

# Sustainability is Our Key Value

- ▶ “Global Warming” is one of the greatest global challenges that humanity faced so far.
- ▶ The call for improved energy efficiency and enhanced sustainability is growing among both governments and end users.
- ▶ Many telecom companies, including Rohde & Schwarz, are assessing their environmental footprint and have initiated measures to diminish it.



# Towards Energy Efficient Networks

- ▶ The call for improved energy efficiency and enhanced sustainability is growing among MNOs due to increasing energy prices impacting their operational costs.
- ▶ 5G data transmission more efficient compared to 4G.
  - Energy consumption is expected to increase dramatically due to increased data rates.
- ▶ By monitoring energy efficiency, network operators can strike a balance between user throughput and power consumption.
  - This does not only help in reducing energy costs but also contributes to a smaller carbon footprint.



# Expanding the O-RU Testing coverage with Network Energy Savings Verification

A fully automated test solution to accurately measure and gauge the **Network Energy Savings (NES)** of the **O-RU** or energy consumption of a **subsystem** within the Radio Unit.

- The **VIAVI TM500 O-RU Tester** offers energy efficiency focused O-DU emulation test scripts.
- The **R&S®RT06 Oscilloscope** monitors the dynamic power consumption of the O-RU versus its broadcasting activities.
- The **R&S®NGP Power Supply** powers the O-RU and monitors voltage and current statistics over time.

VIAVI  
O-RU Test Manager



VIAVI TM500  
O-RU Tester

R&S®NGP  
Power Supply



R&S®RT06  
Oscilloscope

ROHDE & SCHWARZ



VIAVI  
VIAVI Solutions



# Accurate and Time Correlated Measurements

- **R&S®NGP DC power supply** is perfect for powering O-RU and it also measures accurately the overall power consumption with the time resolution of 8ms.



- The R&S®RTO6 oscilloscope tracks power consumption over the time when running different traffic loads scenarios.
  - Time correlated power measurements incl. RF quality analysis can be performed with R&S®VSE software.

