

An Introduction to the Draft Charter

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Introduction to GREEN Working Group (WG)

Purpose

The GREEN WG is dedicated to developing energy efficiency metrics, methods for measuring energy consumption in networking devices, and optimizing energy efficiency across networks.

Short-term Deliverables

- Define terms and definitions for energy efficiency metrics, reusing existing RFCs where possible.
- Develop YANG models for measuring, reporting, and controlling energy usage at component, device, and network levels.
- Create a framework for collecting and using energy consumption metrics, including guidance for legacy devices.

Scope of Work

In Scope

- Establishing common terminology and metric definitions for energy efficiency.
- YANG data models for network lifecycle management, including monitoring and optimization of energy usage.
- Framework for energy metrics collection to support new energy efficiency metrics.

Out of Scope

- Routing protocols and algorithms considering energy factors.
- Benchmarking power consumption methodology.
- Carbon accounting/reporting protocols.
- Environmental sustainability assessment methodologies.
- Impact of energy efficiency on service quality.
- Regulatory and compliance issues.
- Cross-domain trust issues regarding measurements.

Work Items & Collaborations

Work Items

- Informational Architecture document for energy efficiency network management.
- Proposed Standard document for YANG data models related to energy efficiency.
- Informational document on Framework for Energy metrics collection.

Collaborations

- Coordination with IETF Working Groups like IVY, OPSAWG, and NETMOD.
- Interaction with metrics and measurement standardization groups (IPPM, BMWG).
- Research input from IRTF Research Groups (PANRG, NMRG).
- Align with IAB e-impact program and industry stakeholders.

Milestones & Dependencies

Milestones

- Standardize terminologies for energy use and efficiency (Q4 2024).
- Publish YANG models for energy efficiency metrics (Q2 2025).
- Develop a framework for energy-aware tools management (Q3 2025).
- Demonstrate YANG model implementations (Q4 2025).

Dependencies and Liaisons

- Collaborate with other SDOs like ETSI and ITU for benchmarking methodologies.
- Ensure alignment with regulatory bodies and industry standards.
- Foster partnerships for research and practical implementation of WG outputs.