

The TwingTec team (20 December 2016)

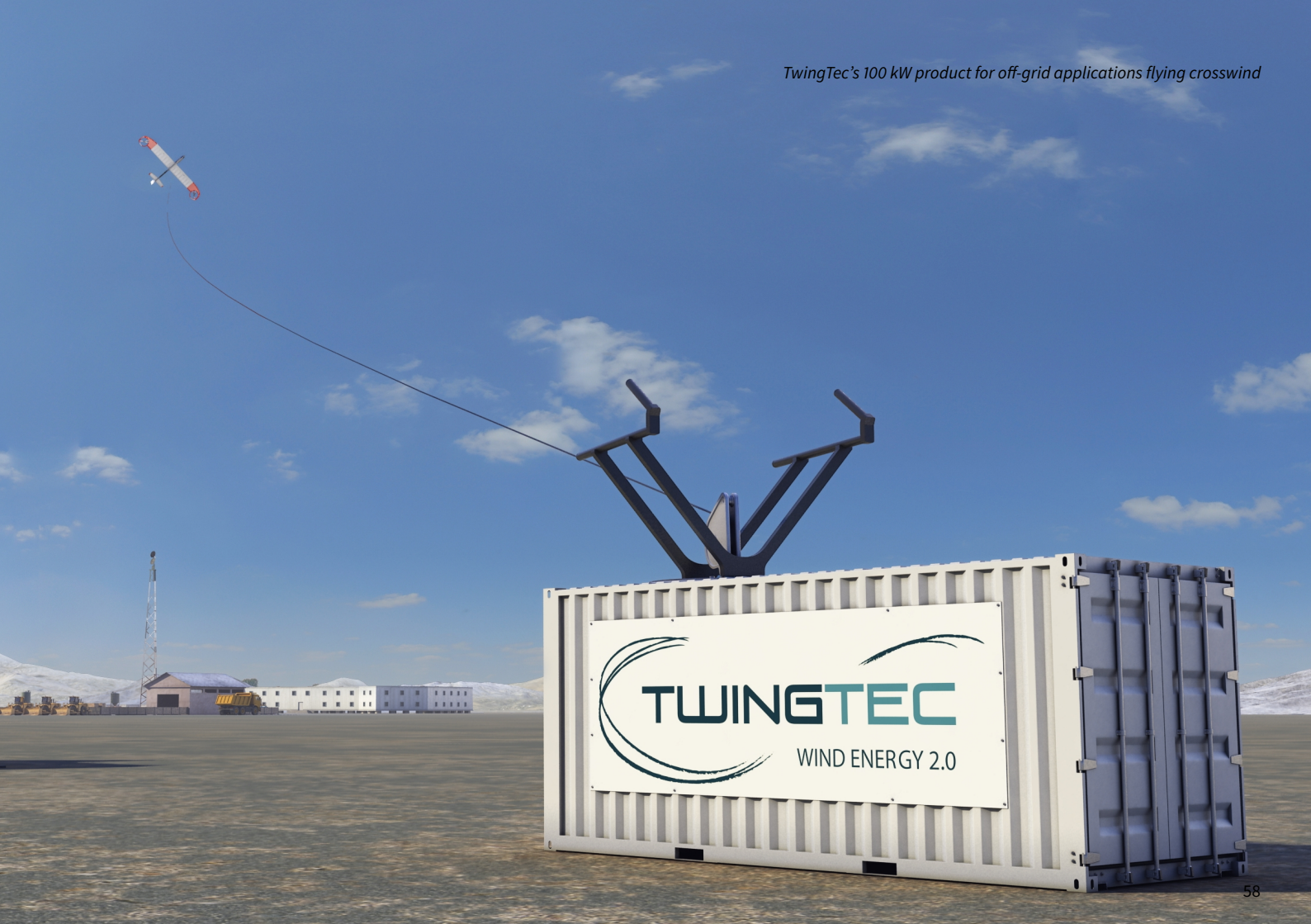


TwingTec's 100 kW product for off-grid applications



TWINGTEC
WIND ENERGY 2.0

TwingTec's 100 kW product for off-grid applications flying crosswind



Off-shore wind farm with TwingTec's 2.5 MW units







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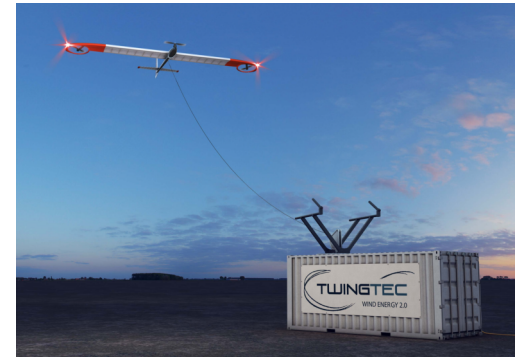
Off-grid, Off-shore and Energy Drones: TwingTec's Roadmap to Wind Energy 2.0

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Current wind turbine technology can only access a small fraction of the global wind energy potential. The massive structures stick to the ground and can off-shore only be deployed in shallow waters. Wind Energy 2.0, the next generation wind energy technology, will expand the range of wind energy up to several hundred meters above ground and to basically the whole surface of the planet, land or sea. An array of 20 x 20 energy drones will produce 1 GW of electrical power. Installed off-shore on floating platforms such Giga-Islands will be a major element of the future sustainable energy economy.

TwingTec is at the forefront of the development of Wind Energy 2.0. The key drivers of TwingTec are a strong focus on the market, a reliable technology, a professional team and a clear product roadmap. In phase I TwingTec has developed its technological concept in close cooperation with leading Swiss R&D institutes. The main guidelines of the development were economics, fully autonomous operation and safety. We realised some years ago that the emerging civil drone technology is key to fulfil these requirements. Thus, our airborne device evolved from a kite into an energy drone. Starting this year TwingTec has entered phase II which is focused on reliability and safety. To this end TwingTec is currently developing a scaled pilot system together with industrial partners. The system is highly mobile and can be readily demonstrated at cus-

tomers sites. Commercialisation will start in phase III in 2018. TwingTec is convinced that the off-grid market provides a very interesting opportunity for Wind Energy 2.0 with products in the range of 100 kW to 500 kW. TwingTec is currently lining up first commercial projects in Canada with mines and remote communities. Finally, TwingTec will step into the utility scale with a 2.5 MW system focussing on off-shore applications, where the ultimate potential for airborne wind energy lies.



TwingTec's 100 kW product during launch