

# Latvia 5g base station solar power generation system





## Overview

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The growing penetration of 5G base stations (5G BSs) is posing a severe challenge to efficient and sustainable operation of power distribution systems (PDS) due to their huge energy demand and ma.

What is Latvia's Energy Strategy 2050?

Latvia's Energy Strategy 2050 outlines major changes in renewable energy production and storage, with significant investments planned in wind, solar, biomass, and biogas, as well as in energy storage technologies like batteries and subsurface systems to ensure supply stability .

Who is responsible for the energy transition in Latvia?

Local authorities are responsible for municipal energy supply and renewable energy projects, with Latvia's energy transition guided by the National Energy and Climate Plan and the Energy Strategy 2050.

Do 5G base stations use intelligent photovoltaic storage systems?

Therefore, 5G macro and micro base stations use intelligent photovoltaic storage systems to form a source-load-storage integrated microgrid, which is an effective solution to the energy consumption problem of 5G base stations and promotes energy transformation.

When will battery energy storage systems be installed in Latvia?

The most recent update regarding BESS installations is that in Tume and Rēzekne, Latvia's transmission system operator "Augstsprieguma tīkli" (AST) in June 2025 installed battery energy storage systems with a combined capacity of 80 MW and 160 MWh, which will undergo testing until October 2025.



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