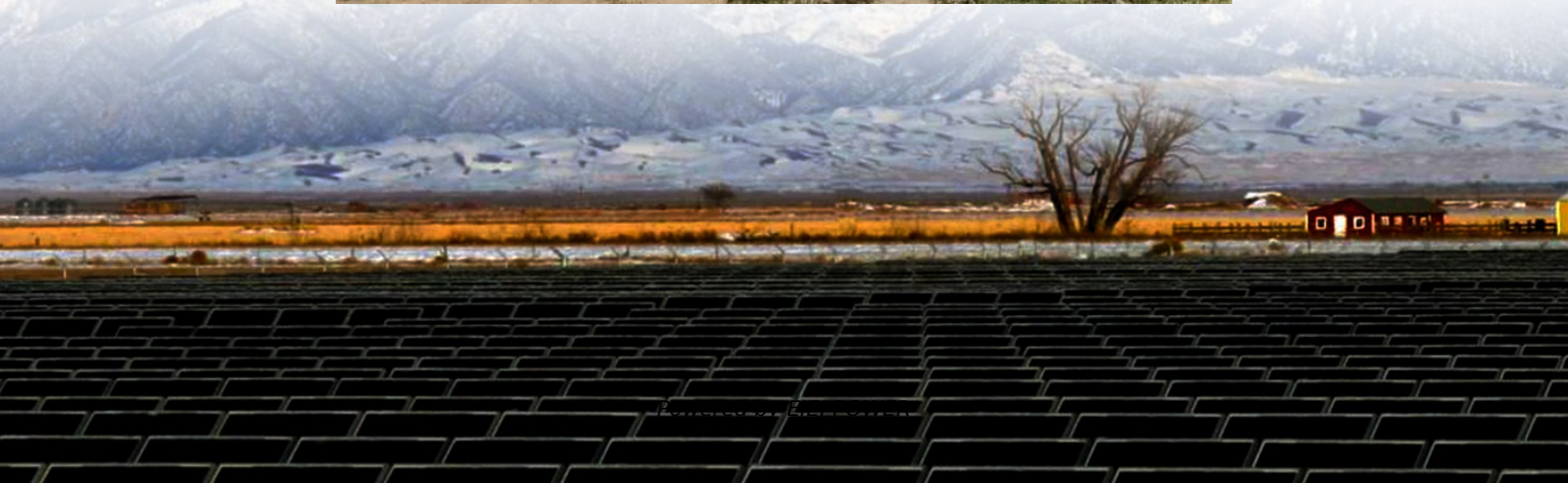


What are the energy-saving measures for outdoor base stations





Overview

Can 3GPP reduce base station energy consumption in 5G NR BS?

Aiming at minimizing the base station (BS) energy consumption under low and medium load scenarios, the 3GPP recently completed a Release 18 study on energy saving techniques for 5G NR BSs . A broad range of techniques was evaluated in terms of the obtained network energy saving (NES) gain and their impact to the user-perceived throughput (UPT).

What is a suitable energy saving strategy?

The suitable energy saving strategy combined with different energy saving functions, include an initial relative threshold to the scenario and an executable energy saving time schedule. This will be enabled for the sites that are expected to have energy saving effects.

Why are energy saving measures important for mobile network operators?

Energy saving measures in mobile network operators (MNOs) are prioritized as needs rather than measures that are nice-to-have. What is more important is that sustainability has risen to the top of the agenda for many industries, including telecoms.

How does network energy saving work?

The beginning of network energy saving came with the fact that many sites had their traffic peaks and troughs, which means certain parts of the base stations could be shutdown to save energy, and these included carrier frequency block, carrier frequency shutdown, channel shutdown and symbol shutdown.



What are the energy-saving measures for outdoor base stations



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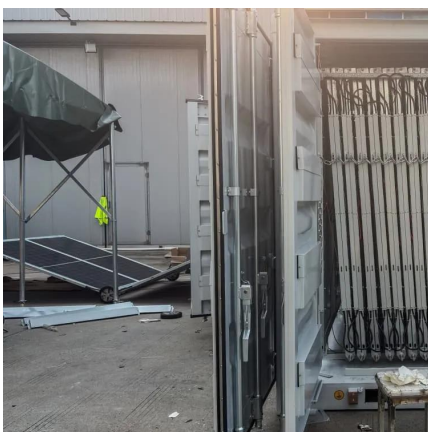
Energy Savings in Base Stations with KDDI

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KDDI's combined scope 1 and 2 emissions in the 2023 financial year were approximately 950,000 tons, of which around half were related to ...



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Network energy-saving techniques tune the parameters and protocols of networks for interference mitigation, resource optimization, and energy saving. It is a prerequisite to understand key ...



[Energy-efficiency schemes for base stations in 5G ...](#)

In today's 5G era, the energy efficiency (EE) of cellular base stations is crucial for sustainable communication. Recognizing this, Mobile Network Operators are actively prioritizing EE for ...



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[Final draft of deliverable D.WG3-02-Smart Energy Saving ...](#)

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