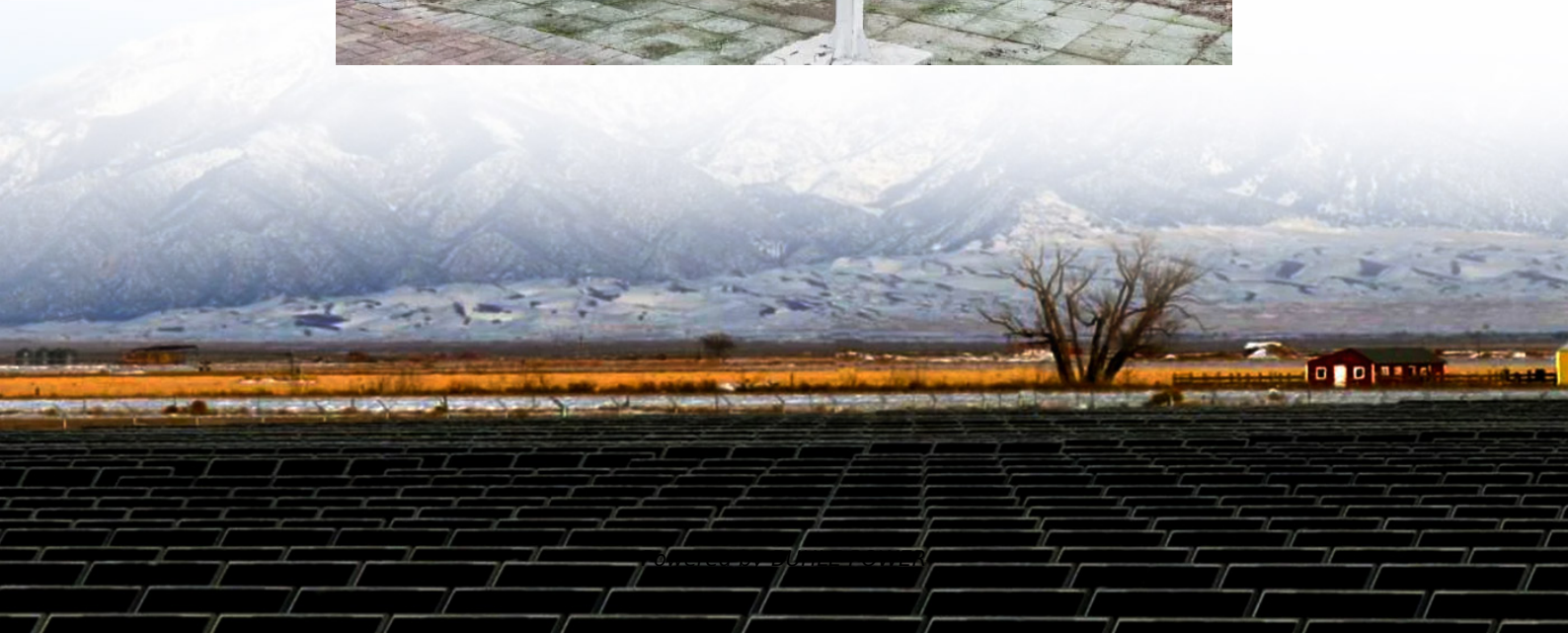


Several wind power generation systems





Overview

Overview: This article describes various types of wind turbine generating systems, including fixed-speed, limited variable-speed, variable-speed partial-scale converters, and variable-speed direct-drive converters. What is wind power generation?

Wind power generation is power generation that converts wind energy into electric energy. The wind generating set absorbs wind energy with a specially designed blade and converts wind energy to mechanical energy, which further drives the generator rotating and realizes conversion of wind energy to electric energy.

What are wind generators?

A Detailed Overview Wind generators, also known as wind turbines, are devices that convert the energy from wind into electrical energy. This process, known as wind power generation, is one of the fastest-growing sources of renewable energy worldwide.

What are the components of wind power generation system?

In terms of configuration, wind power generation system normally consists of wind turbine, generator, and grid interface converters where the generator is one of the core components. There are the following wind power generation technologies such as synchronous generator, induction generator, and doubly fed induction generator.

What are the different types of wind power generating systems?

The commonly used wind power generation systems include the direct-driven wind power generating set and the double-fed wind power generating set; the direct-driven wind power generating set is connected to the grid through a full power converter, while the double-fed wind power generating set is connected to the grid through a double-fed converter.



Several wind power generation systems



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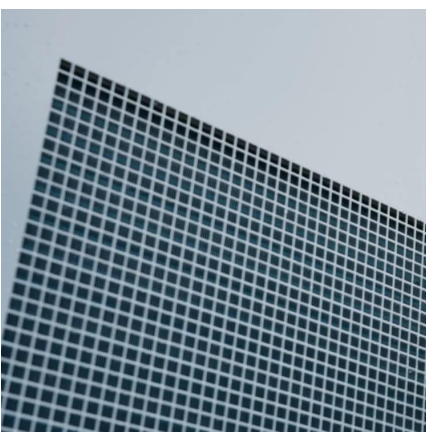
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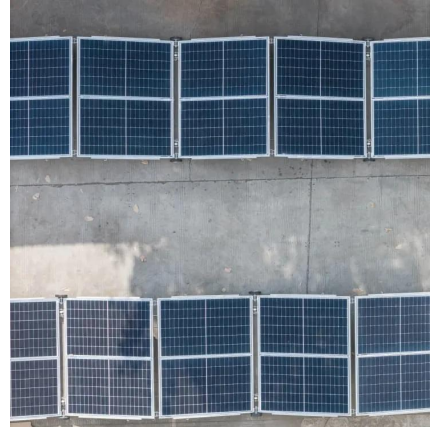
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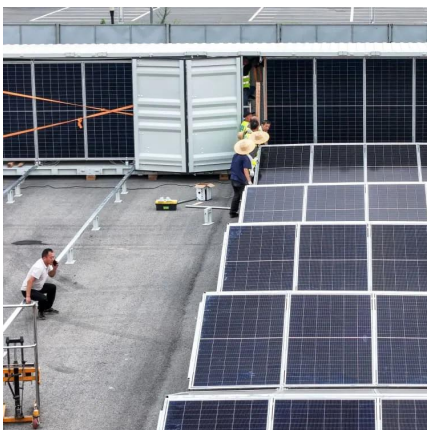
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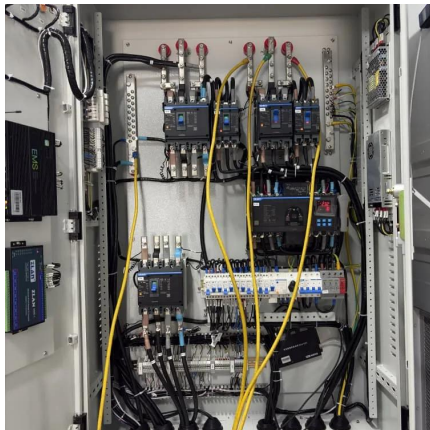
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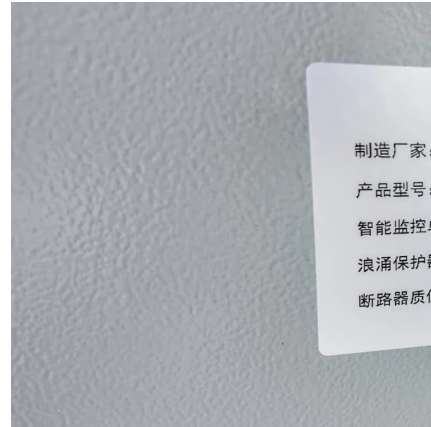
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