



Problem Statement BMN-09

Power and Energy Efficiency Benchmarking

Category: Benchmarking Methodologies for Network Systems (BMN)

[Reference: draft-ietf-bmwg-mlrsearch](#)

[Working Group: BMWG](#)

Problem Statement

Apply BMWG methodologies to measure **energy consumption of networking workloads** (DNS queries, HTTP traffic, SRv6 flows) across **bare-metal, VMs, and containers**. Extend approaches described in **draft-ietf-bmwg-mlrsearch** to correlate **throughput, latency, and packet loss with energy cost**.

Focus Areas

- Quantify “power-per-packet” metrics.
- Identify workloads with highest energy inefficiency
- Propose strategies to optimize energy efficiency in institutional deployments.