Samsung Electronics	Yes	No			2030 Achieve net zero Scope 1, 2 emissions.
SAP	Yes	Yes	1.5°C by 2030	2030	SAP SE commits to reduce absolute scope 1, 2, and 3 GHG emissions 90% by 2030 from a 2023 base year.*
Seagate	Yes	Yes	Well-below 2°C by 2025		American data storage company Seagate Technology LLC commits to reduce absolute scope 1 and scope 2 GHG emissions 20% by 2025 and 60% by 2040 from a 2017 base year.
ServiceNow	Yes	Yes	1.5°C by 2026	2030	ServiceNow Inc. commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2026 from a 2019 base year.
SES	Yes	Yes	1.5°C by 2030	2050	SES S.A. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.
Singtel	Yes	Yes	1.5°C by 2030	2045	Singtel Group commits to reduce absolute scope 1 and 2 GHG emissions 55% by FY2030 from a FY2023 base year.* Singtel Group also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, use of sold products, downstream leased assets, and investments 40% within the same timeframe.
SK Hynix	Yes	No			We aim to keep our absolute emissions (Scope 1 & 2) in 2030 at 2020 levels through aggressive GHG reduction efforts despite the expected increase in production with the operation of new fabs to be built in the Yongin Semiconductor Cluster.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
SK Telecom	Yes	Yes	1.5°C by 2030	2050	SK Telecom commits to reduce absolute scope 1 and 2 GHG emissions 45.7% by 2030 from a 2020 base year.
Skyworks	Yes	No			In 2021, we publicly communicated our long-term target of reducing absolute Scope 1 and Scope 2 carbon dioxide equivalent (CO_2e) emissions from our major manufacturing locations by 30% by 2030 (from a baseline year of 2018).
Snap	Yes	Yes	1.5°C by 2025		Snap Inc. commits to reduce absolute scope 1 and 2 GHG emissions 25% by 2025 from a 2019 base year. Snap Inc. also commits to reduce scope 3 GHG emissions from purchased goods and services, business travel and use of sold products 35% per unit of value added by 2025 from a 2019 base year.
SoftBank	Yes	Yes	1.5°C by 2030	2050	SoftBank Corp. commits to reduce absolute scope 1 and 2 GHG emissions 100% by 2030 from a 2022 base year. SoftBank Corp. also commits to reduce absolute scope 3 GHG emissions 25% within the same timeframe.
SONY	Yes	Yes	1.5°C by 2025	2040	Sony Group Corporation commits to reduce absolute scope 1 and 2 GHG emissions 72% by FY2035 from a FY2018 base year. Sony Group Corporation commits to reduce absolute scope 3 GHG emissions covering use of sold products 45% over the same target period. Sony Corporation also commits that 10% of its suppliers by emissions covering purchased goods and services, will have science-based targets by FY2025.
Spark New Zealand	Yes	Yes	1.5°C by 2030		Spark New Zealand commits to reduce absolute scope 1 and 2 GHG emissions 56% by FY2030 from a FY2020 base year. Spark New Zealand commits that 70% of its suppliers by spend covering purchased goods and services and capital goods will have science-based targets by FY2026.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
STC	Yes	Yes	1.5°C by 2030	2050	Saudi Telecom Company (STC) commits to reduce absolute scope 1 and scope 2 GHG emissions by 50% by 2030 from a 2019 base year. Saudi Telecom Company (STC) also commits to reduce absolute scope 3 emissions by 46.2% within the same timeframe.
STMicroelectronics	Yes	Yes	1.5°C by FY2030		STMicroelectronics commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2025 from a 2018 base year. STMicroelectronics commits to increase annual sourcing of renewable electricity from 22% in 2018 to 80% by 2025 and 100% by 2030.
Swisscom	Yes	Yes	1.5°C by 2030	2035	Swisscom AG commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2018 base year.
Tata Communications	Yes	Yes	1.5°C by 2030	2035	Tata Communications Limited commits to reduce absolute scope 1 and 2 GHG emissions 42% by FY2030 from a FY2022 base year. Tata Communications Limited also commits to reduce absolute scope 3 GHG emissions 25% within the same timeframe.
TCS	Yes	Yes	1.5°C by FY2030		Tata Consultancy Services Limited commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2016 base year. Tata Consultancy Services Limited also commits to reduce absolute scope 3 emissions 35% by FY2034 from a FY2020 base year.
TE Connectivity	Yes	Yes	1.5°C by 2030		TE Connectivity, Ltd commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2020 base year.
Tele2	Yes	Yes	1.5°C by 2025	2035	Tele2 AB commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2025 and 100% by 2029 from a 2019 base year*.
Telecom Italia	Yes	Yes	1.5°C by 2030	2040	Multinational Italian TELCO Company, TIM Group, commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2019 base year*.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Telefónica	Yes	Yes	1.5°C by 2030	2040	Telefónica S.A commits to reduce absolute scope 1 and scope 2 GHG emissions 80% by 2030 from a 2015 base year.
Telenor	Yes	Yes	1.5°C by 2030	2045	The multinational telecommunications company, Telenor Group commits to reduce absolute scope 1 and 2 GHG emissions 64% by 2030 from a 2019 base year.
Telia	Yes	Yes	1.5°C by 2025	2040	Telia Company commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2030 from a 2018 base year.
Telkom Indonesia	Yes	No			For climate target, Telkom has committed to reduce carbon emissions from Scope 1 and 2 by 20% by 2030 compared to the 2020 baseline as a group, and to achieve Net-Zero Emissions by 2060.
Telstra	Yes	Yes	1.5°C by 2030	2050	Taking climate action Reduce our absolute scope 1+2 emissions by 70% by 2030 (from an FY19 baseline).
Tencent	Yes	Yes	1.5°C by 2030	2050	Tencent commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2021 base year. Tencent also commits to increase annual sourcing renewable electricity from 2% in 2021 to 100% by 2030. Tencent further commits to reduce absolute scope 3 GHG emission 30% within the same timeframe.
Texas Instruments	Yes	No	Committed		By year-end 2025, reduce: Absolute scope 1 and scope 2 emissions by 25% from a 2015 base year.
Tokyo Electron	Yes	Yes	1.5°C by 2030	2040	Tokyo Electron Limited commits to reduce absolute scope 1 and 2 GHG emissions 70% by FY2030 from a FY2018 base year.
Toshiba TEC	Yes	No			2019 (Benchmark year) Reduce the total of Scope 1 and Scope 2 (GHG emissions generated from Toshiba Tec Group business activities) by 100% by FY2030.
Twilio	Yes	Yes	1.5°C by 2032		Twilio commits to reduce absolute scope 1 and 2 GHG emissions 54.6% by 2032 from a 2019 base year.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
Türk Telekom	Yes	No	Committed		(7.53.1) Provide details of your absolute emissions targets and progress made against those targets (7.53.1.54) End date of target 12/31/2030 | (7.53.1.11) End date of base year 12/31/2020 |(7.53.1.55) Targeted reduction from base year (%) 45.
Uber	Yes	Yes	1.5°C by 2030	2040	Uber commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.
Verizon	Yes	Yes	1.5°C by 2030		Verizon Communications Inc. commits to reduce absolute scope 1 and 2 GHG emissions 53% by 2030 from a 2019 base year.
Vivo	Yes	No			Carbon Goal Setting [.] Achieve a 50% reduction in carbon emissions in our operations by 2035 compared to 2021 levels.
Vodafone	Yes	Yes	1.5°C by 2030	2040	Vodafone Group commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2020 base year.
Western Digital	Yes	Yes	1.5°C by 2030		Western Digital commits to reduce absolute scope 1 and 2 GHG emissions 42% by FY2030 from a FY2020 base year. Western Digital also commits to reduce scope 3 GHG emissions from use of sold products 50% per petabyte capacity sold by FY2030 from a FY2020 base year.
Wipro	Yes	Yes	1.5°C by FY2030	2040	Wipro commits to reduce absolute scope 1 and 2 GHG emissions 59% by FY2030 from a FY2017 base year.
Xiaomi	Yes	No		2050	Scope 1 & 2: We aim to achieve a 70% reduction in GHG emissions from our existing businesses by 2030, using 2021 as our baseline.
Zain	Yes	Yes	1.5°C by 2030	2050	MOBILE TELECOMMUNICATIONS COMPANY K.S.C.P - Zain commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2020 base year.
Zoom	Yes	No		2040	We remain committed to achieving 100% renewable electricity in our direct operations (Scope 1 and Scope 2) by 2030.

Company	Does the company have a target to reduce Scope 1 and 2 emissions against a baseline year?	Are the targets approved by SBTi?	SBTi status near term	Net Zero year	Target text
ZTE	Yes	Yes	1.5°C by 2030	2050	ZTE Corporation commits to reduce absolute scope 1 and 2 GHG emissions 52% by 2030 from a 2021 base year. ZTE Corporation also commits to reduce scope 3 GHG emissions from use of sold products 52% per TeraByte throughput within the same timeframe.

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