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ESG Metrics for Mobile Benchmarking 2024

February 2025

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Intelligence

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GSMA Intelligence is relied on by leading operators, vendors, regulators, financial institutions and third-party industry players to support strategic decision-making and long-term investment planning. The data is used as an industry reference point and is frequently cited by the media and by the industry itself.

Our team of analysts and experts produce regular thought-leading research reports across a range of industry topics.

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Executive summary

Key takeaways

1 

Harmonising ESG metrics – The mobile industry has developed a set of core ESG KPIs, known as ESG Metrics for Mobile. These KPIs complement existing disclosures by operators and are categorised into environment, digital inclusion, digital integrity and supply chain. In 2024, 24 operators (covering nearly one-third of global mobile connections) provided data to GSMA Intelligence for an ESG benchmarking study, highlighting operators' strong interest in communicating and evaluating their ESG performance through a standardised set of metrics.

2 

Improving transparency through detailed emissions reporting – All 24 operators participating in ESG Metrics for Mobile benchmarking in 2024 disclosed Scope 1 and 2 emissions (operational emissions), reporting an average year-on-year decline of 7%. Moreover, 23 out of the 24 operators disclosed Scope 3 emissions. Over half of these operators disclosed 10 or more categories, while 40% reported emissions from all five key Scope 3 categories (1, 2, 3, 11 and 15) which account for more than 90% of the industry's Scope 3 emissions.

3 

Supporting digital inclusion – A lack of literacy and digital skills hinder mobile internet adoption and usage, underlining the importance of operators' digital skills programmes. During the reporting period, operators participating in the ESG benchmarking delivered digital skills training to approximately 1% of their subscriber base on average. While it might seem modest, this percentage translates to more than 57 million people when considering the total global mobile subscriber base of 5.7 billion individuals.

4 

Ensuring privacy and transparency – More than 85% of participating operator groups reported having a policy covering consumers' digital rights. These policies vary in depth across operators, with the most comprehensive ones addressing privacy, transparency, freedom of expression, government requests for data and government mandates to shut down or restrict access. Meanwhile, 100% of operator groups participating in the benchmarking have implemented controls and programmes to enhance online safety for children and vulnerable individuals.

5 

Integrating ESG criteria into procurement decisions – Nearly all participating operators indicated that they have implemented a sustainable procurement policy. Of those operators who provided details on their policy's scope, at least 80% included provisions addressing labour practices, environmental concerns, fair operating procedures, human rights and organisational governance. Operators with the most comprehensive sustainable procurement policies also addressed consumer issues and community involvement and development.

Four key numbers to note

75%

Percentage of operators participating in the ESG Metrics for Mobile 2024 study who reported a year-on-year decline in Scope 1 and 2 emissions

The reduction in reported Scope 1 and 2 emissions reflects energy efficiency efforts in networks, data centres and offices, as well as the electrification of fleets and generators. Improvements have also been driven by the shift to renewable energy consumption.

13%

Used mobile devices collected through operator take-back schemes as a percentage of new mobile devices distributed directly to customers in the reporting period

Leading operators have set a target for the number of used mobile devices collected through take-back schemes to reach at least 20% of new mobile devices distributed by 2030. Three operators participating in our analysis have already met this goal.

4%

Median retail price of cheapest entry-level smartphone sold by operators (as a % of monthly GDP per capita)

However, in two countries, the retail price of the cheapest entry-level smartphone exceeded 15% of monthly GDP per capita. Meanwhile, the retail price of the cheapest entry-level smartphone (relative to monthly GDP per capita) was between 1-2% in some high-income countries, highlighting the disparity in affordability.

80%

Percentage of operators who reported no data breaches in the past year

Of those who did report a data breach, about 0.01% of subscribers were affected by the data breaches on average. Additionally, three participating operators reported facing regulatory action for data protection violations during the reporting period.

All figures presented on this slide pertain to operators participating in the ESG Metrics for Mobile 2024 benchmarking study, unless otherwise specified

Context

ESG Metrics for Mobile

Development of industry-specific KPIs – Through consultations and workshops with mobile operators, industry stakeholders and subject matter experts, a set of core KPIs has been developed for the mobile industry. The KPIs are designed to complement and build on the disclosures that many operators are already making through their reporting frameworks.

Alignment with established standards – The industry ESG metrics align to existing standards, guidance and methodologies where possible. This includes those established by the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB) and the European Sustainability Reporting Standards (ESRS).

What's included and why – The industry KPIs are organised into four categories (see right). They have been selected on the basis that they are comparable, will be relatively easy to introduce now, are meaningful to external stakeholders and are useful for internal decision-makers. The KPIs provide a lens through which companies can identify and manage emerging opportunities and risk while demonstrating to stakeholders how their corporate purpose is brought to life. Furthermore, the framework creates an opportunity for the industry to amplify its environmental and social impact by aligning operators around the same 'north star' KPIs.

For detailed guidance on the ESG Metrics for Mobile, please see the ESG Metrics for Mobile White Paper, GSMA and EY, June 2024

Figure 1: ESG Metrics for Mobile framework

ENVIRONMENT	DIGITAL INCLUSION	DIGITAL INTEGRITY	SUPPLY CHAIN
Emissions	**Network coverage**	**Data protection**	**Sustainable supply chain**
◊ Science-based targets » Scope 1, 2 and 3 emissions	» Population covered by mobile network	» Customer data incidents	◊ Sustainable procurement policy » Supplier assessments
Energy	**Affordability**	**Digital rights**	
» Energy consumption	» Device and subscription affordability	◊ Digital rights policy	
Circular economy	**Digital skills**	**Online safety**	
» Circularity » Electronic waste	» Digital skills programmes	◊ Online safety measures	

◊ Yes/No questions
» KPIs

ESG Metrics for Mobile – 2024 benchmarking

Background – Partnering with a global set of operators, the GSMA ESG Metrics for Mobile benchmarking is based on fully anonymised data inputs, with goals of improving the standardisation of ESG reporting across the mobile industry and tracking operator progress on these metrics. This research is set against a context of broader efforts to address climate change and incorporate sustainable business practices into the telecoms sector and its supply chain.

Growing participation – In the 2023 ESG Metrics for Mobile pilot programme, 10 operators submitted FY 2022 data to GSMA Intelligence to gain insights into the landscape and progress of their ESG efforts. In 2024, 24 operators (representing nearly one-third of global mobile connections) submitted FY 2023 data as part of the ESG Metrics for Mobile benchmarking study, demonstrating the growing interest among operators in evaluating their ESG performance across a standardised set of metrics.

2025 and beyond – We intend to extend this into a multi-year study with a wider group of industry participants to increase the representativeness and direct applicability of the research. For more information on the project or to become directly involved, please contact **info@gsmaintelligence.com** including the subject header 'ESG Metrics for Mobile'. In addition to public-facing research, participating operators will receive customised reports on their own ESG performance compared to industry peers on an anonymised basis.

Figure 2: ESG Metrics for Mobile benchmarking – key figures

	2023	2024
Number of participating operators	10	24
Market share (participating operators' share of global mobile connections)	11%	31%
Total metrics submitted	234	753
Metrics submitted per operator	23	31
Average response rate per metric	54%	67%

Note: company logos denote operators participating in the 2024 benchmarking

ESG Metrics for Mobile – disclosure

Differences in KPI disclosure – The ESG Metrics for Mobile reporting framework encompasses a range of KPIs, from well-established ones around science-based targets and Scope 1, 2 and 3 GHG emissions to emerging and less-tested indicators in areas such as circularity. As a result, there was some variation in the reporting levels across the different KPIs among operators participating in the ESG benchmarking study.

On the right path – The 2024 benchmarking study has shown an increase in the number of operators submitting data on KPIs within each ESG Metrics for Mobile metric family compared to the 2023 pilot programme. However, further progress is needed. Enhancing ESG reporting requires ongoing industry dialogue to establish best practices and ensure KPIs remain relevant. It also necessitates leadership alignment with ESG goals and employee education on the importance of sustainability reporting and their role in it.

Tracking progress – From slide 11 onwards, we evaluate operator submissions and performance across the key metrics outlined in the ESG Metrics for Mobile framework. In addition, maximum, minimum, median and mean figures for each of the KPIs can be found in the appendix.

Figure 3: Number of participating operators disclosing data for each metric family

ESG Metrics for Mobile metric family	Rating
Science-based targets	●●●
Scope 1, 2 and 3 GHG emissions	●●●
Energy consumption	●●●
Circularity	●
Electronic waste	●●
Population covered by mobile network	●●●
Device and subscription affordability	●●
Digital skills programmes	●●
Customer data incidents	●●
Digital rights policy	●●
Online safety measures	●●●
Sustainability procurement policy	●●●
Supplier assessment	●●

● = Less than one-third of operators submitted data on at least one metric
●● = Between one-third and two-thirds of operators submitted data on at least one metric
●●● = More than two-thirds of operators submitted data on at least one metric

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Environment

Climate targets

Setting near-term targets – As of January 2024, 70 mobile operators have committed to science-based targets (SBTs), accounting for 68% of revenue and nearly half of mobile connections. Analysing operators participating in the ESG Metrics for Mobile benchmarking, 23 out of the 24 have committed to SBTs. Among these 23 operators, 21 have had their targets validated by the Science-Based Targets Initiative (SBTi), with the two remaining operators in the process of doing so.

Making longer term goals – In addition to near-term science-based targets, 53 operators have also set longer-term targets to achieve net zero emissions. Among participating operators in the ESG Metrics for Mobile benchmarking, 19 have set net zero targets. From this cohort, 10 aim to achieve net zero emissions by 2050, three by 2025 and the remaining six by 2040. Moreover, 16 operators participating in the ESG benchmarking have submitted their net zero targets to the SBTi and had them validated by a team of technical experts.

Figure 4: Science-based targets and net zero targets

Source: GSMA Intelligence

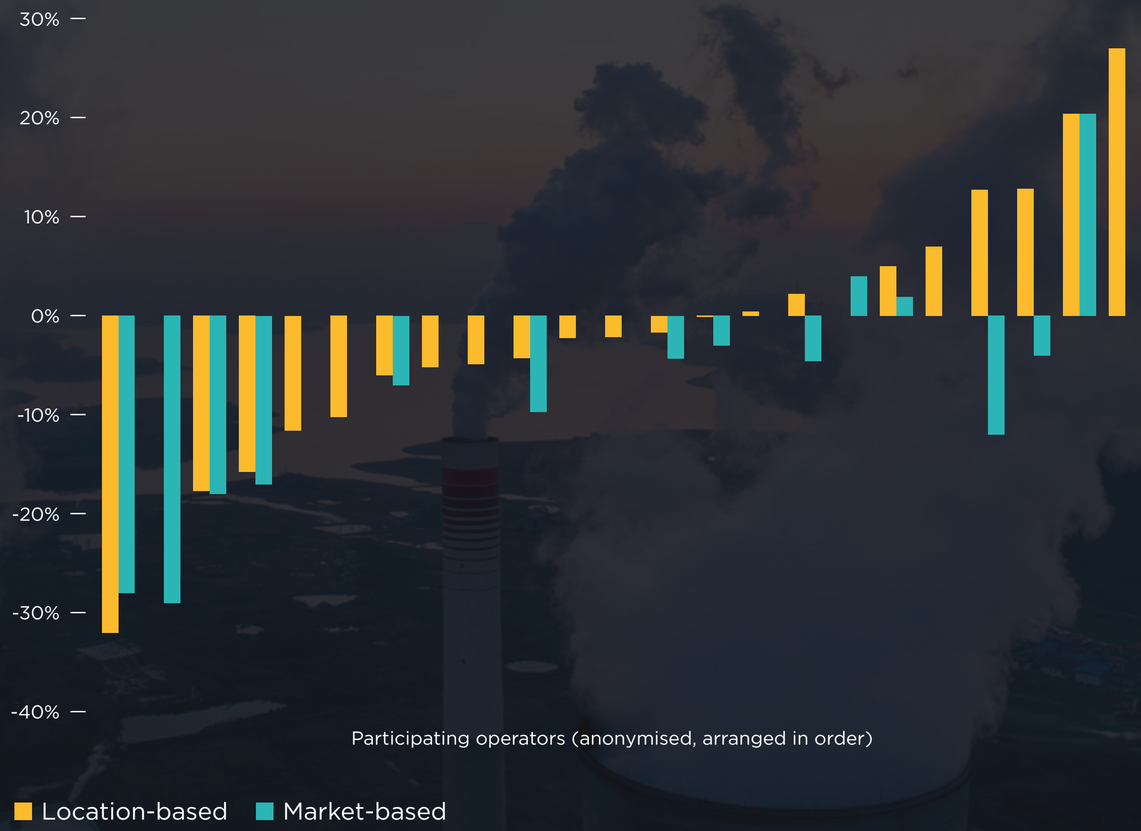
Scope 1 and 2 emissions

Location vs market-based reporting – All 24 operators participating in ESG Metrics for Mobile benchmarking in 2024 disclosed Scope 1 and 2 emissions (operational emissions). Two-thirds of those operators provided market-based Scope 2 emissions data, while the remaining third submitted only location-based data on Scope 2 emissions.

Scope 1 and 2 emissions continue to fall – Analysing data from those operators who submitted market-based emissions for Scope 2, 13 out of 16 operators reported a decrease in operational emissions. This trend was consistent across those operators who provide location-based data for Scope 2 emissions, with five out of eight operators providing location-based data reporting a fall in operational emissions.

Explaining the differences – Reductions in reported Scope 1 and 2 emissions reflect energy efficiency efforts in networks, data centres and offices, as well as the electrification of fleets and generators. Improvements have also been driven by the shift to renewable energy consumption, as highlighted on slide 14. Moreover, large year-on-year swings in operational emissions for some operators in the study are due to methodological changes, such as including more subsidiaries in their reporting.

Figure 5: Year-on-year (YoY) change in Scope 1 and 2 emissions



Source: GSMA Intelligence

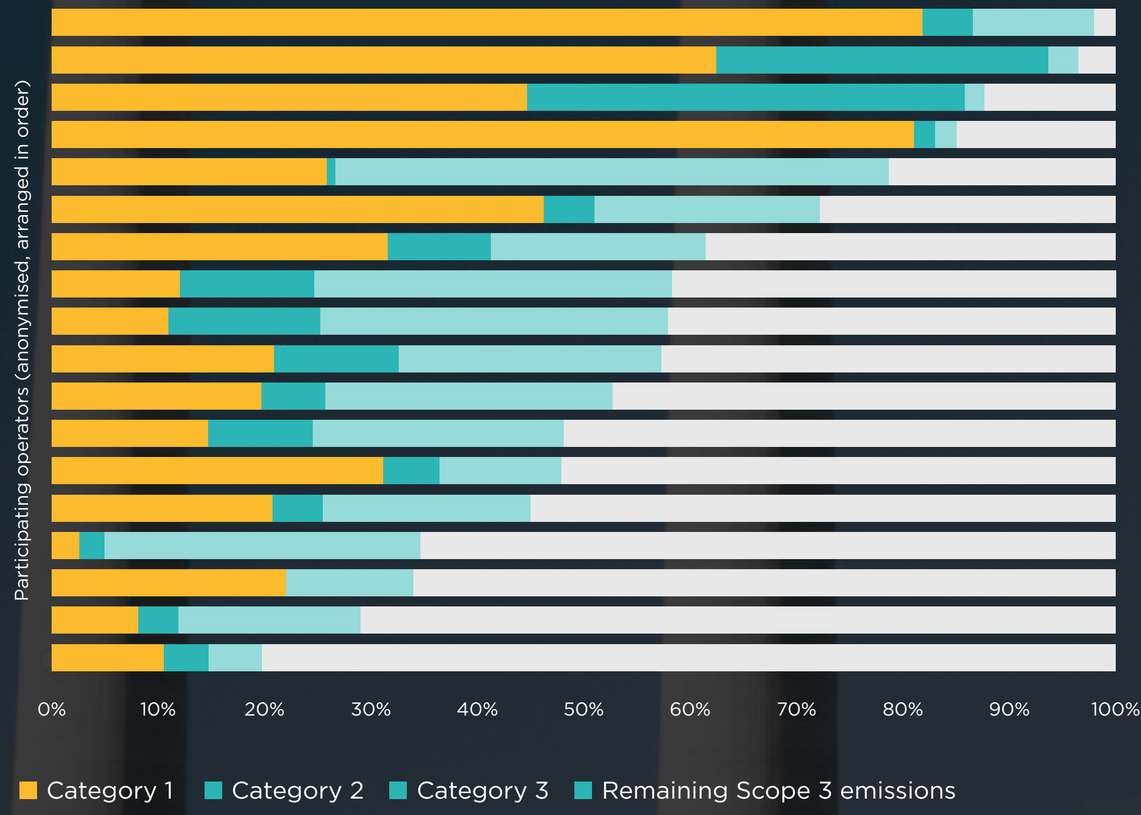
Scope 3 emissions

Stakeholder engagement is key – Analysing data from participating operators in the ESG Metrics for Mobile 2024 benchmarking, around three-quarters of the mobile industry's carbon emission come from its value chain (Scope 3), highlighting the importance of engaging supply chains and customers.

Scope 3 reporting is becoming more granular – 23 out of the 24 operators participating in ESG Metrics for Mobile benchmarking in 2024 disclosed Scope 3 emissions. More than half of these operators disclosed 10 or more categories, while 40% reported emissions from all five key Scope 3 categories (1, 2, 3, 11 and 15) which account for more than 90% of the industry's Scope 3 emissions.

Explaining the differences – As noted in the GSMA Mobile Net Zero 2024 report, the relative shares of Scope 3 emissions from different categories can differ substantially between operators and regions. Some of these differences may stem from actual differences in their businesses (e.g. large conglomerate with large operations in other sectors vs a company that only operates mobile networks), while others may come from methodological differences or a lack of data.

Figure 6: Scope 3 emissions by category



Source: GSMA Intelligence

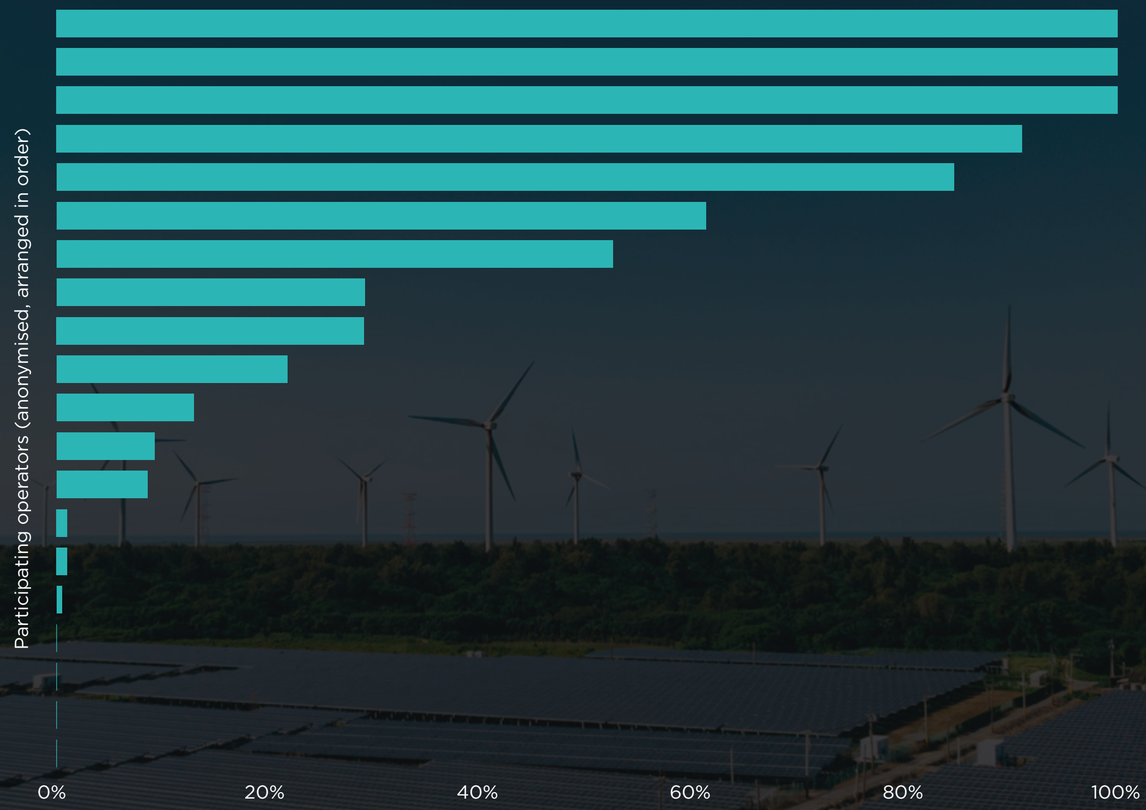
Energy sourcing

Europe leads the way – Among participating operators who provided data on purchased electricity, the weighted average share of electricity use from purchased renewables was 52%*. This figure was highest in Europe, with some operators reporting that 100% of the electricity they purchased came from renewable sources. This reflects the region's ambitious sustainability targets, which have driven higher adoption of renewable energy.

Challenges persist – Four operators reported not purchasing any electricity from renewable sources. This reflects the lack of options for companies to purchase renewables in many countries. Limited access to direct power purchase agreements (PPAs), underdeveloped renewable energy infrastructure and restrictive policies can all hinder procurement efforts.

Steps to scale renewables – Mobile operators can leverage their financial stability to act as reliable offtakers and partners in power projects. Additionally, they can engage in initiatives to advocate for policy reforms and share best practices. An example of such an initiative is the Asia Clean Energy Coalition, which aims to accelerate the demand and supply of renewable energy across Asia.

Figure 7: Purchased electricity from renewable sources as a percentage of total purchased electricity



Source: GSMA Intelligence

* These figures exclude non-purchased renewable and low-carbon sources from grid electricity, which varies significantly between countries.

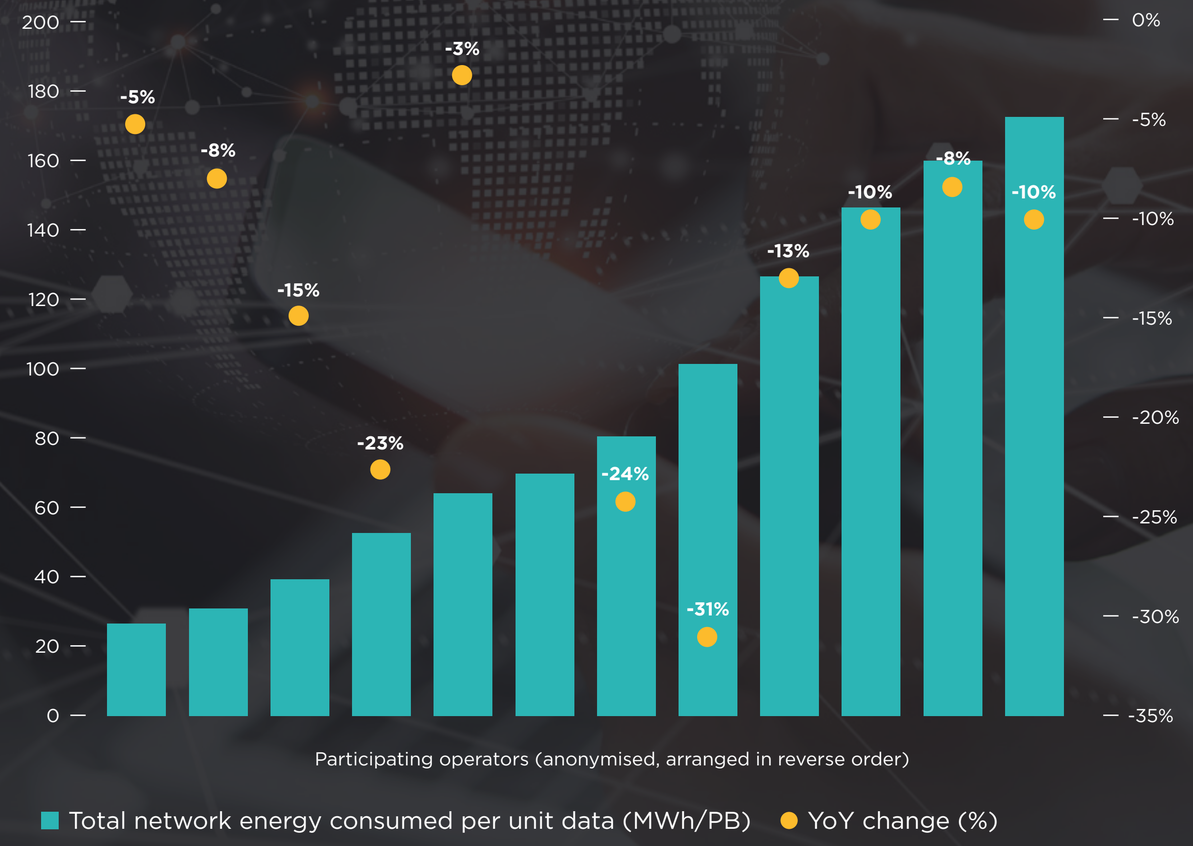
Network energy consumption

Network energy efficiency metrics – There are different ways to measure the energy efficiency of networks. As highlighted in the GSMA Mobile Net Zero report, the most common reported metric by operators is the energy intensity of data transmission (i.e. energy use per unit data), typically reported in kWh per gigabyte (kWh/GB) or megawatt-hours per petabyte (MWh/PB). Operators that report this metric typically report based on company-wide or network-wide energy use.

Solid progress – Half of operators participating in the ESG Metrics for Mobile benchmarking study provided information on total network energy consumed per unit of data (MWh/PB). In comparison, only five operators provided information on total network energy consumed per subscription (KWh per subscription). The data submitted on total network energy consumed per unit of data (MWh/PB) showed improvements across the board, with year-on-year reductions ranging from -3% to -30%.

Explaining the differences – Of the participating operators, half performed in the 25-70 MWh/PB range. Values outside of this range can be explained by inefficient networks and variations in data usage driven by consumer habits and operational differences, such as mobile-only operators versus those offering both fixed and mobile service.

Figure 8: Total network energy consumed per unit data (MWh/PB) and YoY change



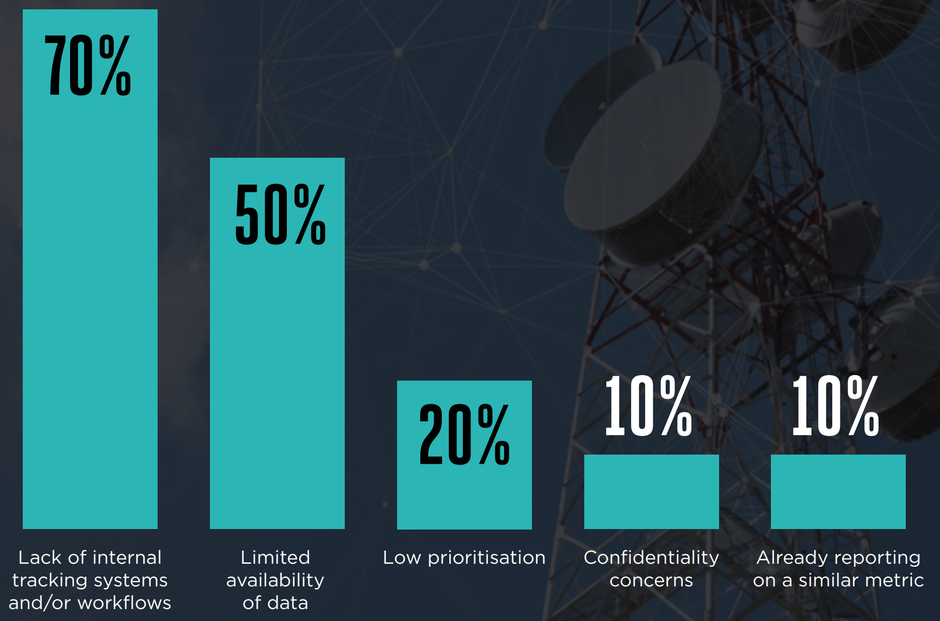
Source: GSMA Intelligence

Circularity of network equipment

Lack of internal systems and available data – Only a few participating operators provided data on metrics related to the circularity of network equipment, reflecting that this is an evolving area with fewer established metrics. Our survey of operators highlights two key points related to this. Firstly, many operators do not have established processes, tools or workflows to track data such as reuse, repair or sale of decommissioned equipment. Additionally, even when such systems exist, operators say they face challenges in providing sufficient information on circularity metrics due to limited data availability, which may result from gaps in supplier reporting or internal records.

New initiatives aim to facilitate equipment reuse – Among those operators who provided data on the percentage of network equipment decommissioned that was repaired, reused or sold to another company, the reported share ranged from 7% to 39%. Leading operators have established marketplaces to re-sell and repurpose large network equipment items (e.g. masts and antennae) to internal opcos and other operator groups. To help operators without such platforms, the GSMA and Shields have launched the GSMA Equipment Marketplace to facilitate the reuse of network equipment among GSMA members. This initiative aims to increase the buying and selling of used equipment by leveraging the GSMA's global reach.

Figure 9: What are the primary reasons your company does not currently report on the circularity of network equipment metrics included in the ESG Metrics for Mobile? Select two options.



Source: GSMA Intelligence
N = 10 operators

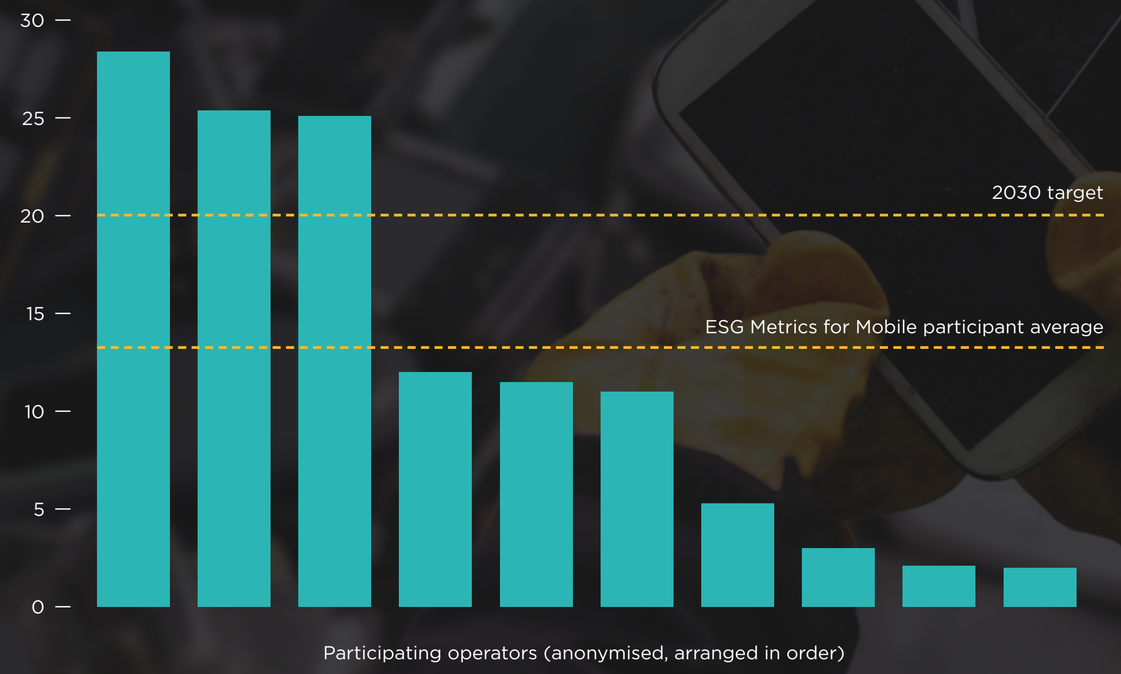
Circularity of mobile devices

A solid start on new circularity targets for mobile phones – In June 2023, the GSMA announced that leading operators had set two new targets to reduce the environmental impact of mobile phones. The first target is for the number of used mobile devices collected through operator take-back schemes to reach at least 20% of the number of new mobile devices distributed to customers by 2030. Analysis indicates that three operators participating in the ESG benchmarking have exceeded this goal, while the average among the 10 operators who provided data on this metric is 13%.

No device should end up as waste – The second target is to ensure that all used mobile devices collected through operator take-back schemes are either repaired, reused or transferred to controlled recycling organisations by 2030. Of the 10 participating operators that submitted data on this metric, eight have already met this target, with the remaining two operators reporting diversion rates above 97%.

Context is key – In addition to the two aforementioned circularity targets, the ESG Metrics for Mobile framework asks operators to report the percentage of refurbished, repaired or used mobile devices distributed to customers for reuse in the reporting period as a share of all mobile devices distributed directly to customers in the reporting period. Only three operators provided data on this indicator, despite its value in contextualising progress on devices collected through take-back schemes.

Figure 10: Used mobile devices collected through operator take-back schemes in the reporting period as a percentage of new mobile devices distributed directly to customers in the reporting period (%)



Source: GSMA Intelligence

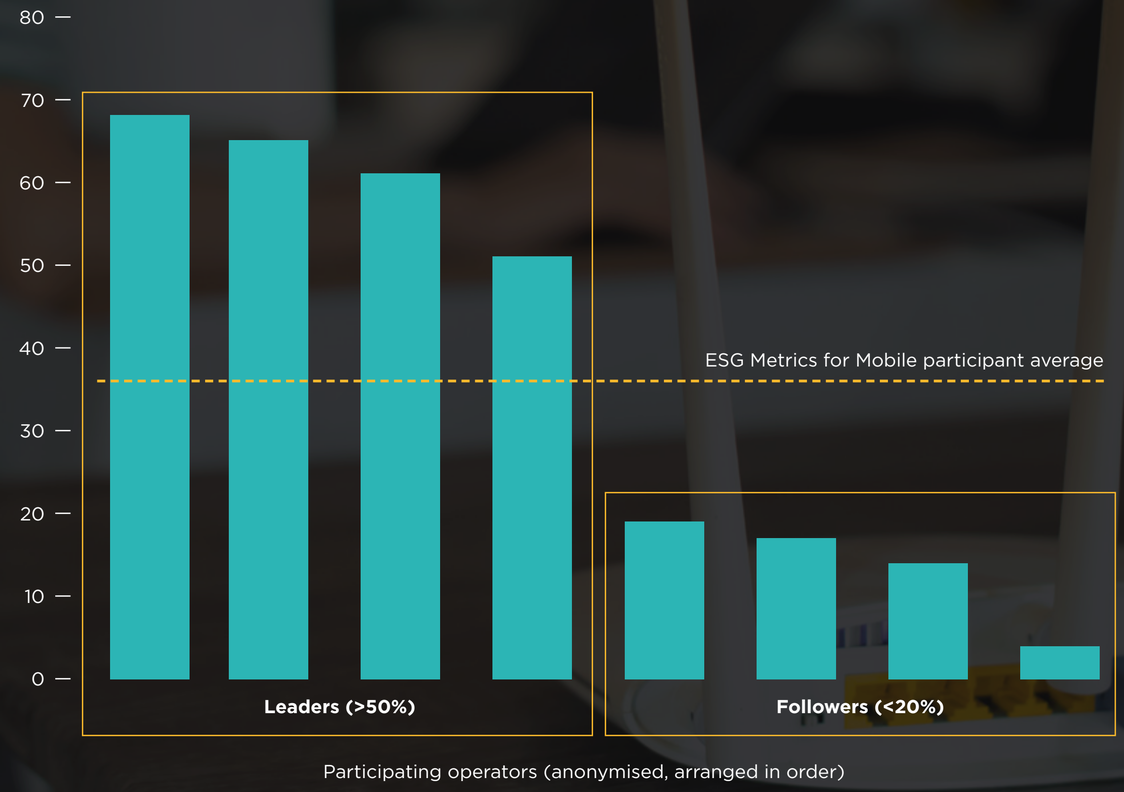
Circularity of customer premises equipment (CPE)

Assessing the full spectrum of devices – Since many mobile operators also have fixed-line businesses, the ESG Metrics for Mobile framework asks operators to provide data on the circularity of CPE. This category encompasses in-home devices such as internet routers, Wi-Fi hubs, access points and set-top boxes.

Mobile vs fixed – On average, participating operators in the ESG benchmarking reported that used mobile devices collected through take-back schemes accounted for 13% of new mobile devices distributed, while used CPE collected made up 38% of new CPE distributed. There are several possible explanations for this difference. Many operators include CPE as part of their service agreements, which means customers return the equipment when they terminate their service. Moreover, people are more likely to keep their old mobile devices as backups or sell them through third parties, which can reduce the volume of devices returned to operators.

Leaders vs followers – Operators vary in their levels of maturity regarding the take-back of CPE. The leading category generally consists of tier-1 operators who conduct the majority of their operations within Europe. Mechanisms for returning CPE tend to be less well-established in other regions, highlighting the need for operators to collaborate and share best practices to advance circularity together.

Figure 11: Used CPE collected through operator take-back schemes in the reporting period as a percentage of CPE distributed to customers in the reporting period (%)



Source: GSMA Intelligence

Electronic waste (eWaste)

eWaste reporting is relatively well-established – eWaste (which includes network equipment, mobile devices, CPE and other electronic waste from operations) provides a holistic view of recycling and reuse efforts within the mobile industry. Compared with the KPIs on slides 16-18, reporting on eWaste is more developed, as indicated by the fact that three-quarters of operators participating in the ESG benchmarking provided data on the total volume of eWaste generated by their operations.

On the path to zero waste – Among participating operators, an average of 94% of eWaste was either recycled or reused by weight. Leading operators report that more than half of their eWaste is reused, driven by increased demand for second-hand devices and network equipment. In countries where this market is less developed, a higher proportion of eWaste tends to be recycled rather than being reused.

Getting ahead of the curve – Establishing formal mechanisms for reporting on eWaste is important for compliance with new regulations. According to the Global E-waste Monitor 2024, 81 countries have implemented an eWaste policy. Of those, 67 have a legal framework governing eWaste management that includes provisions promoting the environmental policy principle of Extended Producer Responsibility. In such cases, operators are responsible for managing the full lifecycle of equipment.

Figure 12: Percentage of electronic waste reused or recycled, by weight (%)

Source: GSMA Intelligence

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Digital inclusion

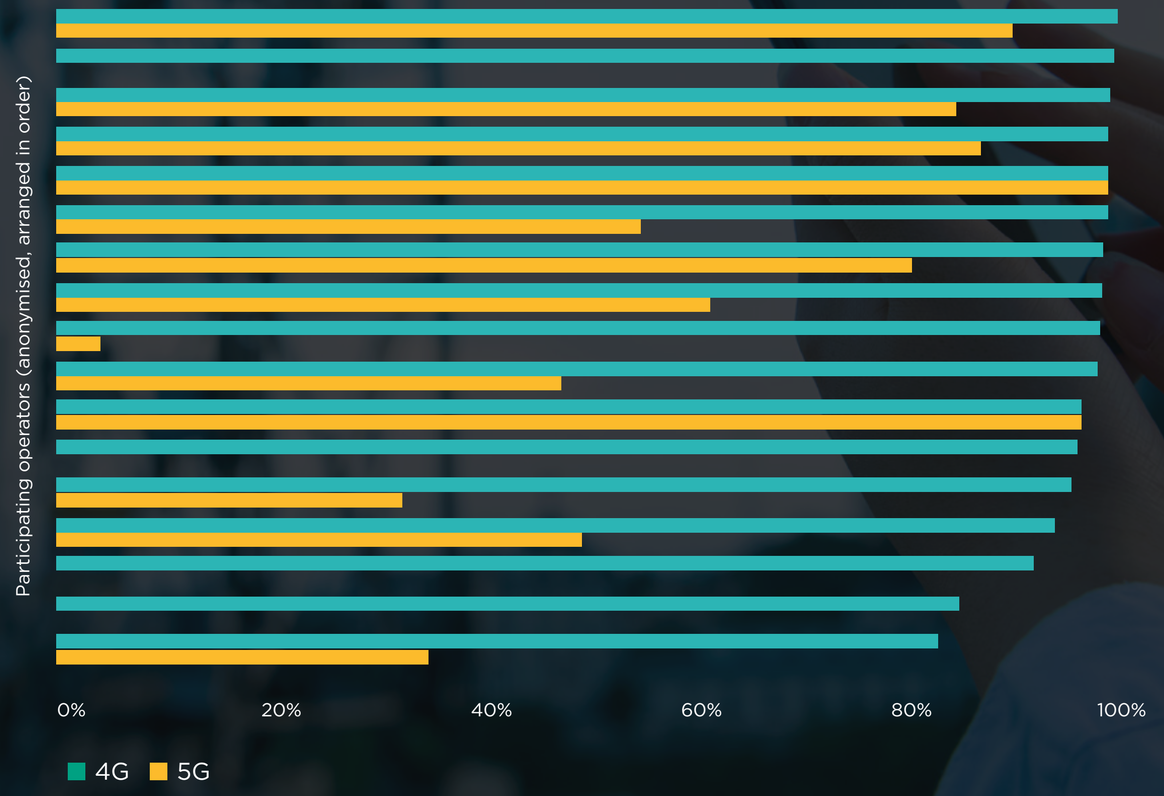
Network coverage

4G vs 5G – Out of the 17 operators who submitted data on 4G coverage, 15 reported that their 4G coverage exceeded 90%. In contrast, only three of these operators reported 5G coverage above 90%. With the majority of network investment now geared towards 5G, the gap between 4G and 5G coverage should narrow significantly over the next few years.

3G – While almost 80% of mobile internet subscribers globally now access the internet on a 4G or 5G smartphone, 2G/3G networks remain important in many LMICs. For example, around two-thirds of mobile internet subscribers in Sub-Saharan Africa use 3G smartphones or feature phones to access the internet. Participating African operators in the ESG benchmarking reported an average 3G coverage of 92%, underlining efforts to close the mobile internet coverage gap in the region.

Rural coverage – As mobile networks now cover most urban and suburban areas, leading operators have begun to track rural network availability in their sustainability reports. This is an important step in ensuring equal network access for all segments of the population. According to the GSMA State of Mobile Internet Connectivity report, rural populations are 28% less likely than their urban counterparts to be mobile internet subscribers.

Figure 13: Percentage of population covered by an operator's 4G and 5G network



Source: GSMA Intelligence

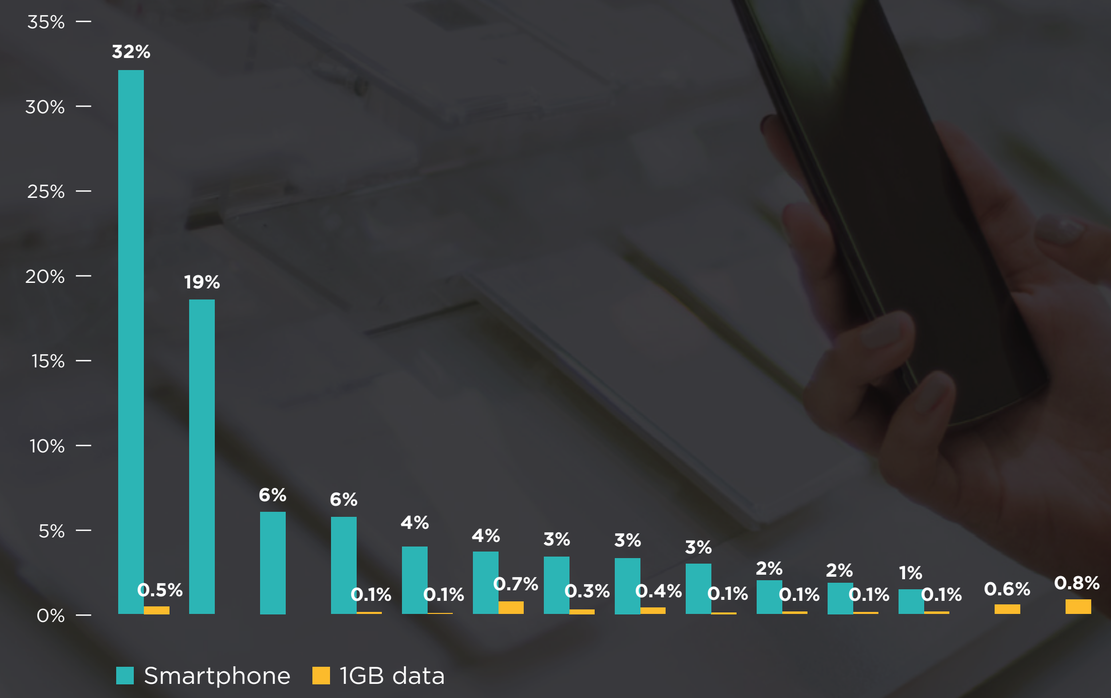
Device and subscription affordability

Smartphone cost – Affordability (particularly of internet-enabled handsets) remains the greatest barrier to mobile internet adoption. The ESG Metrics for Mobile framework asks operators to provide information on the retail price of the cheapest internet-enabled smartphone they sell in their markets. This is expressed as a percentage of GDP in the chart to the right. The median figure stands at 4% but there are clear outliers in the data, highlighting the handset affordability challenge in markets with lower average incomes.

Mobile data cost calculation – Given the wide range of available tariffs, determining the price of mobile internet services is a complex task. This is particularly the case in LMICs, where more than 80% of SIMs use prepaid plans and operators offer a wide variety of validity periods (e.g. daily, weekly, monthly) and plans for particular customer segments (e.g. discounts for younger or older users). The data in the chart to the right tracks at the cheapest way in which a consumer can purchase 1GB of data from an operator (excluding tariff plans with short validity periods and those only available for certain segments).

Performance vs ITU benchmark – All participating operators who provided data on the mobile data metric reported that the cost of 1GB of data was well below the ITU's 2% of income target. However, this is not reflective of the entire industry, with analysis suggesting that more than half of Sub-Saharan African countries have yet to meet this affordability target.

Figure 14: Retail price of the cheapest smartphone and 1GB data (both expressed as a percentage of monthly GDP per capita)



Source: GSMA Intelligence

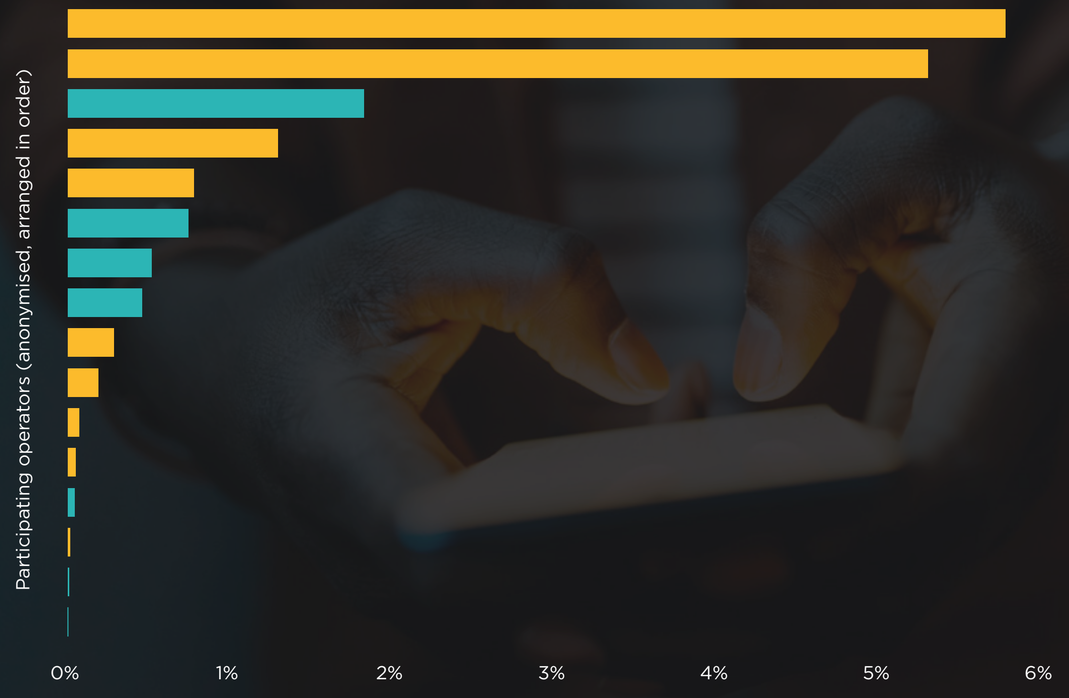
Digital skills programmes

Skills matter – As highlighted in the GSMA State of Mobile Internet Connectivity report, a lack of literacy and digital skills ranks as the second-highest barrier to mobile internet adoption. Improving digital skills among existing mobile internet users is also crucial, enabling them to fully use their mobile subscriptions.

Small steps go a long way – During the reporting period, participating operators delivered digital skills training to approximately 1% of their subscriber base on average. This percentage translates to more than 57 million people when considering the total global mobile subscriber base of 5.7 billion individuals.

Understanding the differences – The discrepancy between operators at the top and bottom of the chart can be partly attributed to the nature of digital skills programmes they offer. Specifically targeting groups who are not currently using mobile internet, such as rural populations or the elderly, requires in-person training delivered through specialised outreach channels. Conversely, digital courses facilitating the teaching of more advanced skills (e.g. coding) can be provided via mobile applications or websites, enabling a broader reach. Notably, there was limited correlation between the region of operations and the proportion of subscribers reached through digital skills programmes.

Figure 15: Number of people (excluding employees) who have completed a basic, intermediate or advanced digital skills training programme divided by total subscribers



Source: GSMA Intelligence
Note: Teal bars indicate estimated data where operators have provided the total number of subscribers reached through operator training programmes but have not supplied the figure as a percentage of subscribers.

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Digital integrity

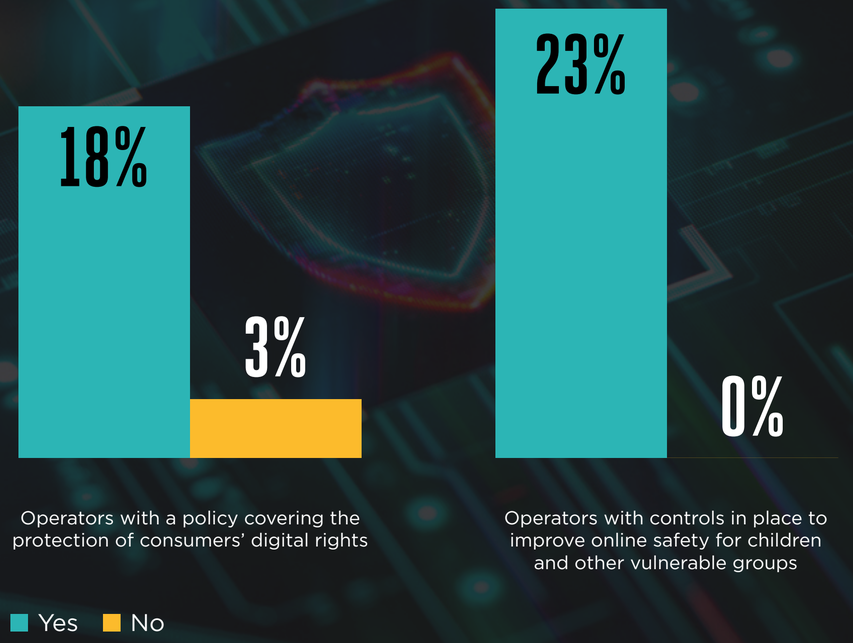
Digital rights and online safety

Protecting digital rights – 18 participating operator groups reported having a policy covering consumers' digital rights. These policies vary in depth across operators, with the most comprehensive ones addressing privacy, transparency, freedom of expression, government requests for data and government mandates to shut down or restrict access.

Supporting vulnerable groups – 23 operator groups participating in the benchmarking have implemented controls and programmes to enhance online safety for children and vulnerable individuals. Examples include free training courses, tailored customer support and technical tools like parental controls and helplines. These measures increase awareness of possible online harms and provide customers with a range of support options.

Safeguarding against security threats – The security threat landscape continues to evolve at a rapid pace. To understand how operators are faring, the ESG Metrics for Mobile framework asks operators to submit information on data breaches* and 80% of participating operators reported no data breaches in the past year. Of those who did, about 0.01% of subscribers were affected by the data breaches on average. Additionally, three participating operators reported facing regulatory action for data protection violations during the reporting period.

Figure 16: What policies and controls do operators have in place covering digital rights and online safety?



Source: GSMA Intelligence
N = 24
Note: Three operators did not provide data on digital rights protection and transparency, while one operator did not provide information on what controls they have in place to improve online safety

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Supply chain

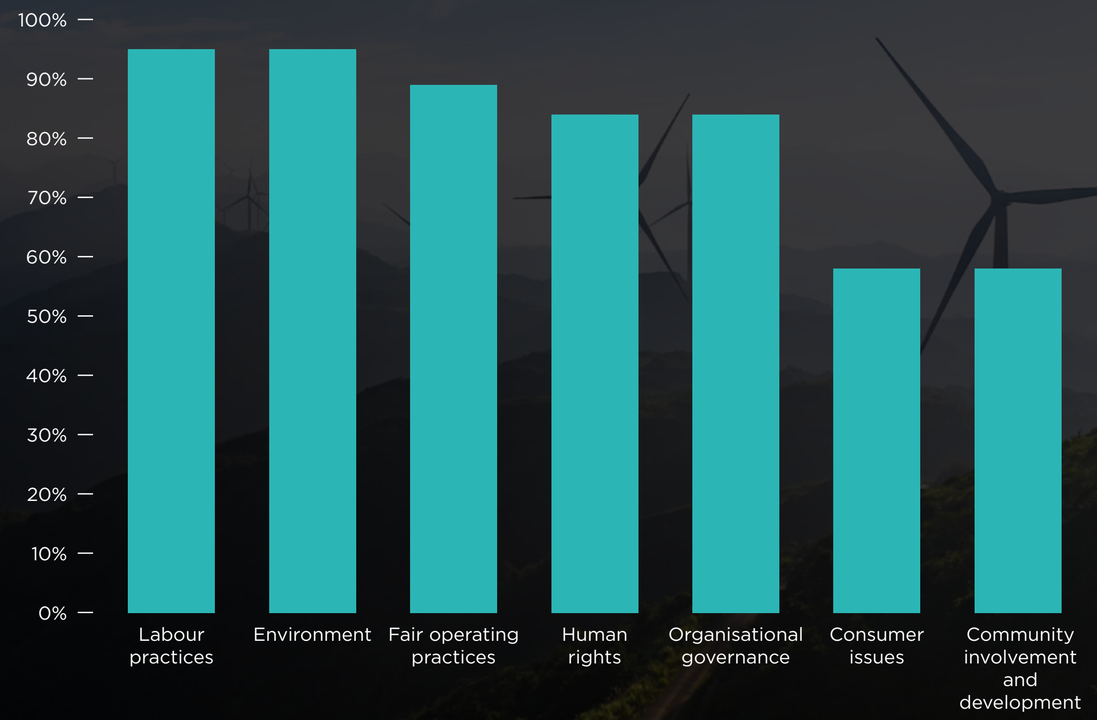
Sustainable supply chain

Sustainable procurement policies cover multiple dimensions – Nearly all participating operators indicated that they have implemented a sustainable procurement policy. Of those operators who provided details on their policy's scope, at least 80% included provisions addressing labour practices, environmental concerns, fair operating procedures, human rights and organisational governance. Operators with the most comprehensive sustainable procurement policies also addressed consumer issues and community involvement and development.

Focusing on high-risk suppliers – Although nearly all participating operators have sustainable procurement policies, assessing every supplier is impractical due to the vast number of suppliers that operators work with. Instead, most operators concentrate on evaluating high-risk suppliers in alignment with their sustainable procurement policies. This explains why the percentage of suppliers screened against the sustainable procurement policy is in the low single digits in most cases. However, even with only key suppliers audited, this still accounts for hundreds of on-site audits across the industry every year.

From policy to practice – The mobile industry conducts hundreds of in-person assessments each year to reinforce supplier evaluations. These on-site assessments allow operators to verify compliance, address specific risks directly and ensure that suppliers adhere to sustainability standards in practice.

Figure 17: Which elements do operators cover in their sustainable procurement policies?



Source: GSMA Intelligence
N = 19 operators

Recommendations

Recommendations

Category		Recommendations for improving reporting on ESG Metrics for Mobile
	Environment	• **Leverage industry guidance:** On average, participating operators disclosed information on eight out of 15 Scope 3 categories, highlighting gaps in reporting. The GSMA's Scope 3 Guidance can help operators to improve their emissions disclosures. It provides methodologies that are consistent with the recommendations of the Greenhouse Gas Protocol for calculating emissions, which are tailored for each different category. The methodologies for each category have been structured so that they are both useful and accessible for companies that are just getting started as well as those that are more advanced in their calculation, measurement and assessment capabilities. • **Align on circularity metrics for network equipment:** The mobile industry has coalesced around two circularity metrics for mobile devices, with 16 operators making a commitment to report on these metrics. However, the limited data submitted on "the percentage of decommissioned network equipment that was repaired, reused or sold" and "the percentage of installed equipment that was reused or refurbished" highlights the slower adoption of circularity metrics for network equipment. A similar industry commitment to the one seen on devices could accelerate progress.
	Digital inclusion	• **Consider the relevance of affordability metrics in high-income countries:** Approximately 40% of operators did not provide data for at least one of the affordability metrics and this figure rises to more than 70% for operators in Europe and developed Asia Pacific. While metrics on the retail price of the cheapest smartphone and 1GB service plan may appear less relevant in these regions, reporting on these metrics allows operators to monitor and demonstrate the impact of their efforts to support those who are digitally excluded, especially with the increasing significance of low-cost social mobile tariffs in many high-income markets. • **Develop better reporting systems for digital skills initiatives:** Around a third of operators did not provide information on the number of people reached by their digital skills programmes, even though nearly all operators have some form of training programme. This indicates that either this metric is not prioritised by operators or there are no reporting systems in place to accurately track the number of people reached by these initiatives. To address the latter, operators should require participants to register before attending training sessions or accessing online courses. This would enable the collection of basic demographic and participation data, which is critical for reporting and assessing the reach of these programmes.

Recommendations

Category		Recommendations for improving reporting on ESG Metrics for Mobile
	Digital integrity	• **Go beyond compliance:** Regulatory compliance often dictates data protection reporting. However, instead of seeing regulations as the end goal, operators have an opportunity to adopt robust metrics that elevate their data protection efforts, such as those outlined in the ESG Metrics for Mobile framework. Surpassing regulatory needs not only ensures transparency but also builds trust and demonstrates a proactive security stance. This is particularly effective when paired with information on specific measures taken to improve cybersecurity, such as investments in staff training and deployment of advanced cybersecurity tools.
	Supply chain	• **Explore opportunities to collaborate on in-person assessments:** While most operators reported on the number of suppliers assessed through sustainable procurement policies, fewer provided data on in-person assessments. This may be due to the limited number of in-person assessments conducted, likely because of the cost and logistical challenges involved. One potential solution is to coordinate on-site audits of suppliers with other operators using a common methodology as demonstrated by the Joint Audit Cooperation, which now includes 29 telecoms operator members. This method helps verify, assess and improve the sustainability performance of shared suppliers in the telecoms sector.

Appendix

Appendix – Environment KPIs (selected emissions KPIs)

KPI name	Maximum	Minimum	Average	Median
1.2a i. Scope 1 emissions (tonnes CO_2e)	457,152	1,741	115,592	39,866
1.2a ii. Scope 2 emissions, location-based (tonnes CO_2e)	4,195,850	14,869	875,837	462,207
1.2a iii. Scope 2 emissions, market-based (tonnes CO_2e)	4,195,850	3,189	601,578	296,032
1.2a iv. Percentage change in combined Scope 1 + 2 emissions since last reporting period	27%	-49%	-7%	-5%
1.2b i. Total Scope 3 emissions (tonnes CO_2e)	10,476,264	4,320	2,377,250	1,295,362

Appendix – Environment KPIs (selected energy KPIs)

KPI name	Maximum	Minimum	Average	Median
1.3a i. Total energy consumption (MWh)	12,200,000	270,358	2,660,117	1,501,913
1.3a ii. Purchased electricity, total (MWh)	11,310,709	241,772	2,251,675	1,212,360
1.3a iii. Purchased electricity from renewable sources (MWh)	102,149,078	6,529	7,433,807	814,000
1.3a iv. Generated electricity consumed by the company from renewable sources (MWh)	174,994	30	21,559	5,929
1.3a v. Total diesel consumption in generators (litres)	171,900,307	19,718	31,968,322	4,826,561
1.3b i. Total network energy consumed, including core, fixed and mobile networks (MWh)	2,053,604,438	218,116	240,144,113	1,336,204
1.3b ii. Energy consumed by mobile networks (MWh)	1,384,024,909	95,414	126,791,565	705,264
1.3b iii. Total network energy consumed per unit data (MWh/PB)	172	27	88	70
1.3b iv. Percentage change in network energy intensity (MWh/PB) since the last reporting period	-3%	-24%	-12%	-10%

Appendix – Environment KPIs (selected circularity KPIs)

KPI name	Maximum	Minimum	Average	Median
1.4b i. Used mobile devices collected through operator take-back schemes in the reporting period as a percentage of new mobile devices distributed directly to customers in the reporting period (%)	28%	2%	13%	11%
1.4b ii. Percentage of used mobile devices collected through operator take-back schemes in the reporting period that were repaired, reused or recycled - i.e. diverted from landfill or incineration (%)	100%	97%	99%	100%
1.4c i. Used CPE collected through operator take-back schemes in the reporting period as a percentage of CPE distributed to customers in the reporting period (%)	68%	4%	37%	35%
1.4c ii. Percentage of used CPE collected through operator take-back schemes in the reporting period that were repaired, reused or recycled - i.e. diverted from landfill or incineration (%)	100%	33%	88%	100%
1.5a i. Total electronic waste generated (tonnes)	31,718	34	4,257	1,780
1.5a ii. Percentage of electronic waste reused or recycled, by weight (%)	100%	68%	94%	97%

Appendix – Digital inclusion KPIs

KPI name	Maximum	Minimum	Average	Median
2.1 Percentage of population covered by operator's 3G network	100%	79%	93%	96%
2.1 Percentage of population covered by operator's 4G network	100%	83%	96%	98%
2.1 Percentage of population covered by operator's 5G network	99%	4%	67%	81%
2.2a Retail price of the most affordable smartphone, as percentage of monthly GDP per capita	32%	1%	7%	4%
2.2b Retail price of 1GB of data, as percentage of monthly GDP per capita	0.8%	0.1%	0.3%	0.2%
2.3 Number of people (excluding employees) who have completed a basic, intermediate or advanced digital skills training programme divided by total subscribers	6%	0.001%	1%	0.2%

Appendix – Digital integrity KPIs

KPI name	Maximum	Minimum	Average	Median
3.1a Number of data breaches, per million subscribers	0.014	0	0.001	0
3.1b Percentage of data breaches involving Personal Identifiable Information	100%	0%	11%	0%
3.1c Number of customers affected, per million subscribers	0.0001	0	0.00002	0
3.1d Number of regulatory actions for data protection violations (e.g. marketing-related complaints, data breaches), per million subscribers	0.046	0	0.004	0

Appendix – Supply chain KPIs

KPI name	Maximum	Minimum	Average	Median
4.2a Percentage of suppliers screened against the sustainable procurement policy using company defined and documented assessment procedure, within the previous two years to the reporting period	100%	2%	63%	75%
4.2b Percentage of suppliers assessed against the sustainable procurement policy through site visits, within the previous two years to the reporting period	100%	3%	65%	72%

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