IMPLEMENTING ESG FOR CSPS REQUIRES TECHNOLOGY, ACCOUNTABILITY, AND EDUCATION

Organizations across industries are continuously looking for ways to be better corporate citizens by adopting initiatives and making practicable changes to operate as responsible, “greener” business. In that spirit, communication service providers (CSPs) have an extraordinary opportunity to build a better business model for sustainability and their environmental, social, and governance (ESG) and corporate social responsibility (CSR) policies through hardware choices, smart technologies, accountability, and amplifying the circular economy.

Responsible hardware choices

By their very nature, CSPs operate on extraordinarily large volumes of data and network traffic, and historically, that’s been sustained by physical data centers. Those data centers then require utilities such as lighting, heating, and cooling—which contribute to the ongoing problem of carbon emissions. To achieve net-zero carbon emissions, or carbon neutrality, data centers must operate more sustainably, get smaller, or even disappear.

For organizations that must maintain physical data centers as part of their infrastructure, bringing those locations up to sustainable ventilation, heating, cooling, and lighting protocols like those established by Leadership in Energy and Environmental Design (LEED) can make a significant impact.

Smart technologies

Migrating data center assets to the cloud, and shifting network traffic from a central hub to the edge can also make a big difference by bringing them closer to customers, who are themselves often on the move. Moving to the edge also reduces latency and the corresponding energy and bandwidth requirements of retaining data centrally and moving it across greater distances. It also gets customers connected faster, so it's a win-win. Implementing Green Internet of Things (IoT) devices that reduce the power and energy usage—and emissions—of edge devices such as radio antennas can also help.

According to *Networks on Cloud: A Clear Advantage*, a recently released Capgemini Research Institute study, the cloud is on the rise for CSPs, and nearly half of telco network capacity will be cloud-native in the next three to five years—growing from a 31 percent global average in 2022 to 46 percent by 2027.

The survey estimates that network assets account for 42 percent of telcos' greenhouse gas emissions, and says that respondents hope to reduce that by five percent through cloud adoption. Additional benefits of cloud include "reduced physical hardware footprint, reduced power usage, auto-scaling of network on demand, and managing power consumption of mobile towers by using and machine learning."

AI can also help CSPs improve operational efficiency with predictive analytics that support resource and network planning and allocation according to variables such as customer behaviors, trends, and climate events, and optimize the supply chain from the routes taken to the modes of transportation, while more advanced tools can ramp energy usage up and down as needed.

A Nokia GSMA Intelligence survey of global mobile service providers found that 78 percent of respondents see AI as very or extremely effective at delivering energy-efficiency improvements such as reducing the carbon footprint of their networks, processing their data efficiently, and translating it into actionable insights. Sixty-five percent believe the technology could shrink their energy consumption by ten percent or more. Most interestingly, half of those surveyed said their customers are the reason they're looking for more energy-efficient network strategies.

Accountability

As more of those customers make sustainability a criteria for doing business, CSPs can publicly affirm their commitments by joining initiatives that hold businesses accountable. The Science Based Targets Initiative (SBTi) partnership's Business Ambition for 1.5˚ C campaign is a collective of businesses committed to reaching the namesake target goal of reducing the earth's temperature by 1.5˚ C and achieving a zero-carbon economy. SBTi recognizes that the Information and Communication Technology (ICT) sector faces ongoing challenges as its industry grows and has set forth guidelines to help it attain more sustainable practices.

A similar initiative was launched in 2021 in the EU. The European Green Digital Coalition (EGDC), supported by the European Commission and the European Parliament at the request of the EU Council, aims to maximize the sustainability benefits of digitalization within the ICT sector, while supporting sustainability goals of other sectors outside the industry. The criteria for participation are here.

Circular economy

Another way CSPs can move the needle on sustainability is by ensuring ethical and responsible disposal of their hardware as they move to cloud and hybrid environments. While promoting new devices and device refreshes to consumers is part of the business model, CSPs can educate those same customers about the circular economy and promote those practices by designing sustainable packaging and encouraging—and incentivizing—customers to recycle or donate their devices when they reach end of life. This will help keep them and their harmful components out of landfills and waterways.

CSPs have an incredible opportunity to make an impact and scale the smart circular economy through an eco-centered supply chain, ethical IT asset disposal, Green IoT, and edge and AI strategies. Together, these key technological enablers can help ensure a sustainable digital transition within the telecommunication industry and beyond. To learn how BMC is helping transform telecommunications for the CSPs of tomorrow, visit bmc.com/CSP.