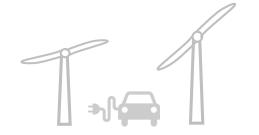


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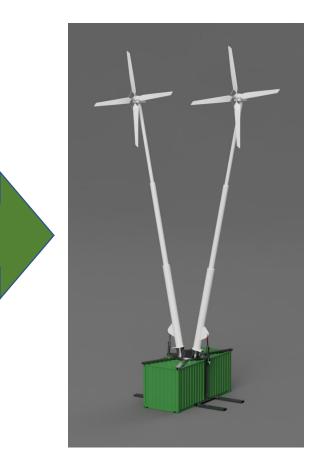






Technology Evolution





- Adapt existing turbines to be used as Multi-Rotor turbine
- Include easy transport, installation and maintenance capabilities
- Easy expansion with other energy generation and storage systems

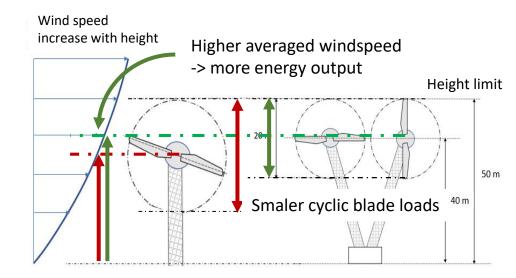
Goal: Minimize LCOE for wind turbines with max. 50 m total height.







Twin rotor as a low-cost electricity supplier



- Optimal energy yield especially at sites with a height restriction
- Easy installation of the turbine because it takes place on the ground
- Survival during extreme wind events, as the individual rotors can be lowered to the ground in a short time (<30 min)
- Lowering of the rotors as needed
- Easy access to all components and thus low maintenance/service costs
- Easy transport due to small and light plant modules to the site (container transport)



Proven EasyWind 6 kW turbine as basis





Rated power:	6 kW
Rotor diameter:	6,2 m
Hub height:	13/19 m
Passive pitch system	
Hydraulic safety brak	ke
Damped yawing win	d vane

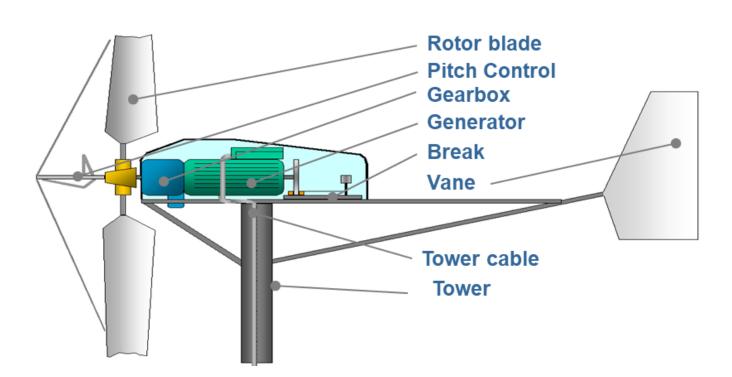








Turbine Technical Data



Technical Data EasyWind 6kW AC	
Rotor diameter:	6.2 m
Number of blade	4
Position	Upwind
Rated speed	83/ 124 RPM
Design of blade	Steel/ glassfiber
Design of hub	Rigid/ solid steel
Capacity output:	6 kW
Rated voltage	400 V, 3 phase 50 Hz
Cut-in wind speed:	3 m/s
Rated wind speed	11.5 m/s
Cut-out wind speed:	none - stormproof
Survival wind speed.:	70 m/s
Control system:	passive pitch
Yawing control by	Wind vane







Type certification IEC 61400-2 Class 1





STC - 090202 Prototype Testing DEWI-OCC, Rev. 0, 2009-00 STC - 101209 Manufacturing Evaluation DEWI-OCC, Rev. 0, 2019-00 R100268-12 Final Evaluation Report DEWI-OCC, Rev. 0, 2010-12 The conformity evaluation was carried out according to IEC WT 01:2001-04 IEC system for confort testing and certification of wind turbines – Rules and procedures in connection with the amendment IEC 61400-2: 2006-03, Annex A: Type certification of small wind turbines. The wind turbine type is specified in the annex of the following Statement of Compliance:	Am Seedeich 9, D-2	GmbH		DEWIFFF
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Certification Body for Wind Turbines



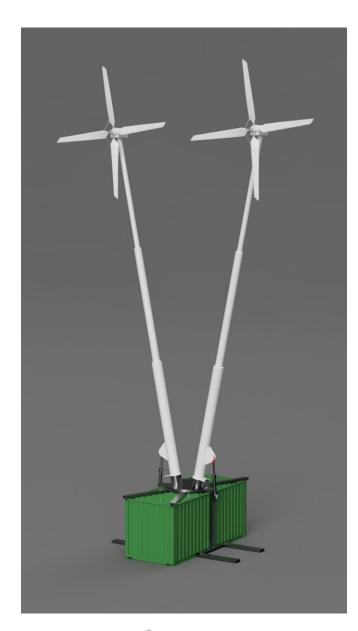
Success of EasyWind turbines



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RESIT TWind 12 kW

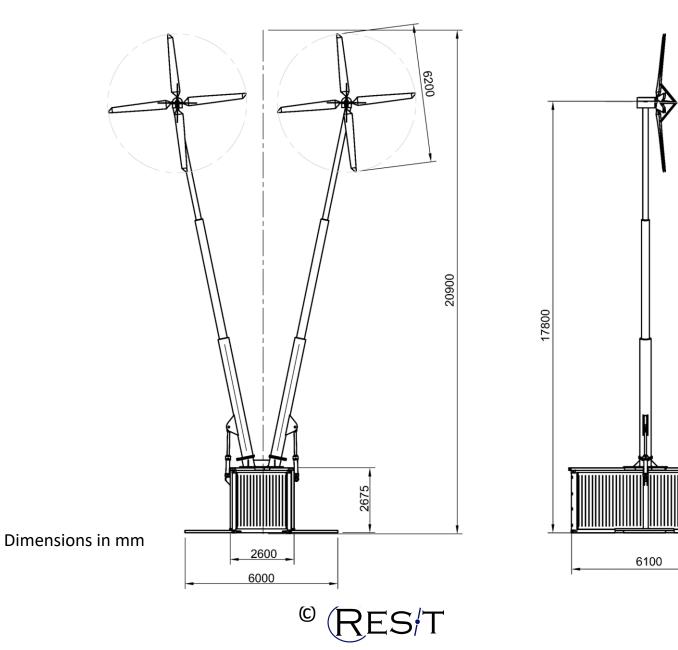
- 2 x EasyWind 6 kW turbine
- EasyWind Mono-Tower with hydraulic tilting system
- Central active yawing system
- 20 ft Container with support structure as "foundation"
- Container used for transportation to site and storage for complementary systems (batteries, (hot) water tank, PV, electrolyser,...)







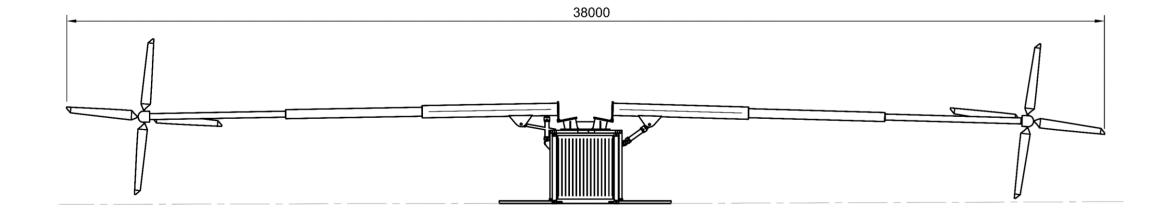
TWind 12 dimensions







TWind 12 dimensions



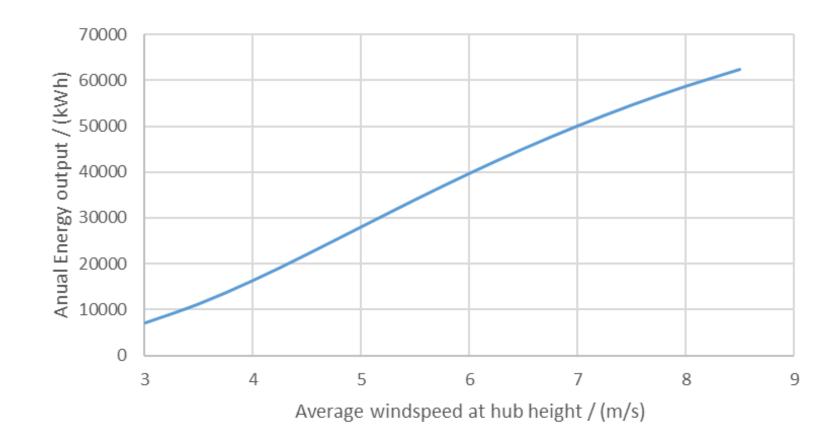








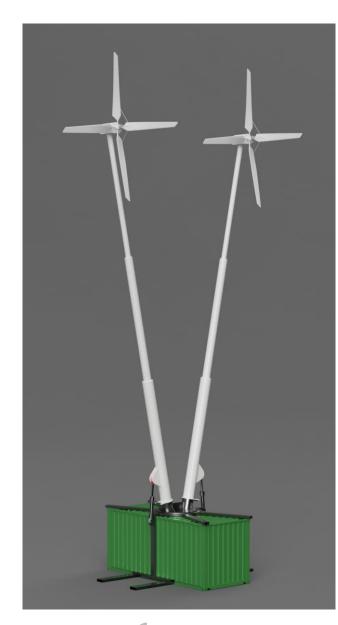
TWind 12 Anual Energy Output





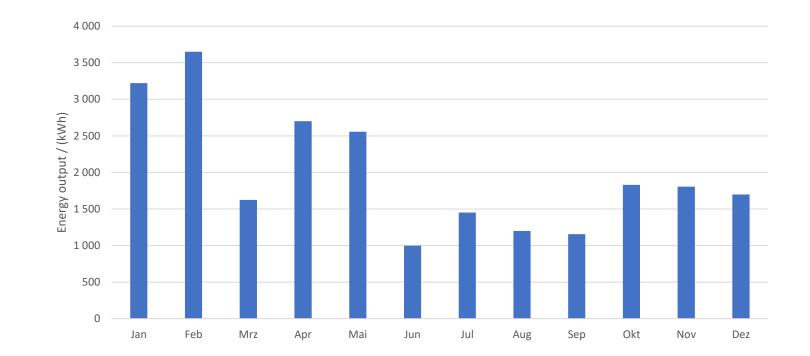






TWind 12 Monthly Energy Output

(4.8 m/s anual average windspeed at hub height)



Total / year : 23000 kWh

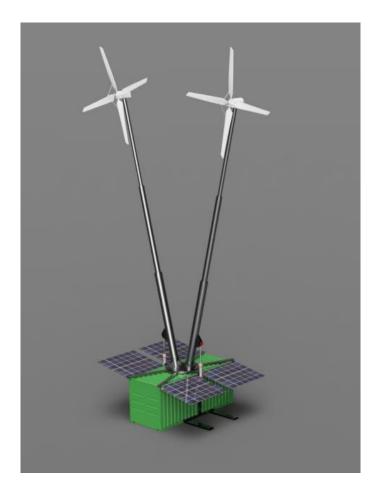








Energy Container Options



- Attached 7 kW Peak PV system
- Integrated storage systems:
 - Lithium battery
 - Redox-Flow battery
 - Fly-wheel
 - H2 electrolyser
- Integrated heat systems:
 - Direct heating of hot water tank
 - Heat pump

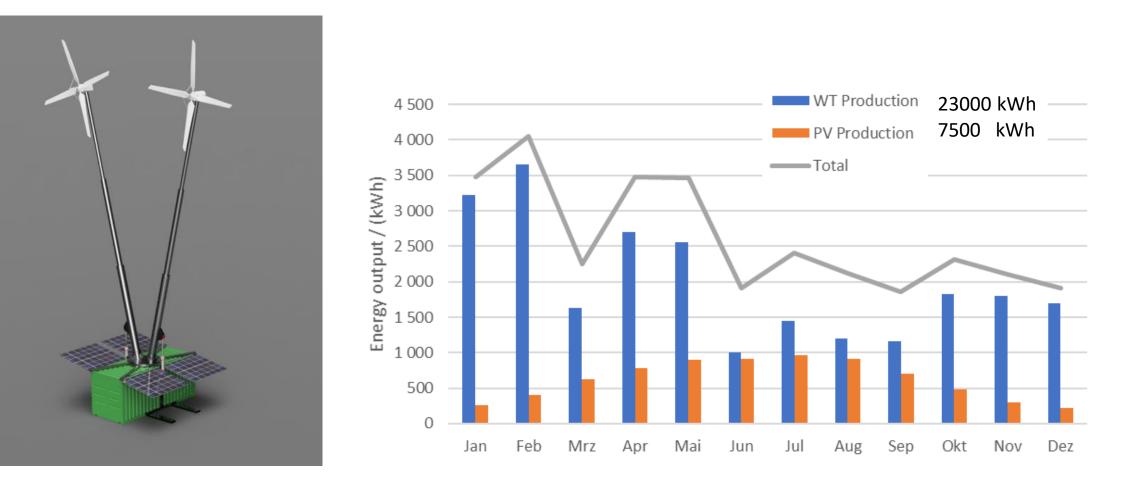






TWind Monthly Energy Output

(4.8 m/s anual average windspeed at hub height and 7 kW peak PV System)







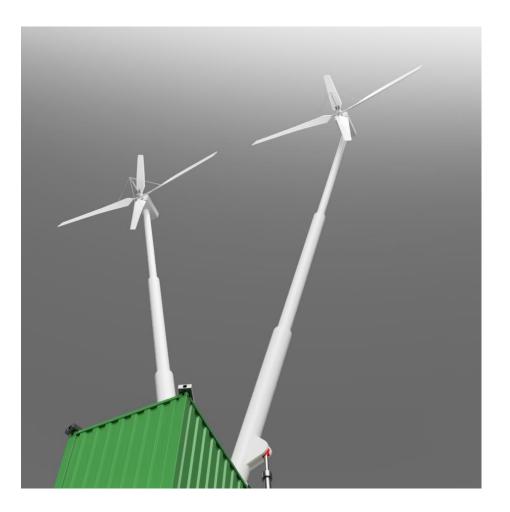


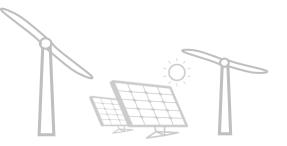


Renewable Energy Systems & Technology UG

m: +491725482736 e: fr@res-t.de w: www.res-t.de

Dorfstraße 36 D25920 Stedesand











European Energy Consulting Flughafenallee 26 28199 Bremen Germany

Dr. Heuberger

