

# Advanced aerodynamic blade tip technology for offshore wind turbines



Anakata are established experts in the Onshore Wind sector. They improve performance in new and operational blades by combining Formula-One-level aerodynamic solutions with deep wind turbine expertise. Anakata products help turbines live longer by reducing fatigue loads and blade leading edge erosion. Their solutions have delivered a >5% increase in Annual Energy Production (AEP) for onshore – and they came to OWGP ready to take on the offshore sector.

## Before

Anakata sought OWGP grant funding to design, develop and test its SATIP blade-tip technology. The specialists at Anakata envisioned SATIP as both a retrofit for existing turbines and a factory-fit component for new blades. The project promised to put the UK at the forefront of Offshore Wind blade innovation, reducing the Levelised Cost of Energy (LCOE) and unlocking significant export opportunities.

## During

The project aimed to extend turbine life and cut LCOE by rethinking blade-tip aerodynamics. Anakata brought together patented winglets with new devices to manage aerodynamic forces and a new-gen LEP system, to boost energy capture and to speed up wake recovery. Developed in Oxford, the new SATIP was put through rigorous wind-tunnel tests to prove it could handle tough conditions.

## After

SATIPs were installed on a 7MW offshore turbine during 2024 and 2025. Designed for domestic and international markets, SATIPs support UK-based OEMs and wind farm operators, while opening up export opportunities. By taking on the critical challenges of turbine performance, Anakata has positioned itself at the forefront of bringing transformative benefits to the global Offshore Wind sector.

## How does this help deliver the IGP?

- This innovation directly addresses the Advanced Turbine Technology priority by tackling key challenges such as erosion and fatigue.
- It helps drive down the LCOE and reinforces UK leadership in offshore wind technology.

**Tailored to work with offshore turbines' longer blades, higher tip speeds and harsh operating conditions, SATIP improves blade performance and supports the growth of offshore wind.**

“OWGP’s support accelerated Anakata’s SATIP blade-tip development forward.”

Huw Griffiths  
CEO | Anakata  
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Advanced turbine technology



**3 jobs** and  
**2 new products**  
created



Exports up **£85,000**,  
turnover up **£185,000**

