

Welcome!

A large white wind turbine is positioned on the left side of the slide, set against a bright blue sky with scattered white clouds. The turbine's tower, nacelle, and three blades are visible. The nacelle features the VENSYS logo.

New Markets with new products – VENSYS 1MW for Poland



Polish Market until 2020

The President of Poland has signed the **Renewable Energy Source (RES) Act** which became effective on 4 May 2015. The RES Act introduces a completely new model of the support scheme so-called auction system. The auction system will cover all producers who start production from renewable energy source after **31-12-2015**.

Basic rules of the new auction system are as follows:

- Support in the new system is to be granted as a result of an **auction**;
- Auction will be conducted at least once a year separately for installations with capacity **up to 1MW** and above 1MW;
- New project can be submitted to an auction after so-called pre-qualification procedure (permit for building and grid connection);
- The basic criterion for auctions will be the **price for 1 MWh**;
- The RES Act assumes that at least **25%** of electrical energy covered by the auction should be generated in small installations **up to 1MW**;
- Reference prices will be established yearly and separately for particular sources and installation capacities;



Auction in 2016

The maximum amount of electricity to be purchased from renewable energy sources in 2016
50.4 Mio. MWh

The budget for the purchase of electric energy
≈ 4.3 bn. EUR

The amount dedicated to RES with capacity factor <4.000 full load hours
30.9 Mio MWh (61,2%)

The amount of electricity from renewable energy sources for facilities **up to 1 MW**
12.6 Mio MWh

The budget for the purchase of electric energy from the installation **up to 1 MW**
1.4 bn. EUR



Auction in 2016

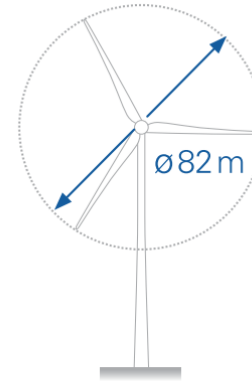
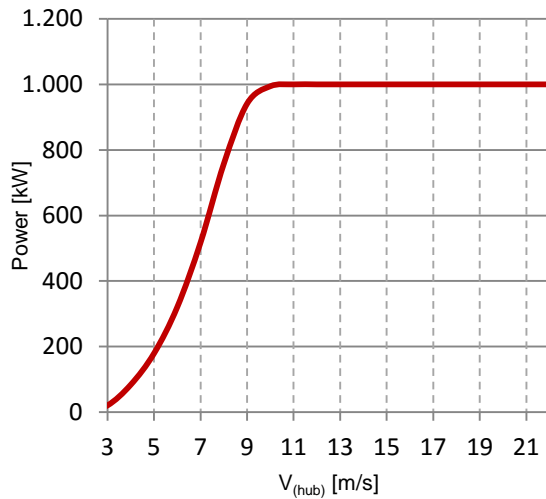
	Wind Project with capacity > 1MW	Wind Project with capacity ≤ 1MW
Energy amount for 15 years	30,9 Mio. MWh	12,6 Mio. MWh
Budget limit for 15 years	4,3 bn. – 1.4 bn. = 2,9 bn. €	1,4 bn. €
Reference price	92 €/MWh	99 €/MWh
Average energy amount / year	30,9 Mio. MWh / 15 years = 2,06 Mio. MWh / year	12,6 Mio. MWh / 15 years = 840k. MWh / year
Average budget for 1 year	2,9 bn. € / 15 years = 176,8 Mio. €	1,4 bn. € / 15 years = 94,1 Mio. €
Average price for 1 MWh	86 €/MWh	112 €/MWh
Assumption -> 2500 h / year	2,06 Mio. MWh / 2500 h = 824 MW	840k. MWh / 2500 h = 336 MW



Auction in 2016

	Wind Project with capacity > 1MW	Wind Project with capacity ≤ 1MW
Assumption I -> 2500 h / year	824 MW	336 MW
Assumption II -> Average capacity of one WTG is 2,5 MW and 1 MW	330 WTG	336 WTG
Assumption III -> Average capacity of wind project 20 MW and 1 MW	41 Projects	336 Projects
Competitors	<ul style="list-style-type: none"> • Wind projects without limit of capacity (Wind farms with 10 MW, 50MW, 200MW and more); • Water plants • Biogas • Offshore wind. 	<ul style="list-style-type: none"> • PV with capacity up to 1MW • Small wind projects up to 1MW capacity – only few on the market;

VENSYS 1MW Platform – special for polish market



VENSYS 82

Rated power	1000 kW
Rotor diameter	82 m
Hub height	70 / 85 / 100 m
Rotor speed range	8 – 16 rpm
Noise Power lvl.	102 dB(A)
IEC class	IIIA



VENSYS Technology

Outstanding features of the VENSYS-Technology:

Direct Drive

Air Cooling System



Permanent Magnet
Technology

Blade Pitchsystem

Full Converter System



Thank you!

VENSYS Energy AG

Im Langental 6
66539 Neunkirchen
GERMANY
T +49 6821 9517-0
F +49 6821 9517-111
vertrieb@vensys.de
www.vensys.de

Office in Poland

Ul. Ogrodowa
62-081 Przeźmierowo

T +48 61 6523 170
sprzedaz@vensys.de

