

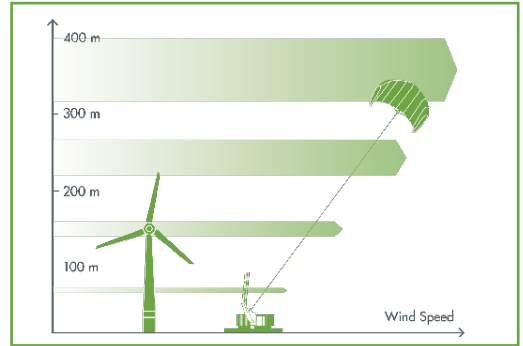


AIRBORNE WIND ENERGY SYSTEM

**SKYSAILS POWER N-CLASS
ONSHORE UNIT SKS PN-14**

THE POWER OF HIGH ALTITUDE WIND

SkySails Power airborne wind energy systems are a reliable and economic alternative to conventional decentralized energy solutions such as wind turbines, solar installations or diesel generators. Whereas surface friction reduces wind speeds closer to the ground, the wind energy potential can be significantly greater at higher altitudes. SkySails Power systems harness this energy with large and fully automatic power kites. The kite's tractive force drives a generator inside the ground station that produces electricity.



Wind energy potential is influenced by the boundary layer and can be significantly higher above 200 meters

CLEAN ENERGY FOR EVERY NEED

The SKS PN-14 onshore system provides clean electricity wherever it is required:

- as a reliable island solution in remote areas that lack a stable grid connection
- as an economic and independent power solution for industry, agriculture, tourism or telecommunication infrastructure
- as a supplement to existing energy projects such as solar parks or wind farms (hybridization)

POWER SOLUTION AVAILABLE ANYWHERE

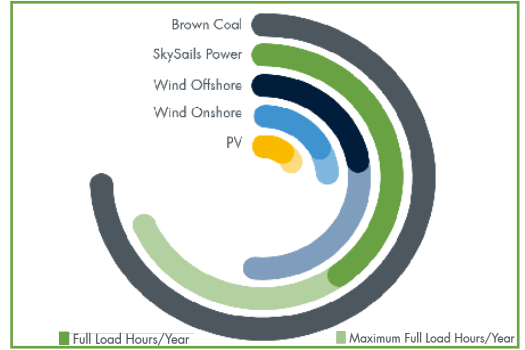


Since the SKS PN-14 harnesses the wind at an altitude of 200 to 400 meters, it achieves high energy yields even at low-wind sites. The system can also be operated in hurricane and typhoon regions, since the power kite is easily retrieved and stowed away before these natural disasters. Thanks to its simple transportation and installation requirements, the SKS PN-14 can even be installed in places that are difficult to access.

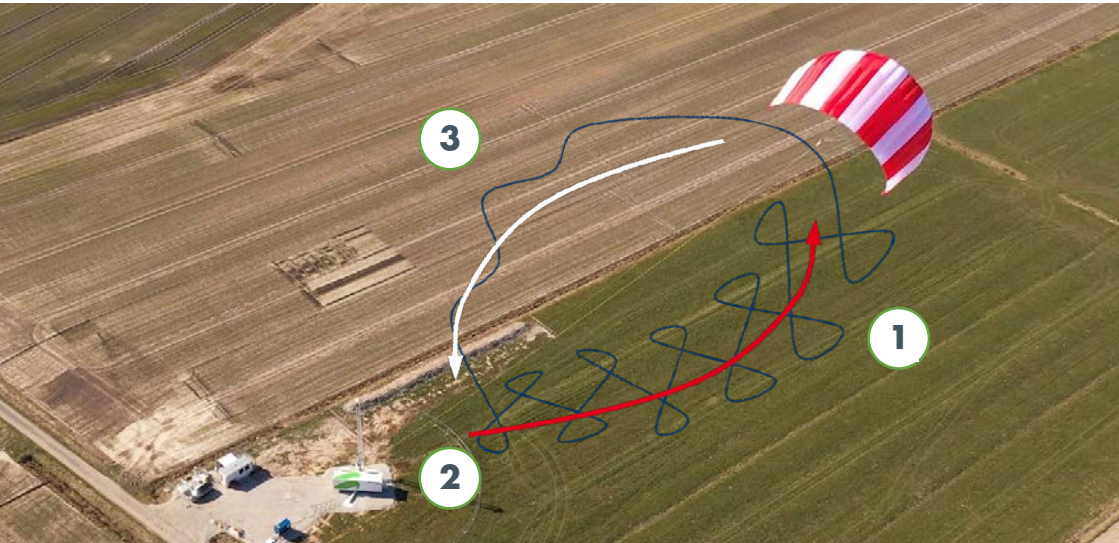
RELIABLE BASELOAD POWER

The SKS PN-14 achieves a high amount of full load hours (up to 6,500 full load hours/year). It is the first time a renewable energy alternative can compete with conventional solutions such as brown coal for supplying baseload power.

**Full load hours:
Production (MWh)/Installed capacity (MW)**



HOW IT WORKS



1

Work phase

The power kite unwinds the tether from the winch.

2

Power generation

A generator inside the winch converts the rotational force to electricity.

3

Rewind phase

The autopilot steers the power kite into a neutral position – the generator now acts as a motor and retracts the tether, while consuming only a fraction of the energy generated during the work phase.

The excess energy is fed into the grid and the power cycle starts over.



- ① Kite
- ② Control pod
- ③ Tether
- ④ Launch & landing mast
- ⑤ Wire guide
- ⑥ Winch with generator & gearbox
- ⑦ Control cabinet
- ⑧ Standard container
- ⑨ Flat rack with ring mount on concrete foundation plate

Components of the SKS PN-14

TECHNICAL DATA SKS PN-14 (¹depending on site specific configuration)

Average cycle power / rated power ¹	80-200 kW
Kite size (laid out) ¹	90-180 m ²
Operating wind range	3-25 m/s
Tether length	800 m
Tether diameter	14 mm
Ground station	30 ft container

U2-MV-MBD-00142-REVO

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