Greening Digital Companies

2026

Monitoring Emissions and Climate Commitments

World Benchmarking Alliance

ITU

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Acronyms and abbreviations

ACT	Assessing Low-Carbon Transition
AI	Artificial intelligence
BVCM	Beyond value chain mitigation
CFE	Carbon-free energy
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CSRD	Corporate Sustainability Reporting Directive
CSDDD	Corporate Sustainability Due Diligence Directive
EGTI	Expert Group on Telecommunication/ICT Indicators

ERP	Enterprise resource planning
ESG	Environmental, social and governance
ESRS	European Sustainability Reporting Standards
FY	Fiscal year
GDA	Green Digital Action
GHG	Greenhouse gas
GW	Gigawatt
ICT	Information and communication technology
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
ITU	International Telecommunication Union
kWh	Kilowatt-hour
LB	Location-based
MB	Market-based
$MtCO_2$	Million tonnes of carbon dioxide
PPAs	Power purchase agreements
RE100	Global corporate renewable electricity initiative
REC	Renewable energy certificate
SBT	Science-based target
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goal
T-EAC	Time-based energy attribute certificate
tCO_2e	Tonnes of carbon dioxide equivalent
TPT	Transition Plan Taskforce
TWh	Terawatt-hour
UN	United Nations
UNEP	United Nations Environment Programme
USD	United States dollar
VCMI	Voluntary Carbon Markets Integrity Initiative
WBA	World Benchmarking Alliance
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute
WTDC	World Telecommunication Development Conference

Foreword

The Greening Digital Companies: Monitoring emissions and climate commitments report, now in its fifth edition, tracks the greenhouse gas (GHG) emissions, energy use, climate commitments and transition planning of 200 digital companies. Developed jointly by the International Telecommunication Union (ITU) and the World Benchmarking Alliance (WBA), it uses publicly available information to assess the impact of the digital sector on the environment. Its objective is to support companies, governments, regulators, investors and civil society in aligning digital transformation with global climate goals.

Encouragingly, this year's assessment shows that more companies are strengthening their climate commitments and reporting practices. Thirteen companies scored at least 90 per cent, up from eight in the previous edition, while 101 companies scored above 50 per cent, compared with 94 last year.

However, stronger commitments and reporting have not yet translated into emissions reductions, including reductions consistent with company targets. Of the 114 companies with validated near-term Scope 1 and 2 targets (the remaining 43 per cent of assessed companies did not have a valid target), 85 are on track to achieve the targets; 14 are deemed not on track, reducing emissions too slowly; and 14 have seen emissions rise or stay the same since their base year. Combined Scope 1 and location-based Scope 2 emissions reached approximately 301 million tonnes of carbon dioxide equivalent in 2024, a 1.2 per cent increase from the previous year. The ten largest operational emitters accounted for around 54 per cent of the total. Scope 3 emissions remain both the largest component of the digital sector climate footprint and the least comprehensively reported. Among the 93 companies disclosing complete inventories across all three scopes, Scope 3 accounted for 76 per cent of total reported emissions. Only one quarter obtained third-party verification of their emissions data.

The scale of energy use is becoming a strategic challenge, in particular with the increased use of artificial intelligence (AI). The 163 companies reporting total electricity consumption used a combined 494 terawatt-hours in 2024, equivalent to approximately 1.7 per cent of global electricity consumption. Although digital companies remain major corporate purchasers of renewable electricity, access to clean power is uneven. The rapid expansion of AI adds further urgency: while AI can support climate action, the infrastructure required to develop and deploy it is increasing electricity demand and contributing to rising emissions among major cloud and AI providers.

Key recommendations from the report include the urgency to move from commitments to implementation: companies need absolute, time-bound targets covering all material emissions, complete and independently verified reporting, and credible transition plans linked to governance, investment, operations, product design and value-chain engagement. Renewable electricity strategies should also better reflect when and where electricity is consumed and contribute to wider power-system decarbonization.

Corporate action must also be connected to national and international climate strategies. The data shows that company climate performance is closely linked to the wider systems in which they operate. Emissions from digital infrastructure depend not only on corporate procurement choices, but also on the pace of electricity-grid decarbonization, infrastructure planning – particularly as AI expands – and value-chain

transformation. Findings from the 2026 report also support the monitoring of ICT sector progress towards net zero and contribute to the ITU Green Digital Action initiative, which brings together governments, industry and other stakeholders to strengthen the environmental sustainability of digitalisation.

At the national level, the ITU-D Expert Group on Telecommunication/ICT Indicators has established a Sub-group on National Greenhouse Gas Emission Monitoring Indicators to strengthen the measurement of emissions from the ICT sector. This work supports countries in developing harmonised indicators, improving national data collection and aligning corporate reporting with national GHG inventories and climate policies.

The World Benchmarking Alliance supplies the analytical back bone to these efforts by systematically assessing the performance and accountability of the world's 2 000 most influential companies. Its work on climate transition planning examines whether corporate commitments are supported by credible strategies, implementation measures and governance arrangements using the ACT Core methodology. Together, these corporate- and national-level initiatives provide a stronger foundation for monitoring progress and identifying where additional action is needed.

The ICT sector has the innovation, resources and influence to make a major contribution to the global climate transition. That potential will only be realised when ambition is matched by action, transparency by accountability, and digital growth by measurable emissions reductions.

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World Benchmarking Alliance

Executive summary

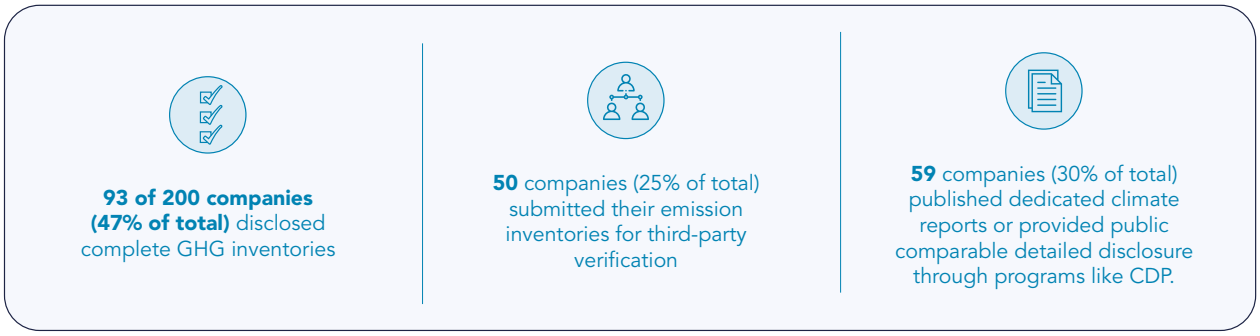
Greening Digital Companies: Monitoring Emissions and Climate Commitments is the fifth consecutive assessment by the International Telecommunication Union (ITU) and the World Benchmarking Alliance (WBA) of the climate performance of 200 digital companies. The assessment uses company data reported for 2024 and covers 75 telecommunication companies, 66 IT software and services companies, and 59 electronics companies across seven geographic regions. Digital technologies can enable emissions reductions across the wider economy through improved efficiency, connectivity, optimisation and innovation. At the same time, the expansion of data centres, telecommunication networks, cloud computing, semiconductor manufacturing and artificial intelligence comes with a growing environmental footprint.

Over five editions, the report has documented an evolution in expectations of corporate climate leadership. Initial progress was measured through the presence of climate commitments, carbon-neutrality claims and annual renewable electricity purchases. Increasingly, companies are demonstrating that these commitments are supported by credible transition plans, implementation mechanisms and measurable reductions in physical emissions.

The key finding of the 2026 report is that the ICT sector has made progress in disclosure, renewable electricity procurement and target setting, but implementation and emissions performance are not advancing at the same pace. The next stage of climate leadership must therefore focus on the credibility and delivery of corporate commitments.

Disclosure has improved, but comprehensive and verified reporting falls behind

The breadth of climate disclosure has continued to improve, particularly for operational emissions and energy consumption. Of the 200 companies assessed: 177 companies (89 per cent), disclosed Scope 1 emissions; 162 companies (81 per cent), disclosed location-based Scope 2 emissions; 138 companies (69 per cent) disclosed market-based Scope 2 emissions; 167 companies (84 per cent), disclosed total energy consumption; and 163 companies (82 per cent) disclosed electricity consumption. However, fewer than half of the assessed companies provided a complete picture of their climate footprint. Only 93 companies (47 per cent) reported a complete GHG inventory covering Scope 1, Scope 2 and all relevant Scope 3 categories.



Quality assurance has room for improvement as only 50 companies, equivalent to one quarter, submitted their emissions inventories for third-party verification. Fifty-nine companies (30 per cent) published dedicated climate reports or provided public comparable detailed disclosure through programs like CDP. Disclosure must move beyond the availability of selected figures. Companies need to report complete Scope 1, location-based and market-based Scope 2, and relevant Scope 3 inventories, together with transparent methodologies, reporting boundaries and independent verification.

Electricity consumption is large and highly concentrated

In 2024, the 163 companies reporting electricity data consumed a combined 494 TWh[1]. This was equivalent to 1.7 per cent of global electricity consumption, although the total is likely to underestimate the sector footprint because not all companies disclosed data and the assessment does not cover every company operating in the digital economy.

A total of 167 companies reported 667 TWh of total energy consumption, including electricity and other sources such as natural gas and diesel. This data showed electricity demand was highly concentrated, with the ten largest electricity-consuming companies using 269 TWh, accounting for 54 per cent of all reported electricity consumption despite representing only 5 per cent of the companies assessed. Six of these ten companies were also among the ten largest operational GHG emitters.

The reported data showed pronounced differences between regions and digital subsectors (telecommunication, IT software and services, electronics). Companies headquartered in East Asia and the Pacific accounted for the largest share of reported electricity consumption, at 289 TWh, but reported a renewable electricity share of 19 per cent. Companies in North America (USA and Canada) consumed 190 TWh and reported a renewable share of 68 per cent, while companies in Europe and Central Asia reported a similar renewable share of 69 per cent.[2]

By subsector, telecommunication companies reported the largest electricity consumption, at 240 TWh, but the lowest renewable electricity share, at 23 per cent. IT software and services companies consumed 134 TWh and reported the highest renewable share, at 79 per cent. Electronics companies consumed approximately 179 TWh, of which 36 per cent was reported as renewable.

1 Terawatt-hour. This is a large unit of energy that equals one trillion watt-hours, or one billion kilowatt-hours (kWh).
2 Further information on the regional classification used in this report is explained in Box 1, with a full break in Annex A.

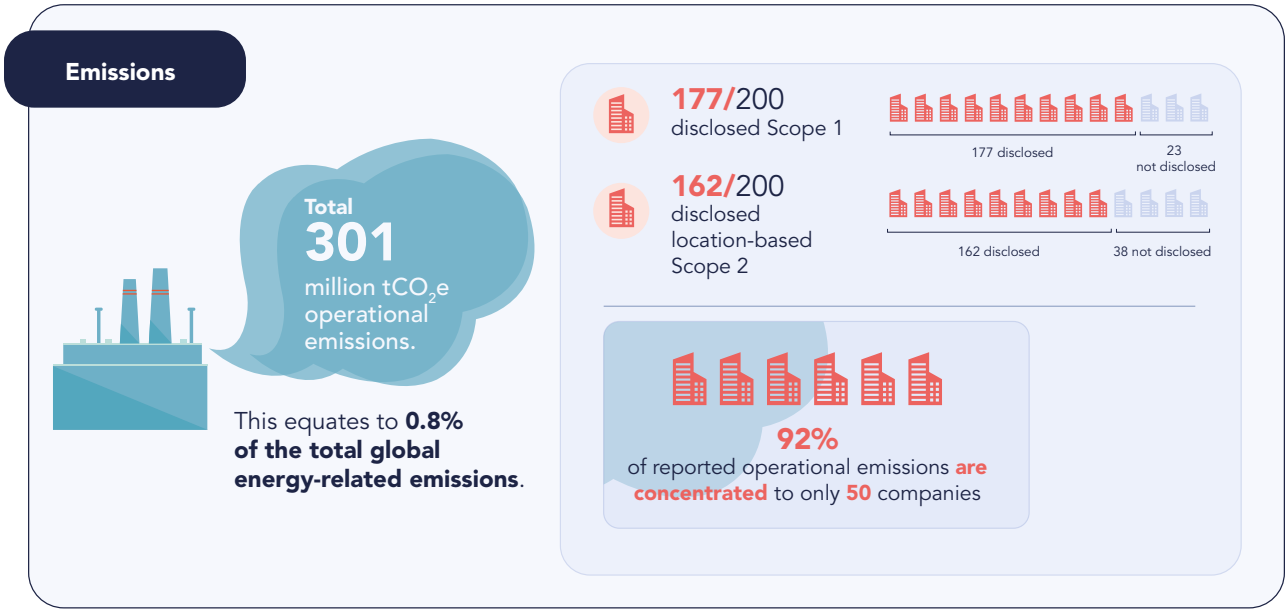
Digital companies remain among the world's largest corporate purchasers of renewable electricity. Their power purchase agreements and other procurement arrangements have helped mobilize investment in renewable generation. Nevertheless, only 25 of the 200 companies assessed reported sourcing 100 per cent renewable electricity in 2024. In addition, data highlights that contractual renewable electricity purchases do not necessarily mean that electricity consumption is physically supplied by low-carbon generation at the time and location where it is used. Companies can report very low market-based emissions while continuing to draw power from carbon-intensive grids. This reinforces the need to disclose and assess both location-based and market-based emissions.

Leading companies are beginning to move beyond annual renewable electricity matching towards 24/7 carbon-free energy, hourly matching, storage, demand flexibility and grid-aware infrastructure planning. These approaches are not yet widespread, but they represent an important shift towards aligning corporate energy strategies more closely with physical electricity-system decarbonization.

Operational emissions remain high and concentrated

The assessed companies reported 301 million tonnes of carbon dioxide equivalent in combined Scope 1 and location-based Scope 2 operational emissions in 2024, which is 0.8 per cent of global energy-related emissions. This represented a 1.2 per cent increase from the 297 million tonnes reported for 2023. Market-based emissions were only around one third of location-based emissions, illustrating the substantial influence of renewable energy certificates, power purchase agreements and other contractual instruments on reported emissions. Location-based reporting remains essential for understanding dependence on the electricity grids from which companies consume power.

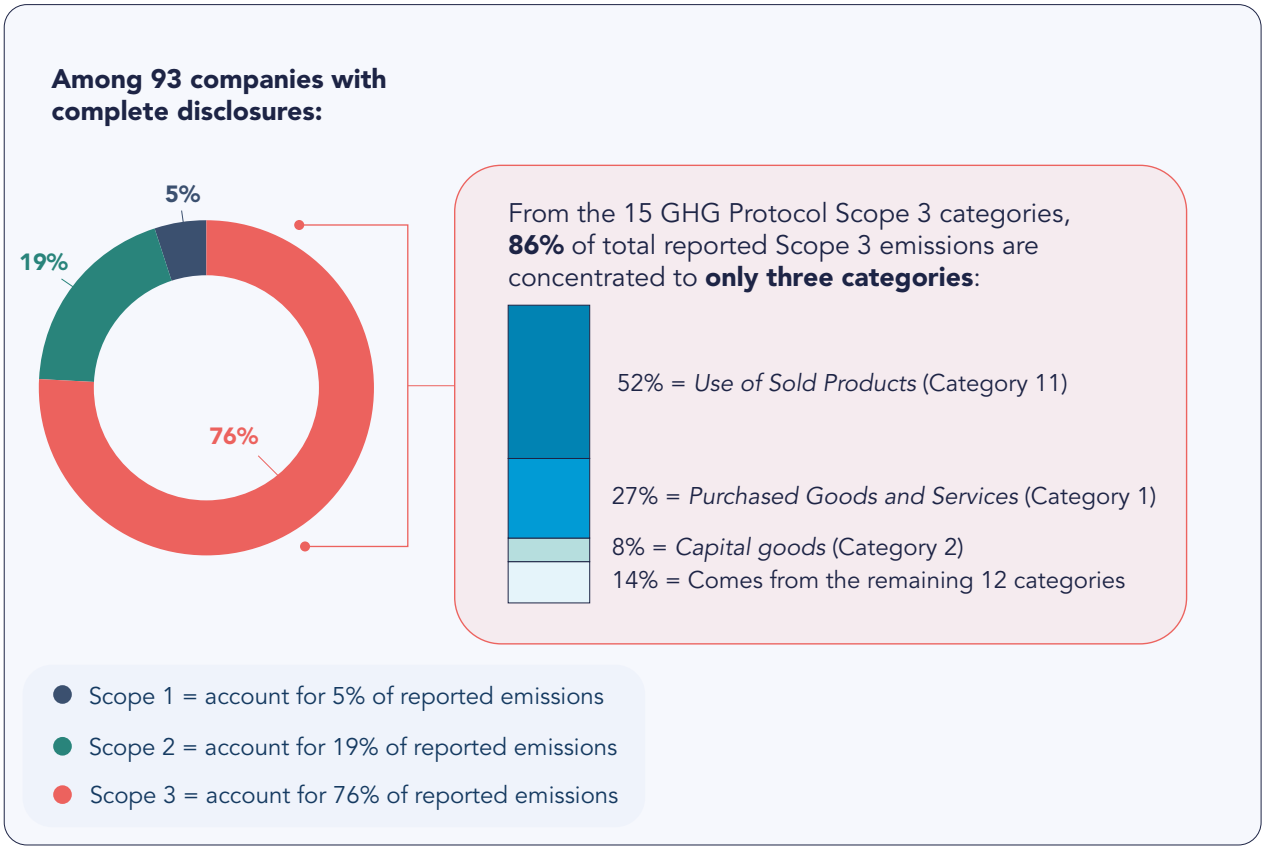
Operational emissions were also heavily concentrated, the 50 largest operational emitters accounting for 92 per cent of reported Scope 1 and location-based Scope 2 emissions. The ten largest emitters alone were responsible for around 163 million tCO_2e, equivalent to 54 per cent of the total. Despite their significance, only 27 of the 50 largest operational emitters had absolute Scope 1 and 2 reduction targets. None of the ten largest operational emitters had a target validated by the Science Based Targets initiative as aligned with a 1.5°C pathway.



Scope 3 and the decarbonization challenge

Value-chain emissions remain the largest component of the ICT sector climate footprint. Across all disclosures, companies reported 924 million tCO_2e of Scope 3 emissions. Among the 93 companies reporting complete greenhouse gas inventories, Scope 3 accounted for 76 per cent of total reported emissions. Scope 1 represented 5 per cent and Scope 2 at 19 per cent. Value-chain emissions were therefore more than three times the emissions generated by company operations.

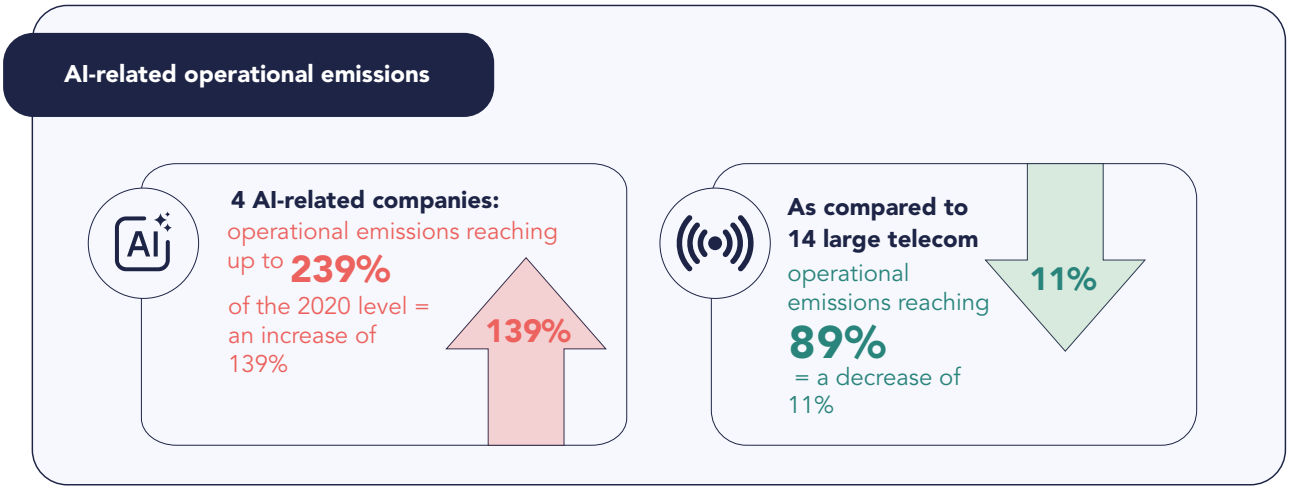
Scope 3 emissions were concentrated in three categories: use of sold products (52 per cent of reported category-level Scope 3 emissions); purchased goods and services (27 per cent), and capital goods (8 per cent). Together, these three categories accounted for 86 per cent of reported Scope 3 emissions. Reducing upstream emissions from purchased goods, services and capital equipment requires deeper supplier engagement, procurement requirements, innovation and improved data collection across multiple supply-chain tiers. Downstream emissions from the use of sold products require improved product energy efficiency, longer product lifetimes, circular design and progress in decarbonizing the electricity grids on which customers use digital products. The three digital subsectors therefore face different climate transition challenges.



Artificial intelligence (AI) is changing the sector emissions trajectory

AI has become one of the defining energy challenges facing the ICT sector. The expansion of AI is accelerating demand for data centres, high-performance computing, advanced cooling systems and semiconductor production. The report compares the operational emissions trajectories of 4 companies associated with growing AI use, with those of a group of 14 large telecommunication operators. By 2024, operational emissions had reached between 192-239 per cent of 2020 levels across the 4 companies.

By comparison, the operational emissions of the large telecommunication companies examined had declined to approximately 89 per cent of their 2020 level. This comparison does not attribute all emissions growth solely to AI, nor does it overlook the potential of AI to support climate action. AI can contribute to renewable energy forecasting, grid optimisation, industrial efficiency and climate modelling. However, the findings demonstrate that rapid growth in cloud and AI infrastructure can outpace improvements in energy efficiency and renewable procurement. The climate implications of AI also extend beyond data-centre operators. Semiconductor manufacturers and electronics suppliers are essential components of the AI value chain and face high electricity requirements, process emissions and embedded supply-chain emissions.

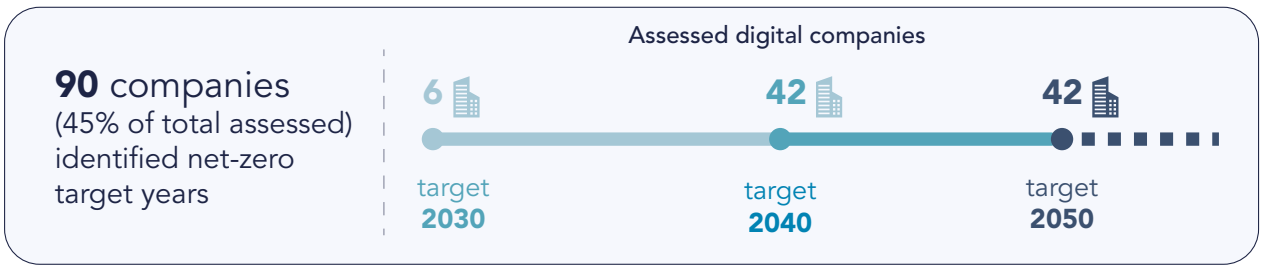


Corporate AI strategies should therefore integrate energy and climate considerations into decisions on model development, hardware efficiency, data-centre location, workload management, chip procurement and electricity sourcing. The climate benefits of AI will depend substantially on whether its underlying infrastructure is powered by low-carbon electricity.

Targets are becoming more common, but ambition must be matched by delivery

Long-term climate targets are now widespread across the digital companies assessed, but their scope, quality and credibility vary. Among the companies with identified net-zero target years, six aim to reach net zero by 2030, 42 by 2040 and 42 by 2050 - these represent 45 per cent of the companies assessed. The number of companies in each target-year category declined compared with the previous reporting period, highlighting that corporate commitments are not necessarily permanent and may be withdrawn, revised or removed from validation frameworks.

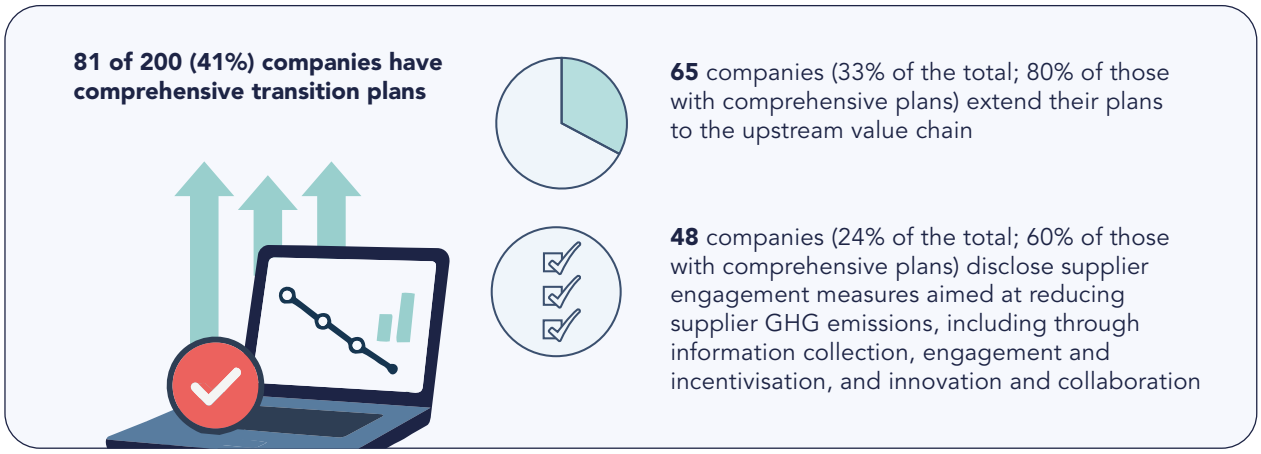
Near-term target coverage is stronger for operational emissions than for value-chain emissions. The assessment identifies broad adoption of Scope 1 and 2 targets but more limited coverage of Scope 3, despite Scope 3 representing the majority of the sector footprint.



Long-term target years alone provide little evidence that companies are on track. Credible targets require comprehensive scope coverage, absolute reductions, interim milestones, transparent progress reporting and clear implementation mechanisms. Carbon credits and offsets should complement rather than replace deep reductions within operations and value chains, and high-quality carbon removals should be reserved for genuinely residual emissions.

Transition plans are becoming established, but implementation maturity is uneven

For the first time, the assessment assessed climate transition planning in detail. 81 (41 per cent) of the assessed companies met the threshold for a comprehensive transition plan, either by publishing a standalone plan or by disclosing all five core components identified in the Transition Plan Taskforce framework (strategic ambition, an implementation strategy, an engagement strategy, metrics and targets, and governance). However, implementation across the value chain remains uneven. 80 per cent of companies with comprehensive transition plans cover upstream value chain emissions, but only 60 per cent disclose measures to actively engage suppliers in reducing GHG emissions.



A credible plan should explain not only where a company intends to go, but how it will get there. This requires alignment between targets and capital expenditure, operational changes, renewable electricity strategies, product design, supplier and customer engagement, corporate governance and executive accountability.

Assessment scores show progress in disclosure and targets, but limited improvement in performance

The climate assessment evaluates companies across three areas: targets, data and performance, for a maximum score of nine points. One company achieved the highest possible score in the 2026 assessment. Thirteen companies scored at least 90 per cent, five more than in the previous assessment, and 38 companies scored above 75 per cent. Top performers remained concentrated in Europe and North America (United States and Canada). A total of 101 companies achieved at least half of the available points, compared with 94 in the previous assessment.

Over the past four assessments, average scores have improved in target setting and, particularly, data disclosure. Performance scores, however, have remained at broadly similar levels. This reinforces the central conclusion that companies are getting better at measuring their emissions and articulating their ambitions, but these improvements have not yet produced equivalent progress in real-world emissions performance.

Priorities for action

The 2026 edition of the Greening Digital Companies report identifies priorities for companies, policy-makers, regulators, investors and electricity-system actors.

- **Move from annual renewable electricity claims towards time- and location-aligned clean energy.** Companies should progressively adopt hourly matching, demand flexibility, storage and procurement strategies that support additional clean generation where electricity is consumed.

- **Report both location-based and market-based Scope 2 emissions.** Both metrics provide valuable but different information. Transparent reporting of each is necessary to distinguish contractual procurement achievements from physical dependence on carbon-intensive grids.

- **Make Scope 3 reduction central to corporate transition strategies.** Companies should establish comprehensive Scope 3 targets and strengthen supplier requirements, product efficiency, and customer engagement.

- **Develop credible and implementable climate transition plans.** Plans should link targets to governance, capital expenditure, operational changes and accountability, and companies should require major suppliers to develop compatible plans.

- **Prioritize absolute and physical emissions reductions.** Renewable procurement, carbon credits and beyond-value-chain mitigation should complement - not substitute - deep reductions across corporate operations and value chains.

- **Align AI and digital infrastructure expansion with energy-system decarbonization.** Decisions on data-centre construction, semiconductor procurement, infrastructure location and electricity supply should be assessed against both corporate climate objectives and the capacity of local electricity systems to decarbonize.

The ICT sector has the financial resources, technological capabilities and market influence to make a significant contribution to the global energy transition. Realising that potential will require moving beyond commitments and accounting mechanisms towards implementation, physical emissions reductions and system-wide responsibility.

About ITU and WBA

ITU is the United Nations specialized agency in the field of telecommunication 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. The Greening Digital Companies 2026 report contributes to the implementation of WTDC Resolution 66 (Rev. Baku, 2025) by strengthening transparency and accountability on the climate performance of the ICT sector. This 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 organization measuring how the 2 000 most influential companies impact people and planet. It does this so that everyone – including governments, financial institutions, civil society organizations and the media – can hold companies accountable for contributing to sustainable development. Data in this report were collected as part of the WBA 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 January 2026, the WBA Climate Benchmark assessed 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/

1

Introduction

The ICT sector is both an enabler of wider decarbonization and a growing source of energy demand and greenhouse gas emissions. Estimates of the global emissions footprint vary according to the activities and lifecycle stages included, for example, existing studies generally place the carbon footprint of the ICT sector at approximately 1.5 to 4 per cent of global GHG emissions.[3] Digital technologies are enabling emissions reductions across many sectors through improved efficiency, optimization and innovation, while digital infrastructure is becoming a major and rapidly growing consumer of electricity. The expansion of cloud computing, artificial intelligence (AI), data centres and telecommunication networks is transforming economies and societies, but it is also increasing demand for energy and placing new pressures on electricity systems. As digitalization accelerates, ensuring that this growth is accompanied by credible and measurable decarbonization has become a strategic priority.

Against this backdrop, climate action by digital companies has continued to evolve. Corporate climate strategies have matured considerably over recent years, moving beyond commitments and target setting towards implementation, accountability and demonstrable emissions reductions. Attention is now being given to the quality of climate transition plans, value chain engagement, renewable electricity procurement, emissions verification, as well as whether reported reductions reflect accounting measures or measurable reductions in physical emissions. Climate transition plans serve a different purpose from sustainability, environmental or ESG reports. The latter provides broad disclosure across a range of environmental, social and governance topics, whereas a transition plan should explain how a company will transform its strategy, operations, investments and value chain to meet defined climate objectives. A company may disclose elements of its transition plan within a wider sustainability report, but the credibility of the plan depends on whether those elements form a coherent, time-bound and accountable pathway to emissions reduction. Companies are also navigating a rapidly evolving policy and standards landscape, including new expectations around transition planning, carbon credits and removals, 24/7 carbon-free energy and Scope 3 emissions management.

This report marks the fifth consecutive assessment of climate performance among the world's 200 leading digital companies, published by the International Telecommunication Union (ITU) and the World Benchmarking Alliance (WBA). Across these assessments, evidence of a clear evolution has emerged in how corporate climate action is understood and evaluated. Early climate leadership in the sector was often measured through commitments, renewable energy procurement and carbon neutrality claims. Today, attention is being placed on planning, implementation and whether reported climate progress reflects actual emissions reductions and meaningful contributions to energy system decarbonization.

The shift reflects broader changes in climate science, policy and stakeholder expectations. While many climate achievements in the ICT sector have been facilitated through accounting mechanisms and market instruments, climate science increasingly emphasizes the need for physical emissions reductions consistent with global carbon budgets and national decarbonization pathways. As a result, the narrative has gradually evolved from carbon neutrality claims to real-world decarbonization, from annual emissions accounting to hourly carbon alignment, and from corporate target-setting to transition planning and system-wide climate responsibility.

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3 The World Bank and ITU. 2024. Measuring the Emissions & Energy Footprint of the ICT Sector: Implications for Climate Action. Washington, D.C. and Geneva. https://www.itu.int/en/ITU-D/Environment/Documents/Publications/2024/ITU-World%20Bank%20Measuring%20the%20Emissions-Energy%20Footprint%20of%20the%20ICT%20Sector%202024.pdf

Across the five editions of this report, several broad trends are evident which are reflected in the following subsections. Climate-related disclosure and assessment scores have generally improved, more companies have adopted emissions-reduction targets, and corporate renewable-electricity procurement has expanded. Progress has been less consistent in Scope 3 disclosure, independent verification and the delivery of absolute emissions reductions.

1.1 From accounting mechanisms to physical emissions reduction

One of the most significant developments in corporate climate action has been the distinction between accounting-based emissions reductions and physical decarbonization. Market-based Scope 2 accounting allows companies to reflect renewable energy certificates (RECs), power purchase agreements (PPAs) and other contractual instruments in their reported emissions inventories, regardless of where or when the associated electricity is generated.[4] These mechanisms have played an important role in expanding renewable energy markets and mobilizing corporate investment in clean energy.

However, market-based accounting does not necessarily reflect the carbon intensity of the electricity consumed at a specific time and location. As a result, some companies report very low market-based Scope 2 emissions while continuing to operate in regions where electricity generation remains carbon intensive. This distinction has led to more scrutiny of the gap between contractual procurement claims and physical emissions outcomes.[5]

Doubt about the effectiveness of renewable energy certificates is increasing. A study commissioned in the United Kingdom by BT found that RECs suffer from several flaws.[6] One is that they do not reflect the amount of GHG emissions the company is actually generating. While an energy provider may supply renewable or other low-carbon electricity (such as nuclear) to the grid, this energy is generally mixed with carbon-generating energy sources. End-users therefore receive electricity from the overall grid mix rather than electricity physically supplied exclusively from renewable or low-carbon sources. Prices are also very low, often way below the price charged for electricity. As a result of the findings, BT switched to Scope 2 location-based for its emissions reduction target.[7] Further, it now omits RECs from its renewable energy indicator, resulting in a drop from 92 per cent in 2023 to 54 per cent in 2024.

Climate science is clear that atmospheric greenhouse gas concentrations - and the consequent climate outcomes - depend on physical emissions reductions rather than accounting allocations.[8] Consequently, investors, regulators and civil society organizations are placing emphasis on demonstrable emissions reductions, system-wide decarbonization and the credibility of climate transition plans. Emerging

4 World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2026. *GHG Protocol Scope 2 Guidance*. https://ghgprotocol.org/scope-2-guidance

5 Brander, M., and Bjørn, A. 2023. Principles for accurate GHG inventories and options for market-based accounting. Int J Life Cycle Assess 28, 1248–1260. https://doi.org/10.1007/s11367-023-02203-8

6 Cornwall Insight. 2024. *Reviewing The Future of REGOs for Corporates*. https://www.bt.com/bt-plc/assets/documents/digital-impact-and-sustainability/our-approach/our-policies-and-reports/reviewing-the-future-of-regos-for-corporates-october-2024.pdf.

7 BT Group plc. 2025. *Annual Report 2025*. https://www.bt.com/about/investors/financial-reporting-and-news/annual-reports.

8 Intergovernmental Panel on Climate Change (IPCC). 2022. IPCC Sixth Assessment Report. Working Group III: Mitigation of Climate Change. https://www.ipcc.ch/report/ar6/wg3/

approaches such as 24/7 carbon-free energy matching seek to align electricity consumption with clean generation on an hourly basis rather than through annual averages, helping to narrow the gap between accounting outcomes and physical system impacts.

At the same time, these developments remain concentrated among a relatively small group of leading companies, particularly large hyperscale cloud providers and well-resourced companies in North America and Europe. Many digital companies continue to rely primarily on conventional renewable energy procurement instruments and face significant financial, technological and regulatory barriers to deeper decarbonization.

The rapid expansion of AI infrastructure is driving unprecedented growth in electricity demand, prompting concerns about grid capacity, energy security and the pace of power-sector decarbonization. In some regions, data centre developers are exploring dedicated generation capacity, including fossil gas generation, to meet reliability requirements and accelerate deployment timelines. While such approaches may address short-term energy constraints, they risk increasing direct emissions and locking in new fossil infrastructure at a time when deep decarbonization of electricity systems is increasingly urgent.[9]

1.2 Carbon offsets and carbon neutrality evolution

Carbon offsets, the purchase of credits representing emissions reductions or removals elsewhere in the economy, play a key role in net-zero and carbon-neutrality claims across the ICT sector. Additionality (whether a project delivers emissions reductions beyond what would have occurred anyway), permanence, leakage and verification have raised concerns about the integrity of some carbon credit categories. Recent reviews of voluntary carbon markets have highlighted variation in the quality and climate effectiveness of offset projects, prompting calls for stronger governance, transparency and quality standards.

As a result, carbon neutrality is increasingly viewed as a transitional milestone rather than an endpoint of corporate climate action. Emerging guidance from the Science Based Targets initiative (SBTi), the Oxford Principles for Net Zero Aligned Carbon Offsetting and the Voluntary Carbon Markets Integrity Initiative (VCMI) emphasizes the need for companies to prioritize deep reductions in their own value-chain emissions before relying on carbon credits to support climate claims. Carbon credits are being framed as a complement to - rather than a substitute for - science-aligned decarbonization.

An important distinction has also emerged between traditional offsetting and carbon removals. Traditional offsets often finance emissions reductions or avoidance activities elsewhere, whereas carbon removals physically remove carbon dioxide from the atmosphere and store it for varying periods of time – a necessity to address residual emissions after reaching a net-zero state. The Oxford Principles recommend that organizations progressively transition from emissions-reduction credits towards removals, and ultimately towards removals with durable storage, for any residual emissions that remain after deep decarbonization.

9 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai

Companies may also finance mitigation beyond their value chains, commonly referred to as beyond value chain mitigation (BVCM). The concept recognizes that limiting corporate climate action solely to operational and value-chain emissions may leave significant mitigation opportunities unfunded, particularly in developing economies and hard-to-abate sectors. This can include support for renewable energy, methane abatement, ecosystem restoration, and other climate solutions that fall outside company GHG emission inventories. Such contributions can complement corporate decarbonization, but they should be disclosed separately and must not be used to substitute for emissions reductions within company operations and value chains.[10,11] The role for BVCM is therefore to go beyond what companies are required to do internally, not to compensate for unresolved emissions. As BVCM frameworks mature, maintaining this distinction will be critical. The most credible approaches combine ambitious science-based targets with transparent, additional contributions to broader climate mitigation.

Compensating genuinely residual emissions through high-quality removals after substantial emissions reductions have been achieved is regarded as consistent with a net-zero pathway. By contrast, reliance on offsets to compensate for emissions that could feasibly be reduced within company operations or value chains is viewed as inconsistent with emerging best practice. The direction of travel across major climate governance frameworks is clear: reduce emissions first, address residual emissions with high-integrity removals, and ensure that any use of carbon credits is transparent, credible, supplementary to decarbonization efforts, and reported separately.

1.3 Energy procurement: from certificate purchases to system-aligned clean power

Digital companies have become the world's largest corporate buyers of renewable electricity. Through long-term power purchase agreements (PPAs) and the procurement of renewable energy certificates (RECs), the sector has played a significant role in accelerating renewable energy deployment. Digital companies including Amazon, Google, Microsoft and Meta have consistently ranked among the world's largest corporate purchasers of renewable energy, helping drive investment in wind and solar generation and contributing to substantial reductions in reported market-based Scope 2 emissions.[12,13]

However, annual market-based accounting does not necessarily ensure that electricity consumption is matched by clean generation at the time and location where electricity is used. A data centre operating overnight in a fossil-intensive grid may purchase renewable energy certificates associated with electricity generated elsewhere and at a different time. While such claims are consistent with current greenhouse gas accounting standards, they may not accurately reflect the carbon intensity of electricity being

10 SbTi. 2024. Above and beyond: An SBTi report on the design and implementation of BVCM. https://files.sciencebasedtargets.org/production/files/Above-and-Beyond-Report-on-BVCM.pdf

11 Axelsson, K., Wagner, A., Johnstone, I., Allen, M., Caldecott, B., Eyre, N., Fankhauser, S., Hale, T., Hepburn, C., Hickey, C., Khosla, R., Lezak, S., Mitchell-Larson, E., Malhi, Y., Seddon, N., Smith, A. and Smith, S.M. 2024. Oxford Principles for Net Zero Aligned Carbon Offsetting (revised 2024). Oxford: Smith School of Enterprise and the Environment, University of Oxford.

12 BloombergNEF. 2025. Carbon Savings Redefine Impact of Corporate Energy Deals. https://about.bnef.com/insights/clean-energy/carbon-savings-redefine-impact-of-corporate-energy-deals/

13 IEA. 2024. Electricity 2024. IEA, Paris. https://www.iea.org/reports/electricity-2024

consumed in real time.[14] This distinction between contractual accounting and physical system outcomes has become an important issue in discussions of corporate climate credibility.

In response, companies and stakeholders have advanced the concept of 24/7 carbon-free energy (CFE) matching: the principle that electricity consumption should be matched with carbon-free electricity on an hourly basis rather than solely through annual averages. Google has committed to operating on 24/7 carbon-free energy across all of its data centres and campuses by 2030, while Microsoft has similarly committed to achieving 100 per cent carbon-free electricity consumption on a time-matched basis by 2030.[15],[16] These commitments have helped stimulate the development of time-based energy attribute certificates (T-EACs), granular energy accounting systems and new approaches to clean-energy procurement.[17]

This shift represents one of the most significant methodological developments in corporate climate action since the introduction of Scope 2 accounting. Rather than focusing exclusively on the volume of renewable electricity purchased over a year, companies are increasingly being asked to consider when and where clean electricity is available. Achieving high levels of hourly carbon-free energy matching may require investments in energy storage, flexible demand, advanced forecasting, geographic diversification and workload optimization to align electricity demand with clean-energy supply.[18,19]

Nevertheless, important challenges remain. Additionality - whether company procurement decisions result in the construction of new renewable energy capacity that would not otherwise have been built - continues to be a central concern in renewable energy markets. While long-term PPAs are generally regarded as providing stronger additionality signals than unbundled renewable energy certificates, concerns remain that some certificate purchases may simply reallocate existing renewable attributes without materially increasing renewable generation.[20]

In addition, the rapid concentration of data centre development in specific geographic regions is creating new energy-system pressures. Major data centre hubs including Northern Virginia in the United States, Dublin in Ireland, and Singapore have experienced rapid growth in electricity demand, prompting concerns about grid capacity, renewable energy availability and infrastructure planning. The International Energy Agency has highlighted the potential for data centres and AI-related infrastructure to become significant drivers of electricity demand growth in certain regions, increasing the importance of coordinated planning between digital infrastructure expansion and power-system decarbonization.[21] In constrained electricity markets, large new data centre loads may increase competition for clean electricity resources and place additional pressure on grid infrastructure, underscoring the need to consider system-wide impacts alongside corporate procurement claims.

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14 Google. 2020. 24/7 by 2030: Realizing A Carbon-free Future. https://sustainability.google/reports/247-carbon-free-energy/
15 IBID.
16 Microsoft. 2025. 2025 Environmental Sustainability Report. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/2025-Microsoft-Environmental-Sustainability-Report.pdf
17 Granular Energy. 2026. SBTi's Corporate Net Zero Standard v2: what it means for hourly matching. https://www.granular-energy.com/insights/sbtis-corporate-net-zero-standard-v2-what-it-means-for-hourly-matching
18 Google. 2020. 24/7 by 2030: Realizing A Carbon-free Future. https://sustainability.google/reports/247-carbon-free-energy/
19 IEA. 2024. Electricity 2024. IEA, Paris. https://www.iea.org/reports/electricity-2024
20 World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2026. *GHG Protocol Scope 2 Guidance*. https://ghgprotocol.org/scope-2-guidance
21 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai

1.4 Artificial intelligence and the energy transition

The rapid expansion of AI infrastructure is increasing demand for large volumes of reliable electricity. Meeting this demand while decarbonizing electricity systems will require a portfolio of measures, including renewable generation, grid expansion, storage, demand flexibility, energy efficiency and, depending on national circumstances, other firm low-carbon resources.[22,23] The appropriate balance among these options is shaped by technical, economic, regulatory, and policy considerations, which varies at a national level.

This recognition has driven a significant reappraisal of nuclear energy. Several large digital companies have entered into agreements to support new nuclear capacity, including small modular reactors (SMRs) and the restart of existing nuclear facilities. Nuclear energy is being positioned as a source of firm, low-carbon generation that can complement intermittent renewables and support the reliable power supply required by AI-scale computing.[24,25] Important caveats apply, however: nuclear generation is itself vulnerable to climate impacts, including water availability and rising cooling-water temperatures, while long development timelines and regulatory complexity limit its ability to address near-term electricity demand growth.

A second and more recent response to power-reliability concerns has been the proposed use of dedicated fossil gas generation for data centres. In some cases, operators are proposing on-site gas turbines or other forms of captive generation to ensure reliable power supply where grid capacity is constrained. While such approaches may address short-term reliability challenges, they risk increasing direct Scope 1 emissions and locking in fossil fuel dependence at a time when many companies have committed to long-term decarbonization goals.[26,27].

1.5 The re-emergence of location-based emissions

Market-based Scope 2 accounting has enabled rapid reductions in reported emissions for many digital companies. However, it can diverge from the physical emissions associated with electricity consumption on national and regional grids. The Greenhouse Gas (GHG) Protocol Scope 2 Guidance explicitly distinguishes between market-based emissions, which reflect contractual procurement instruments, and location-based emissions, which reflect the average emissions intensity of the grid supplying electricity to consumers.[28] As a result, a company may report very low market-based Scope 2 emissions while continuing to operate in regions where electricity generation remains heavily dependent on fossil fuels. This distinction has prompted debate regarding the relationship between corporate renewable energy claims and broader power-sector decarbonization.

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22 IBID.
23 Google. 2020. 24/7 by 2030: Realizing A Carbon-free Future. https://sustainability.google/reports/247-carbon-free-energy/
24 Microsoft. 2025. 2025 Environmental Sustainability Report. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/2025-Microsoft-Environmental-Sustainability-Report.pdf
25 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai
26 IBID.
27 UNEP. 2024. Emissions Gap Report 2024. https://www.unep.org/resources/emissions-gap-report-2024
28 World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2026. *GHG Protocol Scope 2 Guidance*. https://ghgprotocol.org/scope-2-guidance

Location-based Scope 2 accounting is therefore receiving attention as an important indicator of physical emissions impacts. While market-based reporting is valuable for tracking corporate procurement decisions, investors, regulators and civil society organizations also require greater transparency regarding location-based emissions and the extent to which corporate electricity consumption aligns with national and regional decarbonization pathways.[29,30] This report therefore presents both market-based and location-based emissions metrics. The gap between them provides important insight into the extent to which reported emissions reductions are driven by contractual instruments versus changes in the underlying electricity systems from which companies draw power.

This distinction also raises questions about additionality and corporate influence on energy-system transformation. The work carried out by the Oxford Principles for Net Zero Aligned Carbon Offsetting and by EnergyTag on granular energy accounting both emphasize that the climate value of corporate energy procurement depends not only on the volume of renewable electricity purchased, but also on whether procurement decisions stimulate new clean-energy investment and contribute to broader system decarbonization.[31] Long-term power purchase agreements that support the development of new renewable generation are generally considered to provide stronger evidence of additionality than purchases of unbundled renewable energy certificates from existing assets.[32]

Consequently, companies should reduce consumption, improve efficiency and procure low-carbon electricity through instruments that provide credible evidence of additionality, temporal and geographic relevance, where such instruments are available. Second, companies should engage utilities, regulators and governments to support the expansion of low-carbon generation, grids, storage and market structures in the locations where they operate. Reliance solely on improvements delivered by the grid may be too passive for companies with substantial electricity demand, while procurement instruments alone cannot substitute for system-wide grid decarbonization.

29 European Commission. 2026. Corporate sustainability reporting. https://finance.ec.europa.eu/financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

30 CDP. 2026. https://www.cdp.net/en/disclose/question-bank

31 Axelsson, K., Wagner, A., Johnstone, I., Allen, M., Caldecott, B., Eyre, N., Fankhauser, S., Hale, T., Hepburn, C., Hickey, C., Khosla, R., Lezak, S., Mitchell-Larson, E., Malhi, Y., Seddon, N., Smith, A. and Smith, S.M. 2024. Oxford Principles for Net Zero Aligned Carbon Offsetting (revised 2024). Oxford: Smith School of Enterprise and the Environment, University of Oxford.

32 World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2026. *GHG Protocol Scope 2 Guidance*. https://ghgprotocol.org/scope-2-guidance

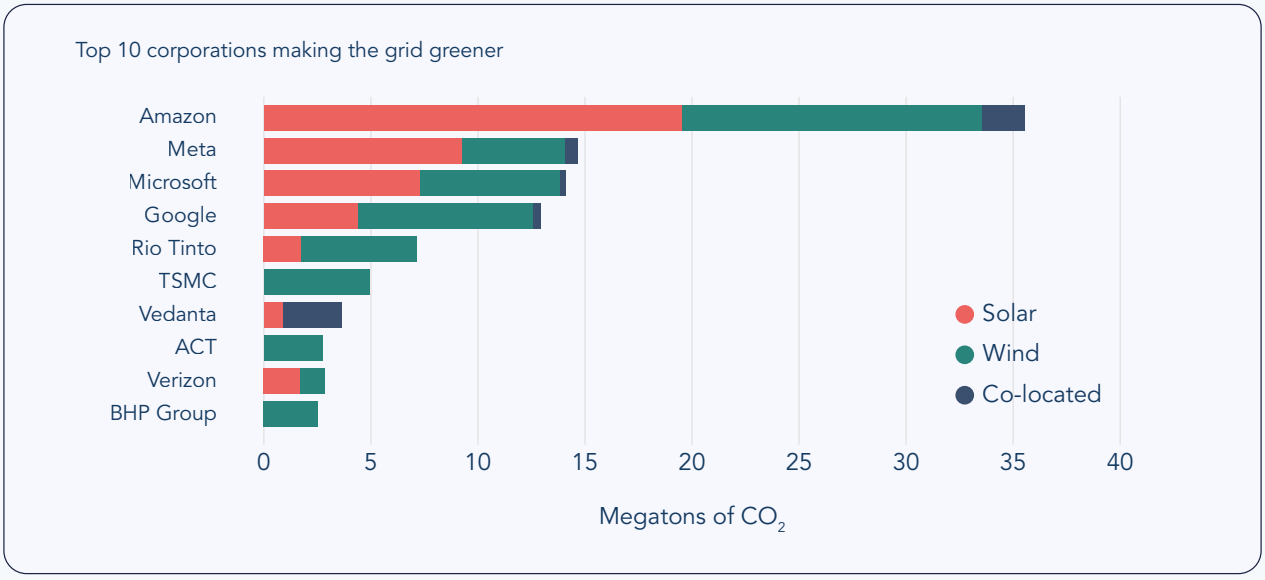
Spotlight: Digital companies as corporate renewable electricity purchasers

Corporate power purchase agreements have traditionally been assessed through additionality - the extent to which they enable new renewable energy capacity. BloombergNEF broadens this assessment by considering emissionality, or the carbon emissions displaced by each agreement (Figure 1). This approach reflects both the volume of renewable electricity contracted and the emissions intensity of the grid where the project is located.

Digital companies feature prominently in BloombergNEF ranking of companies contributing to grid decarbonization. Amazon records the largest estimated avoided emissions from renewable energy purchases, and also includes Google, Meta, TSMC, and Microsoft and Verizon. This reflects both the scale of their procurement and the emissions intensity of the electricity systems in which their projects are located.

These estimates should nevertheless be considered alongside company overall electricity consumption and renewable electricity shares. A company may support substantial renewable generation while still consuming significant amounts of electricity from fossil-fuel-intensive grids. Conversely, a high renewable electricity share does not necessarily demonstrate that procurement has added new clean generation or displaced electricity in the most carbon-intensive locations. Assessing corporate electricity strategies therefore requires consideration of procurement volumes, additionality, emissionality, and the proportion of total electricity demand covered.

Figure 1. Estimated emissions avoided through corporate Power Purchase Agreements (PPAs), 2024 in megatons of CO_2.



Source: Bloomberg NEF, 2025. https://about.bnef.com/insights/clean-energy/carbon-savings-redefine-impact-of-corporate-energy-deals/

1.6 Scope 3 emissions and the credibility of net-zero claims

For most digital companies, the largest share of GHG emissions lies outside their own operations, in their value chains. These include emissions from purchased goods and services, capital goods, and the use of sold products by customers. The GHG Protocol identifies these as Scope 3 categories 1, 2 and 11, respectively, and defines Scope 3 accounting as a way for companies to assess emissions across their full value chain.[33] The quantitative findings for the assessed companies in this report are presented in Section 2.3.2. A net-zero claim that excludes value-chain emissions therefore addresses only part of the climate footprint. For this reason, the SBTi Corporate Net-Zero Standard requires companies to address emissions across Scopes 1, 2 and 3 when setting credible net-zero targets.[34]

Within Scope 3, upstream and downstream emissions present different management challenges. Upstream emissions, such as purchased goods and services and capital goods, can often be addressed through supplier engagement, procurement requirements, audits and supplier emissions disclosure. Downstream emissions, particularly Category 11 emissions from the use of sold products, are harder to control because they depend on how customers use products and on the carbon intensity of the electricity systems in which those products operate. The GHG Protocol defines Category 11 as emissions from the use of goods and services sold by the reporting company, including the Scope 1 and Scope 2 emissions of end users. This means that product energy efficiency, longer product lifetimes and circular design are essential, but downstream Scope 3 reductions also depend on wider grid decarbonization and user behaviour. Recognizing this distinction is essential for setting credible and effective Scope 3 strategies.

1.7 From corporate action to climate transition

Perhaps the most significant shift observed over the past five assessments has not been the roles of digital companies - which have long been recognized as both major infrastructure providers and enablers of wider decarbonization - but the expectations placed upon them. Investors, regulators, customers, civil-society organisations and standard-setting bodies are placing greater emphasis on the credibility of implementation, rather than the ambition of commitments alone. Companies are therefore expected to demonstrate measurable progress through robust climate transition plans, value chain decarbonization, transparent reporting and sustained reductions in GHG emissions, while responding to the energy and emissions implications of rapidly expanding artificial intelligence infrastructure.[35,36]

The basis on which corporate climate performance is assessed is changing. Commitments and procurement claims remain important, but stakeholders are also examining whether companies have

33 World Resources Institute and World Business Council for Sustainable Development. 2011. Corporate Value Chain (Scope 3) Accounting and Reporting Standard. https://ghgprotocol.org/corporate-value-chain-scope-3-standard
34 SBTi. 2026. The Corporate Net-zero Standard. https://sciencebasedtargets.org/corporate-net-zero
35 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai
36 World Economic Forum. 2026. Why AI will be key to accelerating the energy transition. https://www.weforum.org/stories/energy-transition/ai-accelerating-energy-transition/

credible implementation plans and whether those plans result in measurable emissions reductions. This shift is particularly important as AI, cloud computing and digital infrastructure drive additional electricity demand and place pressure on the pace of power-sector decarbonization. Decisions relating to renewable electricity procurement, data centre expansion, semiconductor manufacturing and supplier engagement therefore have implications that extend beyond individual companies and contribute to broader climate outcomes.[37]

This year's report reflects that evolving understanding of climate responsibility and introduces new data. The report assesses three connected but distinct stages of corporate climate action: the ambition expressed through targets; the plans, governance and resources established to deliver them; and the emissions outcomes achieved. A transition plan is not itself evidence of decarbonization. It is a roadmap whose credibility must ultimately be tested through implementation and sustained reductions in absolute greenhouse gas emissions.

Regulators are moving in the same direction. The European Union Corporate Sustainability Reporting Directive (CSRD) and Corporate Sustainability Due Diligence Directive (CSDDD) require greater transparency regarding climate risks, transition plans and implementation, while investors are placing growing emphasis on evidence of delivery rather than ambition alone.[38] The report therefore examines whether companies disclose the core elements of a transition plan and whether they report actions across their operations and value chains. The central question is not only whether a company has made a climate commitment or published a plan, but whether it has started to implement it and deliver measurable emissions reductions.

37 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai

38 European Commission. 2026. Corporate sustainability reporting. https://finance.ec.europa.eu/financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

Spotlight: Climate transition plans

Table 1. Transition plan components guided by the principles of ambition, action and accountability.

Component	What it covers
Strategic ambition (foundations)	The overall strategic ambition for the transition of a company, including its commitments, priorities, and how the transition plan is embedded in its business strategy and planning processes.
Implementation strategy	The specific actions, policies, and portfolio and business model changes the company is taking or planning to deliver on its transition objectives, including capital allocation, product and service changes, and operational adjustments.
Engagement strategy	How the company works with value chain partners, industry peers, policy-makers, and affected stakeholders - including workers and communities - to support the broader transition.
Metrics and targets	The quantitative targets the company has set (apart from the GHG emissions reduction targets), the metrics used to track progress, and how these are aligned with its transition objectives and relevant science-based pathways.
Governance	The board and management structures responsible for overseeing and delivering the transition plan, including accountability mechanisms and how climate-related performance is linked to remuneration.

Source: adapted from the TPT Disclosure Framework (TPT 2023)

A company transition plan is a strategic roadmap for reducing greenhouse gas (GHG) emissions and supporting the transition to a low-carbon economy. It outlines how the company intends to achieve its climate objectives through measures such as improving energy efficiency, increasing the use of renewable energy, reducing value-chain emissions, and ultimately reaching net-zero emissions. A comprehensive transition plan should be aligned with a 1.5°C pathway and demonstrate how climate considerations are embedded within corporate strategy, governance, capital allocation, risk management, and operational decision-making.

The credibility of a transition plan depends not only on the ambition of its targets, but also on the extent to which implementation, governance, and accountability mechanisms are in place to support their delivery. Drawing on the Transition Plan Taskforce (TPT) Disclosure Framework[39], a comprehensive transition plan should include five core elements (Table 1):

1. Strategic ambition (foundations)
2. Implementation strategy
3. Engagement strategy
4. Metrics and targets
5. Governance

Assessment of implementation across the value chain

Because a credible transition plan should describe not only strategic ambition but also how the company will deliver emissions reductions, this assessment also examined implementation beyond company operations. Drawing on the ACT Core Methodology[40], supplier engagement was assessed using three categories of actions: information collection, engagement and incentivization, and innovation and collaboration. Customer engagement was assessed using four categories: education and information sharing, collaboration and innovation, compensation, and customer motivation through marketing and choice architecture ('nudging'). Companies were considered to actively engage suppliers or customers where they disclosed at least two engagement measures.

Note: For the purposes of this assessment, publication of a standalone transition plan or disclosure of all five core elements within corporate reporting was used as the minimum threshold for identifying a comprehensive transition plan.

39 Transition Plan Taskforce. 2023. Disclosure Framework. https://www.ifrs.org/content/dam/ifrs/knowledge-hub/resources/tpt/disclosure-framework-oct-2023.pdf

40 WBA and ADEME. 2025. ACT Core, Version 1.10. https://actinitiative.org/wp-content/uploads/pdf/act-core-methodology.pdf

2

Assessment

This section presents the quantitative assessment of the 200 digital companies (Explanatory Box 1). The analysis is organized into five thematic areas. Section 2.1 examines the state of company disclosure; Section 2.2 covers energy and electricity use, including renewable electricity; Section 2.3 assesses Scope 1, Scope 2 and Scope 3 emissions; Section 2.4 examines target setting and progress; and Section 2.5 assesses climate transition planning. Section 2.6 presents the climate assessment scores. Additional information is presented in the Annex, including the assessment methodology and company-level data. Supplementary materials, including the full dataset and company information, are available through the Greening Digital Dashboard.

Explanatory Box 1. Company selection, data sources and comparability

The assessment in this report covers 200 digital companies: 75 telecommunication companies, 66 IT software and services companies and 59 electronics companies (see table below for what type of companies this breakdown includes). The companies are drawn from the World Benchmarking Alliance SDG2000, which identifies companies with substantial influence on people, economies and the environment, and from the WBA Digital Inclusion Benchmark.

All company data were collected from publicly available sources, including annual, sustainability and climate reports, CDP disclosures, company websites and other corporate publications. The 2026 report assesses information relating to the 2024 financial or reporting year.

The company list is unchanged from the 2025 edition, enabling direct comparison for indicators collected in both years (learn more about the selection of the companies in Explanatory Box 1 of the 2025 report[41]). Comparisons across the full five-year report series (all report editions can be accessed from the Green Digital Dashboard[42]) should be treated as indicative at the time of publication because the assessed company sample changed in some earlier editions, and companies may restate historical emissions following acquisitions, divestitures, boundary changes or methodological revisions. The data is not retroactively corrected and any republished emissions figures by a company are not reflected in the data.

The sample represents influential digital companies rather than the entire ICT sector. Aggregates and subsector comparisons therefore describe the companies assessed and should not be extrapolated directly to the global ICT sector.

The regional groupings used in this report follow the World Benchmarking Alliance classification and differ from ITU's six administrative regions. They are used because the assessment focuses on multinational companies and classifies each company according to the location of its corporate headquarters. For example, in this classification, North America comprises the United States and Canada, while Mexico is included in Latin America and the Caribbean. Regional results therefore reflect the headquarters of the companies assessed rather than the full geographical distribution of their operations, revenues or emissions.

41 See: https://assets.worldbenchmarkingalliance.org/app/uploads/2025/01/WBA-Shaping-Tomorrow-SDG2000-January-2025.pdf and https://www.itu.int/en/ITU-D/Environment/Pages/Publications/GDC-25.aspx

42 https://greeningdigital.itu.int/

Annex A, Table 1A provides a list of all companies assessed in this report, together with their headquarters locations and corresponding regional classifications.

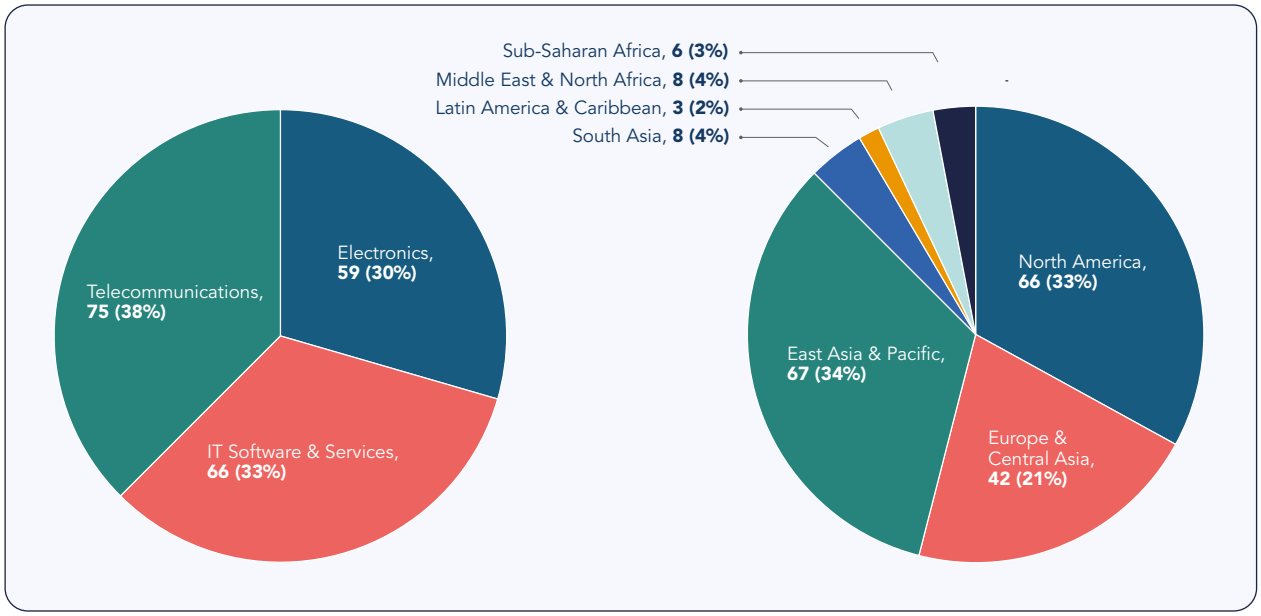
Subsector*	What it covers
Telecommunication	Fixed and mobile network operators, integrated telecommunication groups and satellite or connectivity providers
IT software and services	Software, cloud and data-centre services, digital platforms, e-commerce, payments, ride-hailing and other digital-service businesses
Electronics	Semiconductor, device, component, network-equipment and other digital-hardware manufacturers

*Note: In this report, the term 'ICT sector' refers specifically to the digital companies covered by the assessment, including telecommunications operators, IT software and services companies, and electronics manufacturers. It does not encompass the wider digital economy unless otherwise stated. The categories are analytical groupings based on principal digital activities. Many companies operate across more than one business model. Comparisons describe the assessed sample within each subsector and should not be interpreted as estimates for the full global ICT subsector.

The 200 companies assessed in this report span three ICT subsectors and seven geographic regions (Figure 2). By subsector, the report comprises 75 telecommunication companies (38 per cent), 66 IT software and services companies (33 per cent), and 59 electronics companies (30 per cent). 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.

By region, the largest groupings are East Asia and the Pacific (67 companies, 34 per cent), North America (66 companies, 33 per cent), and Europe and Central Asia (42 companies 21 per cent). This regional distribution reflects the global concentration of ICT sector activity, though it also introduces important heterogeneity: companies headquartered in different regions face very different electricity grid conditions, regulatory environments, and market opportunities for renewable energy - all of which shape what is achievable in terms of emissions reduction.

Figure 2. Distribution of the 200 assessed digital companies by ICT subsector (left) and headquarters region (right), number of companies and percent of total companies.



Source: ITU and WBA. 2026.

Most digital companies use the GHG Protocol Corporate Accounting and Reporting Standard to calculate their carbon dioxide equivalent (CO_2e) emissions. The protocol divides emissions into three scopes (see Explanatory Box 2, Figure 3). 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. 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).

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.

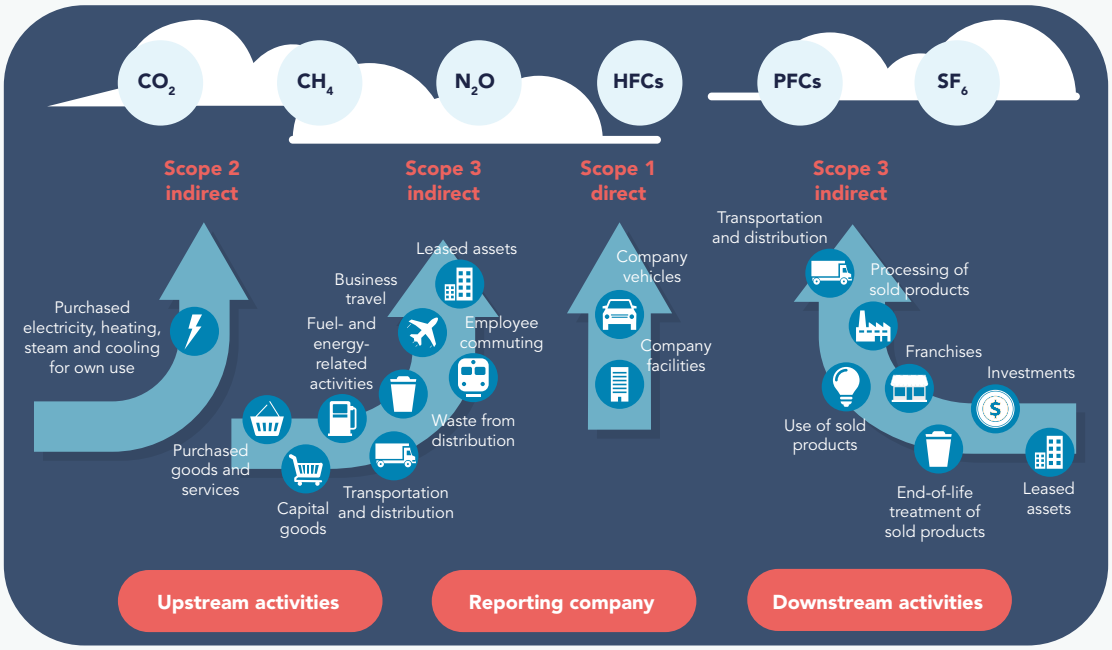
Explanatory Box 2. Understanding the GHG Protocol scope framework

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 (indirect 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 (in the supply of goods, services, and capital) and downstream (in the use of sold products and their end-of-life treatment). 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.

Figure 3. Overview of greenhouse gas emission scopes.



Source: Adapted from World Resources Institute and World Business Council for Sustainable Development. 2011. https://ghgprotocol.org/corporate-value-chain-scope-3-standard

2.1 State of company climate data disclosure

The quality and completeness of climate data disclosed by digital companies has improved since the first edition of this report, but substantial gaps remain. Climate disclosure among the assessed companies is widespread for operational emissions and energy use, but remains incomplete for Scope 3 emissions and rarely receives independent assurance. Scope 1 emissions were disclosed by 89 per cent of companies and electricity consumption by 82 per cent. By contrast, only 47 per cent disclosed all relevant Scope 3 categories, 30 per cent published a dedicated climate report and 25 per cent obtained third-party verification of their greenhouse gas inventories. Disclosure quality matters not just for transparency but as a prerequisite for credible climate action: companies cannot set meaningful reduction targets for emissions they have not yet measured, and accountability requires a verifiable baseline against which progress can be assessed.

Assessment scores indicate a broad improvement in the availability and quality of climate information over the five editions of this report. However, this report does not present a fully restated indicator-level time series because company coverage changed in earlier editions and companies frequently revise historical emissions. Current-year disclosure rates are therefore presented in Table 2, while the longer-term development of overall assessment scores is discussed in Section 2.6.

Scope 1 emissions were disclosed by 89 per cent of companies, while 81 per cent of companies reported location-based Scope 2 emissions and 69 per cent reported market-based Scope 2 emissions. The lower level of market-based reporting limits the ability to compare contractual renewable energy claims with the emissions associated with the electricity grids from which companies draw power.

Scope 3 emissions remain the least consistently reported component of corporate GHG inventories. A total of 47 per cent of companies disclosed emissions across all relevant Scope 3 categories, and the same percentage also provided a complete GHG inventory covering Scopes 1, 2 and 3. Given the importance of value-chain emissions to the overall climate impact of digital companies, this represents a significant transparency gap.

Disclosure of energy-related indicators was comparatively stronger. A total of 84 per cent of companies reported total energy consumption, 82 per cent disclosed electricity consumption, and 73 per cent reported the share of electricity sourced from renewable energy. However, only 13 per cent of companies reported sourcing 100 per cent renewable electricity in 2024.

Table 2. Summary of key climate disclosure indicators across the 200 assessed companies, 2024.

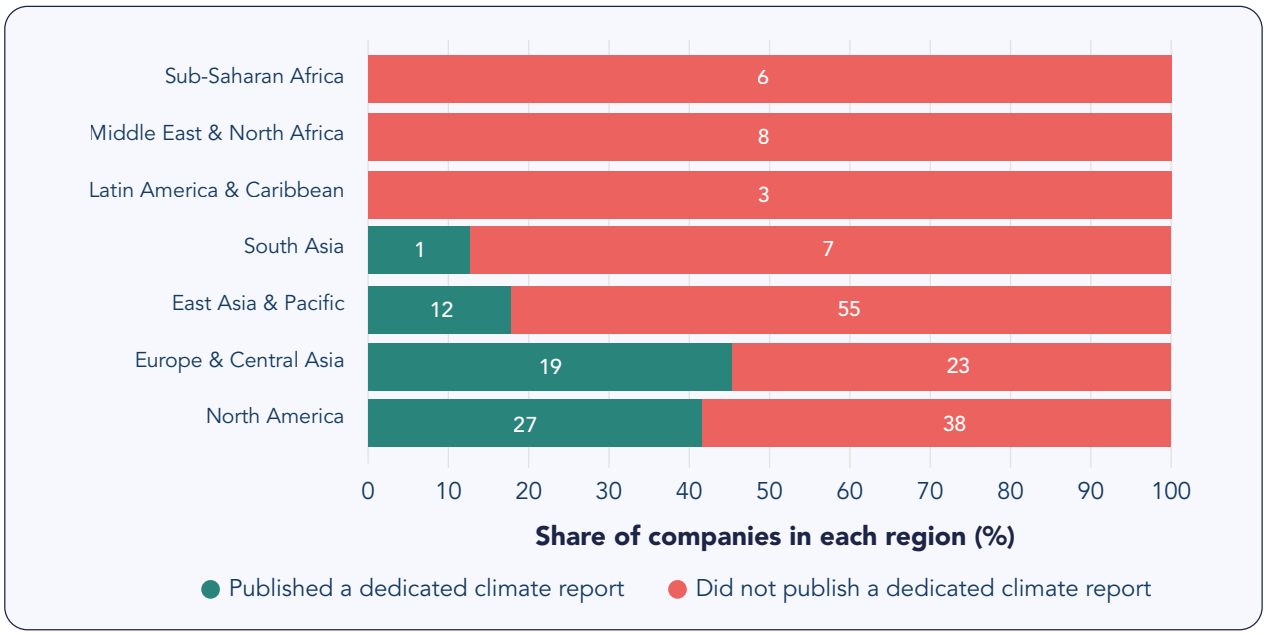
Indicator reported per company	Number of companies disclosing (out of 200)	% of companies disclosing
Scope 1 emissions	177	88.5
Scope 2 Location-based	162	81.0
Scope 2 Market-based	138	69.0
Scope 3 emissions (all relevant categories)	93	46.5
Complete GHG inventory (all 3 scopes)	93	46.5
Total energy consumption	167	83.5
Total electricity consumption	163	81.5
Renewable electricity share	145	72.5
100 per cent renewable electricity	25	12.5
Published a dedicated climate report[43]	59	29.5
Inventory submitted for third-party verification	50	25.0

Beyond disclosure, the quality, transparency and credibility of reported climate data remain important considerations. Of the 200 companies assessed, only 50 submitted their greenhouse gas inventories for third-party verification, providing independent assurance of the accuracy and completeness of reported emissions data. A further 59 companies published a dedicated climate report or made detailed climate-related information publicly available through platforms such as CDP.

Figure 4 highlights regional variation in climate reporting practices. Companies headquartered in Europe and Central Asia were the most likely to publish a dedicated climate report, with 45 per cent of assessed companies in the region providing standalone climate disclosures. North America followed closely at 42 per cent. Higher reporting rates in these regions likely reflect stronger investor expectations, more mature sustainability reporting practices, and the influence of evolving regulatory frameworks, including the European Union Corporate Sustainability Reporting Directive (CSRD). In contrast, dedicated climate reporting was absent among the assessed companies from South Asia, Latin America and the Caribbean, the Middle East and North Africa, and sub-Sahara Africa. These findings highlight persistent regional disparities in climate transparency and suggest that strengthening disclosure practices will require not only regulatory drivers but also targeted capacity-building, reporting guidance and technical support. Without independently verified data and transparent reporting, it remains difficult for investors, regulators and other stakeholders to assess the credibility of reported emissions reductions and climate commitments.

43 A dedicated climate or environmental report, published separately from a broader environmental, social and governance report, can provide detailed climate-related disclosure but does not necessarily constitute a climate transition plan which is also introduced in this report. A transition plan must set out how climate objectives will be delivered through the company strategy, governance, implementation actions, resource allocation, stakeholder engagement, and metrics and targets.

Figure 4. Number and share of assessed companies publishing a dedicated climate report, by headquarters region, 2024



Note: Bars show the percentage of assessed companies in each region; figures within the bars show the number of companies.

Source: ITU and WBA. 2026.

2.2 Electricity, energy and renewables

Energy - and electricity in particular - is a key variable in ICT sector decarbonization. The electricity consumed by data centres, telecommunication networks, manufacturing facilities, and office infrastructure determines both the scale of Scope 2 emissions and the nature of the decarbonization challenge. It is also an area where companies can have direct control and on which the most innovation in corporate climate strategy has occurred.

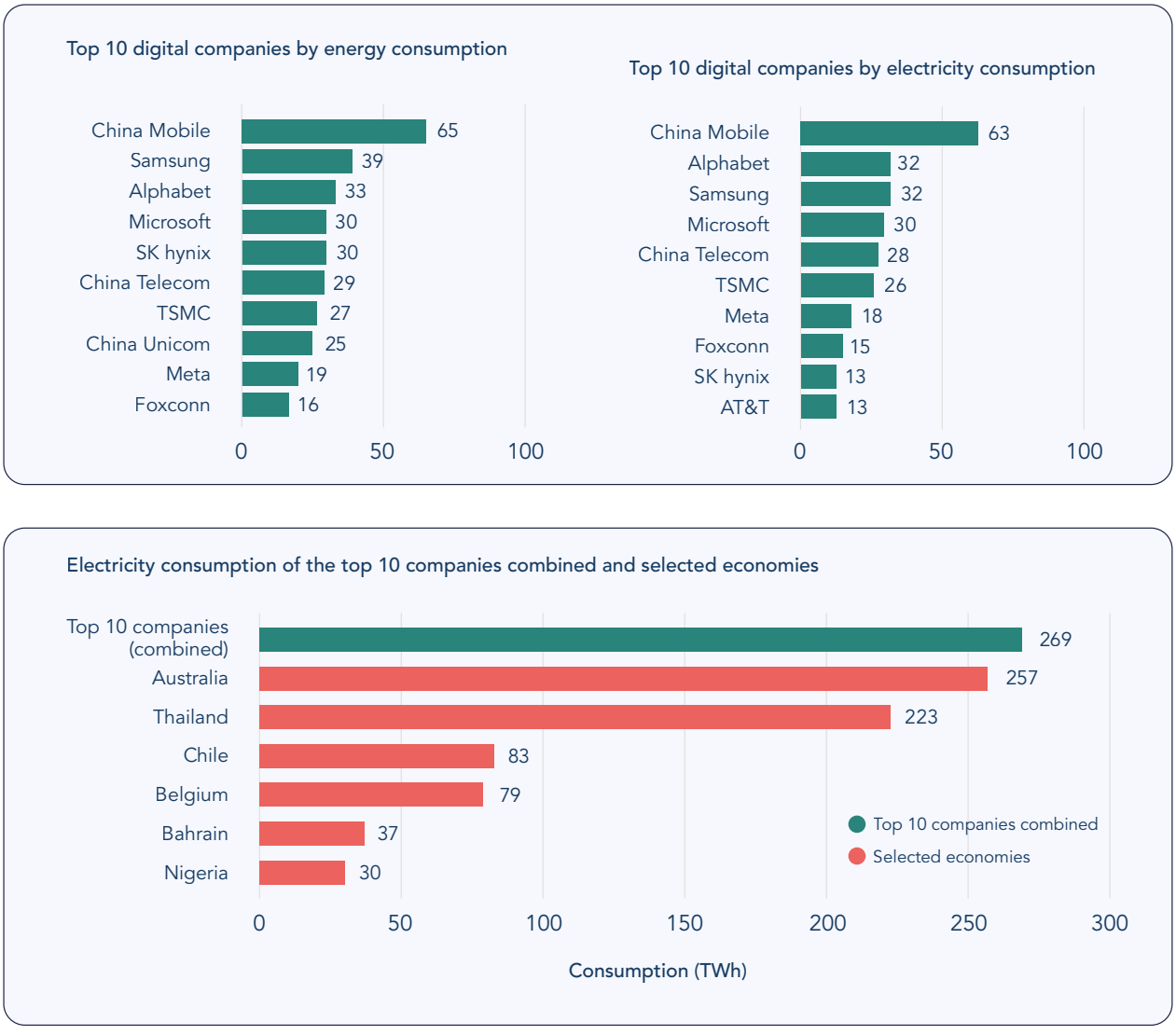
In 2024, 163 digital companies reported electricity consumption data, collectively consuming 494 TWh of electricity. This represents approximately 1.7 per cent of total global electricity consumption in 2024[44] - a substantial share, and a figure that likely understates the sector footprint given incomplete reporting coverage and the ICT sector extending beyond these 163 companies. For example, Amazon did not report energy or electricity data for 2024 which has lowered the percentage share of the global total compared to the 2025 report. A total of 167 companies reported total energy consumption (including electricity and other sources such as natural gas and diesel), which amounted to 667 TWh in 2024.

Electricity consumption is highly concentrated within the sector. The top 10 electricity-consuming companies accounted for 54 per cent of total reported electricity use, despite representing just

44 Based on global net electricity consumption of 28,534 billion kWh in 2024 from the United States Energy Information Administration, 2026. https://www.eia.gov/international/data/world/electricity/electricity-consumption.

5 per cent of the company count. Six of these ten companies also rank among the top 10 operational GHG emitters, underscoring the extent to which a small number of companies drive both the sector energy consumption and its direct climate impact. The combined electricity consumption of the top 10 companies used approximately 269 TWh in 2024 – more electricity than Australia (257 TWh), the largest national comparator shown in Figure 5.[45] This comparison illustrates the scale of electricity demand concentrated among a small number of digital companies.

Figure 5. Top 10 digital companies by energy and electricity consumption (TWh), and compared to selected economies, 2024.



Note: Amazon did not report energy or electricity data for 2024.
Source: ITU and WBA. 2026.

45 https://www.eia.gov/international/data/world/electricity/electricity-consumption

The geographic distribution of energy consumption reveals a regional imbalance (Table 2). Companies headquartered in East Asia and the Pacific accounted for the largest share of both total energy consumption (349.1 TWh) and electricity consumption (289.3 TWh) in 2024, followed by North America (213.7 TWh and 190.4 TWh, respectively). Together, these two regions accounted for more than 80 per cent of total reported electricity consumption. Renewable electricity use, however, was concentrated in North America (129.3 TWh) and Europe and Central Asia (40.2 TWh), where renewable electricity represented approximately 68 per cent of electricity consumption. By contrast, East Asia and the Pacific reported a renewable electricity share of only 18.5 per cent, despite accounting for the largest share of electricity demand. The result reflects a combination of grid conditions, the availability of procurement instruments and company reporting practices.

Table 3. Breakdown of total energy, electricity and renewable electricity consumption of the 200 companies by region 2024. Note that some companies report total electricity but not total energy, 2024.

Region	Total energy consumption (TWh)	Total electricity consumption (TWh)	Renewable electricity used (TWh)	Renewable electricity share (%)
East Asia and Pacific	349.1	289.3	53.6	18.5
North America	212.9	189.6	129.3	68.2
Europe and Central Asia	69.8	58.6	40.2	68.5
Middle East and North Africa	21.1	7.5	0.3	3.6
Latin America and Caribbean	7.4	4.2	0.1	1.8
South Asia	4.9	3.0	1.2	38.5
Sub-Sahara Africa	1.7	0.7	0.0	0.1

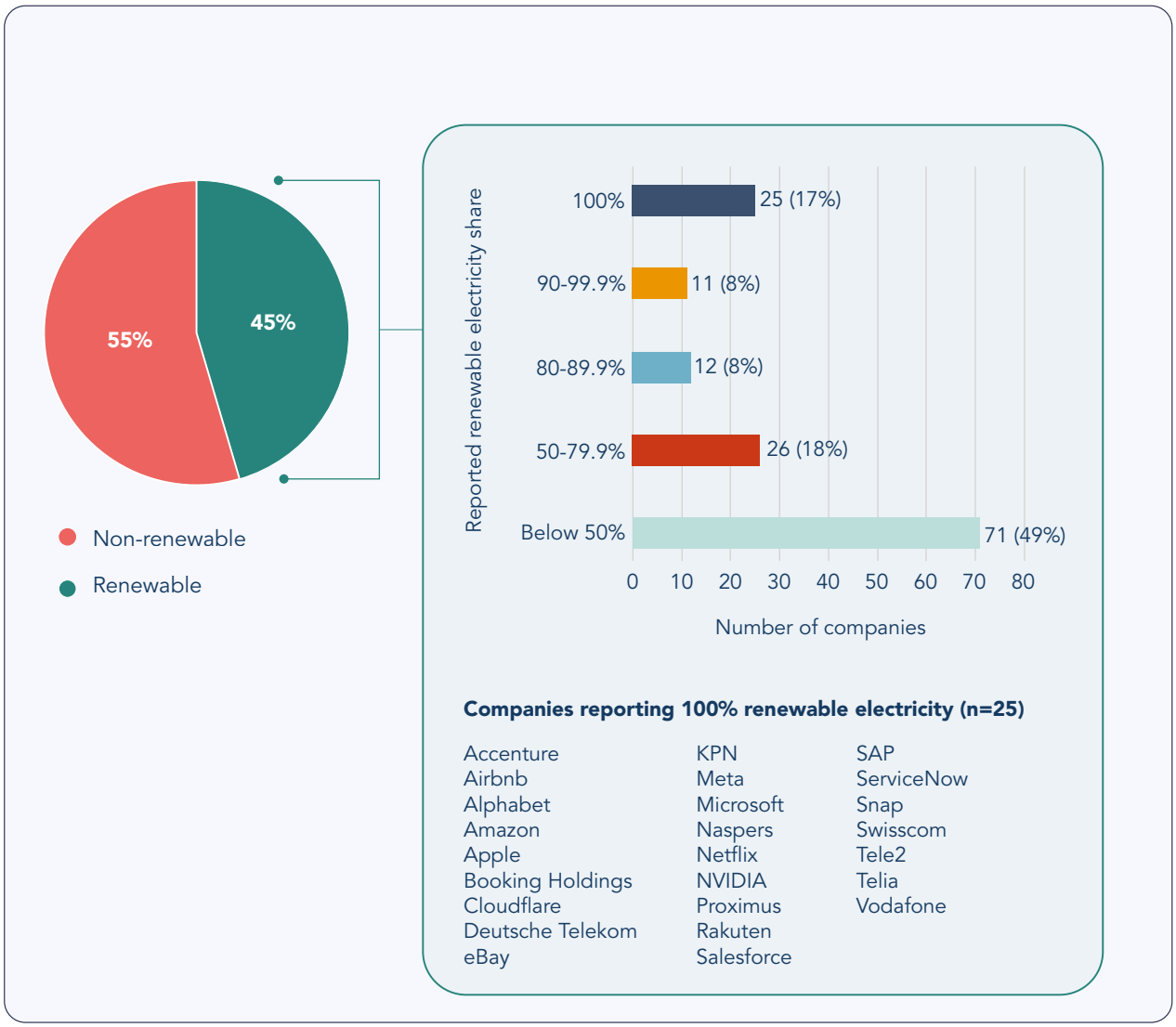
Energy consumption patterns also vary across ICT subsectors (Table 3). These differences reflect the varying pace of decarbonization across the sector and can help explain the contrasting renewable-electricity shares shown in the table. Telecommunication companies reported the highest aggregate electricity consumption and the lowest renewable-electricity share among the three assessed subsectors. Their networks consist of geographically dispersed sites operating across many electricity markets, which can make direct procurement and hourly matching more complex than for a smaller number of large data centres. Electronics companies face additional constraints from energy-intensive manufacturing and supplier networks, while software and services companies - particularly hyperscale providers - have made extensive use of power purchase agreements and renewable-energy certificates. As AI-related electricity demand continues to grow, maintaining high renewable electricity shares has become increasingly important for limiting emissions growth across the ICT sector.

Table 4. Breakdown of total energy, electricity and renewable electricity consumption by ICT subsector; note that some companies report total electricity but not total energy, 2024.

Sector	Total energy consumption (TWh)	Total electricity consumption (TWh)	Renewable electricity used (TWh)	Renewable electricity share (%)
IT software and services	150.1	134.3	106.2	79.1
Telecommunication	282.4	240.0	54.5	22.7
Electronics	234.3	178.6	64.0	35.8

Across companies reporting, renewable electricity represented 45 per cent of reported electricity consumption, while 55 per cent was reported as non-renewable (Figure 6). These figures reflect company disclosure and procurement accounting rather than a direct measurement of the physical electricity delivered to every facility. Reported renewable electricity use varies widely across the sector. Of the 145 companies with sufficient data, almost half reported sourcing less than 50 per cent of their electricity from renewable sources, while 48 companies reported shares of at least 80 per cent, including 25 reported 100 per cent renewable electricity, which includes matching through PPAs or RECs (see sections 1.1 and 1.3). Several companies explicitly acknowledged in their reporting that despite purchasing 100 per cent renewable electricity contractually, the physical electricity available at their locations is not always renewable - particularly in regions where the local grid remains fossil-intensive or where the electricity generating mix varies significantly by time of day.

Figure 6. Renewable energy and electricity consumption and reporting share, 2024.



Note: Based on 145 companies reporting renewable electricity share. Companies with no reported value are excluded (n=55); the 25 companies reporting 100 per cent renewable electricity are listed separately.

Source: ITU and WBA. 2026.

Among the top 10 largest electricity consuming companies in 2024, Alphabet, Microsoft, Meta, Foxconn and SK hynix have publicly disclosed commitments linked to sourcing 100 per cent renewable or carbon-free electricity (Table 2). Google and Microsoft target 2030, Meta has already achieved annual matching of 100 per cent renewable electricity consumption, Foxconn joined RE100 in 2024 with a commitment to source 100 per cent renewable electricity by 2040, and SK hynix has committed to achieving RE100 by 2050. By contrast, major electricity consumers including China Mobile, China Telecom and AT&T have adopted emissions reduction and renewable energy procurement targets but have not publicly committed to sourcing 100 per cent renewable electricity across their global operations. Table 4 highlights differences in how major digital companies procure renewable electricity, engage suppliers, and transition from annual renewable electricity matching towards broader net-zero and carbon-free energy strategies. It illustrates the increasing role of digital companies in shaping both renewable energy markets and value-chain decarbonization.

Table 5. Renewable electricity procurement strategies, supply-chain requirements and clean energy commitments among the ten largest electricity-consuming digital companies, 2024.

Company	Primary Energy Procurement Mechanisms	Scope 3 Supply Chain Rules & Mandates	100% Renewable vs. Net-Zero Timeline
Alphabet (Google)	24/7 CFE hourly matching, utility Green Tariffs, advanced PPAs.	Renewable Energy Addendum: Top hardware suppliers must match 100% RE by 2029.	100% RE since 2017; targeting 24/7 Carbon-Free Energy by 2030.
Microsoft	Regional PPAs, 24/7 match tracking contracts, carbon-removal investments.	2025 Disclosure Cycle: Mandatory vendor carbon tracking, automated ERP Scope 3 validation.	100% RE annual match; targeting Carbon Negative by 2030.
Meta	Large-scale virtual and physical PPAs, regional grid direct investments.	Supplier Code of Conduct emissions disclosure; prefers active carbon-reduction partners.	100% RE since 2020; targeting Net-Zero value chain by 2030.
TSMC	Joint Procurement Models, 20-year multi-supplier pooled PPAs.	GREEN Agreement: Mandates 85% RE domestically and 100% internationally for suppliers by 2030.	~14% RE in 2024; pulled forward 100% RE goal to 2040 (Net-Zero 2050).
Foxconn	Self-invested on-site solar, PPAs, local market RECs.	No relevant requirement identified in public disclosure	Joining RE100 targeting 100% RE by 2040; absolute Net-Zero by 2050.
Samsung	Green Tariffs, Unbundled RECs, slow expansion of regional PPAs.	Environmental standards integrated into supplier scorecards; slow supply chain clean energy rollouts.	Transitioning regional campuses gradually; targeting 100% RE / Net-Zero by 2050.
SK hynix	Korea-RE100 system, Green Premium tariffs, direct PPAs where legally available.	No relevant requirement identified in public disclosure	Committed to 100% RE by 2050 via RE100 guidelines.
AT&T	Virtual PPAs (vPPAs) with utility-scale wind and solar developers.	No relevant requirement identified in public disclosure	No strict 100% RE target date; targeting operational Carbon Neutrality by 2035.
China Mobile	Localized green power trading, government-allocated renewable allocations.	Supplier environmental monitoring; emphasis on energy-efficient hardware procurement.	No explicit 100% RE year; tied to China's national 2060 Carbon Neutrality timeline.
China Telecom	Provincial green energy markets, state-backed clean energy grid quotas.	Mandatory low-carbon specifications during equipment tendering cycles.	No explicit 100% RE year; tied to China's national 2060 Carbon Neutrality timeline.

2.3 Emissions

2.3.1 Scope 1 and 2 operational emissions

For this report, operational emissions are defined as Scope 1 emissions plus Scope 2 emissions, using location-based Scope 2 data where available. Where a company reports market-based Scope 2 emissions but does not disclose a location-based figure, the market-based value is used instead. This avoids double counting while allowing the broadest possible coverage of reported operational emissions. Market-based Scope 2 emissions are also presented separately, where available, to illustrate the effect of contractual electricity procurement. As discussed earlier, the relative significance of operational emissions differs across business models. They are generally more material for telecommunication network operators, data centre operators and semiconductor manufacturers, whereas companies providing less infrastructure-intensive digital services may have a larger proportion of emissions across their value chains. The relative importance of operational emissions should therefore be interpreted in the context of each company business model and infrastructure footprint. Total operational emissions (Scope 1 plus location-based Scope 2) stood at 301 million tCO_2e - representing approximately 0.8 per cent of global energy-related emissions in 2024.[46] This marks a 1.2 per cent increase from 2023, when assessed companies reported 297 million tCO_2e, equivalent to approximately 0.8 per cent of global energy-related emissions.

Of the 200 companies assessed, 177 disclosed Scope 1 emissions, which totalled 47 million tCO_2e in 2024. Location-based Scope 2 emissions, reported by 162 companies, amounted to 245 million tCO_2e, while market-based Scope 2 emissions, reported by 138 companies, totalled 81 million tCO_2e. The substantial difference between location-based and market-based reporting illustrates the significant influence of renewable electricity procurement instruments, such as RECs and PPAs on reported emissions outcomes. Across reporting companies, market-based Scope 2 emissions were 164 million tCO_2e lower than location-based emissions. In other words, market-based emissions amounted to only around 33 per cent of the emissions associated with the carbon intensity of the electricity grids from which companies physically consumed power. This highlights the extent to which contractual renewable energy purchasing arrangements can reduce reported emissions relative to location-based accounting and reinforces the importance of reporting both metrics to provide a more complete picture of corporate climate performance.

Nearly 92 per cent of all reported Scope 1 and location-based Scope 2 emissions are concentrated among the top 50 emitting digital companies, which together accounted for 268 million tCO_2e in 2024. 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. 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. Their large footprints reflect the scale of their manufacturing operations, the carbon intensity of the grids on which they operate, or both.

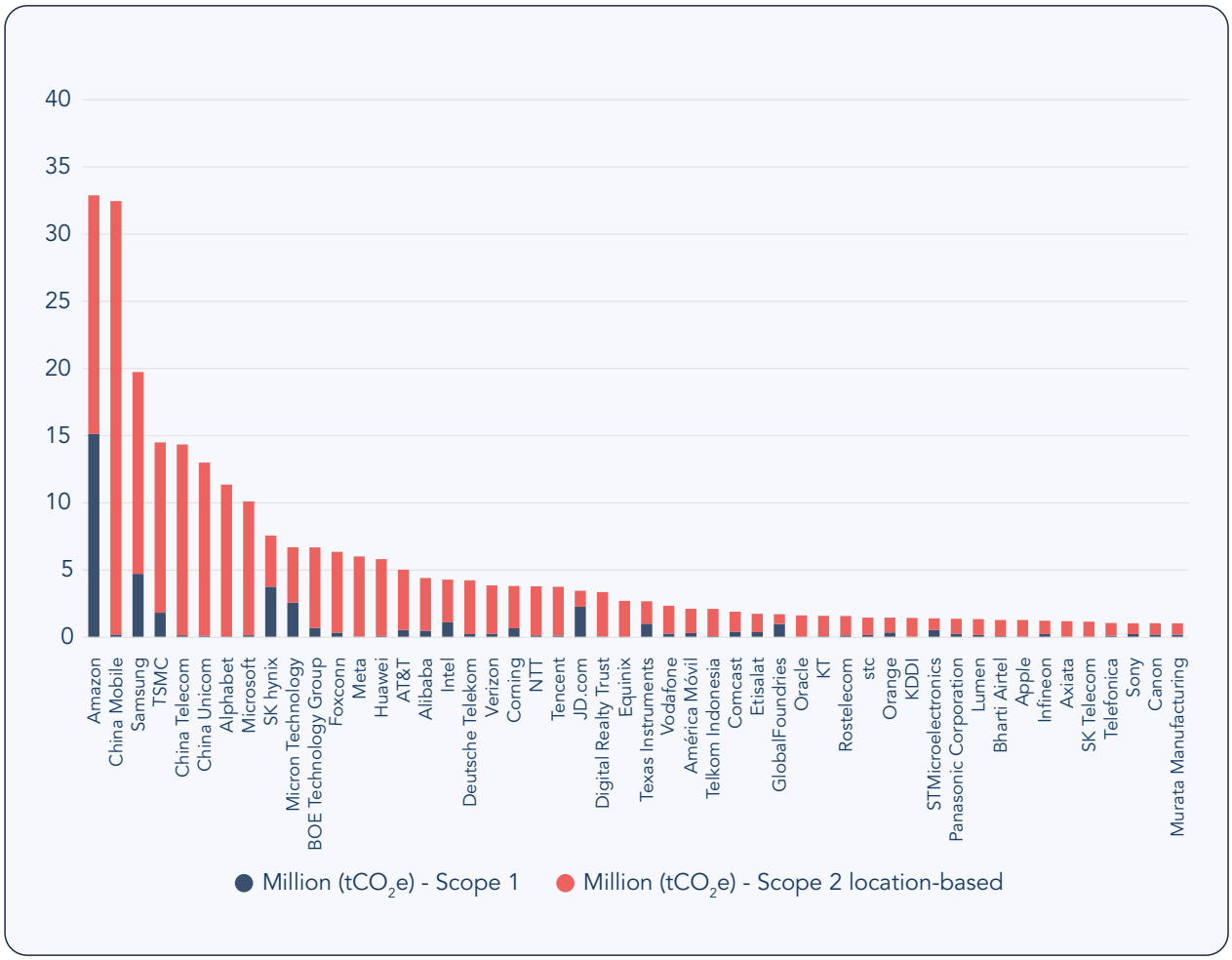
Emissions from the top 50 digital companies dominate the operational carbon footprint of the sector. The top 10 emitters alone were responsible for 163 million tCO_2e, equivalent to approximately 54 per cent

46 IEA. 2025. Using total energy-related CO_2 emissions of 37.8 Gt CO_2. https://www.iea.org/reports/global-energy-review-2025/co2-emissions

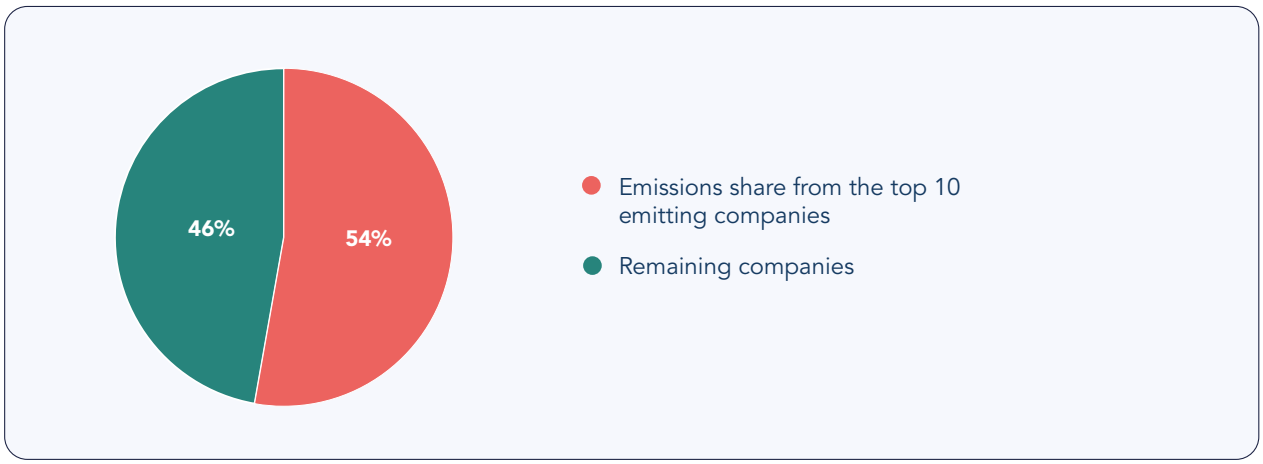
of all Scope 1 and Scope 2 location-based emissions reported in 2024. The comparatively high Scope 1 emissions reported by Amazon standout but reflect the scale of its logistics and physical operations. The main sources are fossil-fuel usage from its delivery fleet, freight trucks and aircraft, stationary equipment such as boilers and generators, and refrigerants to cool data centres, fulfilment centres, offices and grocery stores.[47] This concentration underscores the influence that a small group of companies holds in shaping the overall climate impact of the sector.

The top 10 emitting companies for Scope 1 and 2 location-based 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 7. Scope 1 and 2 emissions of the top 50 digital companies in 2024, with the top 10 emitters accounting for 54% of total emissions



47 Amazon. 2024. https://sustainability.aboutamazon.com/2024-amazon-sustainability-report.pdf



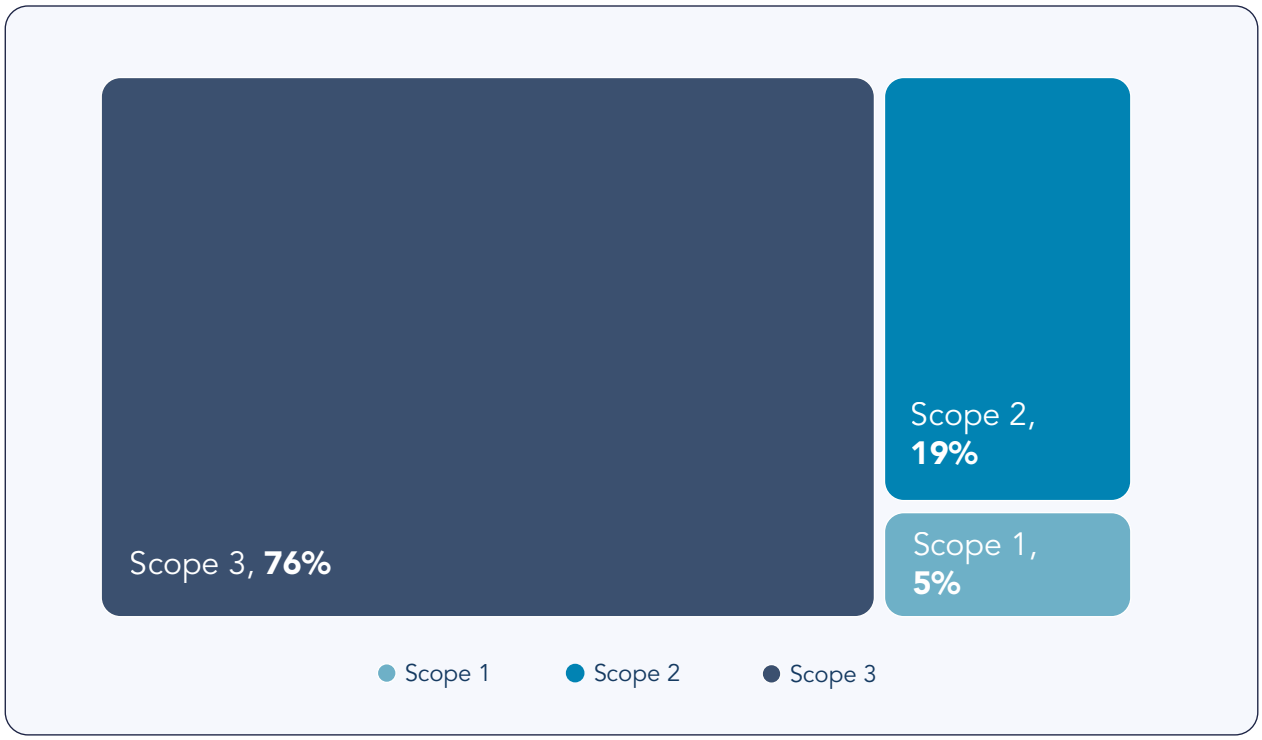
Source: ITU and WBA. 2026.

2.3.2 Scope 3 emissions

Scope 3 emissions represent the indirect GHG emissions that arise from a company value chain, both upstream and downstream. In 2024, 93 companies disclosed GHG emissions across all relevant Scope 3 categories defined by the GHG Protocol – a marked decline from the 106 companies that did so in 2023. Across these companies, reported Scope 3 emissions reached 924.1 million tCO_2e. As companies develop more sophisticated transition plans and face increasing regulatory scrutiny, the completeness of Scope 3 disclosure should be increasing, not decreasing. The decline may reflect methodological recalibration, changes in reporting boundaries, or the challenges of supply-chain data collection in a more complex regulatory environment. It warrants close monitoring in future editions of this report.

A total of 93 companies provided a complete GHG inventory across all three scopes, where Scope 3 accounted for 76 per cent of total reported emissions, compared to just 5 per cent of Scope 1 and 19 per cent for Scope 2 (Figure 8). This means that in aggregate, the indirect emissions embedded in company supply chains and the use of their products generate more than three times the emissions produced by their own operations combined.

Figure 8. Breakdown of 93 companies disclosing both operational (Scope 1 and 2) and indirect (Scope 3) emissions, 2024.[48]



Source: ITU and WBA. 2026.

An analysis of the 15 GHG Protocol Scope 3 categories reveals a pronounced concentration in two categories that together account for approximately 79 per cent of all disclosed Scope 3 emissions (Table 6). Subsector-differentiated Scope 3 analysis is presented in Section 2.4. Category 11 (Use of Sold Products) is the largest, representing 52 per cent of total Scope 3 emissions at 528.7 million tCO_2e. This category captures the energy consumed by customers using digital hardware - smartphones, computers, servers, networking equipment - over the product lifetime. For electronics manufacturers and cloud infrastructure providers, this category reflects the downstream energy intensity of the products they bring to market. Reducing these emissions requires action on product energy efficiency, design for longevity, and ensuring that the grids on which products are used are themselves decarbonizing.

Category 1 (Purchased Goods and Services) is the second largest, contributing 27 per cent of total Scope 3 emissions (271 million tCO_2e). This encompasses the embedded emissions in all goods and services that companies purchase - from raw materials and components to contracted services and logistics. For companies with complex global supply chains, this category requires data collection from suppliers across multiple tiers and geographies, and demands active supplier engagement programmes to drive real emissions reductions rather than merely improved reporting. In addition, Category 2 (Capital Goods)

48 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. In addition, Scope 3 estimates are subject to greater uncertainty than Scope 1 and Scope 2 because companies use varied calculation methods, rely extensively on secondary data and supplier estimates, and may not report every category completely even where the category is identified as relevant. Aggregated Scope 3 figures should therefore be interpreted as reported estimates rather than a complete measurement of the sector value-chain emissions.

adds a further 8 per cent (76.8 million tCO_2e), and captures the embedded emissions in long-lived assets such as network infrastructure, data centres, manufacturing equipment and buildings. Categories 1 and 2 are closely related, as similar types of expenditure may be classified differently depending on whether they are treated as operating costs or capital assets in company inventories.

The remaining twelve Scope 3 categories collectively account for approximately 14 per cent of disclosed emissions. While individually smaller, several of these categories are material for specific subsectors. Category 4 (Upstream Transportation and Distribution), reported by 104 companies with a combined 26.7 million tCO_2e, is significant for electronics manufacturers with global logistics networks. Category 15 (Investments), reported by 48 companies with 21.4 million tCO_2e, is likely underreported, particularly among companies with large financial holdings or that own stakes in energy-intensive portfolio companies. Given their contribution to the reported total, digital companies should, at a minimum, assess the relevance of Categories 1, 2 and 11 and disclose emissions for each category that is material to their business model. Other categories may nevertheless be equally important for particular companies, including transportation, leased assets, end-of-life treatment and investments. A corporate net-zero target that does not credibly address Scope 3 is therefore, at best, a partial commitment.

Table 6. Number of companies reporting within each of the 15 Scope 3 categories and their total emissions per category, 2024.

Scope 3 Category	Companies reporting (out of 200)	Share of companies reporting (%)	Total emissions (tCO_2e)	Share of total emissions reported (%)*
Cat. 11 - Use of Sold Products	96	48	528 717 882	51.9
Cat. 1 - Purchased Goods and Services	131	65.5	270 995 605	26.6
Cat. 2 - Capital Goods	116	58	76 770 813	7.5
Cat. 3 - Fuel and Energy (not Scope 1/2)	128	64	31 954 871	3.1
Cat. 4 - Upstream Transportation & Distribution	104	52	26 660 760	2.6
Cat. 15 - Investments	48	24	21 383 600	2.1
Cat. 12 - End-of-Life Treatment of Sold Products	72	36	12 276 934	1.2
Cat. 13 - Upstream Leased Assets	66	33	11 186 257	1.1
Cat. 14 - Downstream Leased Assets	49	24.5	10 006 600	1.0
Cat. 7 - Employee Commuting	129	64.5	9 257 476	0.9

Scope 3 Category	Companies reporting (out of 200)	Share of companies reporting (%)	Total emissions (tCO_2e)	Share of total emissions reported (%)*
Cat. 9 - Downstream Transportation & Distribution	57	28.5	8 610 431	0.8
Cat. 6 - Business Travel	139	69.5	7 692 972	0.8
Cat. 5 - Waste Generated in Operations	112	56	1 196 097	0.1
Cat. 10 - Processing of Sold Products	19	9.5	805 411	0.1
Cat. 8 - Franchise	19	9.5	332 412	0.0
Total			**1 017 848 121 ******	**100**

*Notes: *The reporting distribution reflects the companies and categories for which emissions were publicly reported. It is affected both by differences in the emissions profiles of the assessed business models and by uneven reporting across Scope 3 categories. It should not be interpreted as the definitive distribution of Scope 3 emissions across the global ICT sector. ** The total is the sum of all category-level Scope 3 values reported by the 200 companies assessed. It therefore uses a broader reporting population than the 924.1 million tCO_2e cited in the narrative and Table 6, which refers only to the 94 companies that disclosed all relevant Scope 3 categories. The category-level total does not represent the complete Scope 3 footprint of all 200 companies and may include double counting across value chains, as many digital companies are suppliers to, customers of, or otherwise embedded within one another's upstream and downstream activities.*

2.3.3 Emissions summary and breakdown by ICT subsector

The three ICT subsectors covered by this assessment - Electronics, Telecommunications, and IT Software and Services - exhibit different emissions profiles (Table 7, Figure 9) that reflect their distinct business models, supply chains, and energy use patterns. Understanding these structural differences is important for interpreting sector-level aggregates and for setting appropriate expectations about where decarbonization is most needed and most achievable.

Among the 200 assessed companies, the electronics subsector generates the largest total reported emissions of the three, at approximately 648.4 million tCO_2e including all scopes, accounting for more than half of all emissions. This is driven primarily by Scope 3 emissions, which at 547.1 million tCO_2e represent 84 per cent of this subsector footprint. The dominance of Scope 3 reflects the dual challenge facing electronics companies: as manufacturers, they have large embedded-carbon supply chains (Category 1 and 2 emissions); as producers of energy-consuming hardware, they also bear significant Category 11 (use of sold products) emissions. Scope 1 and location-based Scope 2 emissions from electronics companies total approximately 95.2 million tCO_2e - substantial in absolute terms, reflecting the high energy intensity of semiconductor fabrication, display manufacturing, and assembly processes, and the relatively low renewable electricity shares in the regions where much of this manufacturing occurs.

The IT software and services subsector, which includes hyperscale cloud providers, large software companies, and digital services platforms, reports total emissions of approximately 322.2 million tCO_2e. Scope 3 accounts for 73 per cent of this total (236.3 million tCO_2e), with the remainder coming from Scope 1 emissions of 19.5 million tCO_2e and location-based Scope 2 emissions of 66.3 million tCO_2e. For this subsector, the growing energy demands of AI infrastructure are a primary emissions driver, and the large gap between location-based and market-based Scope 2 figures (66.3 million versus 14.6 million tCO_2e respectively) illustrates the scale at which clean energy certificate purchases are shaping reported figures.

The telecommunication subsector has the smallest total emissions footprint of the three (254.1 million tCO_2e) despite comprising the largest number of companies (75). Its Scope 3 emissions, while significant at 140.6 million tCO_2e, represent a lower share of total emissions than in the other two subsectors, at 55 per cent. Telecommunication companies tend to have proportionally larger operational footprints relative to their value chains, driven by the energy-intensive nature of running network infrastructure - mobile towers, switching equipment, data centres - at scale across wide geographic footprints. The Scope 2 location-based figure for this subsector (105.7 million tCO_2e) is the highest of the three, underscoring the centrality of grid decarbonization and renewable energy procurement to telecommunication sector climate strategy.

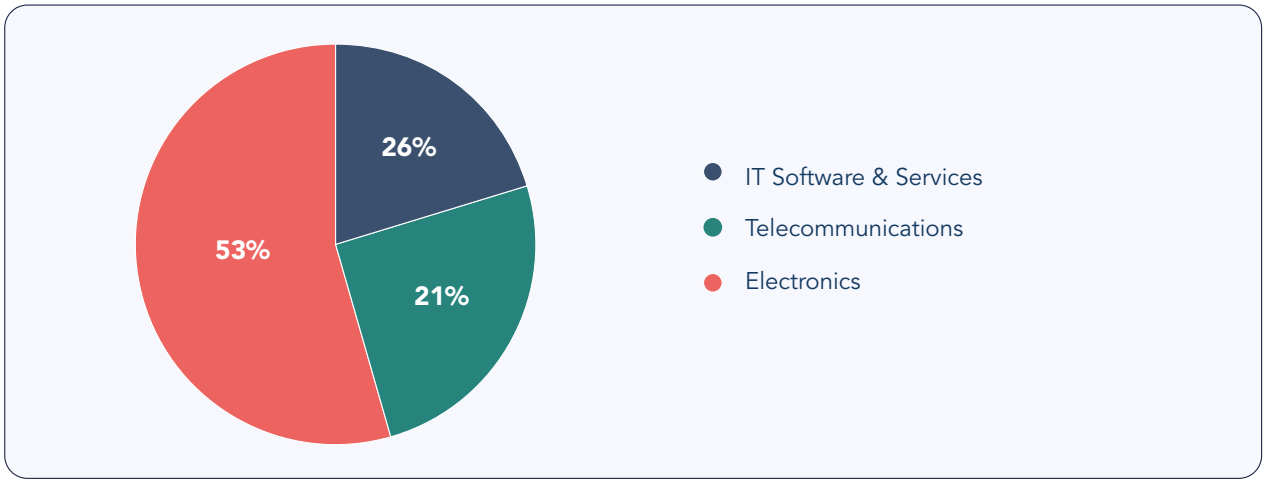
Table 7. Breakdown of Scope 1, 2 (location-based and market-based) and Scope 3 emissions by ICT subsector as reported by the assessed 200 companies, 2024.

ICT subsector	Scope 1 (tCO_2e)	Scope 2 LB (tCO_2e)	Scope 2 MB (tCO_2e)	Scope 3 (tCO_2e)	Total (tCO_2e)
IT software and services	19 471 586	66 293 160	14 560 818	236 336 610	322 231 092
Telecommunication	6 103 182	105 702 632	21 283 231	140 598 955	254 104 211
Electronics	21 835 543	73 346 345	44 982 296	547 145 262	648 377 643
Total	**47 410 311**	**245 342 137**	**80 826 345**	**924 080 827**	**1 224 712 946**

Reported emissions and average reported emissions per assessed company, by ICT subsector, 2024

ICT subsector	Total reported emissions ($MtCO_2e$)	Companies	Average per assessed company ($MtCO_2e$)
IT software and services	322.2	66	4.9
Telecommunication	254.1	75	3.4
Electronics	648.4	59	11.0

Figure 9. Share of total reported Scope 1, location-based Scope 2 and Scope 3 emissions by ICT subsector, 2024



Source: ITU and WBA. 2026.

Spotlight Box 3

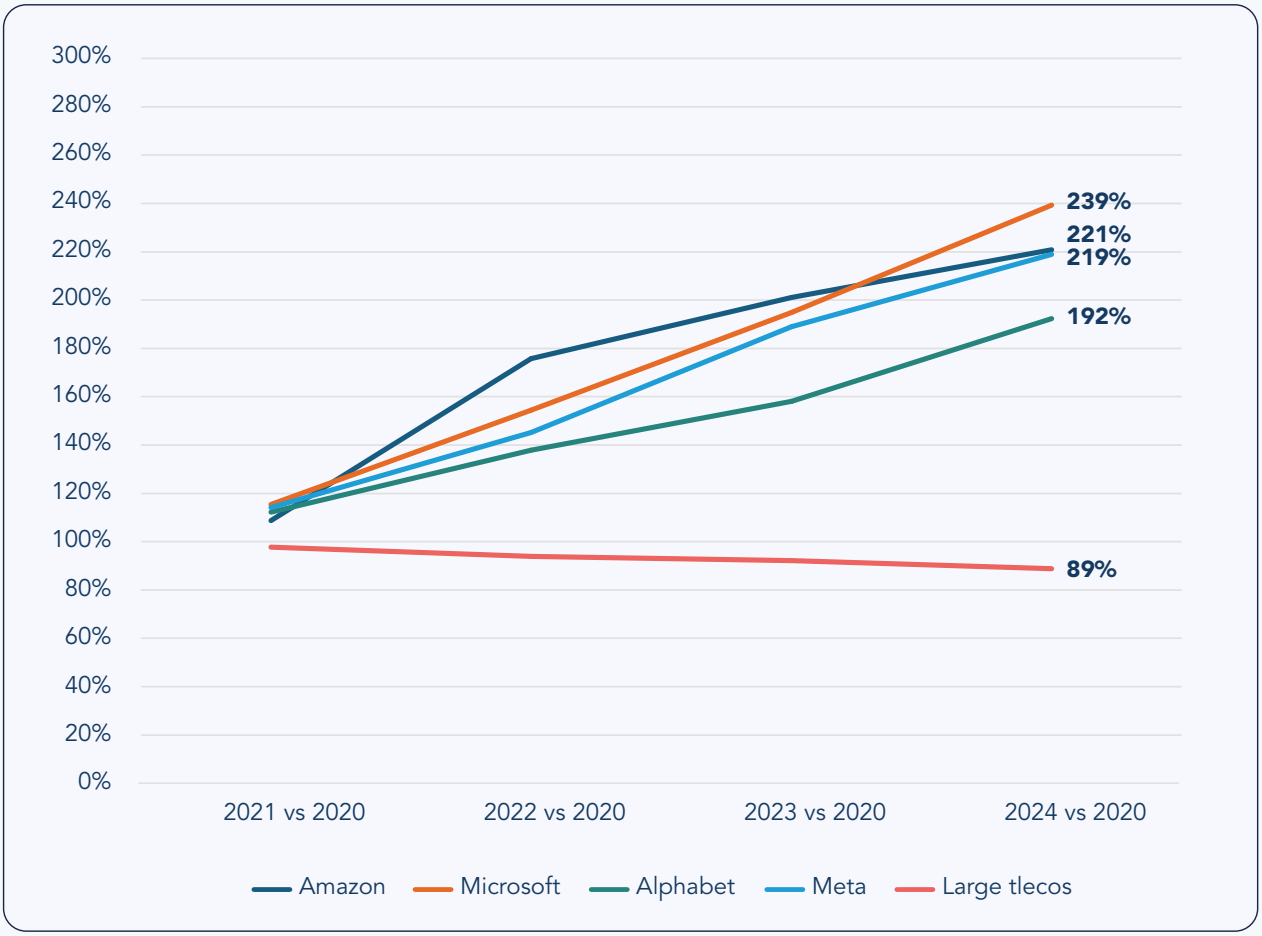
Spotlight: AI-related growth and operational emissions among major digital infrastructure providers

AI has emerged as one of the defining energy challenges facing the ICT sector. Advances in AI capabilities have been accompanied by rapid growth in computing requirements, with successive generations of frontier models requiring substantially greater computational resources for both training and deployment. As a result, AI has become an important driver of electricity demand, data-centre expansion and infrastructure investment across the digital economy.[49]

The following analysis, undertaken for this report, compares changes in the operational emissions of four major hyperscale cloud and AI infrastructure providers - Amazon, Microsoft, Alphabet and Meta - with those of a comparator group of large telecommunication operators. It does not isolate emissions attributable exclusively to AI, as companies generally do not disclose sufficiently granular AI-specific energy and emissions data (Figure 10). Indexed to 2020 emissions levels, operational emissions among the hyperscalers increased sharply between 2020 and 2024, reaching 239 per cent of 2020 levels for Microsoft, 221 per cent for Amazon, 219 per cent for Meta and 192 per cent for Alphabet. In contrast, operational emissions among large telecommunication operators declined slightly over the same period, reaching 89 per cent of 2020 levels by 2024.

49 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai

Figure 10. Trajectory of operational emissions (including location-based Scope 2 emissions) among Amazon, Microsoft, Alphabet and Meta, compared with large telecommunication companies, indexed to 2020 levels, 2021-2024



Source: ITU and WBA. 2026.

The divergence began to emerge in 2022 and widened through 2023 and 2024. While telecommunication operators continue to face substantial energy demands from network infrastructure, they have not experienced comparable growth in electricity consumption or operational emissions. This difference reflects the energy intensity of large-scale AI workloads and the rapid expansion of specialized infrastructure, including AI-optimized data centres, high-performance computing clusters, advanced cooling systems and increasingly powerful semiconductor technologies.[50,51]

The comparison highlights the extent to which AI is becoming a major differentiator within the ICT sector. Historically, many digital companies developed emissions reduction pathways based on assumptions of relatively steady growth in energy demand. The emergence of large-scale AI has altered those

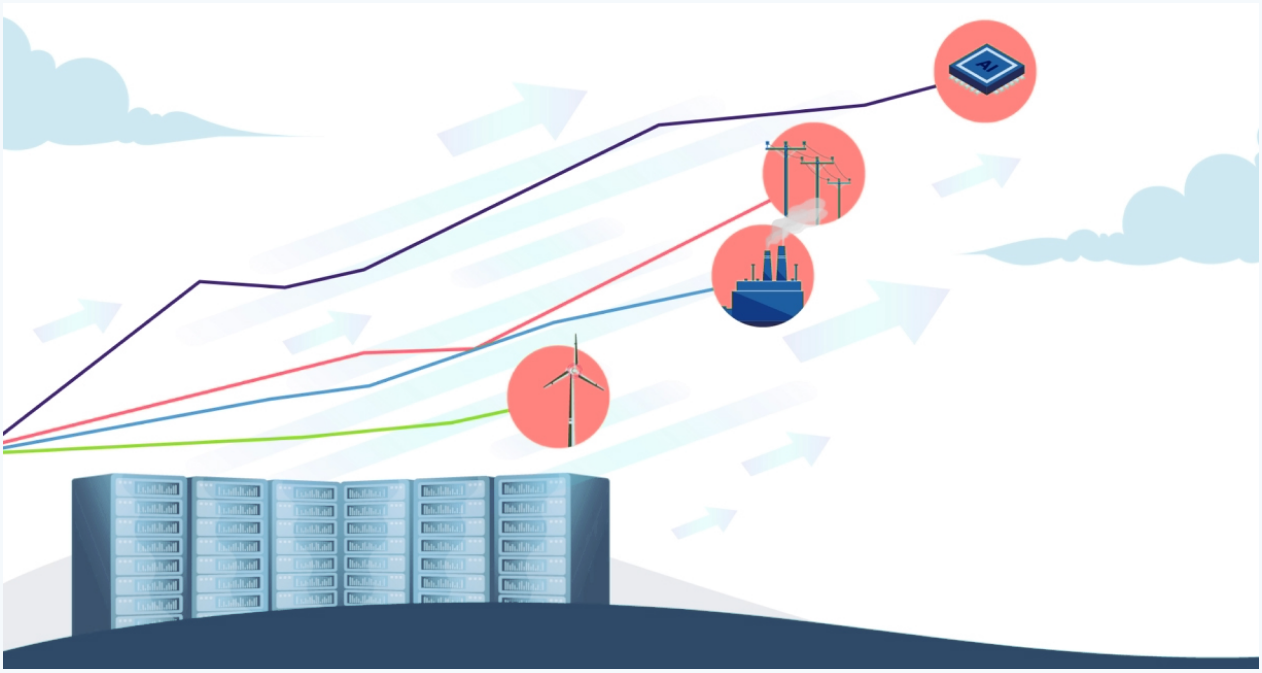
50 Microsoft. 2025. 2025 Environmental Sustainability Report. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/2025-Microsoft-Environmental-Sustainability-Report.pdf

51 Google Cloud Blog. 2025. How much energy does Google's AI use? We did the math. https://cloud.google.com/blog/products/infrastructure/measuring-the-environmental-impact-of-ai-inference

assumptions. For hyperscale providers, emissions trajectories are increasingly shaped not only by efficiency improvements and renewable energy procurement, but also by the pace at which electricity systems can decarbonize while accommodating rapidly growing demand.

This presents a challenge for corporate climate strategies as companies not only need to procure increasing volumes of renewable electricity, but also to ensure that the electricity systems powering AI infrastructure are decarbonizing in line with corporate net-zero commitments and national climate objectives. Where AI-driven demand growth outpaces the deployment of clean electricity, operational emissions may continue to rise even as companies expand renewable energy procurement.[52]

The findings suggest that AI is reshaping the relationship between digitalization and climate action. The key question is no longer simply whether companies can match growing electricity demand with renewable energy purchases, but whether the underlying energy systems that support AI expansion can decarbonize quickly enough to accommodate that growth. The answer will have significant implications for both the credibility of corporate climate commitments and the climate impact of the next generation of digital infrastructure. These findings reinforce the ITU Green Digital Action initiative call for greater transparency on the environmental impacts of computing infrastructure, including clearer disclosure of energy use, greenhouse gas emissions and progress against science-based targets. They also inform wider United Nations efforts to improve environmental transparency for AI by highlighting the limits of current company-level reporting and the need for more granular, comparable disclosure. This is particularly timely following the United Nations Secretary-General's June 2026 call for all AI companies to disclose the full environmental footprint of data centres, including their carbon, water and land impacts Initiative[53].



52 International Energy Agency (IEA). 2025. Energy and AI. https://www.iea.org/reports/energy-and-ai
53 UNU. 2026. https://unu.edu/inweh/news/un-secretary-general-launches-ai-environmental-transparency-initiative-calling-ai

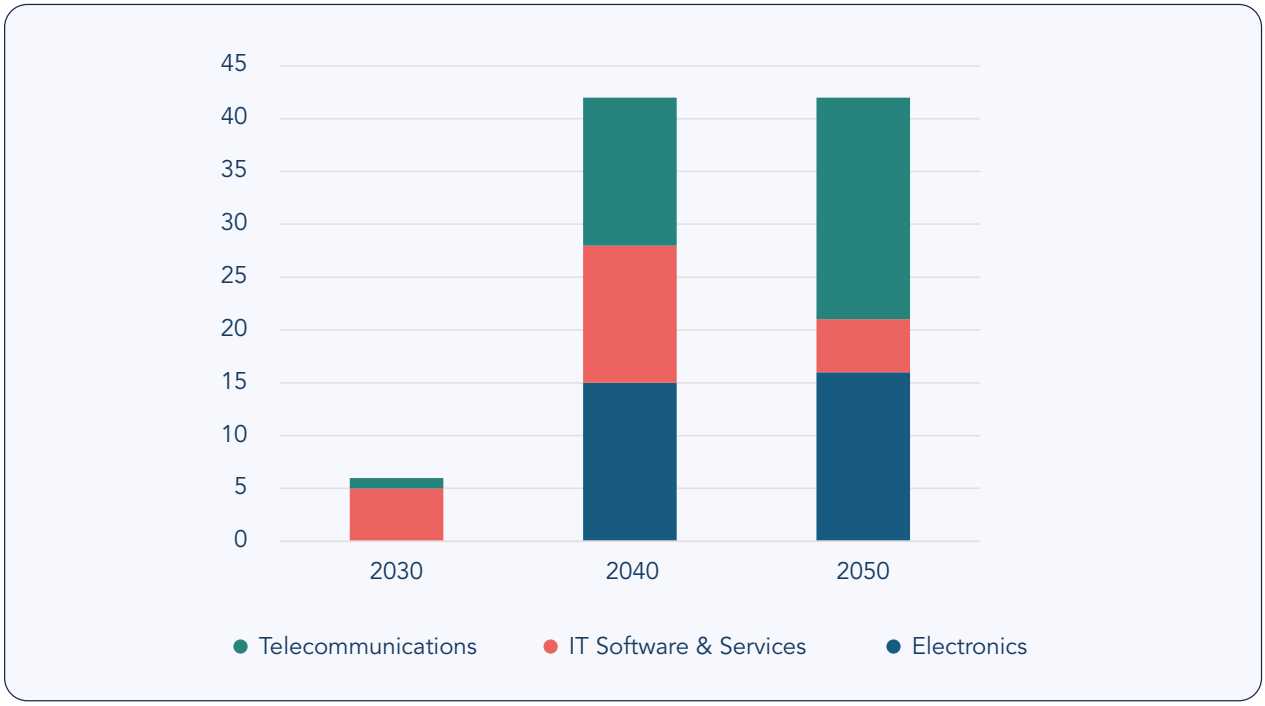
2.4 Target setting

2.4.1 Net-zero and carbon neutral targets

The Science Based Targets initiative (SBTi) provides the leading global framework for companies to set emissions reduction targets aligned with limiting global warming to 1.5°C. Companies submit targets and supporting emissions data to SBTi for independent validation. Following review, targets are classified as either committed, target set (validated), or removed if companies fail to meet submission requirements or withdraw their commitments. Under the SBTi Corporate Net-Zero Standard, companies are required to set both near-term and long-term science-based targets covering Scope 1 and 2 emissions, and Scope 3 emissions where these represent a significant share of the company's footprint. Companies will set net-zero or carbon-neutral targets as their long-term goals. Long-term net-zero targets require companies to reduce emissions by at least 90 per cent before neutralizing residual emissions.

Among digital companies with net-zero targets, 45 per cent commit to achieving their net-zero ambitions by 2050. Of those companies, 6 aim to be net zero by 2030, 42 by 2040 and 42 by 2050 (see Figure 11; when compared to 2023 data, numbers were 9, 42 and 41 respectively).

Figure 11. Number of companies in ICT subsectors with net-zero commitments as of 2024, by target date



Source: ITU and WBA. 2026.

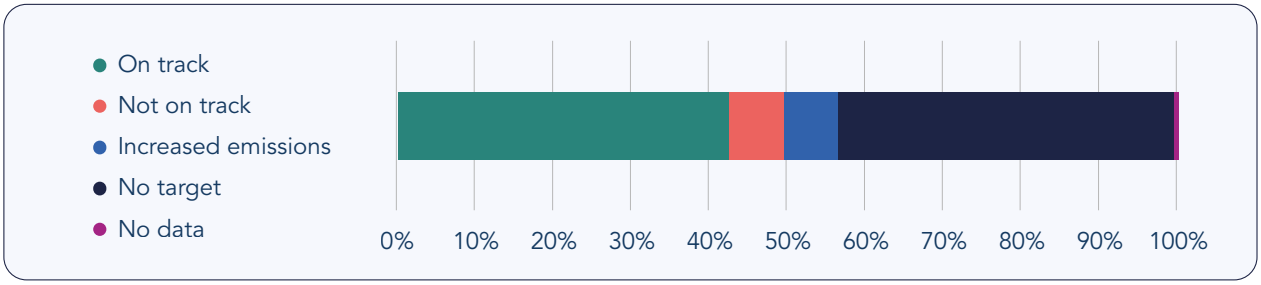
Taking a deeper look, sector differences are relevant. Electronics companies show the highest ambitions, with over half of the sample pledging to be net-zero by 2050. In contrast, only 35 per cent of IT software and service companies have made similar commitments. Telecommunication companies are in the middle, with 48 per cent pledging to be net-zero by 2050.

2.4.2 Scope 1 and 2 operational emissions near-term targets

The setting of science-based, quantified targets for operational emissions is now relatively standard practice among the world's largest digital companies. In 2024,76 per cent or 151 of the 200 assessed companies submitted near-term reduction targets for Scope 1 and 2 emissions - a high adoption rate that reflects both voluntary leadership and the influence of investor expectations, SBTi campaigns, and emerging regulatory requirements. However, the quality and credibility of these targets vary, with only 114 of the 151 having their targets validated by SBTi.

Of the 114 companies with validated near-term Scope 1 and 2 targets, 85 are on track to achieve the targets; 14 are deemed not on track, reducing emissions too slowly; and 14 have seen emissions rise or stay the same since their base year (Figure 12). One of the companies did not report enough data to assess progress. "On track" is a simplified assessment based on progress from the baseline year and should not be interpreted as a forecast or independent validation that the target will be achieved.

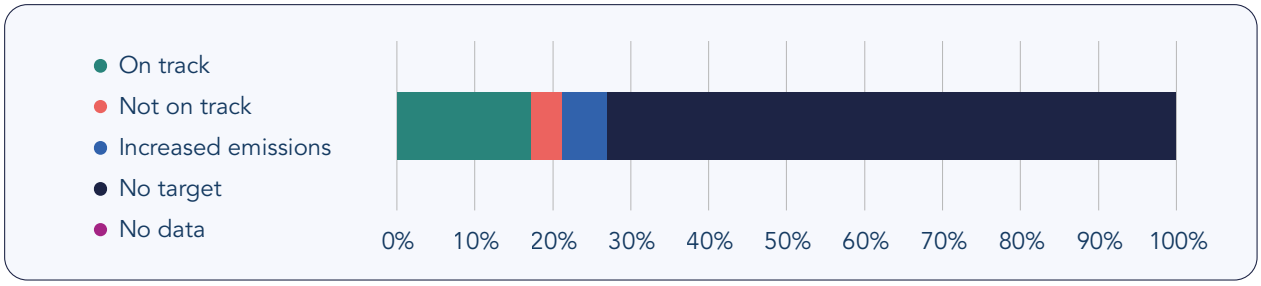
Figure 12. Breakdown of companies by Scope 1 and 2 near-term target performance, 2024



Source: ITU and WBA. 2026.

Although a high share of digital companies are setting targets, high-emitting companies still shy away from committing to reducing their emissions. Only 4 of the top 15 highest-emitting companies have an SBT for their Scope 1 and 2 emissions. In physical terms, it means that even though the majority of digital companies in the sample have targets, companies with SBT are responsible for less than 30 per cent of sector emissions (Figure 13).

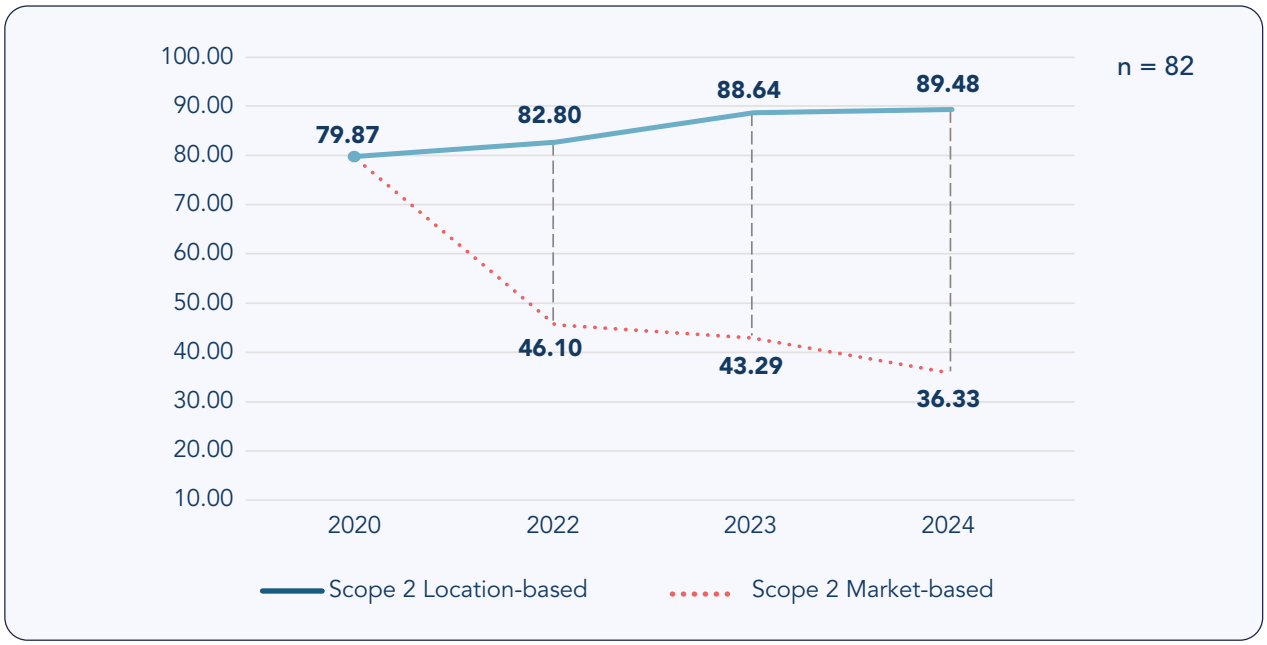
Figure 13. Breakdown of emissions by Scope 1 and 2 near-term target performance, 2024



Source: ITU and WBA. 2026.

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. 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 14). Taking location-based emissions in 2020 as a reference, emission trajectory can be compared for both accounting methods. Between 2020 and 2024, market-based Scope 2 emissions showed a reduction - from 79.9 million tCO_2e in 2020 to 36.3 million tCO_2e in 2024 - suggesting progress toward decarbonization. However, location-based Scope 2 emissions over the same period increased, from 79.9 million tCO_2e in 2020 to 89.5 million tCO_2e in 2024.[54]

Figure 14. Scope 2 emissions (million tCO_2e) trajectory for companies with SBTi validated targets that report location-based and market-based emissions, 2024 (n = 82)



Source: ITU and WBA. 2026.

2.4.3 Indirect Scope 3 emission near-term targets

Despite the growing recognition that Scope 3 emissions typically account for the majority of digital company climate footprints, target coverage remains limited. In 2024, 102 companies disclosed near-term Scope 3 emissions reduction targets, compared with 110 companies in 2023 and 73 companies in 2022. Of these, 96 companies had Scope 3 targets validated by the Science Based Targets initiative (SBTi). This represents a decline from 100 companies with validated Scope 3 targets in 2023.

Among companies with Scope 3 targets, 13 per cent used intensity-based metrics rather than absolute emissions reductions to track progress.

54 Note: a number of companies restated their historical emissions during the data collection period due to boundary changes; where restatements were identified, updated figures have been used to ensure comparability, though the trajectory analysis should be interpreted with this caveat in mind.

A total of 89 companies set absolute targets (interim) for reducing their Scope 3 emissions in 2024. Of the companies setting Scope 3 targets, a sizable majority (65) does so for all the relevant Scope 3 categories.

2.5 Climate transition planning

While inventories and target setting are important, the end goal is to deliver an emission reduction in line with 1.5°C and net-zero ambitions. As Section 1.8 shows there is still a gap between ambition and action. To bridge that and enable implementation and delivery, climate transition planning needs to expand and advance to translate emission targets into tangible roadmaps. This is the reason why the concept of climate transition plans is gaining traction as a tool for companies and their stakeholders to identify and monitor their emission reduction strategies and the actions that are needed at each step to ensure that ambitious targets become ambitious delivery.

Based on the WBA assessment of the transition planning maturity the digital companies were assessed as part of an assessment of 2 000 of the world's most influential companies across sectors and jurisdictions following the ACT Core methodology. This assessment acknowledged that a proper transition plan considers actions taken within company operations and through their value chain such as expectations on supplier emission reductions.

A total of 81 companies (representing 41 per cent of the total) were found to have transition plans that included all the five core components shown in Figure 16 (see also Spotlight: Climate transition plans in section 1), either published as a standalone transition plan encompassing all these elements[55] or disclosed them as individual components. While the share of companies that has a clear plan for their transition needs to expand, the numbers show that transition planning is already well established within the sector.

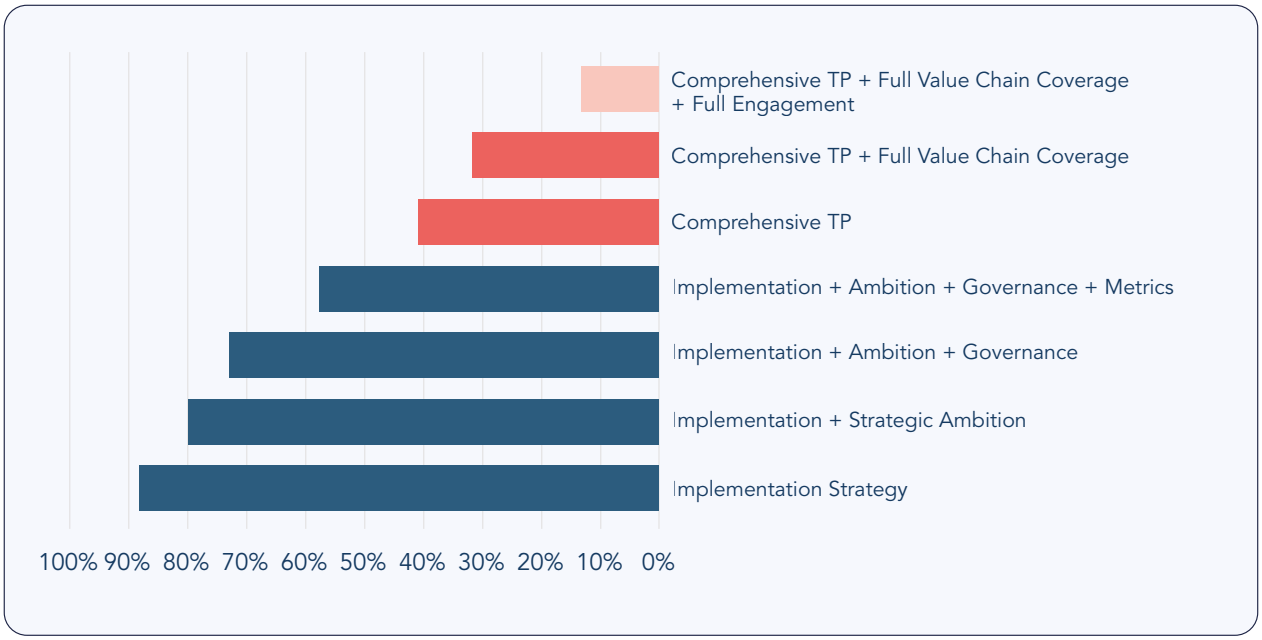
Recognizing that company material emissions usually extend beyond its own operations, this assessment also examined whether transition plans address upstream and downstream value chain emissions and disclose actions to influence emissions reductions among suppliers and customers. A total of 65 companies, representing 80 per cent of those with transition plans with all core elements in place, also extend their scope to include the upstream value chain. 48 companies, representing 60 per cent of those with plans with core elements covered, go a step further by also disclosing supplier engagement measures aimed at reducing supplier GHG emissions such as information collection, engagement and incentivisation, and innovation and collaboration. Similarly, 64 companies, representing 79 per cent of those with plans, extend their transition plans to the downstream value chain, but only 28 companies, representing 35 per cent of those planning, disclose measures to engage customers in reducing downstream GHG emissions such as education and information sharing, collaboration and innovation, compensation, and customer motivation through marketing and choice architecture. Although many companies recognize emissions across their value chain, considerably fewer describe actions to influence emissions reductions beyond their own operations.

55 See the Spotlight box climate transition plans for a list of items.

This implementation gap is particularly evident when considering the distribution of Scope 3 emissions. The Use of Sold Products (Category 11) accounts for the largest share of Scope 3 emissions across the companies assessed (52 per cent), yet only 28 companies, representing 14 per cent of the total, disclose measures to engage customers in reducing downstream emissions. This suggests that, while many companies recognize downstream emissions within their transition plans, relatively few disclose actions to influence emissions reductions where the largest share of value chain emissions arises.

From an implementation perspective, 178 companies, representing 89 per cent of the total, disclose concrete actions taken or planned within their business operations, products, services and policies, making it the most commonly reported component of a transition plan (referred to as "Implementation Strategy" in Figure 15), while evidence of implementation across the value chain is considerably less common. Only 26 companies, representing 13 per cent of the total, combine a transition plan covering all core elements with upstream and downstream value chain coverage and active engagement with both suppliers and customers. This highlights a gap between planning and implementation. Although many companies have established the core elements of a transition plan, relatively few have translated these plans into actions that seek to influence emissions reductions across their value chain. Without value chain implementation, company transition plans may fail to address the largest emissions sources.

Figure 15. Elements of a transition plan, 2024



Source: ITU and WBA. 2026.

These results show that transition planning are relatively common, but not many of them have enough detail to make them credible as tools for implementation. This will be important to advance corporate climate maturity but also since climate transition planning sets a blueprint for transition planning in other areas such as nature.

Overall, while this dataset looked at the climate transition as a stand-alone topic, moving forward it will be increasingly important to consider the interactions between climate, nature and social targets and how they could amplify or hamper each other. An obvious example of their interconnected nature being

the topic of just transition. For this reason, future WBA assessments will also look at the integration of plans across the dimensions of climate, nature and social, especially focusing on their interdependencies. These issues are outside the scope of the present assessment and are not evaluated in this report.

2.6 Climate assessment scoring

Explanatory Box 3. 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 2024.

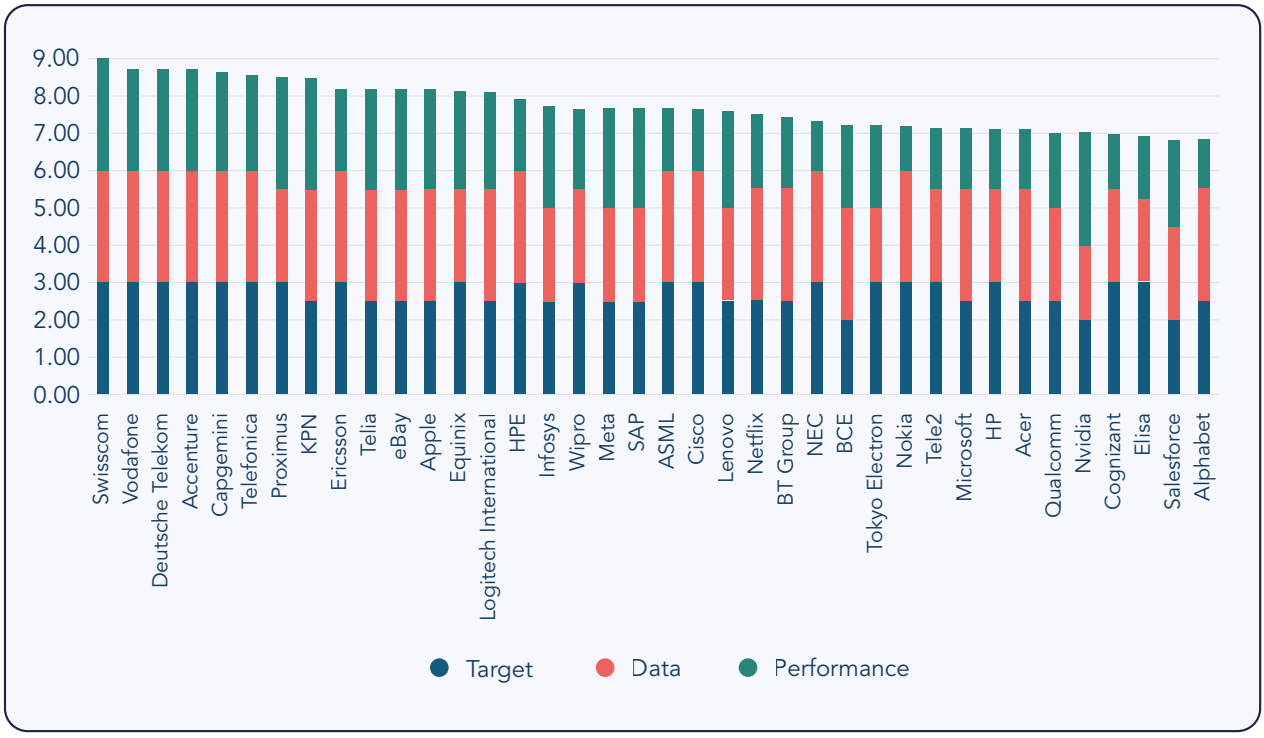
Targets (3 points): Companies must have emission reduction targets validated by SBTi. Points are awarded for: submitting a target (1 point); ensuring it is not intensity based (0.5 points); covering Scope 3 emissions (1 point); and aiming for net zero across all relevant scopes by 2040 (0.5 points).

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).

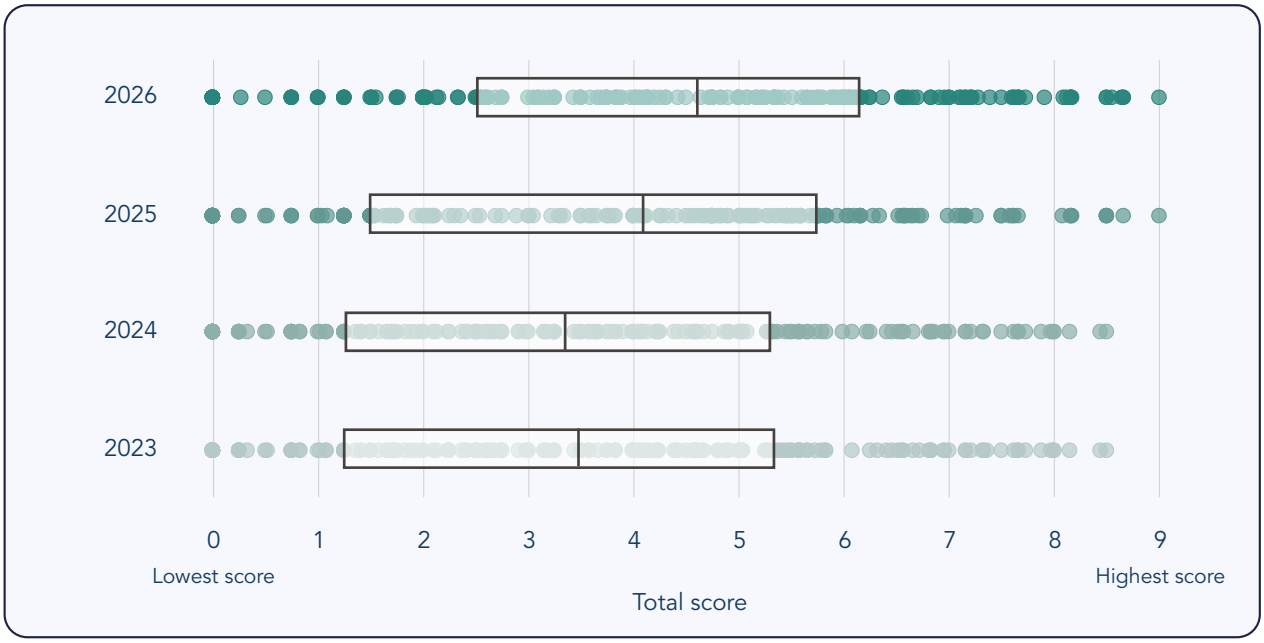
Each edition of the Greening Digital Companies report assesses companies on their data disclosure, targets and performance. In this year's assessment, one company achieved the highest possible score, while 13 companies scored 90 per cent or higher, 5 more than last year, setting the benchmark for transparency, emissions reduction and renewable energy adoption. Overall, 38 companies scored above 75 per cent; this represents an increase from the 2025 edition of the report (Figure 16). Top-performing companies remain concentrated in Europe and North America. However, the scoring also shows broader regional representation, including companies headquartered in East Asia and the Pacific and South Asia. The presence of firms such as Lenovo, NEC, Tokyo Electron, Acer, Infosys and Wipro among the higher-scoring companies suggests that stronger climate disclosure and target-setting practices are becoming more geographically dispersed, although progress remains uneven across regions.

Figure 16. Companies scoring at least 75 per cent on the climate assessment (n=38), 2024



A greater number of companies are now achieving a passing grade of 50 per cent or higher (101 vs. 94 last year), meaning that half of the companies now achieve a score of 50 per cent or higher. At the same time, the number of companies with a score of zero has decreased (18 vs. 22 last year).

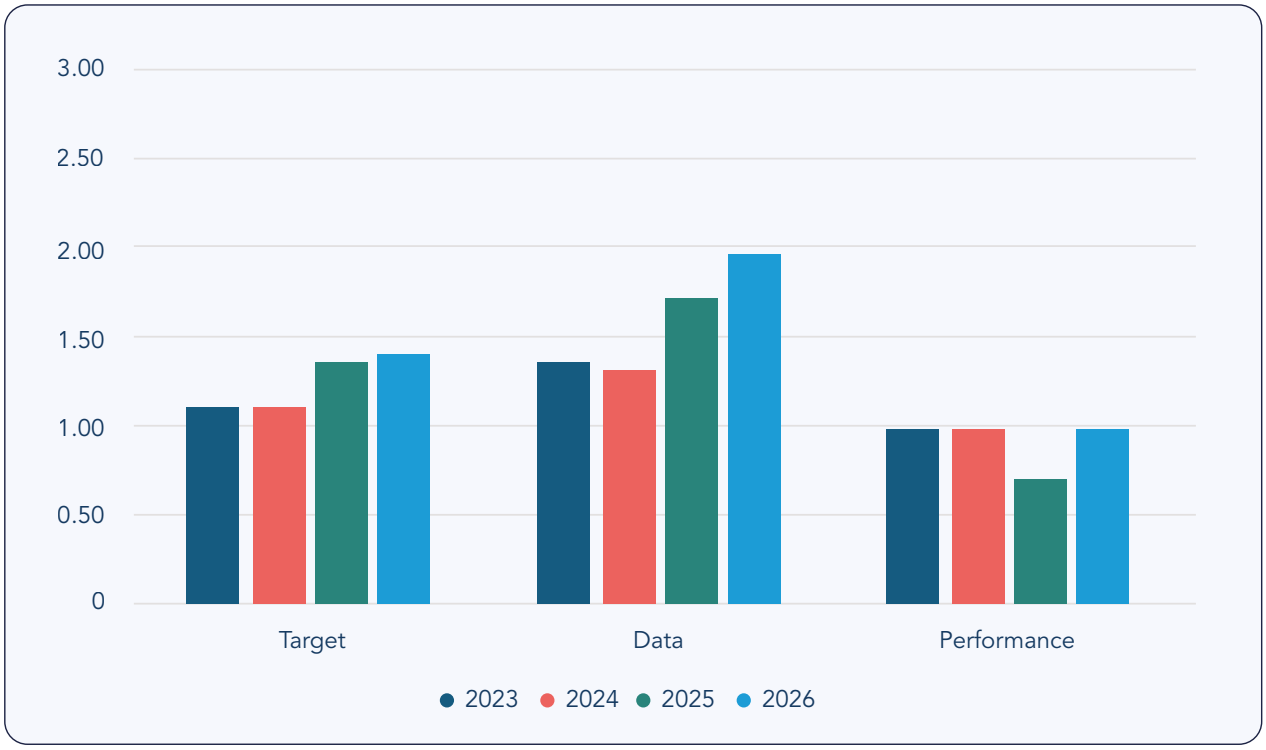
Figure 17. Climate performance score distribution (2023-2026)



Source: ITU and WBA. 2026.

The graph above compares the total score distribution for the past 4 iterations of the report. The first iteration of the report is not included in the analysis, this is due to significant changes in the sample of companies (150 vs. 200) and the application of a more mature methodology. From the 2023 iteration of the report, companies have been improving their average score. Additionally, the number of companies scoring 0 has steadily decreased. In 2025, it was the first time a company received the highest score, and in 2026, more companies scored in the 90 per cent range.

Figure 18. Climate performance scores by area (2023-2026)



Source: ITU and WBA. 2026.

Examining area scores in further detail, companies improved year on year in target setting and data disclosure. However, performance scores remained at similar levels over the last four years. Decarbonization has become more salient within the ICT sector. However, it is still important for companies to translate data disclosure and commitments into tangible actions.

3

Conclusions and recommendations

Five editions of the Greening Digital Companies report show clear improvements in climate disclosure, target setting and renewable-electricity procurement among many of the world's largest digital companies. The assessment results show gradual but broad-based improvement in corporate climate performance. Thirty-eight companies scored at least 75 per cent, and more companies reached the 90 per cent range than in previous editions. Average scores have also increased across the four comparable assessments conducted since 2023. These trends indicate that climate disclosure, target setting and related corporate practices are becoming more established across the sector. However, progress remains uneven, and improvements in assessment scores have not yet been matched by emissions reductions at the scale required. Digital companies now rank among the world's largest purchasers of renewable electricity, and several have established ambitious net-zero commitments and transition strategies.

However, these improvements have not yet translated into emissions reductions at the scale or pace required. While market-based Scope 2 emissions have fallen substantially for many companies, location-based emissions remain high and, in some cases, continue to increase. This reflects a broader shift in climate governance away from accounting-based claims and towards physical emissions reductions and demonstrable contributions to energy-system decarbonization.

The rapid growth of AI, cloud computing and digital infrastructure is further reshaping the climate trajectory of the sector. Electricity consumption among the assessed companies now approaches 500 TWh annually, equivalent to approximately 1.7 per cent of global electricity consumption. As AI, cloud computing and digital infrastructure continue to expand, electricity demand is expected to increase further. Digital companies remain among the world's largest corporate purchasers of renewable electricity, demonstrating their ability to stimulate investment in clean energy generation. Maintaining this leadership while supporting wider electricity system decarbonization will be critical for achieving long-term climate objectives.

The report highlights that Scope 3 emissions remain the dominant source of emissions across the ICT sector, accounting for approximately three-quarters of total reported emissions among companies disclosing complete inventories. Progress on supplier engagement, value-chain decarbonization and credible Scope 3 target setting remains uneven and represents one of the most significant barriers to achieving sector-wide net-zero ambitions.

At the same time, the assessment results show broader progress in corporate climate performance. As illustrated in Figures 16-18, 38 companies scored at least 75 per cent, while 101 companies achieved a score of 50 per cent or higher, compared with 94 in the previous edition. The number of companies scoring zero also declined from 22 to 18. Across the four comparable assessment cycles, average scores have increased and more companies are entering the highest score ranges. However, these improvements have been driven mainly by stronger target setting and disclosure, while progress in emissions performance and value-chain implementation remains more limited.

Assessed for the first time in this report, climate transition plans emerge as an important component of corporate climate strategies across the ICT sector. A growing number of companies (40%) have now published transition plans or incorporated transition planning into broader sustainability strategies, demonstrating growing recognition that achieving net zero requires a structured implementation roadmap rather than targets alone. However, the assessment also indicates considerable variation in

the quality and completeness of these plans. While leading companies are beginning to integrate governance, capital allocation, implementation milestones and accountability mechanisms, many plans remain high-level and lack sufficient detail on delivery pathways, financing, interim actions and progress monitoring. Strengthening the credibility and implementation of climate transition plans will therefore be critical to ensuring that long-term ambitions translate into measurable emissions reductions.

Differences between subsectors further demonstrate that there is no single pathway to decarbonization. Electronics manufacturers face substantial supply chain emissions associated with manufacturing and purchased goods, telecommunication companies continue to manage extensive operational energy requirements, while software and IT services companies are increasingly challenged by the rapid expansion of AI-enabled computing infrastructure. These differences reinforce the need for sector-specific implementation strategies while maintaining consistent expectations for climate transparency and accountability.

Overall, the assessment demonstrates encouraging progress over the past five years while also illustrating that the next phase of climate leadership will depend on delivering credible implementation. Science-based targets, renewable electricity procurement and climate disclosure have become increasingly established across the sector. The next challenge is ensuring that robust climate transition plans translate these commitments into measurable action through investment, governance, operational change and value chain decarbonization. As AI, cloud computing and digital infrastructure continue to drive rapid growth in electricity demand, successful implementation of these transition plans will be essential if the ICT sector is to reduce its own environmental footprint while continuing to enable decarbonization across the wider economy.

3.1 Recommendations for digital companies, ICT regulators and policy-makers

Recommendation 1: Strengthen physical decarbonization of electricity systems

Digital companies should continue expanding renewable electricity procurement while placing greater emphasis on reducing actual emissions from the electricity systems on which they operate. Alongside market-based renewable electricity purchasing, companies should increase disclosure of location-based emissions, support additional renewable energy generation, improve energy efficiency and explore approaches such as time- and location-matched clean electricity procurement where appropriate. Governments and electricity market operators should continue to accelerate power sector decarbonization to enable sustained emissions reductions as digital electricity demand continues to grow.

Recommendation 2: Prioritize value chain decarbonization and strengthen Scope 3 emissions management

Scope 3 emissions remain the dominant source of GHG emissions across the digital companies and represent one of the greatest barriers to achieving net-zero ambitions. Upstream emissions, particularly from purchased goods and services and capital goods, should be addressed through stronger supplier engagement, climate-related procurement requirements, improved supplier data, and science-based

reduction targets covering key supply-chain categories. Companies should work with suppliers across multiple tiers to reduce emissions from materials, components, manufacturing, logistics and infrastructure.

Downstream emissions, particularly from the use of sold products, require companies to improve product energy efficiency, extend product lifetimes, support repair and circular design, and help customers reduce the emissions associated with using digital products and services. This should include greater transparency on product energy performance and closer alignment with the decarbonization of the electricity systems on which customers depend.

Across both areas, companies should establish comprehensive Scope 3 targets, report all relevant categories and collaborate with suppliers, customers and other value-chain partners to improve data quality, accountability and measurable emissions reductions.

Recommendation 3: Strengthen transition planning

As climate strategies mature, companies should focus on delivering measurable emissions reductions. Companies should distinguish clearly between developing a credible climate transition plan and implementing it. Transition plans should set out how long-term net-zero commitments will be delivered through clear decarbonization pathways, interim milestones, governance arrangements, capital allocation, operational changes and accountability mechanisms. Their credibility depends not only on the quality of the plan, but also on evidence that the planned actions are being carried out and are producing measurable emissions reductions.

Companies should therefore report regularly on implementation progress, including actions completed, resources committed, milestones achieved and deviations from planned pathways. Implementation should extend across operations and value chains through supplier engagement, customer collaboration and changes to products, infrastructure and procurement. Policy-makers, investors and reporting frameworks should strengthen expectations both for transparent transition plans and for comparable evidence of their delivery.

Recommendation 4: Align digital infrastructure expansion with clean energy development

The rapid expansion of AI, cloud computing and digital infrastructure is expected to increase electricity demand significantly over the coming years. Governments, regulators, utilities and digital companies should work together to ensure that digital infrastructure expansion is aligned with national energy and climate strategies. This includes investing in renewable energy generation, grid modernization, transmission capacity, energy storage and demand-side flexibility to ensure that growing electricity demand supports rather than delays wider decarbonization objectives.

Recommendation 5: Strengthen climate reporting and assurance requirements

Governments and relevant regulatory and supervisory authorities should introduce or strengthen mandatory climate-reporting requirements where these are not already in place. Requirements should cover Scope 1, location-based and market-based Scope 2, material Scope 3 emissions, transition plans and independent assurance, while seeking consistency with internationally recognised reporting

frameworks. ICT regulators may support sector-specific data collection and guidance, such as those introduced by Arcep, the French Regulator. Greater consistency across reporting standards would improve comparability and accountability. International organizations, including ITU through technical assistance and capacity-building activities, can support countries in strengthening national monitoring frameworks and improving the availability and quality of ICT sector emissions data, following the indicator framework developed through the Expert Group on Telecommunication/ICT Indicators (EGTI) Subgroup on National Greenhouse Gas Emission Monitoring Indicators.

Recommendation 6: Support equitable global decarbonization of the ICT sector

Opportunities to procure renewable electricity and implement ambitious climate strategies remain unevenly distributed across regions due to differences in electricity markets, policy environments and infrastructure. Governments, development partners and international organizations should work together to expand access to renewable electricity procurement mechanisms, strengthen low-carbon electricity infrastructure and build institutional capacity in emerging and developing economies. Supporting equitable access to clean energy will help ensure that climate leadership is not limited to companies operating in favourable markets and that the ICT sector can contribute to global decarbonization regardless of geography.

3.2 Looking ahead

As digital technologies continue to transform economies and societies, their contribution to sustainable development will increasingly depend on ensuring that digital growth is accompanied by credible climate action. The rapid expansion of AI, cloud computing and digital infrastructure presents both opportunities and challenges: digital technologies can accelerate decarbonization across the wider economy, but they also increase demand for electricity and critical resources.

Future assessments should therefore continue to monitor not only corporate commitments and disclosure, but also the effectiveness of implementation, progress in reducing Scope 3 emissions, the quality of transition plans and the relationship between digital growth and electricity system decarbonization. Maintaining transparency, strengthening accountability and translating ambition into measurable emissions reductions will be essential if the ICT sector is to realize its full potential as both a leader in corporate climate action and an enabler of the global transition to a low-carbon future.

4

Annexes

Annex A: Company overview

Table A1. Overview of the 200 digital companies included in the climate assessment

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
Kakao	PT_02821	Kakao Corp.	Korea, Rep. of	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. of	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. of	East Asia & Pacific	Electronics

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
Naver	PT_01239	NAVER Corporation	Korea, Rep. of	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
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.	State of Palestine	Middle East & North Africa	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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. of	East Asia & Pacific	Electronics
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

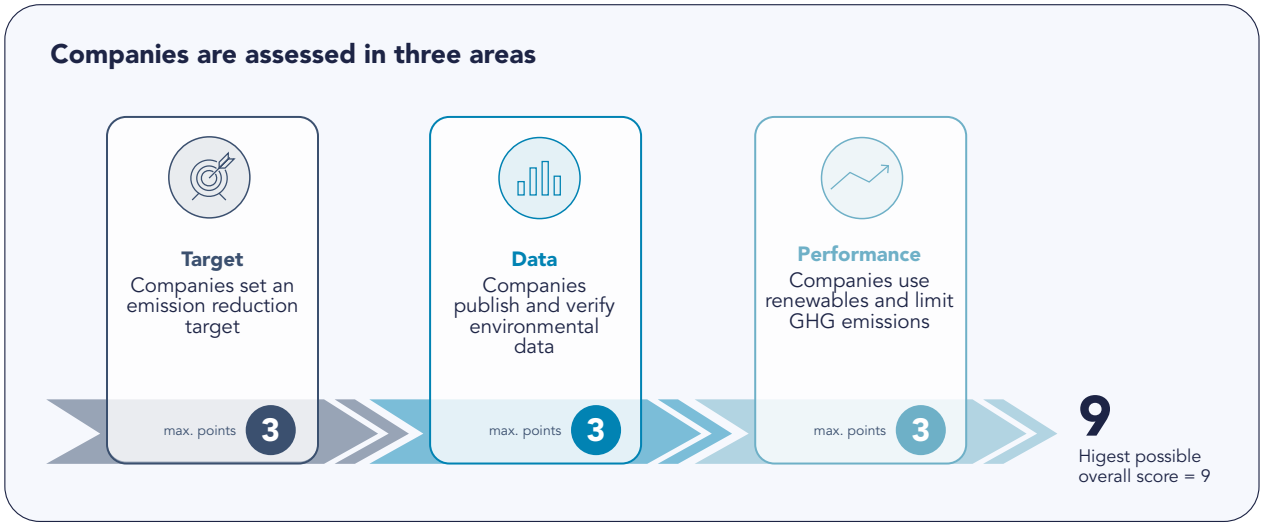
Company	WBA ID	Corporate name	HQ	Region	ICT subsector
SK Telecom	PT_02006	SK Telecom Co., Ltd.	Korea, Rep. of	East Asia & Pacific	Telecommunications
SK Hynix	PT_02005	SK hynix Inc.	Korea, Rep. of	East Asia & Pacific	Electronics
Skyworks	PT_02160	Skyworks Solutions, Inc.	United States	North America	Electronics
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
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

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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
Telefonica	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
Uber	PT_01831	Uber Technologies, Inc.	United States	North America	IT Software & Services
Veon	PT_01877	VEON Ltd.	Netherlands	Europe & Central Asia	Telecommunications

Company	WBA ID	Corporate name	HQ	Region	ICT subsector
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	Russian Federation	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

Annex B: Assessment and scoring 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 was 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 2024.



Target: 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).

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.

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 2024 compared to the proportion in fiscal year 2023, 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).

Explanatory Box 4. Climate assessment scoring methodology review through industry consultation and recommended improvements

To ensure that the Greening Digital Companies assessment continues to reflect evolving corporate climate reporting practices, ITU and the WBA undertook a review of the assessment methodology in August and September 2025 with companies and technical experts. The consultation sought feedback on whether the scoring indicators, evidence requirements and thresholds accurately captured climate performance and aligned with emerging reporting frameworks. Participants were invited to review the methodology, complete a structured questionnaire and participate in a technical review session.

The consultation resulted in several proposed improvements to the methodology. First, the target assessment was proposed to be expanded to recognize that an increasing number of companies adopt a single combined Scope 1, 2 and 3 emissions reduction target rather than separate Scope 1-2 and Scope 3 targets. It was proposed to introduce an additional calculation to assess these combined targets consistently without disadvantaging companies using this approach. The review also proposed a new method for evaluating target performance by assessing whether companies are on track to achieve their published emissions reduction commitments, based on their target year, base year and expected annual reduction pathway. In addition, the evidence requirements for environmental reporting were broadened to recognize Climate Transition Plans, ESRS E1 Climate Change reports and publicly available CDP Climate questionnaires where these contain the required level of emissions disclosure. Finally, the methodology proposes assessing Beyond Value Chain Mitigation (BVCM) using reported carbon credits (tCO_2e) as an interim indicator, reflecting current reporting practice while more robust BVCM metrics continue to emerge.

Not all proposed changes could be incorporated. Pilot testing against a sample of 25 digital companies demonstrated that some enhancements require substantial manual interpretation of sustainability reports, SBTi target documentation and supporting disclosures. For example, determining whether Scope 3 targets cover all relevant emissions categories increasingly requires reviewing company-specific exclusions permitted under updated SBTi guidance, while assessing progress against non-SBTi targets often requires interpreting inconsistent target wording where companies do not disclose a clear base year or percentage reduction. Applying this level of analysis consistently across all 200 companies assessed would require a significant increase in research effort beyond the resources available. Consequently, these enhancements have been identified as priorities for future editions as reporting practices become more standardized and additional analytical capacity becomes available.

The proposed revision to the methodology would assess whether companies are on track to achieve their published emissions reduction targets rather than simply recording the existence of a target. For example, a company commits to reducing its absolute Scope 1 and 2 emissions by 94 per cent by 2030 from a 2020 baseline. By 2024, four years of the ten-year target period have elapsed, meaning the company would be expected to have reduced emissions by approximately 38 per cent to remain on a linear pathway towards its target. If the company reports an actual reduction of 90 per cent by 2024, it is considered to

be ahead of schedule and receives the maximum performance score. Conversely, if a company commits to reducing Scope 3 emissions by 47 per cent by 2030 from the same baseline but has achieved only a 10.7 per cent reduction by 2024, compared with an expected reduction of 19 per cent, it receives partial credit because emissions have declined but progress remains behind the trajectory required to meet the target. An updated methodology would also accommodate companies with a single combined Scope 1, 2 and 3 target by applying the same principle to the combined emissions inventory.

Example application of proposed revised assessment methodology (Deutsche Telekom)

Assessment area	Evidence	Outcome under revised methodology
Science-based targets	SBTi-validated targets covering Scopes 1, 2 and 3; net-zero target by 2040	Received full target score (3.0/3.0) for comprehensive, science-based targets.
Data disclosure	Complete disclosure of Scope 1, Scope 2 (location-based), Scope 3, electricity consumption, dedicated climate report and third-party verification	Received full data score (3.0/3.0), demonstrating comprehensive and transparent climate reporting.
Target progress (Scopes 1 & 2)	Required reduction by 2024: 38%; actual reduction: 90%	Awarded full performance points for exceeding the emissions reduction pathway needed to remain on track towards the 2030 target.
Target progress (Scope 3)	Required reduction by 2024: 19%; actual reduction: 11%	Awarded partial points, recognizing that emissions had declined but remained below the trajectory required to achieve the target.
Beyond Value Chain Mitigation (BVCM)	Reported retirement of 35,167 tCO_2e of carbon credits	Awarded points under the proposed interim BVCM indicator based on publicly reported carbon credits.
Overall result	Combined assessment across targets, disclosure and performance	**Overall score: 8.5/9.0**, illustrating how the revised methodology rewards both transparent reporting and measurable progress towards emissions reduction targets.

Key lessons and recommendations

- Continue refining the assessment methodology through regular consultation with reporting companies and technical experts.
- Recognize evolving climate disclosure frameworks, including ESRS E1, Climate Transition Plans and publicly available CDP Climate questionnaires, as acceptable sources of evidence.

- Assess company performance based on measurable progress towards published emissions reduction targets rather than target existence alone.
- Introduce dedicated scoring for companies using combined Scope 1, 2 and 3 targets to improve comparability across reporting approaches.
- Continue monitoring developments in BVCM reporting to replace interim carbon credit indicators with more robust measures as international guidance matures.
- Prioritize future incorporation of enhanced Scope 3 target assessment and company-specific target interpretation once sufficient analytical resources are available to apply these consistently across the full sample of companies.

Annex C: Climate assessment scoring example

The below example shows how the climate assessment score was calculated for Swisscom.

Table C1. Assessment score calculations for Swisscom

	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	Swisscom AG commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2018 base year.
Aims for net zero by 2040	0.5	0.5	Overall Net Zero Target Swisscom AG commits to reach net-zero greenhouse gas emissions across the value chain by 2035.
Target includes Scope 3	0.5	0.5	Swisscom AG commits to reduce absolute scope 1, 2 and 3 GHG emissions 60.7% by 2030 from a 2018 base year
Scope 3 target includes all relevant categories	0.5	0.5	Yes, there is no exclusion in the text above
Data	3.0	3.0	
Data availability	2.0	2.0	
Scope 1 (tCO_2e)	0.5	0.5	10 927
Scope 2 Location-based (tCO_2e)			42 997
Scope 3 (tCO_2e)	0.5	0.5	320 867
Scope 3 - All relevant categories (tCO_2e)	0.5	0.5	Categories 9, 10, 13 and 14 are not taken into account in this report, since they are not relevant for us
Electricity (MWh)	0.5	0.5	489654
Reporting:	0.5	0.5	
Company has dedicated climate report	0.5	0.5	2024 Sustainability statement. https://reports.swisscom.ch/download/2024SIR/en/swisscom_sustainability_impact_report_2024_en.pdf

	Max points	Score	Evidence
Verification	0.5	0.5	
Third-party verification of emissions data	0.5	0.5	SGS Verification https://reports.swisscom.ch/en/2024SIR/report/sustainability-impact-report/report/sgs-verification
Performance	**3.0**	**3.0**	
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	1.0	FY 2023: GHG/USD Revenue = 4.94/ FY 2024: GHG/USD Revenue = 4.30. Decreased ratio from 2022 to 2023 assigned score of 1.
Proportion of (market-based) Scope 2 emissions to electricity use, normalized to one-point scale	1.0	1.0	Value 0.0. The lower, the better,
TOTAL POINTS	**9.0**	**9.0**	

Sources: Swisscom. 2024. Sustainability Impact Report 2024.
https://reports.swisscom.ch/en/2024SIR/report/sustainability-impact-report

Annex D: Climate assessment scores

Table D1 presents each company assessment score from a total of 9 points, based on three equally weighted dimensions: targets, data and performance. Scores are also shown as percentages to support comparison.

Table D1. Climate assessment scores of the 200 digital companies

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
Accenture	8.66	96	3.00	3.00	2.66
Deutsche Telekom	8.66	96	3.00	3.00	2.66
Vodafone	8.66	96	3.00	3.00	2.66
Capgemini	8.64	96	3.00	3.00	2.64
Telefonica	8.55	95	3.00	3.00	2.55
KPN	8.50	94	2.50	3.00	3.00
Proximus	8.50	94	3.00	2.50	3.00
Ericsson	8.17	91	3.00	3.00	2.17
Apple	8.16	91	2.50	3.00	2.66
eBay	8.16	91	2.50	3.00	2.66
Telia	8.16	91	2.50	3.00	2.66
Equinix	8.12	90	3.00	2.50	2.62
Logitech International	8.09	90	2.50	3.00	2.59
HPE	7.91	88	3.00	3.00	1.91
Infosys	7.73	86	2.50	2.50	2.73
Wipro	7.67	85	3.00	2.50	2.17
Meta	7.66	85	2.50	2.50	2.66
SAP	7.66	85	2.50	2.50	2.66
ASML	7.62	85	3.00	3.00	1.62
Cisco	7.62	85	3.00	3.00	1.62

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)
Lenovo	7.60	84	2.50	2.50	2.60
Netflix	7.50	83	2.50	3.00	2.00
BT Group	7.39	82	2.50	3.00	1.89
NEC	7.28	81	3.00	3.00	1.28
BCE	7.22	80	2.00	3.00	2.22
Tokyo Electron	7.22	80	3.00	2.00	2.22
Nokia	7.20	80	3.00	3.00	1.20
Microsoft	7.16	80	2.50	3.00	1.66
Tele2	7.16	80	3.00	2.50	1.66
HP	7.12	79	3.00	2.50	1.62
Acer	7.10	79	2.50	3.00	1.60
Qualcomm	7.01	78	2.50	2.50	2.01
Nvidia	7.00	78	2.00	2.00	3.00
Cognizant	6.96	77	3.00	2.50	1.46
Elisa	6.91	77	3.00	2.25	1.66
Alphabet	6.83	76	2.50	3.00	1.33
Salesforce	6.83	76	2.00	2.50	2.33
TE Connectivity	6.70	74	2.00	2.50	2.20
PayPal	6.66	74	2.50	2.25	1.91
Dell	6.61	73	2.50	2.50	1.61
Adobe	6.57	73	2.00	2.50	2.07
Seagate	6.57	73	3.00	3.00	0.57
Chunghwa Telecom	6.55	73	2.50	3.00	1.05
KDDI	6.37	71	3.00	3.00	0.37
Airbnb	6.25	69	2.00	2.25	2.00
Globe Telecom	6.24	69	2.50	2.50	1.24
STMicroelectronics	6.17	69	2.50	2.50	1.17

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)
Atos	6.16	68	2.50	2.00	1.66
ServiceNow	6.16	68	2.00	2.50	1.66
Liberty Global	6.12	68	2.00	2.50	1.62
Comcast	6.11	68	2.00	3.00	1.11
Digital Realty Trust	6.08	68	2.00	2.75	1.33
Applied Materials	6.06	67	2.00	3.00	1.06
Asus	6.05	67	2.00	2.50	1.55
ZTE	6.04	67	2.50	2.50	1.04
Far EasTone	6.02	67	2.50	2.50	1.02
Rakuten	6.00	67	2.00	3.00	1.00
Telstra	6.00	67	2.50	2.50	1.00
NTT	5.98	66	3.00	2.50	0.48
Iliad	5.95	66	2.50	2.50	0.95
Uber	5.92	66	2.50	2.00	1.42
Telenor	5.90	66	2.00	3.00	0.90
Lam Research	5.88	65	1.50	2.50	1.88
Orange	5.80	64	3.00	2.00	0.80
Eutelsat	5.78	64	2.00	2.25	1.53
GoTo	5.75	64	2.50	2.25	1.00
Twilio	5.75	64	2.00	2.25	1.50
Singtel	5.70	63	2.00	2.50	1.20
Bharti Airtel	5.66	63	2.50	2.00	1.16
Block	5.65	63	1.50	2.50	1.65
Millicom	5.61	62	2.00	2.50	1.11
Lumen	5.51	61	2.50	3.00	0.01
Western Digital	5.43	60	2.00	3.00	0.43
Verizon	5.38	60	2.50	2.00	0.88

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)
Tata Communications	5.35	59	3.00	2.00	0.35
HCL	5.35	59	3.00	2.00	0.35
Juniper Networks	5.34	59	2.50	2.50	0.34
Telecom Italia	5.34	59	2.00	1.50	1.84
GlobalFoundries	5.26	58	1.00	3.00	1.26
AT&T	5.23	58	1.50	2.50	1.23
Tencent	5.22	58	2.50	2.50	0.22
TCS	5.18	58	2.50	1.50	1.18
Canon	5.16	57	2.00	3.00	0.16
SK Telecom	5.09	57	2.50	2.50	0.09
American Tower	5.08	56	2.50	1.50	1.08
Foxconn	5.00	56	2.00	2.00	1.00
Cloudflare	5.00	56	0.00	2.00	3.00
Naspers	5.00	56	1.50	2.50	1.00
Snap	5.00	56	1.50	2.50	1.00
SONY	4.90	54	3.00	1.50	0.40
Türk Telekom	4.83	54	1.00	2.50	1.33
Amazon	4.75	53	0.50	2.25	2.00
Booking Holdings	4.75	53	3.00	0.75	1.00
Kyocera	4.75	53	2.50	2.25	0.00
Safaricom	4.75	53	2.00	1.75	1.00
Zain	4.75	53	1.50	2.25	1.00
Infineon	4.72	52	1.50	2.00	1.22
Intel	4.64	52	0.00	3.00	1.64
MediaTek	4.50	50	2.00	1.50	1.00
NXP Semiconductors	4.42	49	2.00	2.00	0.42

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)
Akamai	4.33	48	1.50	2.00	0.83
Samsung Electronics	4.31	48	0.00	3.00	1.31
Panasonic Group	4.31	48	2.00	2.00	0.31
América Móvil	4.25	47	2.50	1.75	0.00
Kuaishou	4.20	47	0.00	2.00	2.20
LG Electronics	4.14	46	2.00	2.00	0.14
TSMC	4.14	46	0.50	2.50	1.14
IBM	4.13	46	0.00	3.00	1.13
SK Hynix	4.12	46	0.00	2.50	1.62
Spark New Zealand	4.08	45	1.50	2.25	0.33
Kakao	4.05	45	1.00	3.00	0.05
Alibaba	4.02	45	0.50	2.00	1.52
Axiata	4.02	45	2.00	2.00	0.02
Quanta Computer	3.98	44	2.00	1.50	0.48
Murata Manufacturing	3.89	43	2.50	1.00	0.39
Broadcom	3.86	43	1.00	1.50	1.36
Ant	3.84	43	0.50	2.00	1.34
AMD	3.83	43	0.00	3.00	0.83
Corning	3.75	42	2.50	1.25	0.00
MTN	3.75	42	2.50	1.25	0.00
Oracle	3.74	42	0.00	2.50	1.24
PLDT	3.70	41	0.00	2.00	1.70
Altice	3.66	41	0.00	2.50	1.16
Analog Devices	3.59	40	1.50	1.50	0.59
Lyft	3.50	39	1.50	2.00	0.00
NetApp	3.50	39	2.00	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)
SoftBank	3.50	39	2.00	1.50	0.00
MercadoLibre	3.43	38	0.00	2.00	1.43
Grab	3.25	36	0.50	1.75	1.00
STC	3.25	36	2.00	1.25	0.00
Texas Instruments	3.25	36	1.00	2.00	0.25
Microchip Technology	3.20	36	0.50	2.50	0.20
TCL	3.15	35	0.00	2.00	1.15
Rostelecom	3.10	34	0.00	2.00	1.10
Micron Technology	3.09	34	0.00	2.00	1.09
Baidu	3.05	34	0.00	2.00	1.05
Palantir	3.00	33	0.50	1.50	1.00
China Unicom	2.75	31	0.00	1.75	1.00
Ooredoo	2.75	31	0.00	1.75	1.00
PCCW	2.75	31	0.00	1.75	1.00
Viasat	2.69	30	0.00	2.50	0.19
Delivery Hero	2.62	29	1.50	1.00	0.12
e&	2.60	29	2.00	0.50	0.10
China Telecom	2.60	29	0.00	1.50	1.10
China Mobile	2.56	28	0.00	1.50	1.06
Naver	2.55	28	0.00	2.50	0.05
Skyworks	2.52	28	0.00	1.50	1.02
BOE Technology Group	2.52	28	0.00	1.50	1.02
AIS	2.51	28	0.00	2.50	0.01
SES	2.50	28	1.50	1.00	0.00
Amphenol	2.34	26	0.00	2.00	0.34
GTT	2.33	26	0.00	2.00	0.33

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)
Huawei	2.15	24	0.00	2.00	0.15
Oppo	2.13	24	0.00	2.00	0.13
Vivo	2.03	23	0.00	2.00	0.03
KT	2.02	22	0.00	2.00	0.02
NetEase	2.02	22	0.00	2.00	0.02
JD.com	2.00	22	0.00	2.00	0.00
Jio	2.00	22	2.00	0.00	0.00
Bytedance	2.00	22	0.00	2.00	0.00
Spotify	2.00	22	0.50	1.50	0.00
Nintendo	1.77	20	0.00	1.50	0.27
Telkom Indonesia	1.75	19	0.00	1.75	0.00
Weibo	1.75	19	0.00	0.75	1.00
Liquid Telecom	1.55	17	0.00	1.50	0.05
Xiaomi	1.51	17	0.00	1.50	0.01
Veon	1.51	17	0.00	1.50	0.01
Zoom	1.50	17	0.00	1.50	0.00
VK	1.25	14	0.00	1.25	0.00
Keyence Corporation	1.25	14	0.00	1.25	0.00
MTS	1.25	14	0.00	1.25	0.00
Shopify	1.25	14	0.00	1.25	0.00
Omantel	1.00	11	0.00	1.00	0.00
Meituan	1.00	11	0.00	1.00	0.00
Bezeq	1.00	11	0.00	1.00	0.00
Transsion	0.75	8	0.00	0.75	0.00
Yandex	0.75	8	0.00	0.75	0.00
DiDi Chuxing	0.75	8	0.00	0.75	0.00
Toshiba TEC	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)
Fiserv	0.50	6	0.00	0.50	0.00
Digicel	0.27	3	0.00	0.25	0.02
Citrix	0.00	0	0.00	0.00	0.00
Coupang	0.00	0	0.00	0.00	0.00
Ethio Telecom	0.00	0	0.00	0.00	0.00
Iridium Communications	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
Nepal Telecom	0.00	0	0.00	0.00	0.00
PalTel	0.00	0	0.00	0.00	0.00
SpaceX	0.00	0	0.00	0.00	0.00
Stripe	0.00	0	0.00	0.00	0.00
Telecom Egypt	0.00	0	0.00	0.00	0.00
Viettel	0.00	0	0.00	0.00	0.00
X	0.00	0	0.00	0.00	0.00
Yunji	0.00	0	0.00	0.00	0.00
Cogent Communications	0.00	0	0.00	0.00	0.00
Pinduoduo	0.00	0	0.00	0.00	0.00
Sudatel	0.00	0	0.00	0.00	0.00

Annex E: Emissions reduction commitments

Table E1. Emissions reduction commitments of the 200 digital companies

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Accenture	Yes	Accenture commits to reduce absolute scope 1 and 2 GHG emissions 80% by FY2030 from a FY2019 base year.	Yes	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.	Yes	2040
Acer	Yes	Acer Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.	Yes	Acer Inc. also commits to reduce absolute scope 3 GHG emissions 35% by 2030 from a 2020 base year.	Yes	2050
Adobe	Yes	Adobe Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by FY2030 from a FY2022 base year.	No		Yes	2050
AIS	Yes	Target Reduce GHG emissions intensity as calculated from the ratio of direct (GHG scope 1) and indirect emissions (GHG scope 2) to data traffic, by 25% by 2030 compared to the 2024 baseline.	No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
AMD	Yes	50% absolute reduction in greenhouse gas (GHG) emissions from AMD operations (Scope 1 and 2) by 2030 (base year 2020).	No			
Airbnb	Yes	Airbnb established a near-term science-based target to reduce Scope 1 and 2 absolute emissions6 by 78.4 percent by 2030 from our 2019 baseline.	No		Yes	2030
Akamai	Yes	Reduce 100% of our combined Scope 1, 2 (market-based), and 3 (Category 3 and 8) absolute emissions (compared with our base year) by 2030 24.90 % reduction since base year.	Yes	Emissions reduction targets Reduce 100% of our combined Scope 1, 2 (market-based), and 3 (Category 3 and 8) absolute emissions (compared with our base year) by 2030.		2040
Alibaba	No		No			
Alphabet	Yes	Alphabet, Inc. commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by 2030 from a 2019 base year	Yes	We aim to reduce absolute, combined scope 1, 2 (market-based), and 3 emissions by 50% from a 2019 base year by 2030.	Yes	
Altice	Yes	Reduce by 40% its direct and indirect emissions by 2030 compared to 2022	Yes	Reduce by 40% its direct and indirect emissions by 2030 compared to 2022		
Amazon	No		No			2040
America Movil	Yes	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	Yes	América Móvil also commits to reduce absolute scope 3 GHG emissions 14% by 2030 from a 2019 base year	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
American Tower	Yes	American Tower Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 40% by 2035 from a 2019 base year.	Yes	American Tower Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 40% by 2035 from a 2019 base year.	Yes	
Amphenol	Yes	By the end of 2030, Amphenol will reduce absolute Scope 1 and market-based Scope 2 GHG emissions by 10% compared to our 2021 levels.	No			
Analog Devices	Yes	Analog Devices Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.	No		Yes	
Apple	Yes	Apple, Inc. commits to reduce absolute combined scope 1, 2 and 3 GHG emissions 62% by FY2030 from a FY2019 base year.	Yes	Apple, Inc. commits to reduce absolute combined scope 1, 2 and 3 GHG emissions 62% by FY2030 from a FY2019 base year.	Yes	2050
Applied Materials	Yes	50% reduction in Scope 1 and Scope 2 (market-based) emissions by 2030 from 2019 baseline.	No		Yes	2040
ASML	Yes	ASML commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2019 base year.	Yes	ASML also commits to reduce scope 3 GHG emissions 55% per million EUR value added within the same timeframe.	Yes	2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Asus	Yes	Committing to reduce Scope 1 and Scope 2 emissions by 50% and Scope 3 emissions from 'purchased goods and services' and 'use of sold products' by 30% by 2030.	Yes	The Company is committed to reducing Scope 1 and Scope 2 carbon emissions by 50% and Scope 3 emissions from "purchased goods and services" and "use of sold products" by 30% by 2030, with 2021 as the base year.	Yes	2050
AT&T	Yes	Reduce our absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 63% (2015 base year) — aligning with a 1.5°C pathway by the end of 2030.	No		Yes	
KDDI	Yes	KDDI CORPORATION commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2019 base year.	Yes	KDDI CORPORATION commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2019 base year. KDDI CORPORATION also commits to reduce absolute scope 3 GHG emissions 28% within the same timeframe.	Yes	2040
Axiata	Yes	Axiata Group Berhad commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2022 base year.	Yes	Axiata Group Berhad commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2022 base year. Axiata Group Berhad also commits to reduce absolute scope 3 GHG emissions 25% within the same timeframe.	Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Baidu	Yes	In 2021, we announced our climate target of achieving carbon neutrality across our operations by 2030. Using 2020 as the baseline year, we have set corresponding emission reduction targets	No			
Vivo	Yes	We aim to achieve a 50% reduction in carbon emissions in our operations by 2035 compared to 2021 levels, and achieve carbon neutrality in our operations by 2050.	No			
BCE	Yes	BCE Inc. commits to reduce absolute scope 1 and 2 GHG emissions 58% by FY2030 from a FY2020 base year.	Yes	Reduce our absolute scope 3 GHG emissions from all categories other than purchased goods and services by 42% by 2030, from a 2020 base year.	Yes	
Bharti Airtel	Yes	Indian telecommunication company Bharti Airtel commits to reduce absolute scope 1 and 2 GHG emissions 50.2% by FY2031 from a FY2021 base year.	Yes	To reduce absolute Scope 3 GHG emissions by 42% by FY ending 2031, using FY 2020-21 as baseline, per SBTi.	Yes	2050
BOE Technology Group	Yes	Reduce operational carbon emissions by Increase the share of renewable energy to 10% relative to the 2022 baseline.	No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Booking Holdings	Yes	Reducing Our Scope 1 and 2 Emissions Our target is to reduce our absolute Scope 1 & 2 emissions1 by 95% against a 2019 baseline by the end of 2030.	Yes	Reducing Our Scope 3 Emissions Our target is to reduce our absolute Scope 3 emissions2 by 50% against a 2019 baseline by the end of 2030 and by 90% by 2040.	Yes	2040
Broadcom	Yes	In 2021, 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.	No			
BT Group	Yes	BT Group commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2031 from a FY2017 base year.	Yes	By FY31, to reduce our supply chain carbon emissions by 42%, compared to FY17 levels (Scope 3 categories 1 – 8).	Yes	2041
Bytedance	No		No			
Canon	Yes	CANON INC. commits to reduce absolute scope 1 and 2 GHG emissions 42.0% by 2030 from a 2022 base year.	Yes	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.	Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Lumen	Yes	To reduce absolute scope 1 and 2 (market basis) GHG emissions 18% by 2025 from a 2018 base year.	Yes	Target objective To reduce absolute scope 3 GHG emissions (categories 1,2,3,4,5,6 & 7) by 10% by 2025 from a 2018 base year.	Yes	
China Mobile	Yes	Targets By 2025, the total Scope 1 and Scope 2 GHG emissions will be controlled within 46.5 million tons.	No			
China Telecom	No		No			
China Unicom	No		No			
Chunghwa Telecom	Yes	For Scope 1 and Scope 2, we aim to reduce carbon emissions by 50% by 2030 compared to 2020 levels.	Yes	Reducing absolute Scope 3 GHG emissions by 25% by 2030 from a 2021 base year.	Yes	2045
Cisco	Yes	Cisco commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2019 base year. Target NA NA Near-term 1+2 1.5°C 2019 2030.	Yes	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.	Yes	2040
Citrix	No		No			
Cloudflare	No		No			
Cogent Communications	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Comcast	Yes	Comcast commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.	Yes	Comcast commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.* Comcast also commits to reduce absolute scope 3 GHG emissions from fuel- and energy-related activities, business travel, employee commuting, use of sold products and downstream leased assets 27.5% within the same timeframe.	Yes	
Corning	Yes	Corning Incorporated commits to reduce absolute scope 1 and 2 GHG emissions 30% by 2028 from a 2021 base year.	Yes	Corning also has an SBTi approved near-term science-based emissions target to reduce our absolute Scope 3 GHG emissions by 17.5% by 2028 from the 2021 base year.	Yes	
Delivery Hero	Yes	Delivery Hero commits to reduce absolute scope 1 and 2 GHG emissions 50.4% by 2032 from a 2022 base year.	No		Yes	
Dell	Yes	Dell Technologies commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2031 from a FY2020 base year.	Yes	By 2030, we will reduce absolute scope 3 GHG emissions from purchased goods and services by 45%.	Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Deutsche Telekom	Yes	Deutsche Telekom AG commits to reduce absolute scope 1 and 2 GHG emissions 94% by 2030 from a 2020 base year.	Yes	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	Yes	2040
DiDi Chuxing	No		No			
Digicel	Yes	By 2035, we hope to reduce our scope one and two emissions by 50%, with the ambition of being net zero by 2050.	No			2050
Digital Realty Trust	Yes	Digital Realty commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2023 base year.	Yes	Digital Realty also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, upstream transportation and distribution, downstream leased assets and investments 25% within the same timeframe.	Yes	
eBay	Yes	eBay Inc. commits to maintain a minimum of 90% absolute scope 1 and 2 GHG emissions reductions from 2030 through 2045 from a 2019 base year.	Yes	eBay Inc. also commits to reduce absolute scope 3 GHG emissions from downstream transportation and distribution 27.5% within the same timeframe.	Yes	2045

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Elisa	Yes	Elisa Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 42% by 2030 from a 2021 base year.	Yes	Elisa Corporation commits to reduce absolute scope 1, 2 and 3 GHG emissions 42% by 2030 from a 2021 base year.	Yes	2040
e&	Yes	43% reduction in Scope 1 and 2 across all our markets by 2030 versus the 2022 baseline – SBTi validated.	Yes	25% reduction in Scope 3 across all our markets by 2030 versus the 2022 baseline – SBTi validated.	Yes	2050
Equinix	Yes	Reduce absolute Scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year.	Yes	Reduce absolute Scope 3 emissions from fuel and energy related activities 50% by 2030 from a 2019 base year.	Yes	2040
Ericsson	Yes	Reduce total GHG emissions in the value chain by 50%, and scope 1 and 22) by 90%. (SBTi3) validated). Base year1) 2020 Target year 2030.	Yes	Reduce total value chain emissions by half by 2030, including a 90% reduc- tion in Scope 1 and 2, and a 50% reduction of the sum of Scope 3 emissions.	Yes	2040
Ethio Telecom	No		No			
Eutelsat Group	Yes	Absolute carbon reduction of Scope 1 & 2 of 50% by 2030 from a baseline of 2021.	Yes	A reduction in carbon intensity per satellite MBit of 52% by 2030 from a baseline of 2021.	Yes	
Meta	Yes	Meta commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2031 from a 2021 base year.	Yes	Not exceed our 2021 baseline Scope 3 emissions by the end of 2031	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Far EasTone	Yes	Far EasTone Telecommunications Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 43.6% by 2030 from a 2021 base year.	Yes	Far EasTone Telecommunications Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 43.6% by 2030 from a 2021 base year. Far EasTone Telecommunications Co., Ltd. also commits to reduce absolute scope 3 GHG emissions 42.0% within the same timeframe.	Yes	2048
GlobalFoundries	Yes	In April 2025 we accelerated our commitment to reduce absolute combined Scope 1 and Scope 2 GHG emissions by 42% from 2021 to 2030.	No			
Globe Telecom	Yes	Globe Telecom, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.	Yes	Globe Telecom, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.* Globe Telecom, Inc. also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, fuel- and energy-related activities, use of sold products, and end-of-life treatment of sold products 25% within the same timeframe.	Yes	2050
Grab	Yes	As a triple bottom line company, Grab has taken an emissions reduction-first and inclusive approach toward carbon neutrality by 2040.	No			2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
GTT	No		No			
Oppo	No		No			
HCL	Yes	HCL Technologies commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2020 base year.	Yes	Reducing our direct and indirect emissions is pivotal to our decarbonization strategy. For us to reduce the impacts of climate change, we formulated our Science-Based Targets. Our SBTi-approved target for 2030 requires a reduction of 50% for Scope 1 and 2 emissions and 42% for Scope 3 emissions compared to our FY20 baseline. In FY25, the implementation of energy efficiency and technology improvement initiatives across our infrastructure played a pivotal role in reducing our carbon footprint. As a result, we achieved a combined 46% reduction in Scope 1 and Scope 2 emissions from the base year and a 27% reduction year or year, marking a significant stride towards net-zero. In addition, we have also achieved a 22% reduction in scope 3 emissions compared to our base year 2020.	Yes	2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Foxconn	Yes	HON HAI PRECISION INDUSTRY CO., LTD. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2020 base year.	Yes	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.	Yes	2050
HP	Yes	HP Inc. commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by FY2030 from a FY2019 base year.	Yes	HP Inc. commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by FY2030 from a FY2019 base year.	Yes	2040
Huawei	No		No			
IBM	Yes	Reach net zero Operational GHG emissions by 2030.	No			
iliad Group	Yes	The iliad Group commits to reduce absolute Scope 1 and Scope 2 GHG emissions by 60% by 2030 from a 2022 base year. The Group also commits to reduce absolute Scope 3 GHG emissions by 46% by 2030 from a 2022 base year;.	Yes	The iliad Group commits to reduce absolute Scope 1 and Scope 2 GHG emissions by 60% by 2030 from a 2022 base year. The Group also commits to reduce absolute Scope 3 GHG emissions by 46% by 2030 from a 2022 base year.	Yes	2050
Infosys	Yes	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.	Yes	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.	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Intel	Yes	Our goals are to achieve an additional 10% reduction in our absolute Scope 1 and 2 GHG emissions by 2030 and to reach net-zero Scope 1 and 2 GHG emissions by 2040.	No			2050
Iridium Communications	No		No			
JD.com	No		No			
JOYY	No		No			
Jumia	No		No			
Juniper Networks	Yes	Juniper Networks commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2022 base year	Yes	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.	Yes	2040
Keyence Corporation	Yes	Our objective is to reduce greenhouse gas emissions from business activities (Scope 1 + 2) by 43% by fiscal year 2030 compared to fiscal year 2016, with the ultimate goal of achieving carbon neutrality by 2050.	No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
KPN	Yes	KPN commits to reduce absolute scope 1 GHG emissions 84% by 2030 from a 2015 base year.	Yes	KPN further commits to reduce absolute scope 3 GHG emissions 75.6% by 2033 from a 2015 base year.	Yes	2040
Kyocera	Yes	KYOCERA Corporation commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by FY2030/31 from a FY2019/20 base year.	Yes	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	Yes	
Lam Research	Yes	Reduce absolute Scope 1 and 2 (market-based) GHG emissions 25% by the end of 2025 and 46.2% by the end of 2030 from a 2019 baseline.1 By 2040, achieve net zero operations.	No		Yes	2050
Liberty Global	Yes	OUR SCOPE 1 AND 2 EMISSIONS Alongside our carbon neutrality goal by 2030 for market based Scope 1 and 2 emissions, we have established Science Based Targets initiative (SBTi)-approved targets to reduce absolute Scope 1 and 2 emissions by 50% by 2030 and 80% by 2050 (from a 2019 baseline).	Yes	As approved by the SBTi, we are targeting a 50% reduction in Scope 3 GHG emissions intensity per home passed by 2030, as well as a 50% reduction in absolute Scope 3 GHG emissions from the manufacture and use of customer premise equipment (CPE) by 2030 (from a 2019 baseline).	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Logitech International	Yes	Logitech International S.A. commits to reduce absolute scope 1 and 2 GHG emissions 85% by 2030 from a 2019 base year.	Yes	Reduce absolute scope 3 GHG emissions 50% by 2030 from a 2021 base year.	Yes	2047
Lyft	Yes	Lyft, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 56.5% by 2030 from a 2018 base year.	Yes	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.	Yes	
MediaTek	Yes	MediaTek Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2023 base year.	Yes	MediaTek Inc. commits to reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2023 base year. MediaTek Inc. also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel- and energy-related activities, and use of sold products 25% within the same timeframe.	Yes	2050
MegaFon	No		No			
Meituan	No		No			
MercadoLibre	No		No			
Microchip Technology	Yes	Mid-term reduction 50% Reduction (Scope 1+2)	No			2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Micron Technology	Yes	42% absolute reduction in scope 1 emissions by CY30 from the CY20 baseline	No			
Microsoft	Yes	American multinational technology company Microsoft commits to continue annually source 100% renewable electricity through 2030.	Yes	Scope 3 emissions Our value chain or Scope 3 emissions increased by 26% from our 2020 baseline. Microsoft continues to work to scale carbon-free electricity markets across our supply chain and invest to decarbonize need-to abate sectors, including steel, concrete, and other building materials used in our datacenters, as well as fuels[.] Microsoft's target of reducing Scope 3 emissions by more than 50% by 2030.	Yes	
Millicom	Yes	Our Targets Reduce absolute Scope 1 and 2 market-based GHG emissions by 50% by 2030 from a 2020 base year and absolute Scope 3 GHG emissions 20% by 2035 from a 2020 base year. Considering recent changes in SBTi ambition, we are working to update our current targets to achieve net-zero emissions by 2050.	No		Yes	2050
MTS	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
MTN	Yes	MTN Group Limited commits to reduce absolute Scope 1 and 2 GHG emissions 50% by 2030 from a 2021 base year.	Yes	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.	Yes	2050
Murata Manufacturing	Yes	Murata Manufacturing Co. , Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 46% by FY2030 from a FY2019 base year.	Yes	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	Yes	2050
Naspers	Yes	Reduce absolute scope 1 and 2 GHG emissions 100% by FY28 from a FY20 base year (aligned with SBTi's 1.5-degree pathway).	Yes	Reduce absolute scope 3 GHG emissions from air business travel 30% by FY30 from a FY20 base year	Yes	
Naver Corporation	Yes	Greenhouse Gas Reduction Targets and Strategies GHG Emissions Reduction Target (Scope 1 & 2) 60% 2030.	No			
NEC	Yes	2030 SBT Net-Zero Scope 1 and 2 50% (compared to FY2021).	Yes	2030 SBT Net-Zero Scope 3 50% (compared to FY2021).	Yes	2040
Nepal Telecom	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
NetApp	Yes	NetApp, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50.8% by FY2030 from a FY2020 base year.	Yes	NetApp, Inc. also commits to reduce scope 3 GHG emissions from use of sold products 51.6% per effective petabytes shipped by FY2030 from a FY2023 base year.	Yes	
NetEase	No		No			
Netflix	Yes	46% Absolute Reduction in Scopes 1 and 2 Emissions (from a 2019 baseline).	Yes	Netflix commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by 2030 from a 2019 base year. Netflix also commits to reduce scope 3 GHG emissions 55% per million USD of value added within the same timeframe.	Yes	
NTT	Yes	NTT Group's GHG emissions reduction targets Scope 1 2 80% reduction by FY2030 from FY2018 base year.	Yes	NIPPON TELEGRAPH AND TELEPHONE CORPORATION further commits to reduce absolute scope 3 GHG emissions 32% by FY2030 from a FY2018 base year.	Yes	2040
Nokia	Yes	Nokia commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by 2030 from a 2019 base year.	Yes	Nokia commits to reduce absolute scope 1, 2 and 3 GHG emissions 50% by 2030 from a 2019 base year.	Yes	2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Nvidia	Yes	NVIDIA commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2023 base year.	Yes	NVIDIA commits to reduce absolute scope 1 and 2 GHG emissions 50% by FY2030 from a FY2023 base year. NVIDIA also commits to reduce scope 3 GHG emissions from use of sold products 75% per PetaFLOP within the same timeframe.	Yes	
NXP Semiconductors	Yes	NXP Semiconductors commits to reduce absolute scope 1 and 2 GHG emissions 55% by 2030 from a 2021 base year.	Yes	NXP Semiconductors commits to reduce absolute scope 1 and 2 GHG emissions 55% by 2030 from a 2021 base year. NXP Semiconductors also commits to reduce absolute scope 3 GHG emissions 35% by 2033 from a 2022 base year.	Yes	
Omantel	Yes	Near-Term Goal: 2030 45% emission reduction covering Scope 1 and Scope 2 emission sources.	No			
Ooredoo	No		No			
Oracle	Yes	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.	Yes	Oracle has set a target to achieve net-zero emissions by 2050 and to halve our Scope 1, Scope 2, and Scope 3 greenhouse gas emissions across our operations and supply chain by 2030, relative to a 2020 baseline.		

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Orange	Yes	Orange commits to reduce absolute scope 1, 2 and 3 GHG emissions 45% by 2030 from a 2021 base year.	Yes	Carbon by 2040, Orange has set itself interim targets:– to reduce its Scope 1, 2 and 3 carbon footprints by 45% (2030 vs. 2020)	Yes	2040
PalTel	No		No			
Panasonic Group	Yes	Panasonic Holdings Corporation commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2019 base year.	Yes	Panasonic Holdings Corporation commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2019 base year. Panasonic Holdings Corporation also commits to reduce absolute scope 3 GHG emissions from use of sold products 30% within the same timeframe.	Yes	2050
PayPal	Yes	PayPal Holdings, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 25% by 2025 from a 2019 base year.	Yes	PayPal Holdings, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 25% by 2025 from a 2019 base year. PayPal Holdings, Inc. commits to reduce the absolute scope 3 GHG emissions from fuel and energy-related activities 25% over the same timeframe.	Yes	2040
PCCW	Yes	Our 2025 goal of reducing our absolute Scope 1 and 2 emissions by 34.3% compared to the 2018 base year.	No			
PDD Holdings	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
PLDT	Yes	The PLDT Group has a decarbonization roadmap that aims for a 40% reduction in Scope 1 and 2 GHG emissions by 2030, with 2019 as the base year.	No			
Proximus	Yes	Reduce absolute Scope 1 and Scope 2 GHG emissions by 66% in 2030 from a 2020 base year (previously -95%);.	Yes	Reduce absolute Scope 3 GHG emissions by 42% in 2030 from a 2020 base year (previously -60%);.	Yes	2040
Qualcomm	Yes	Our 2030 GHG reduction targets are as follows: Reduce absolute Scope 1 and Scope 2 GHG emissions 50 percent from a 2020 base year.	Yes	Our 2030 GHG reduction targets are as follows: Reduce absolute Scope 3 GHG emissions 25 percent from a 2020 base year.	Yes	2040
Quanta Computer	Yes	Near-Term Targets (by 2030) Absolute Emissions: Reduce Scope 1 and Scope 2 greenhouse gas emissions by 42% from the 2022 baseline.	Yes	Near-Term Targets (by 2030) Absolute Emissions: Reduce Scope 3 emissions by 25% from the 2022 baseline.	Yes	2050
Rakuten	Yes	Rakuten Group, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 99.7% by FY2032 from a FY2022 base year.	Yes	Rakuten Group, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 99.7% by FY2032 from a FY2022 base year. Rakuten Group, Inc. also commits to reduce absolute scope 3 GHG emissions 30% within the same timeframe.	Yes	
Rostelecom	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Safaricom	Yes	Safaricom PLC commits to reduce absolute scope 1 and 2 GHG emissions 43% by 2030 and 74% by 2050 from a 2017 base year.	Yes	Safaricom PLC commits to reduce absolute scope 3 GHG emissions 41% by 2030 and 72% by 2050 from a 2017 base year.	Yes	2050
Salesforce	Yes	Salesforce, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 67% by FY2031 from a FY2019 base year.	Yes	Salesforce, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 67% by FY2031 from a FY2019 base year. Salesforce, Inc. also commits to reduce scope 3 GHG emissions 68% per USD value added within the same timeframe.	Yes	2050
Samsung Electronics	Yes	The DX Division aims to achieve net zero Scope 1 and 2 emissions by 2030, focusing on reducing direct GHG emissions and expanding the use of renewable energy.	No			
SAP	Yes	Reduce SAP's Gross GHG Emissions (market-based) across our value chain (Scope 1, 2 and 3) by at least 90% to reach net zero by 2030. Remaining residual emissions will be neutralized by a maximum of 10% carbon removals. Scope	Yes	SAP SE commits to reduce absolute scope 1, 2, and 3 GHG emissions 90% by 2030 from a 2023 base year.* SAP SE also commits to reduce absolute scope 3 GHG emissions beyond the minimum boundary from use of sold products 90% within the same timeframe.	Yes	2030

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
stc	Yes	Our climate action roadmap outlines our guide to meet near-term targets, including a 50% reduction in absolute Scope 1 and 2 emissions and a 46.2% reduction in Scope 3 emissions by 2030 versus our 2019 baseline.	Yes	Our climate action roadmap outlines our guide to meet near-term targets, including a 50% reduction in absolute Scope 1 and 2 emissions and a 46.2% reduction in Scope 3 emissions by 2030 versus our 2019 baseline.	Yes	2050
Seagate	Yes	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.	Yes	Seagate Technology LLC also commits to reduce absolute scope 3 GHG emissions 20% by 2025 and 60% by 2040 from a 2017 base year.	Yes	2040
SES	Yes	By 2030: Achieve a 50% reduction in absolute Scope 1 and 2 GHG emissions from our 2019 baseline. This commitment is integral to SES's sustainability strategy, ensuring operational efficiency improvements while transitioning toward low-carbon technologies.	No		Yes	2050
Weibo	No		No			
Singtel	Yes	Singtel Group commits to reduce absolute scope 1 and 2 GHG emissions 55% by FY2030 from a FY2023 base year*.	Yes	Singtel Group also commits to reduce absolute scope 3 GHG emissions from purchased good and services, capital goods, use of sold products, downstream leased assets and investments 40% within the same timeframe.	Yes	2044

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Snap	Yes	We are committed to reducing our absolute Scope 1 and 2 GHG emissions by 25% by 2025 compared with our 2019 baseline, ensuring that our direct operations are increasingly energyefficient and low-carbon.	No		Yes	
Softbank Group	Yes	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.	Yes	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.	Yes	2050
SONY	Yes	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.	Yes	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.	Yes	2040
SpaceX	No		No			
Spark New Zealand	Yes	Spark New Zealand commits to reduce absolute scope 1 and 2 GHG emissions 56% by FY2030 from a FY2020 base year.	No		Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Spotify	No		No			2030
Sudatel	No		No			
Swisscom	Yes	Swisscom AG commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2018 base year.	Yes	Swisscom AG commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2018 base year. Swisscom AG commits to reduce absolute scope 3 GHG emissions 60% within the same timeframe.	Yes	2035
TSMC	Yes	Reduce unit GHG emissions by 30% compared to the base year (metric ton of carbon dioxide equivalent metric tons CO_2e/12-inch equivalent wafer mask layer) by 30%, and restore GHG emissions to the 2020 level (Base year: 2020)	Yes	2030 Goals Reduce supplier carbon emissions by 30% from what they year (metric ton of carbon dioxide equivalent metric tons CO_2e/12-inch equivalent wafer mask layer) by 30%, and restore GHG emissions to the 2020 level (Base year: 2020)		2050
TCL	No		No			
TE Connectivity	Yes	TE Connectivity, Ltd commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2020 base year.	Yes	TE Connectivity, Ltd commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2020 base year. TE Connectivity, Ltd also commits to reduce absolute scope 3 GHG emissions covering purchased goods and services, capital goods, fuel and energy related activities and upstream transportation and distribution 30% by 2032 from a 2022 base year.	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Tele2	Yes	The near-term targets for scope 1 and 2 emissions includes a 90% GHG emission reduction by 2025 and reducing 100% by 2029. For scope 3, the target is to reduce GHG emissions by 60% per subscription by 2029.	Yes	The near-term targets for scope 1 and 2 emissions includes a 90% GHG emission reduction by 2025 and reducing 100% by 2029. For scope 3, the target is to reduce GHG emissions by 60% per subscription by 2029.	Yes	2035
Telecom Egypt	No		No			
Telecom Italia	Yes	On this occasion, the TIM Group committed itself to reducing absolute Scope 1 and 2 GHG emissions by 75% by 2030 compared to the 2019 reference year, in addition to confirming the supply of 100% renewable electricity by 2025 and the intermediate target relating to the reduction of supply chain emissions.	No		Yes	2040
Telefonica	Yes	Targets Telefónica S. A commits to reduce absolute scope 1 and scope 2 GHG emissions 80% by 2030 from a 2015 base year.	Yes	Targets Telefónica S. A commits to reduce absolute scope 1 and scope 2 GHG emissions 80% by 2030 from a 2015 base year. Telefónica S. A commits to reduce absolute scope 3 GHG emissions 56% by 2030 from a 2016 base year.	Yes	2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Telkom Indonesia	Yes	The company aims to achieve a 20% reduction in Scope 1 and Scope 2 GHG emissions by 2030 compared to the 2023 base year.	No			
Telenor	Yes	Reduce scope 1 and 2 emissions by 64% within 2030, from a 2019 baseline. The target reduction for the Nordics operations is 95% and 50% reduction for the Asia operations.	No		Yes	2045
Telia	Yes	Telia Company commits to reduce absolute scope 1 and 2 GHG emissions 90.0% by 2030 from a 2018 base year.	Yes	Telia Company commits to reduce absolute scope 1 and 2 GHG emissions 90.0% by 2030 from a 2018 base year. Telia Company also commits to reduce absolute scope 3 GHG emissions 50.0% within the same timeframe.	Yes	2040
Telstra	Yes	Reduce our absolute scope 1+2 emissions by at least 70% by 2030 (up from 50%), from a FY19 baseline (T25 Scorecard).	Yes	Reduce our absolute scope 3 emissions by at least 50% by 2030, from a FY19 baseline.	Yes	2050
Tencent	Yes	Tencent commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2021 base year.	Yes	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.	Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Texas Instruments	Yes	Texas Instruments commits to reduce absolute scope 1 and 2 GHG emissions 42.0% by 2030 from a 2023 base year.	No			
Tokyo Electron	Yes	Targets recognized as SBTs Reducing absolute Scope 1 and 2 GHG emissions 70% by fiscal 2031, using fiscal 2019 as a baseline.	Yes	Reducing Scope 3 GHG emissions caused from the use of sold products by 55% per wafer processed by fiscal 2031, using fiscal 2022 as a baseline.	Yes	2040
Transsion	No		No			
Türk Telekom	Yes	Our science-based emissions reduction targets and SBTi commitments continue to form the foundation of our climate transition plan. We aim to reduce our Scope 1 and 2 emissions by 45% by 2030, compared to the 2020 baseline, and plan to achieve net-zero emissions by 2050.	No			
X	No		No			
Uber	Yes	Uber commits to reducing absolute Scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year.	Yes	Science Based Targets Near-term Uber commits to reducing absolute Scope 1 and 2 GHG emissions 42% by 2030 from a 2021 base year. 35 Uber also commits to reducing Scope 3 GHG emissions from use of sold products 34% per service kilometer within the same time frame.	Yes	2040

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
VEON	No		No			
Verizon	Yes	Verizon Communications Inc. commits to reduce absolute scope 1 and 2 GHG emissions 53% by 2030 from a 2019 base year. Target NA NA Near-term 1+2 1.5°C 2019 2030.	Yes	Verizon Communications Inc. commits to reduce absolute scope 3 GHG emissions 40% by 2035 from a 2019 base year.	Yes	
Viettel	No		No			
Vodafone	Yes	Vodafone Group commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2030 from a FY2020 base year.	Yes	Vodafone Group further commits to reduce absolute scope 3 GHG emissions 50% by FY2030 from a FY2020 base year.	Yes	2039
Western Digital	Yes	We have also committed to reduce our Scope 1 and 2 emissions by 42% by 2030 from a 2020 base year.	Yes	Additionally, we have committed to reduce Scope 3 use-phase emissions per terabyte by 50% by 2030 from a 2020 base year.	Yes	
Xiaomi	Yes	By no later than 2030, reduce GHG emissions from our existing business segments to 30% of the base year level.	No			2050
Yunji	No		No			
Zain	Yes	Near-Term Targets: Zain commits to reduce absolute Scope 1 and 2 GHG emissions by 42% by 2030 from a base year of 2020.	No		Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
ZTE	Yes	Targets ZTE Corporation commits to reduce absolute scope 1 and 2 GHG emissions 52% by 2030 from a 2021 base year.	Yes	ZTE Corporation also commits to reduce scope 3 GHG emissions from use of sold products 52% per TeraByte throughput within the same timeframe. Long-Term Targets 'ZTE Corporation commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2040 and maintain through 2050 from a 2021 base year. ZTE Corporation commits to reduce absolute scope 3 GHG emissions 90% within the same timeframe.	Yes	2040
SK Hynix	Yes	SK hynix has established long-term goals of achieving Net Zero and RE100 by 2050.	No			
SK Telecom	Yes	SK Telecom commits to reduce absolute scope 1 and 2 GHG emissions 45.7% by 2030 from a 2020 base year.	Yes	SK Telecom commits to reduce absolute scope 1 and 2 GHG emissions 45.7% by 2030 from a 2020 base year. SK Telecom also commits to reduce absolute scope 3 GHG emissions 22.3% within the same timeframe	Yes	2050

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Jio	Yes	Reliance Jio Infocomm Limited commits to reduce absolute scope 1 and scope 2 GHG emissions 76% by FY2028 from a FY2020 base year.	Yes	Reliance Jio Infocomm Limited commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated in operations, business travel and upstream leased assets 66.5% by FY2028 a FY2020 base year.	Yes	
Lenovo	Yes	Targets Lenovo commits to reduce absolute scope 1 and scope 2 GHG emissions 50% by FY2029/2030 from a FY2018/2019 base year.	Yes	Reduce Scope 3 GHG emissions (value chain) from use of sold products 35% on average for comparable products FY 2029/30, from a FY 2018/19 baseline.	Yes	2049
Tata Communications	Yes	42% Absolute reduction of Scope 1 and Scope 2 emissions by FY 29-30 (FY 21-22 baseline).	Yes	FY 2030 SBTI (Near term Targets) Reduce absolute scope 3 emissions by 25% from FY 2022 baseline.	Yes	2030
LG Electronics	Yes	LG Electronics Inc. commits to reduce absolute scope 1 and scope 2 GHG emissions 54.6% by 2030 from a 2017 base year.	Yes	LG Electronics Inc. commits to reduce absolute scope 1 and scope 2 GHG emissions 54.6% by 2030 from a 2017 base year. LG Electronics Inc. also commits to reduce scope 3 GHG emissions from use of sold products 20% per functional unit sold by 2030 from a 2020 base year.	Yes	

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Nintendo	No		No			
KT	Yes	KT aims to reduce greenhouse gas emissions by 51.7% by 2030 and 75.8% by 2040 compared to 2021 levels, and achieve carbon neutrality by 2050	No			
Palantir	Yes	However, Palantir continues to target 4.2% annual absolute linear reduction in gross greenhouse gas emissions across Scopes 1, 2, and 3 from our baseline year of 2019	Yes	However, Palantir continues to target 4.2% annual absolute linear reduction in gross greenhouse gas emissions across Scopes 1, 2, and 3 from our baseline year of 2019		
ServiceNow	Yes	ServiceNow Inc. commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2026 from a 2019 base year.	No		Yes	2030
Twilio	Yes	Twilio commits to reduce absolute scope 1 and 2 GHG emissions 54.6% by 2032 from a 2019 base year.	Yes	Twilio commits to reduce absolute scope 1 and 2 GHG emissions 54.6% by 2032 from a 2019 base year. Twilio also commits to reduce absolute scope 3 GHG emissions covering fuel- and energy-related activities and upstream leased assets 32.5% within the same timeframe.	Yes	
Zoom	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Ant	Yes	On April 22, 2021, Ant Group released a carbon-neutrality roadmap and commitment. From 2021, the (Scope 1 and Scope 2) carbon neutrality will be achieved in operation, and by 2025, the absolute Scope 1 and Scope 2 GHG emissions will be reduced by 30% as compared to the 2020 baseline year.	No			2030
Bezeq	No		No			2050
Liquid	No		No			
Stripe	No		No			
Infineon	Yes	Infineon Technologies AG commits to reduce absolute scope 1 and 2 GHG emissions 72.5% by 2030 from a 2019 base year.	No		Yes	
Atos	Yes	Atos commits to reduce absolute scope 1, 2 and 3 GHG emissions by 50% by 2025 from a 2019 base year.	No		Yes	
Toshiba Tec	Yes	2019 (Benchmark year) Reduce the total of Scope 1*1 and Scope 2*2 (GHG emissions generated from Toshiba Tec Group business activities) by 100% by FY2030. The target is set 97% reduction if the purchasing of carbon credits is excluded.	Yes	2019 (Benchmark year) Reduce GHG emissions from the use of sold products and services associated with power consumption*3 sold in Scope 3*4 by 28% by FY2030.		

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
Cognizant	Yes	Cognizant commits to reduce absolute scope 1 and 2 GHG emissions 77% by 2030 from a 2019 base year.	Yes	Cognizant commits to reduce absolute scope 1 and 2 GHG emissions 77% by 2030 from a 2019 base year. Cognizant also commits to reduce absolute scope 3 GHG emissions 47% within the same timeframe.	Yes	2040
Capgemini	Yes	Capgemini SE commits to reduce absolute scope 1 and 2 GHG emissions 80% by 2030 from a 2019 base year.	Yes	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. Capgemini SE commits to reduce absolute scope 3 purchased goods and services GHG emissions 50% by 2030 from a 2019 base year	Yes	2040
Skyworks	Yes	Having achieved this target ahead of schedule, we have strengthened our CO_2e emissions reduction target to reduce Scope 1 and 2 CO_2e emissions from factory operations by 85% by 2030 (from baseline year 2018).	No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
HPE	Yes	Reduce absolute Scope 1 and 2 GHG emissions by 70% by 2030 from a 2020 base year.	Yes	Reduce absolute Scope 3 GHG emissions by 42% by 2030 from a 2020 base year.	Yes	2040
STMicroelectronics	Yes	STMicroelectronics commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2025 from a 2018 base year.	Yes	ST aims to achieve a 10% reduction in its scope 3 upstream GHG emissions by 2030, and a 20% reduction by 2035, versus the baseline year 2024. The scope of the reduction target is identical to the inventory of the carbon footprint calculation for scope 3.1 to scope 3.8 categories. with specific focus on decarbonization on goods and services procurement (scope 3.1 and 3.2 categories).	Yes	2035
GoTo	Yes	GoTo commits to reduce absolute Scope 1 and 2 GHG emissions 83% by 2030 from a 2022 base year.	Yes	GoTo commits to reduce absolute Scope 1 and 2 GHG emissions 83% by 2030 from a 2022 base year. GoTo also commits to reduce absolute Scope 3 GHG emissions 51% within the same timeframe.	Yes	2050
Block	Yes	Block, Inc. commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by 2030 from a 2019 base year.	No		Yes	
Viasat	No		No			

Company	Does the company have a target to reduce Scope 1&2 emissions against a baseline year?	Target text	Does the company have a target to reduce its Scope 3 emissions?	Target text	Are the targets approved by SBTi?	Net zero year
TCS	Yes	TCS commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY 2030 from a FY 2016 base year. • TCS also commits to reduce absolute scope 3 emissions 35% by FY 2034 from a FY 2020 base year.	Yes	TCS also commits to reduce absolute scope 3 emissions 35% by FY 2034 from a FY 2020 base year.	Yes	
Coupang	No		No			
Wipro	Yes	TARGET 59% Reduction to be achieved in Scope 1 and Scope 2 emissions by 2030 from 2017 baseline	Yes	TARGET 55% Reduction to be achieved in Scope 3 emissions by 2030 from 2020 baseline	Yes	2040
Shopify	No		No			
Kakao	Yes	Kakao aims to achieve 60% renewable energy usage and reduce Scope 1 and 2 greenhouse gas (GHG) emissions by 40% by 2030,.	No			2040
VK	No		No			
Fiserv	Yes	In our 2023 CSR Report, we set out a near-term objective of reducing our scope 1 and scope 2 emissions by 50% from our 2019 baseline by 2030.	No			
Kuaishou	No		No			
Yandex	No		No			

Annex F: Climate transition plan example – Swisscom

Table F1: Elements, criteria and evidence for Swisscom reports

<table>
<tr><th>Element</th><th>Criteria</th><th>Evidence (quoted from Swisscom reports)</th></tr>
<tr><td>Transition plan publication</td><td>Part of periodic reports</td><td>Elements of the company transition plans are published in their annual reports.</td></tr>
<tr><td>Strategic ambition to achieve the transition plan</td><td>True</td><td>
<table>
<tr><th>SBTi targets Swisscom Group</th><th>Start year</th><th>Target year</th><th>Target</th><th>2024</th></tr>
<tr><td>Reduction of greenhouse gas emissions Scopes 1+2</td><td>2018</td><td>2030[1]</td><td>–80%</td><td>–37%</td></tr>
<tr><td>Reduction of greenhouse gas emissions Scope 3</td><td>2018</td><td>2030[1]</td><td>–60%</td><td>–20%</td></tr>
<tr><td>Reduction of greenhouse gas emissions Scopes 1–3</td><td>2018</td><td>2035[1]</td><td>–90%</td><td>–20%</td></tr>
</table>
[1]Interim target 2030; final target 2035.
[2]Residual emissions are offset through climate protection projects for CO_2 avoidance or removal.
<table>
<tr><th>Emissions scopes 1–3 in CO_2eq. tonnes</th><th>2024</th><th>2023</th><th>2024</th></tr>
<tr><td>Scopes 1+2</td><td>13 694</td><td>14 149</td><td>–3.2%</td></tr>
<tr><td>Scope 3</td><td>505 541</td><td>515 790</td><td>–2.0%</td></tr>
<tr><td>Total scopes 1–3</td><td>519 235</td><td>529 939</td><td>–2.0%</td></tr>
</table>
</td></tr>
<tr><td>Metrics and targets to monitor progress on the transition plan</td><td>True</td><td>Since 2016, Swisscom has been systematically switching from fossil fuel heating systems to heat pumps or using district heating and, where possible, heat recovery from its own operations to heat its buildings. It has also set itself the goal of electrifying its fleet by 2030. In doing so, it wants to reduce the direct emissions of its vehicle fleet by half between 2020 and 2025, and to zero by 2030. To this end, Swisscom ordered more than 1 200 electric vehicles at the start of 2024. The associated fuel savings led to a significant reduction in direct emissions. This allowed Swisscom to further reduce its Scope 1 emissions by 12 per cent compared to the previous year.</td></tr>
</table>

Element	Criteria	Evidence (quoted from Swisscom reports)
Implementation strategy for the transition plan	True	Since 2020, Swisscom has used investments in climate protection to make a climate contribution outside its value chain in addition to reducing CO_2 emissions. This contribution has corresponded to the level of residual emissions from all its customers' products and subscriptions since 2022. To achieve this, it invests in carefully selected climate protection projects that meet high quality and integrity standards in accordance with the Gold Standard, the Verified Carbon Standard (VCS) and the Plan Vivo Standard. In collaboration with the external partners myclimate, South Pole and First Climate, Swisscom invested in a total of five climate protection projects in the reporting year. The switch from fossil fuels to renewable energy sources is the main factor contributing to the reduction in Scope 1 emissions. By using certified electricity and district heating, Swisscom reduces its Scope 2 emissions from electricity and transfers them to the indirect emissions and thus the provision of electricity and district heating. Since 2016, Swisscom has been systematically switching from fossil fuel heating systems to heat pumps or using district heating and, where possible, heat recovery from its own operations to heat its buildings. It has also set itself the goal of electrifying its fleet by 2030. In doing so, it wants to reduce the direct emissions of its vehicle fleet by half between 2020 and 2025, and to zero by 2030. To this end, Swisscom ordered more than 1 200 electric vehicles at the start of 2024. The associated fuel savings led to a significant reduction in direct emissions. This allowed Swisscom to further reduce its Scope 1 emissions by 12 per cent compared to the previous year. Efficiency measures mentioned in the 'Energy efficiency' chapter reduce electrical energy consumption and help to minimise Scope 2 emissions. Swisscom also uses an electricity mix of 100 per cent renewable energy sources, the majority of which comes from wind power. It has been purchasing renewable district heating since 2019 and looks into new connections to the local district heating network wherever possible. and is having photovoltaic plants installed on its properties. The electricity produced is consumed primarily by the company itself, with any surplus being channelled into the grid. Swisscom installed 18 new photovoltaic plants in the reporting year. The total solar power plant output increased to 5 233 kWp as a result. Swisscom is stepping up the expansion of photovoltaic plants at its locations between now and 2026.
Governance embedding of the transition plan	True	Group Communications & Responsibility: The Group Communications & Responsibility (GCR) division coordinates the ESG measures on an operational level. It provides the relevant expertise to enable decisions to be made and supports the CEO, Group Executive Board, Board of Directors and subsidiaries in matters relating to sustainable development. These include, among other things, the development and implementation of the ESG strategy and coordination in the definition of material non-financial matters, including the goals, measures and involvement of interest groups. The GCR division is responsible for regular reporting to the Group Executive Board and the Board of Directors. Among other things, this includes implementation progress, planned activities and important developments regarding sustainability (including relevant climate risks and opportunities).
Engagement strategy for the transition plan	True	We rely on cooperation and collaboration with suppliers and international telecom peers to accelerate the transformation. Scaling our efforts through the JAC industry alliance means we are excellently positioned to accelerate changes in the global ICT industry.

Element	Criteria	Evidence (quoted from Swisscom reports)
Material emissions covered by transition plan	Own operations, upstream, downstream	We are committed to achieving net-zero greenhouse gas emissions across the entire value chain by 2035 in accordance with the Science Based Targets initiative, SBTi. In doing so, we are committed to reducing our absolute Scope 1, 2 and 3 greenhouse gas emissions by 90 per cent by 2035, as against our baseline year 2018 and neutralising the remaining maximum 10 per cent.
Actions to influence suppliers/ investors/savers in reducing GHG emissions	Innovation and collaboration, Information collection, Engagement and incentivization	Reduce CO_2 emissions in the value chain: carbon reduction programme with suppliers, circular proprietary products. CO_2 emissions in our supply chain: every year, we purchase CO_2-relevant goods and services worth over CHF 3.4 billion. In total, we work with over 3 000 suppliers in more than 150 commodity groups. Two thirds of our indirect emissions in the value chain are generated in the production and delivery of the network infrastructure, IT, merchandise and services we purchase. Our procurement team ensures compliance with procurement regulations and due diligence. It is attached to the Group Business Steering division and is therefore the responsibility of the CFO. Mitigating the effects of climate change can only be achieved through long-term collaboration. That's why, along with other telecoms providers, we are an active member of J JAC (Joint Alliance for CSR). True to the motto 'Cooperation beyond competition', we are working together as an industry to decarbonize supply chains. Challenges in the reporting year and how we deal with it: The supply chain is not only our largest source of emissions, but also one of the most complex ones. Accordingly, we faced challenges in managing supply chain emissions in the reporting year: • Volatile CO_2 reporting from key suppliers due to more precise emission reporting as well as regular GHG recalculations of our suppliers. • Changes in procurement type and spend depending on the business needs. • AI as an emissions driver. In order to take the volatile changes in the reported supply chain emissions into account also historically, we carry out regular recalculations. The last recalculation took place in 2023. Another recalculation is planned for 2025, where we will consider the newest CO_2 data available from our suppliers all the way back to our base year 2018. This will allow us to better compare current emissions with our base year emissions and thus, enable us to follow our reduction path more precisely. We will also switch from a spend-based to an activity-based methodology for certain products. This will provide us with a more reliable database and enable us to implement more targeted measures to further reduce our product emissions.
Deliberate objective of influencing GHG emissions reduction along the supply chain disclosed	True	The Supplier shall take action to address climate change. Its task should be to identify, monitor and minimise greenhouse gas (GHG) emissions from its business activities. Supplier should have a plan in place to reduce energy consumption and shall calculate the GHG emissions from its own operations (scope 1 & 2 emissions). The GHG inventories should be calculated in accordance with the GHG protocol. Supplier will provide Swisscom with the corresponding data upon request.

Element	Criteria	Evidence (quoted from Swisscom reports)
Percentage of supplier-related emissions/ procurement spending/source funding (for investors only)/ savings (for banks only) applied to engagement	50 per cent	In 2024, 146 suppliers (2023: 124) disclosed their footprint. The reporting companies account for a spend share of 50 per cent.
Actions to influence clients/ consumers to reduce GHG emissions	Education\ information sharing, collaboration and innovation	According to various studies, the J ICT industry can make its greatest contribution to environmental and climate protection by enabling its customers to reduce their emissions through sustainable digital services. In the reporting year, for example, digitalswitzerland published the study 'Smart and Green – Digital Pathways to net-zero' in cooperation with Accenture. It states that up to 20% of the reduction of greenhouse gases in Switzerland needed by 2030 can be achieved through the use of digital technologies in mobility, buildings, agriculture, industry and energy systems. For corporate customers, which also includes cities and municipalities, we offer the following product groups for reducing CO_2 emissions. • Climate protection solutions for our customers: For corporate customers, which also includes cities and municipalities, we offer the following product groups for reducing CO_2 emissions. • Work Smart: solutions for video conferencing and working from home. Thanks to our services, customers can eliminate some of their travel by communicating remotely by video and audio and remotely exchanging data. Savings in this area have fallen again, following an increase during the COVID-19 pandemic. • IoT solutions: The Internet of Things (IoT) enables data-based control of devices, buildings and vehicles in real time, making systems more efficient and better at conserving resources. We hold competitions such as the IoT Climate Award and the StartUp Challenge to find and promote IoT companies with climate-friendly services. www.swisscom.ch/iot • Virtualization and centralization of data centres: Our J cloud and housing services enable our customers to give up their own data centres and servers and outsource them to highly efficient data centres, largely operated with virtualised servers. • Extending the service life of electronic devices: We refurbish used but still functional mobile phones, laptops, tablets, J routers and TV-Boxes so that they can be used again. In the case of mobile phones, these are reused as low-cost devices in Switzerland or in emerging countries.
Actions to influence clients/ investees to reduce GHG emissions		
Deliberate objective of influencing client/investee GHG emissions reduction disclosed	True	Energy-optimised operation of devices: We aim to reduce the energy consumption of our customers' end devices and to provide them with information about the various energy-saving options available. We also offer recommendations for solutions that can be implemented to optimise the energy consumption of end devices.

Element	Criteria	Evidence (quoted from Swisscom reports)
Percentage of client-related emissions applied to engagement		
Suppliers/ clients required to establish quantified GHG emissions reduction targets	True	Supplier shall reduce GHG emissions from its business activities. Supplier should have a plan in place to reduce energy consumption and shall calculate the GHG emissions from its own operations (scope 1 & 2 emissions). The GHG inventories should be calculated in accordance with the GHG protocol. Supplier will provide Swisscom with the corresponding data upon request. Supplier should have a full assessment of their value chain emissions (scope 3). Supplier should set a target to bring its emissions into line with the Paris Agreement on Climate Change. This target should be validated by the Science Based Target Initiative or an association that verifies the same level of ambition. Supplier is familiar with the Life Cycle Assessment of its products and/or services and may, if possible, submit the result of the CO_2 footprint calculation over the entire lifecycle in accordance with ISO 14044.
Suppliers/clients required to have established transition plans	True	Supplier shall reduce GHG emissions from its business activities. Supplier should have a plan in place to reduce energy consumption and shall calculate the GHG emissions from its own operations (scope 1 & 2 emissions). The GHG inventories should be calculated in accordance with the GHG protocol. Supplier will provide Swisscom with the corresponding data upon request. Supplier should have a full assessment of their value chain emissions (scope 3). Supplier should set a target to bring its emissions into line with the Paris Agreement on Climate Change. This target should be validated by the Science Based Target Initiative or an association that verifies the same level of ambition. Supplier is familiar with the Life Cycle Assessment of its products and/or services and may, if possible, submit the result of the CO_2 footprint calculation over the entire lifecycle in accordance with ISO 14044.

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