

# 5G Sustainability Initiatives of LF-Aether (Previously ONF)

Sarat Puthenpura, Chief Architect – Open RAN

- SMaRT – 5G (<https://aetherproject.org/smart-5g/>)
  - Sustainable Mobile and RAN Transformation 5G (SMaRT-5G) is a collaborative effort to develop and enable ML-driven energy savings solutions for mobile networks
    - Series of PoCs that demonstrate progressively advanced energy savings techniques on both Open-RAN and traditional RAN architectures
      - Completed two PoCs (Fyuz -23; NTIA RIC Forum – 24), more on the way
- 5G Energy Efficiency – Metrics, Models, and System Tests
  - R&D effort funded by NTIA grant under the Public Wireless Supply Chain Innovation Fund\*
  - Joint effort with Rutgers WINLAB
  - Research, develop, and validate accurate and effective test methods:
    - To measure the energy efficiency of 5G network components
    - Effectiveness of end-to-end Open RAN energy optimization strategies
  - Key enabler of SMaRT-5G

Join our efforts for creating the next generation sustainable networks!



\*Note: The NTIA grant is yet to be transferred to Aether from ONF