

Vendors will soon be pushed to help telcos more aggressively reduce emissions

Summary

This brief report addresses the role of the supply chain in telco efforts to reduce their overall measured carbon footprint across Scopes 1 (direct energy), 2 (electricity purchases), and 3 (upstream and downstream value chain).

With each passing year, the outlook for climate change worsens and its impact becomes more tangible. Costs are now clearly visible as society pays more to cope with extreme heat and cold, protect against flooding, clean up after abnormal weather events, relocate populations, reinforce structures, and many other measures. Yet national governments continue to struggle to find common ground, and private, voluntary action to cope with climate change is often more about lip service than real action. The network operator sector is no exception. While there are some standouts, most operators are embarrassingly conservative in their approach to carbon footprint reductions. That's especially true for the telco sector. It's easy to focus on reducing energy consumption, as it has a direct impact on the bottom line, but investing in renewable energy is harder to support. More important, most telcos are just beginning to focus on their indirect (Scope 3) emissions, the bulk of which relate to their supply chain. The tipping point has arrived, though. Telcos need to become leaders in aggressively reducing their carbon footprints, and that will have a direct impact on how they engage with vendors. A small number of telcos already quantify the environmental performance of their suppliers within the procurement process; that will grow, and standards will become more stringent. Organizations like the Joint Audit Cooperation (JAC) will push this along. Vendors need to get ready.

Telcos dominate power consumption within network operator business

In October 2022, MTN Consulting published a report, "[Network operator power use grew 10% in 2021.](#)" The report reviewed electricity consumption for three types of network operators: telcos, webscalers, and carrier-neutral providers. The main conclusions:

- In 2021 network operators consumed approximately 467.6 Terawatt-hours (TWh) of electricity, including purchased and self-generated.
- Power consumption by network operators in 2021 grew by 9.8%, about the same as the 9.3% growth recorded in 2020. By operator type, webscale power consumption is booming, up 19% and 25% in 2020 and 2021, respectively, while telco power consumption grew by just 6.0% and 4.7% in the same two years. CNNOs were in the middle, recording 16% growth in power consumption in 2020, and 15% in 2021.
- Telcos accounted for 66% of the three-segment total power consumption in 2021 (2020: 69.2%); webscale accounted for 22.9% (2020: 20.2%), and carrier-neutral was 11.1% (2020: 10.7%).
- Telcos account for a higher percentage of Scope 1-2 emissions than implied by the 66% figure. There are two direct reasons for this. First, telcos have invested minimally in renewable energy, even those with the resources to make such investments such as NTT and AT&T. That's in contrast to webscalers and *some* carrier-neutral providers. Second, telcos in many regions rely heavily on small-scale, fossil fuel-based energy production such as diesel generators at mobile base stations.