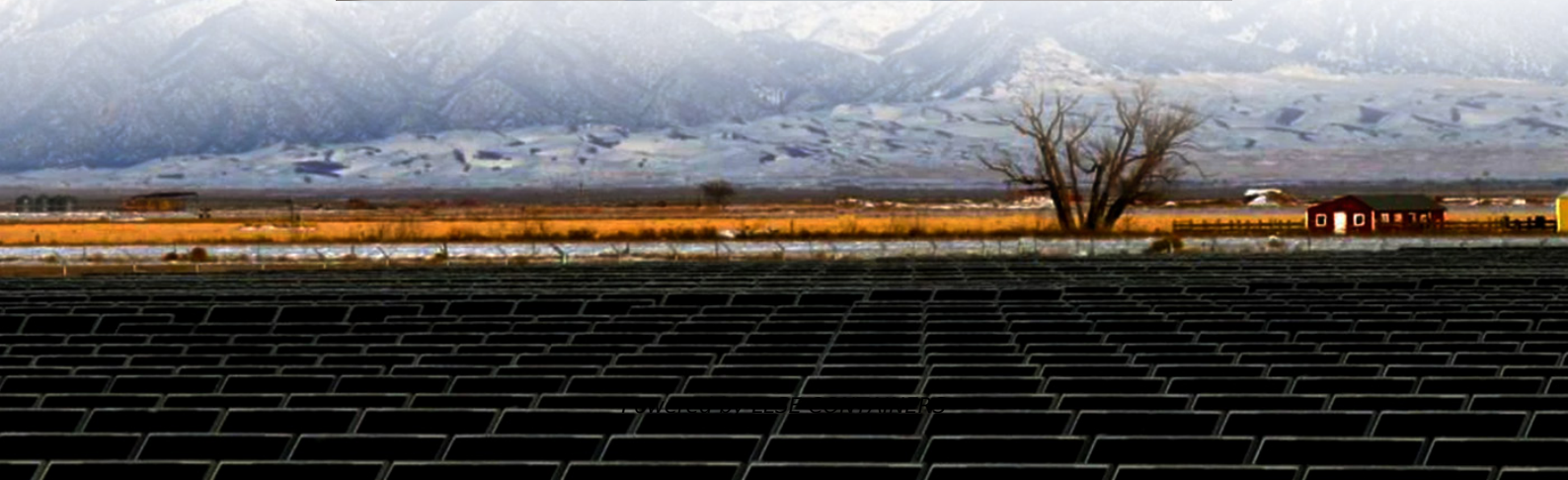


Communication green base station ground network composition





Overview

Are green cellular base stations sustainable?

This study presents an overview of sustainable and green cellular base stations (BSs), which account for most of the energy consumed in cellular networks. We review the architecture of the BS and the power consumption model, and then summarize the trends in green cellular network research over the past decade.

Can low-carbon communication base stations improve local energy use?

Therefore, low-carbon upgrades to communication base stations can effectively improve the economics of local energy use while reducing local environmental pollution and gaining public health benefits. For this research, we recommend further in-depth exploration in three areas for the future.

What is a green communication initiative?

The green communication initiative primarily aims to improve the energy efficiency, reduce the OPEX, and eliminate the GHG emissions of BSs to guarantee their future evolution [2, 3]. Cellular network operators attempt to shift toward green practices using two main approaches.

How much energy does a communication base station use a day?

A small-scale communication base station communication antenna with an average power of 2 kW can consume up to 48 kWh per day. 4,5,6 Therefore, the low-carbon upgrade of communication base stations and systems is at the core of the telecommunications industry's energy use issues.



Communication green base station ground network composition

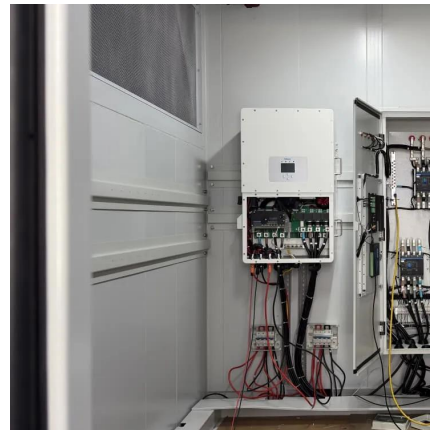


[Green Radio Communication Networks: Base station power ...](#)

Summarizing existing and ongoing research, the book explores communication architectures and models, physical communications techniques, base station power-management techniques, ...

[Toward Green Network: An Expanding of Base Station ...](#)

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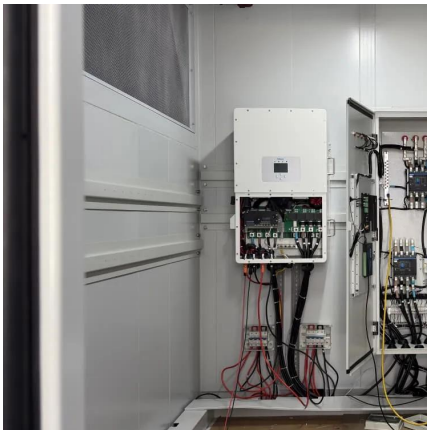
[Energy-Efficient Base Stations , part of Green Communications](#)

Aug 29, 2022 · The impact of the Base Stations comes from the combination of the power consumption of the equipment itself (up to 1500 Watts for a nowadays macro base station) ...



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