Greening Digital Companies
Report 2024

Monitoring emissions and climate commitments

Greening Digital Companies 2024 – Key Highlights

Key takeaways

What are the main findings? What is the report/publication saying that is new?

- The report, now in its 3rd edition, presents a detailed analysis of GHG emissions and energy use data from 200 digital companies, as well as insights into best practices aimed at improving companies' emission reduction performance.
- The 2024 edition of the report highlights a concerning trend: while the digital sector is rapidly advancing, its environmental impact is worsening. Despite the industry's commitment to a twin transition - embracing both digital growth and environmental sustainability - this report reveals an overall decline in progress towards climate goals across the 200 companies. GHG emissions and energy consumption have increased, while transparency and accountability have declined. These developments do not yet fully account for the growing impact of AI technologies, which are poised to further strain energy resources and exacerbate emissions. Digital companies must address their environmental footprint, and improve reporting and transparency. Most digital companies have not submitted an emissions reduction targets aligned with the Paris Agreement's 1.5°C goal.
- The report highlights the need for more comprehensive and transparent data reporting as not all digital companies fully disclose their emissions. While 166 digital companies disclose their operational or Scope 1 & 2 emissions, a significant portion of their carbon footprint related to their value-chain or Scope 3 emissions -- including suppliers, transportation and product use -- remains underreported (125 companies do not fully disclose a full Scope 3 emission inventory). Many companies face challenges in accurately calculating and attributing Scope 3 emissions, including a lack of data from suppliers, double counting, and inconsistent application of emission allocation principles.
- The report reveals that the race to develop artificial intelligence and expand data centers is fueling a sharp rise in emissions and energy consumption.
- The digital sector can play a pivotal role in achieving global climate goals, but so far is not living up to that potential. The digital sector can drive climate change monitoring, energy optimization, and the adoption of low-emission technologies. The trajectory of digitalization will have profound implications for our environment and the future of our planet. Digital tech companies stand at the forefront of the global transition to a net-zero society.

ITU World Benchmarking Alliance

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How does it help the work of our stakeholders?

- Addressing the complexities of GHG emission reporting in the digital sector requires concerted efforts towards standardization, transparency, and ambitious reduction targets. By improving Scope 3 emission reporting, digital companies can strengthen sustainability initiatives and contribute meaningfully to global climate and environment goals. Third-party verification, improved methodologies and regulation are essential for enhancing transparency and accuracy.
- The widening gap between digital expansion and sustainable practices underscores the urgent need for more robust and genuine commitments to mitigate the sector's escalating environmental footprint.
- The report highlights the need for more comprehensive and transparent data reporting. In this context, WTIS and EGTI play a key role in building global consensus through identifying harmonized indicators and best practices and ensuring reliable data for informed decision-making and policy development. The findings of this report will be discussed at WTIS and EGTI in relation to the importance of developing new indicators to measure the environmental footprint of the digital sector. As regulatory bodies tighten reporting requirements, there is a growing need for governments to implement monitoring of national digital sector emissions and energy use – currently ARCEP, the French regulatory agency, is leading such efforts. ITU is committed to supporting such endeavors to drive the digital sector towards a more sustainable and low-carbon future.
- The report also highlights how governments have a major role to play in liberalizing energy markets, accelerating green energy availability, and investing in grid modernization, including energy storage technologies. Digital companies have shown a huge appetite to invest in renewables, but green energy needs to be made available at the locations where the companies operate. More work is needed between ministries of ICT, environment and energy to create such conditions.

Key statistics

- Data from this report highlights that the 200 companies assessed collectively account for nearly 1 per cent of global GHG emissions and around 2 per cent of electricity use. The actual numbers are certainly higher since companies do not report across all GHG emission categories.

- Of the 200 companies reviewed, the report found that Scope 3 emissions are, on average, over six times greater than operational (Scope 1 and 2) emissions, underscoring their critical role in a company carbon footprint. Only 75 of the 200 companies fully disclose Scope 3 emissions, and just 42 companies have committed to reducing these emissions across all relevant categories, underscoring the need for more comprehensive and transparent reporting practices. There is significant potential for carbon reduction in this area. It also highlights the importance for the 125

companies which do not disclose a full Scope 3 emission inventory to track and monitor these emissions.

- The report sheds light on the disparities in renewable energy adoption across regions. 103 companies provided data on the proportion of renewables they purchased in 2022. Notably, 16 companies reported sourcing 100 per cent renewable electricity. While companies headquartered in Europe lead in sourcing 100 per cent renewable electricity, those in East Asia dominate in overall electricity consumption, often relying heavily on non-renewable sources. Four companies (Alphabet, Amazon, Microsoft and Deutsche Telekom) purchase 100 per cent renewable electricity although they are not always getting it where they need it. This imbalance highlights the need for a more equitable global approach to energy sustainability in the digital sector.

- Regarding Scope 1 and 2 emissions reductions, 103 digital companies have submitted a target to the Science Based Target initiative (SBTi). However, only 69 have been validated by SBTi and they cover only 19 per cent of the 200 companies' total emissions. Only 73 companies have a Scope 3 target. Only 27 digital companies (14 per cent of the 200 assessed) have a non-intensity-based Scope 3 target that covers all relevant categories and for which the base year emissions can be determined. Eighteen companies are on track vis-a-vis their targets for a reduction from the baseline in Scope 3 emissions. Scope 3 emissions are rising in the other 9 companies. The vast majority of digital companies have no or non-measurable Scope 3 targets.

- The findings reveal that Google, Amazon, and Microsoft saw a 62 per cent rise in their combined operational GHG emissions in 2023 compared to 2020, reaching 47 million metric tons in 2023, and a 78 per cent increase in electricity usage, now over 100 TWh - equivalent to the energy consumption of the Philippines. These companies are making significant investments in renewable energy, yet the challenges of integrating these resources, especially as AI-driven energy demands grow, remain substantial. Despite a handful of companies setting ambitious climate targets, many are now facing challenges meeting these amid the growing energy needs of AI technologies.