

# Reducing Network Energy Consumption via Sleeping and Rate-Adaption

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# Outline

- Introduction
- Potential Approaches
- Putting Network Elements to Sleep
- Rate Adaption
- Energy Savings

# Introduction

- There is opportunity for substantial reductions in the energy consumption of existing networks.
- Networks are provisioned for worst-case load, which typically exceeds their long term utilization.
  - Backbone utilizations under 30%
- Energy consumption of network equipment remains substantial even when the network is idle.