

Renewables Power

OUR SUSTAINABILITY ROADMAP



Huseyin Turker, Chief Technology and Information Officer (CTIO), Banglalink

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**The Daily Star (TDS):** Telecom networks are energy-intensive. How is Banglalink reducing its carbon footprint and improving energy efficiency across its infrastructure?  
**Huseyin Turker (HT):** Digital technologies impact energy use and emissions both directly and indirectly. According to the International Energy Agency, data centres and data transmission networks are responsible for approximately 1 percent of global energy-related greenhouse gas emissions. Being at the forefront of innovation and connectivity, we recognise our responsibility to utilise technology in an environmentally sustainable manner. We are committed to responsible growth and have taken significant strides to address this issue. Our networks are equipped with a suite of smart energy-saving technologies, including AI-based energy-saving features, deep sleep modes, PowerStar, and device-aware energy optimisation systems. In 2024 alone, these smart features helped us reduce our annual energy consumption by approximately 8.8 gigawatt-hours (GWh), resulting in a reduction of over 4,000 tonnes of carbon emissions. However, we remain fixated on saving even more energy.

We've highly optimised our data centres, improved cooling systems, and rethought space utilisation. By doing so, we managed to save an additional 2 GWh of electricity and cut more than 900 tonnes of emissions. Additionally, we have upgraded to more energy-efficient telecom equipment, resulting in reduced energy consumption and contributing a further 2 GWh in energy savings, as well as a 900-tonne reduction in emissions. A significant effort to replace traditional air conditioners with free cooling units at more than 1,900 tower sites enabled the saving of 17 GWh in electricity and 7,000 tonnes of carbon emissions. We've deployed highly efficient power systems to reduce diesel consumption, saving over 159 kilolitres of fuel and reducing emissions by 400 tonnes in 2024. In total, our energy efficiency efforts are cutting emissions by

more than 7,000/6,000 tonnes. We also refrain from using paper and printers in our office to demonstrate our commitment to sustainability. These are not isolated efforts; they represent Banglalink's culture of sustainable innovation.

**TDS:** Has Banglalink adopted any initiatives to deploy renewable energy solutions, such as solar-powered towers or green data centres?  
**HT:** Indeed. Renewable energy solutions are a core part of our sustainability roadmap. Within our network, we have deployed solar power systems at our network sites and increased the use of renewable energy sources, including solar, wind, and hydropower. Our Radio Access Network (RAN) sites are powered by solar systems that collectively produce approximately 1.5 gigawatt-hours (GWh) of electricity annually, resulting in a reduction of over 500 tonnes of carbon emissions. We have reached a significant milestone by introducing solar power into our data centre operations, making us the first telecom operator in Bangladesh to do so. Our 80-kilowatt (kW) solar system at the data centre generates around 0.13 GWh per year, saving more than 60 tonnes of carbon emissions.

We're also collaborating with national power authorities to implement specialised power lines at key facilities. We estimate that this will reduce fuel consumption by 88,000 litres annually, equivalent to over 200 tonnes of carbon emissions. Altogether, our renewable energy initiatives are currently generating approximately 1.57 GWh of clean energy, helping us reduce emissions by more than 700 tonnes annually. Renewable energy is not just a part of our operations; it forms the foundation of our vision for a sustainable digital future.

**TDS:** Digital inclusion can drive sustainability. How is Banglalink using its digital services to promote environmental awareness or green practices among customers?  
**HT:** At Banglalink, digital inclusion is deeply



integrated with our sustainability goals. Our digital services are built upon the 6C model. This model is designed to enhance connectivity, community, content, creativity, commerce, and care, which support our broader DOI440 strategy. This strategy aims to offer meaningful digital experiences for every minute of the user's day. We were globally recognised for this strategy in 2023 with the GSMA Award for Best Service for Connected Consumers at the MWC in Barcelona.

A key example of our sustainability-driven digital innovation is the Early Warning System we developed to help communities prepare for disasters such as Cyclone Mocha. More than one million unique smartphone users received real-time updates that allowed them to assess their proximity to the cyclone and take necessary precautions. This initiative was recognised as the 'Best Sustainability Excellence Initiative in Disaster Response' at the Bangladesh Sustainability Excellence Awards 2023.

**TDS:** What role do you think the telecom sector should play in supporting Bangladesh's climate resilience and digital sustainability goals?  
**HT:** Telecom players have a crucial role to play in helping Bangladesh meet its climate and sustainability objectives. Our parent company,

VEON, has long established an Environmental, Social, and Governance (ESG) forum that drives sustainability best practices across all operating companies. Since 2017, Banglalink has reduced carbon emissions by more than 200,000 tonnes, and we continue to work towards our goals in collaboration with national policies and regulatory expectations. We would like to express our sincere gratitude to all our stakeholders, particularly the Bangladesh Telecommunication Regulatory Commission (BTRC), for their guidance and ongoing support. In Bangladesh, the regulator has outlined sustainability commitments, such as the use of green technology, in its licensing guidelines, which we strictly follow.

This sector can further contribute by investing in smart infrastructure, enabling climate-resilient connectivity in vulnerable areas, and leveraging big data and artificial intelligence (AI) to support disaster preparedness and sustainable urban planning. However, to achieve this, the industry needs a favourable regulatory environment, progressive policy support, and formal recognition of sustainability efforts by the government.

**TDS:** On this World Environment Day, what is your message about the intersection of technology and environmental stewardship?  
**HT:** The message should be clear: we must leverage the full potential of innovation and technology in building a greener, more inclusive world. The telecom industry, given its scale and reach, has significant potential to reduce energy consumption, minimise waste, and move towards carbon neutrality, aligning with the 'Three Zero Theory' proposed by Chief Adviser Dr Muhammad Yunus. Achieving net-zero carbon emissions should not be a far-fetched vision; all we need is a can-do attitude. At Banglalink, we are ready to do our part. We invite all industry stakeholders, including policymakers, to join us in creating an environmentally responsible digital future.

