Bayerischer Staatspreis für Nachwuchsdesigner

Bavarian Ministry of Economic Affairs and Media, Energy and Technology

WINNERS 2012

WOLT – WIND ENERGY IN THE VINEYARD

Wolt facilitates the efficient dual use of modern vineyards – in addition to harvesting grapes Wolt makes it possible to harvest energy. Inspired by windbelt technology, Wolt generates power using a ribbon oscillating in the wind rather than using a rotor. Because the energy output exceeds the volume required for wine production, ecological viniculture with a sound energy balance is possible.

Wolt consists of hundreds of elements that are mounted on posts throughout the vineyard and connected above ground. The system uses the existing infrastructure in modern vineyards and builds on it. While grapes are harvested once a year, wind energy can be harvested throughout the year.

Wolt was designed as a cost-efficient, low-maintenance and robust alternative to current wind power plants.

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Diploma thesis 2010

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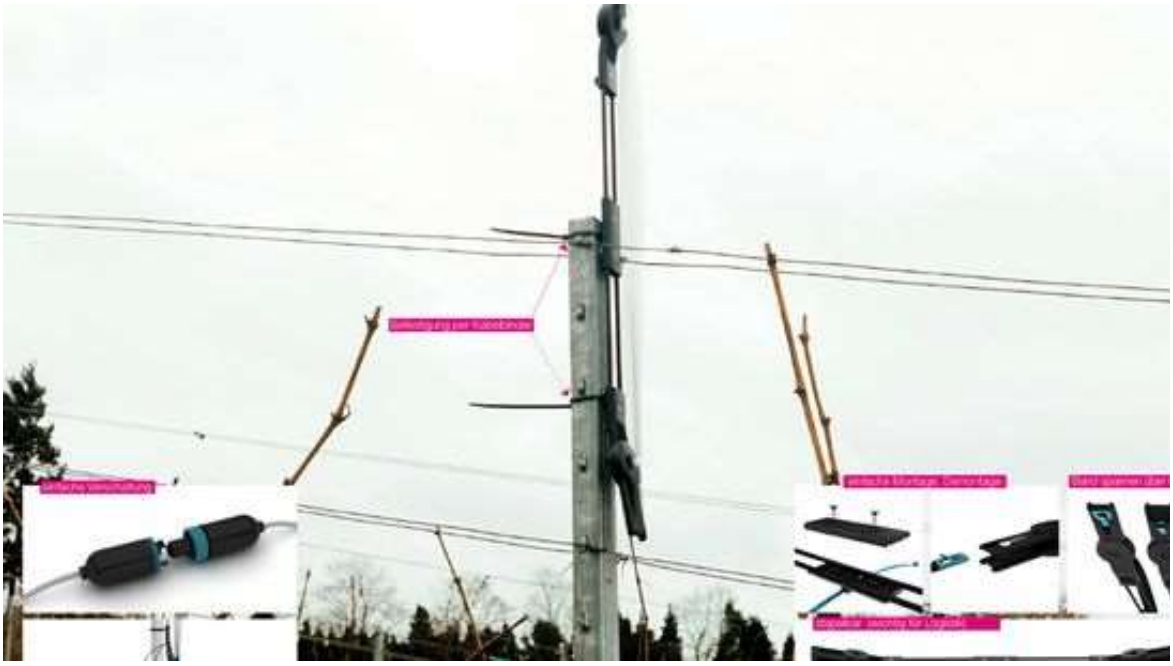
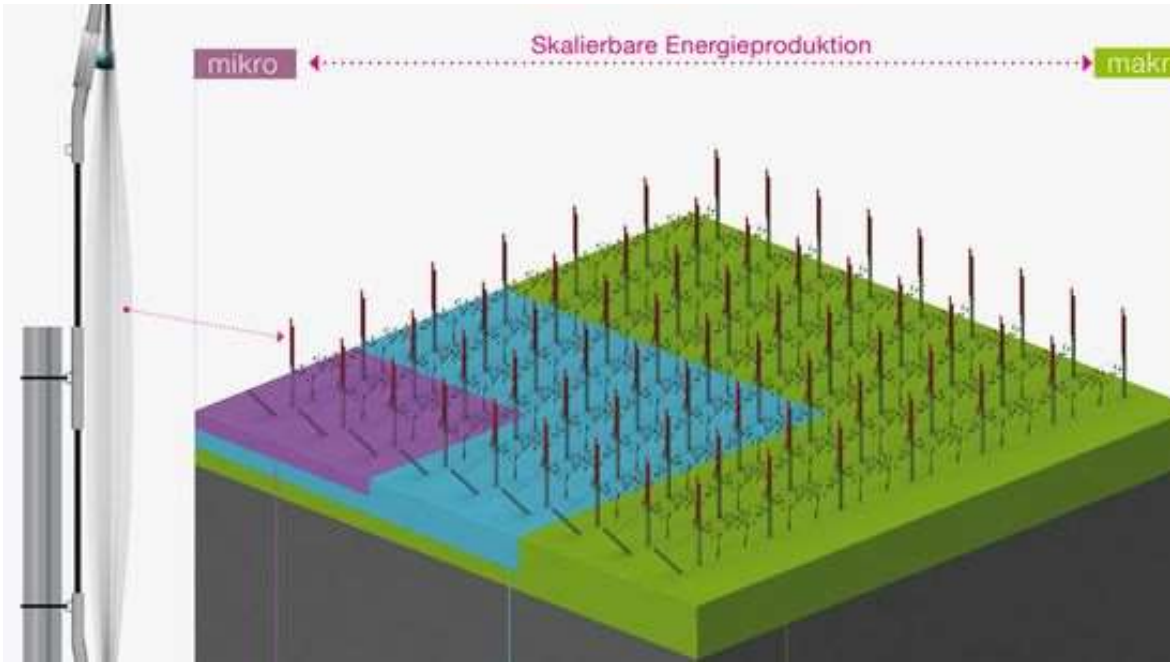
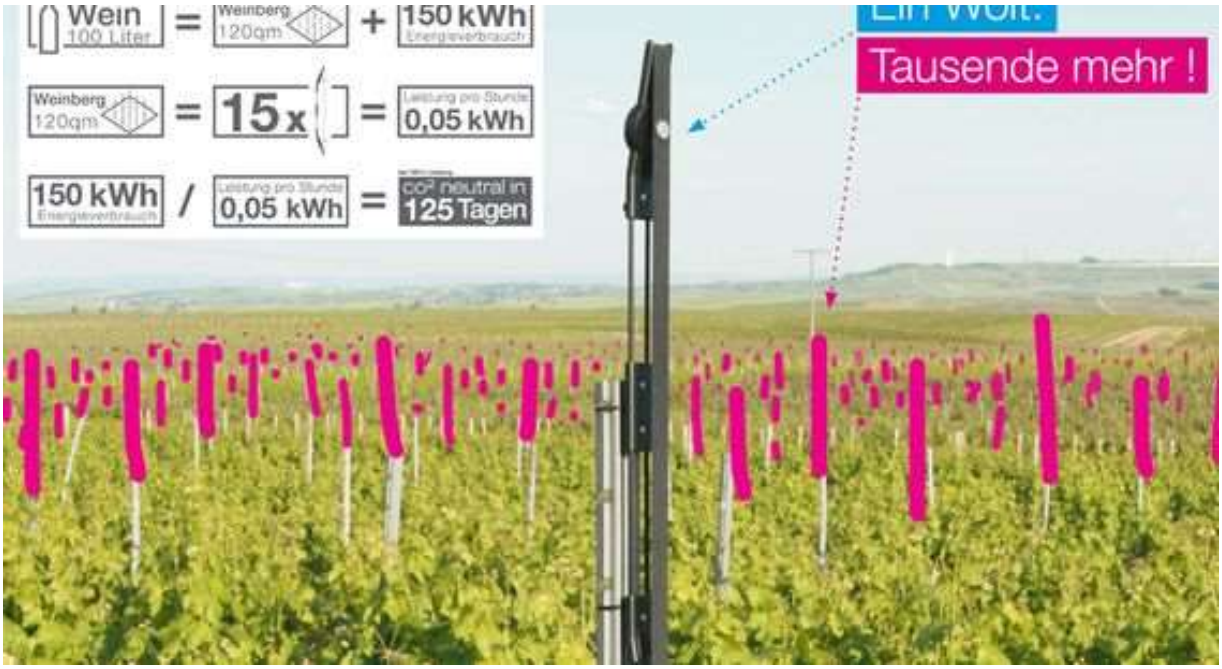
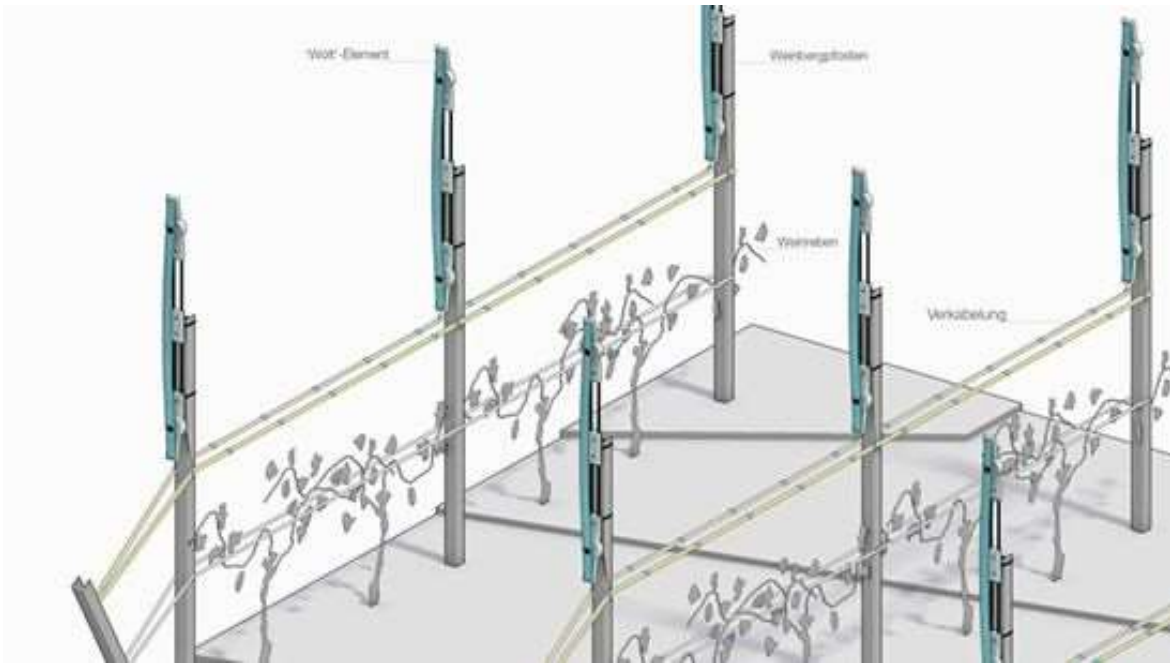



mikro
Skalierbare Energieproduktion


Wein
100 Liter
=
Weinberg
120qm
+
150 kWh
Energieverbrauch
Weinberg
120qm
=
15 x
=
Leistung pro Stunde
0,05 kWh
150 kWh
Energieverbrauch
/
Leistung pro Stunde
0,05 kWh
=
CO² neutral in
125 Tagen
Ein Volt.
Tausende mehr !


Volt-Element
Weinbergpfosten
Weinreben
Verkabelung


Magnete
Band
Kupferspule
Gleichrichter
Spritzgussteile
Aluminiumrohre