

### Operationalizing Climate Action in Facility and Network Operations

To further ensure network resilience while lessening carbon emissions, Globe established an interdepartmental sustainability-linked working group to streamline its network decarbonization and energy efficiency projects and initiatives which was instrumental in driving the reduction from Scope 2 emissions.

The working group focused on three main pillars: Sustainable Power Sources and Self Generation, Green Network Equipment and Solutions, and Drive Execution of Eco-friendly Facilities. More information about its impact on the company’s energy management system and overall greenhouse gas (GHG) emissions is disclosed in the Natural Capital section of the report (see pages 204-228).

Pillar	Program	Objective	2022 Outcome
<b>Sustainable Power Sources and Self Generation</b>  Shifting eligible sites to renewable energy and enable self-generation for energy use in network facilities	Hybrid Power Alternative Source	Reduce carbon emissions associated with fuel consumption  Reduce cost from energy use and Operations & Maintenance (O&M)	Average of 50% reduction in fuel consumption and 50% savings across pilot sites
	Renewable Energy Transition	Shift facilities with 100 kW consumption to Renewable Energy via Power Purchase Agreements (PPA)	10 sites shifted to renewable energy via the Green Energy Option Program (GEOP)
<b>Green Network Equipment and Solutions</b>  Evolving network equipment across different domains to energy efficient platform and solutions	Automated Power Saving Solution	Asses the Power Saving Gain vs. Network Performance drawbacks of the Access Feature	1% - 7% energy savings validated from equipment power saving features
	Wideband Remote Radio Unit (RRU)	Deploy single antenna to support multiple bands with lower power consumption compared to a single band RRU	7,725.40 MWh energy saving from 10,453 wideband RRUs deployed
	Microwave to Fiber Optic Cable (FOC) Migration	Upgrade existing link capacity into a much higher bandwidth to support the increasing demand per site	84.29 MWh savings projected from 151 microwave sites upgraded
	Continued decommissioning of end-of-life (EOL) equipment	Decommission EOL network elements	922 MWh savings projected from decommissioning activities
<b>Drive Execution of Eco-Friendly Facilities</b>  Transitioning various Globe network facilities to sustainable operations in energy consumption	Power Efficiency	Derive a facilities model that could deliver highest efficiency possible	Established a facility model that is highly efficient while producing significant cost avoidance and savings
	Efficient Cooling Systems	High Sensible Cooling systems; Utilize eco-friendly chemical agent for cooling systems	87.5 kWh savings projected from 35 deployed cooling equipment
	Continued shifting to LED Lights	Reduce power consumption from lighting fixtures in facilities	13.93 MWh savings projected from shifting to LED lights
	Rectifier Systems	Utilize high efficiency rectifier modules (96% vs 92.5%)	3.60 MW monthly capacity increase for battery backup systems
	Backup battery systems	Deploy sodium-based battery systems to replace Valve Regulated Lead Acid (VRLA) batteries	More than 50% of core network sites are already fully or partially using sodium nickel batteries