

SolarInnovate Energy Solutions

Wind power supply for communication base stations in Italy



Overview

Where are Italian wind plants located?

Italian wind plants are concentrated in the south of the country and generate a sixth of Italy's green energy. Thanks to the wind, 20 terawatt hours of energy are produced each year and installed capacity is expected to almost double by 2030.

How is wind energy distributed in Italy?

Wind energy is not distributed in a homogenous way across Italy's regions, but is predominantly concentrated in Southern Italy.

Which country has the most wind power in Italy?

Italy is 1.6 MW. New wind power capacity was mainly installed in Sicily (43%), followed by Campania (18%) and the Apulian Region (16%). 90% of the total installed capacity is concentrated in six southern regions: Apulian (25%), Sicily (19%), Campania (16%), Basilicata (12%), Calabria (10%).

Where does Italian wind power come from?

In fact, the heart of Italian wind power production is the southern part of the Apennine ridge, prevalently the eastern side. Moreover, wind energy is also being harnessed in significant quantities on the large islands, thanks to favorable natural conditions. Another peculiarity of Italian wind power concerns the deployment of individual plants.

Can wind energy be used to power mobile phone base stations?

Worldwide thousands of base stations provide relaying mobile phone signals. Every off-grid base station has a diesel generator up to 4 kW to provide electricity for the electronic equipment involved. The presentation will give attention to the requirements on using wind energy as an energy source for powering mobile phone base stations.

How many wind plants are there in Italy?

And in 2004, for example, in all of Italy there were still only 120 wind plants installed, for an overall capacity of 1.1 gigawatts. The expansion of wind power then advanced erratically, peaking in the two-year period 2000-2001, and growing rapidly between 2006 and 2012.

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