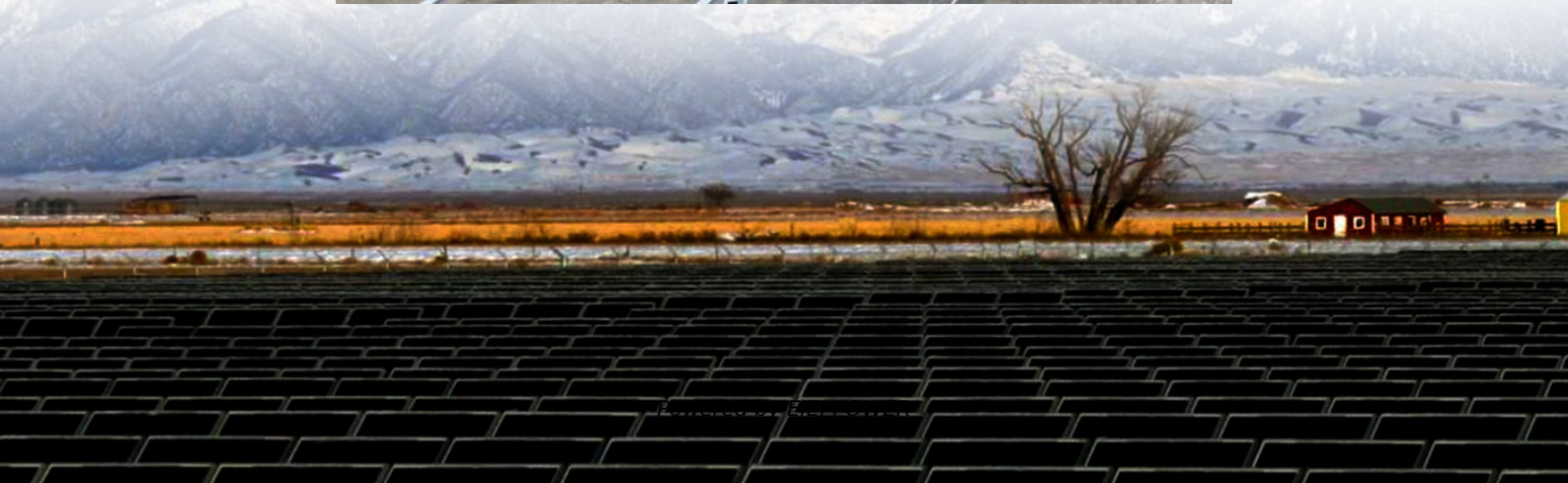


The composition structure of 5g communication green base station





Overview

Can a 5G base station promote green development of mobile communication facilities?

However, a significant reduction of ca. 42.8% can be achieved by optimizing the power structure and base station layout strategy and reducing equipment power consumption. Overall, this study provides a clear approach to assess the environmental impact of the 5G base station and will promote the green development of mobile communication facilities.

What is the scope of a 5G base station?

Scope: The scope of the entire lifecycle of the 5G base station includes the materials and equipment manufacturing, transportation and operation, which excludes the end-of-life stage. Both a single 5G macro base station and a 5G micro base station are included.

How much power does a 5G base station use?

2.6. Scenario analysis 5G base stations are high-frequency with an average coverage of about 450 m, while the 4G base stations cover an average range of about 1500 m. Taking a 64T64R S111 5G macro station equipment as an example, the power consumption was ca. 3-4 kW, 2-3 times higher than that of 4G equipment (Li, 2019).

Are 5G base stations based on a 4G base station?

At present, most 5G base stations are upgraded or constructed based on 4G base stations in China and ca. 97% of the towers are constructed based on existing site resources (Meng, 2020). The installation of AAU adopts poles or towers according to a certain proportion.



The composition structure of 5g communication green base station

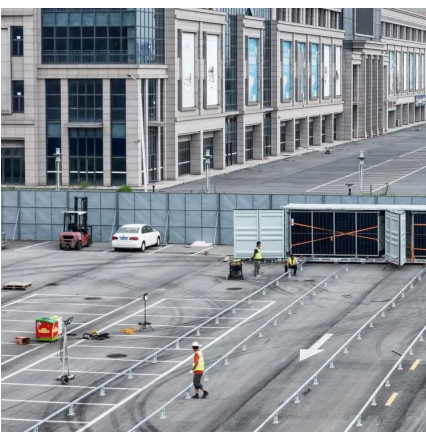


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