

What is kitenergy?

We develop innovative energy technologies, harnessing altitude winds driven by Italian ingenuity, creativity and passion. The key idea of Kitenergy is to harvest high-altitude wind energy with minimal effort in terms of generator structure, costs and land occupation.

What is kitenrg technology?

This technology has the potential of generating renewable energy, available in large quantities almost everywhere, with lower production costs than those of fossil energy. Kitenrg is the new frontier of energy generation using a clean, performing and sustainable technology to harvest high-altitude wind currents.

How does kitenergy work?

Since 2010, Kitenergy has been innovating in the wind energy field with the introduction of a new way of exploiting wind energy. We use ultralight kites tethered to a ground-based generator at which are transferred the kite aerodynamic forces. The kites operate high enough to not be influenced by the Planetary Boundary Layer.

Who owns Kitepower?

Kitepower was founded in 2016 by Johannes Peschel and Roland Schmechlas a university spin-off from the Delft University of Technology's airborne wind energy research group established by the former astronaut Wubbo Ockels. The company is located in Delft, Netherlands, and currently comprises 18 employees (2018).

How does kite-based electricity work?

How It Works Kite-based electricity generation taps into high-altitude winds, which are much stronger and more consistent than those used by traditional wind turbines. This cutting-edge technology involves airborne wind energy systems (AWES), where tethered kites fly hundreds of meters above the ground, capturing the wind's kinetic energy.

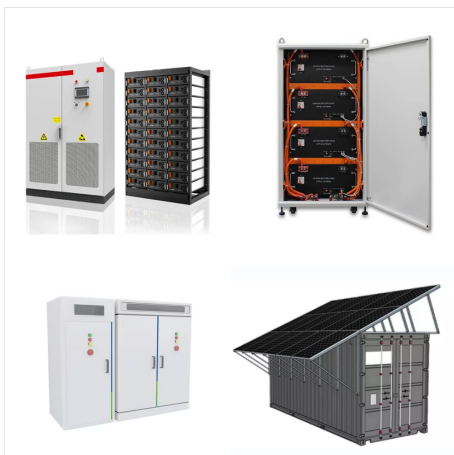
Why do kites use a wind turbine?

1. Higher Altitude, Stronger Winds: Kites can access winds at altitudes of up to 1,000 meters, where wind speeds are significantly higher and more stable. This leads to a greater energy yield compared to

conventional turbines, which are typically limited to around 200 meters.



Imagine that you are standing on a beach, flying a kite across the wind. You feel the strong force from the kite strings. As you fly the kite sideways, you notice that it flies faster ??? way faster than the wind itself is blowing. Flying a kite across ???



In the ongoing pursuit of sustainable energy, kite-based electricity generation is making waves. By reaching stronger, more consistent winds at higher altitudes, these energy kites promise greater efficiency, ???



A key part of the technology's appeal is that kites can harvest wind energy that conventional turbines cannot. A typical 1.5 MW turbine stands 100 m tall, and its net capacity factor ??? the actual energy produced, divided by ???



Utilizing advanced technology, it offers seamless control, regenerative energy, and upgradeable features, making it more efficient, reliable, and versatile than traditional kite control systems. Perfect for both hands-on sailors and ???



The two companies plan to fly a 120m? kite to a height of approximately 400m above ground to generate electricity. The kite pulls rope from the winch during its ascent in a controlled trajectory. Electricity will be ???



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