

Mobile communication green base station survey





Overview

Since base stations consume the maximum portion of the total energy in current cellular systems, we explore important renewable energy techniques for green base stations. We will provide a comprehensive survey on how to generate renewable energy, such as solar, wind and fuel cells, for green base stations in 5G green cellular networks. 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 cellular BSS operators establish a green cellular network?

Case Studies for Enabling Green Cellular BSs operators establish a green cellular network. This section presents existing studies on cellular BSs and proposes directions for future research. 4.3.1. South Korea particularly its LTE cellular network, which offers data-oriented services. The LTE cellular network.

Are cellular network operators moving towards green cellular BS?

Figure 10 reveals that many cellular network operators in the world have still not shifted toward green cellular BS. Most of these operators are located in developing countries with limited electricity supply and unreliable electric grids. The financial issues in these countries must be investigated further. 4.5.

How many green cellular Bs are there?

GSMA predicted that the number of green BSs would increase to 389,800 by 2020 [8], which reflects the growing awareness of cellular network operators about the significant economic and ecological influence of their networks in the coming years. Figure 10. Worldwide deployment of green cellular BSs [



107].



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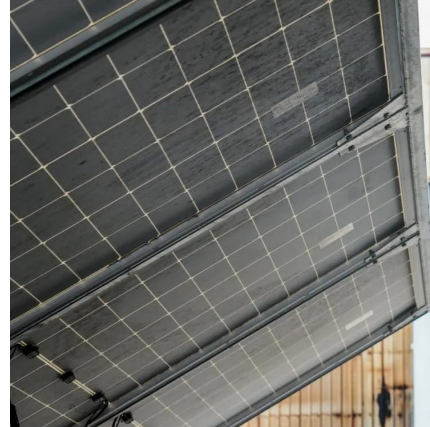
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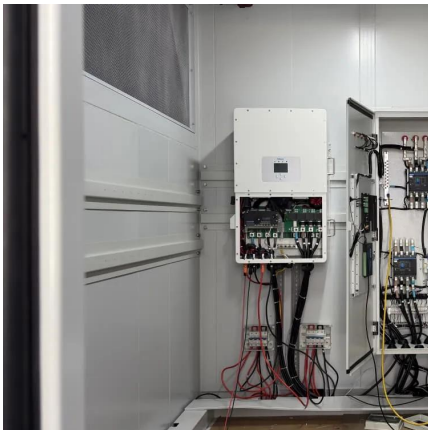
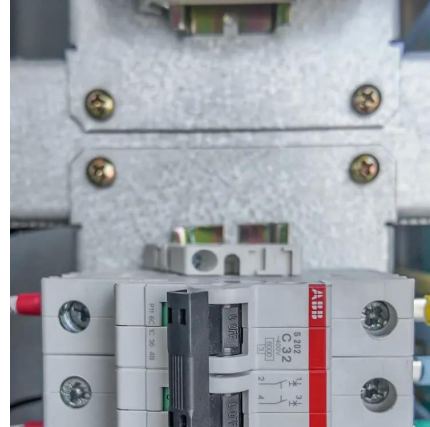
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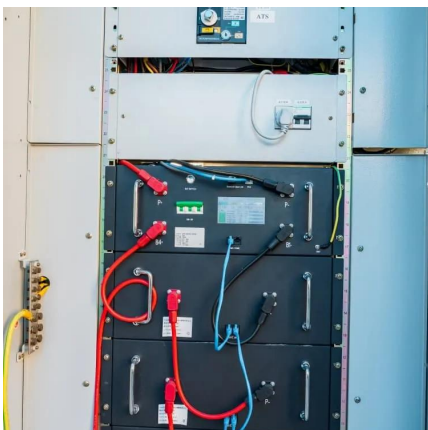
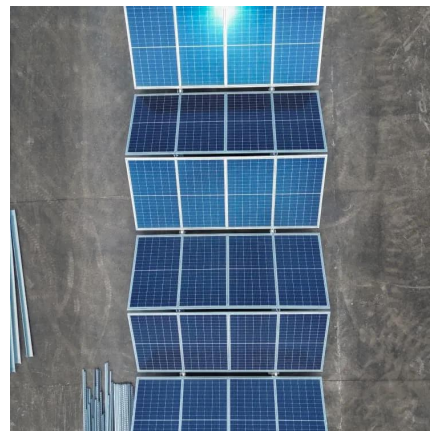


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[China Mobile - Renewable energy and green base station ...](#)

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