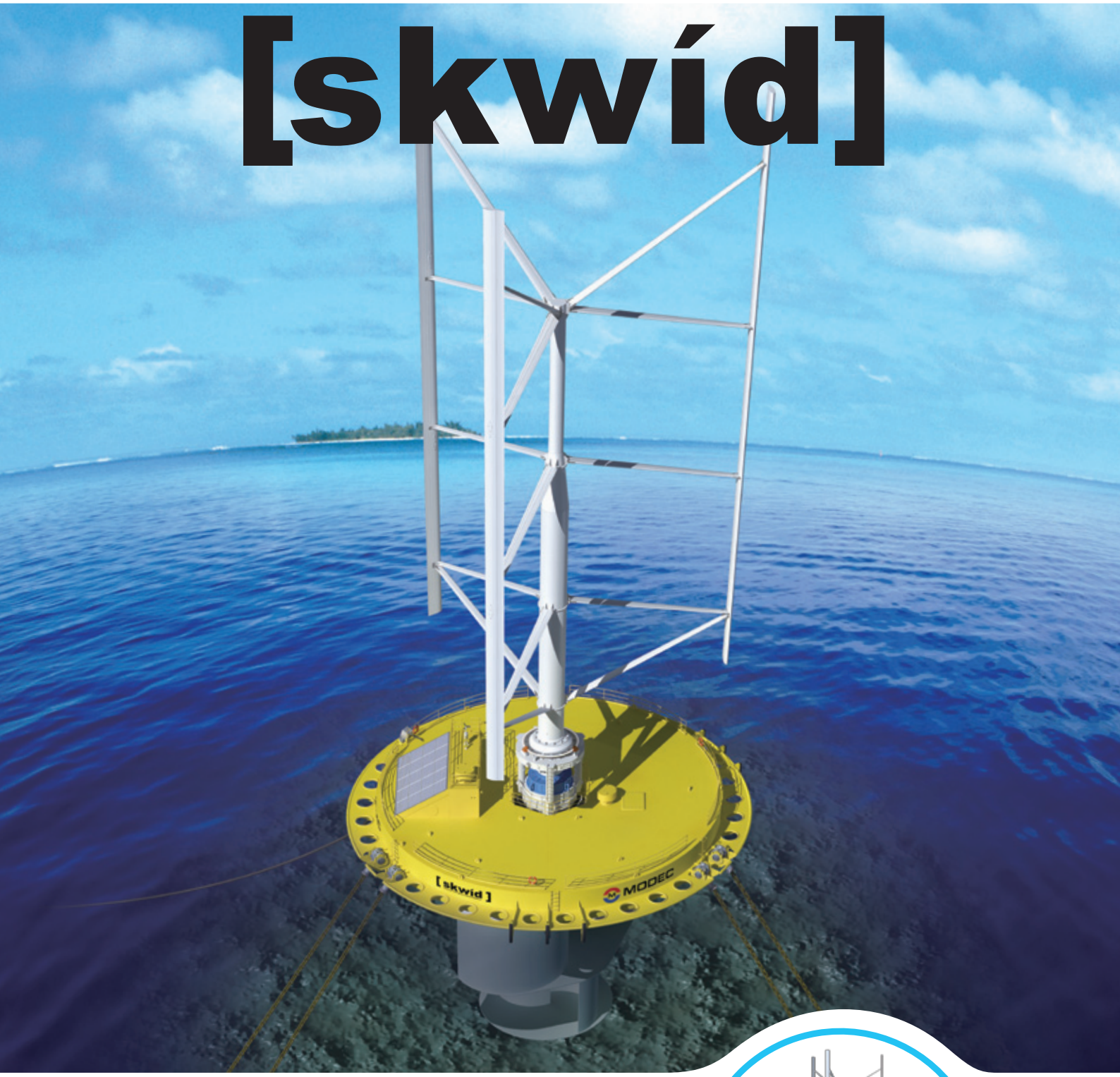
MODEC

World's First

Floating Wind & Current Hybrid Power Generation

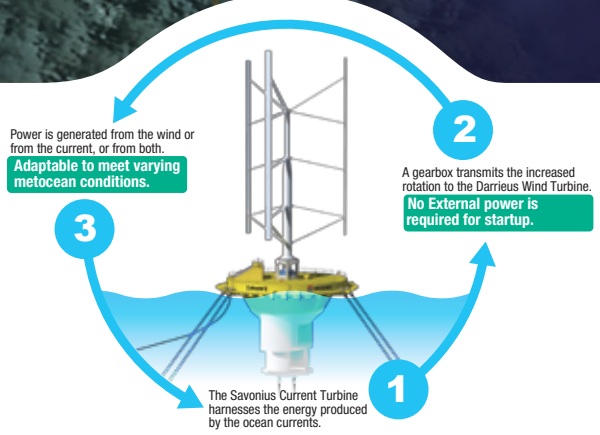
Savonius Keel & Wind Turbine Darrieus

[skwíd]

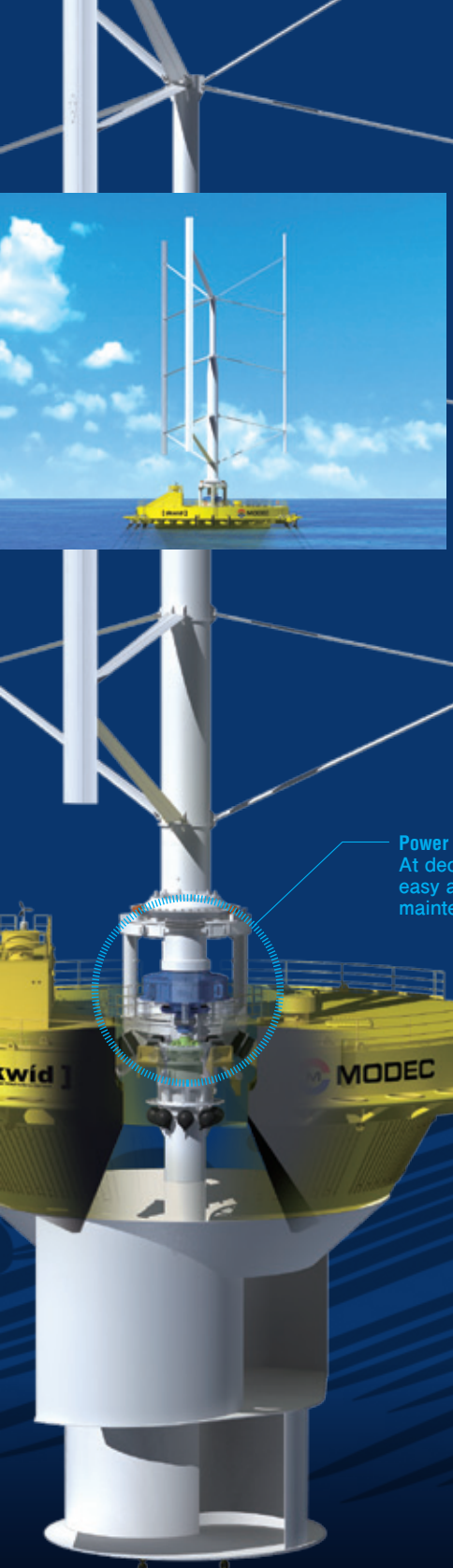


World's First Ocean Power Generation System

The SKWID is a floating wind and current hybrid power generation system capable of converting two inexhaustible ocean energy sources into abundant power. By harvesting the renewable energy from never-ending currents and strong and continuous ocean winds, the pioneering technology of the SKWID provides cost-effective power generation with minimal environmental impact.



World's first hybrid turbine capable of maximizing the harvesting of ocean energy from wind and current.



The Darrieus wind turbine efficiently harnesses the ocean wind.

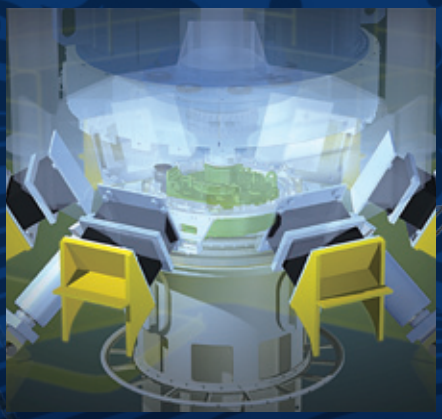
The omnidirectional Darrieus turbine rotates regardless of the wind direction. Due to the location of the generator, the system has excellent stability with a low center of gravity, as well as excellent maintainability with easy access. The Darrieus' rectangular swept area catches twice as much wind when compared to the circular swept area of typical onshore wind turbines of the same diameter and is therefore capable of delivering twice as much power from a single installation - far more power from the same wind farm area.

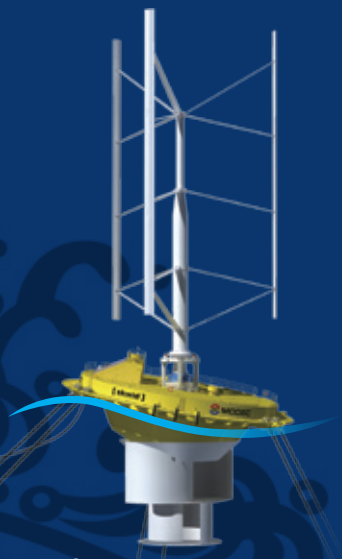
The Savonius current turbine harnesses the current.

The split-cylinder-shaped buckets of the Savonius current turbine can harness any weak current and will rotate in one direction regardless of current direction. This turbine is insensitive to marine growth on the buckets and is harmless to the marine ecosystem, as it rotates slowly at the speed of the current.

Stable performance in an unstable sea.

The float structure supports the power generation assembly via a set of rubber mounts like a gimbal to isolate the power generation assembly from the wave motion.





The Savonius current turbine acts as a ballast, making the power generation assembly self-righting.

A renewable energy power generation system that does not require external power to operate.

The SKWID is ideally suited for "stranded" islands to "isolated" islands as an emergency power source as well as other broad applications.

MODEC is a leading offshore technology company specializing in floating oil and gas production systems.

MODEC has always focused its technology and operations on the offshore arena and considers the ocean, especially deeper waters, its playground. Dedicated to providing premiere offshore products and services, MODEC has engineered, constructed and delivered many floating oil and gas production systems globally, and has provided time charter as well as operation and maintenance services for floating systems around the world. MODEC incorporates mooring technology that enables systems to remain permanently moored during 100 year return period storms. MODEC's design, operation and maintenance knowledge provides confidence for 20+ years of offshore operation. MODEC's 100 years cumulative operation experience of FPSO/FSOs leads the industry. All these factors contribute to our global reputation: Creating Value the MODEC Way.

*FPSO and FSO systems have become the primary method for many offshore oil and gas producing regions around the world since 1970s.

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The floating current power generation part is developed under a joint development agreement with NEDO (New Energy and Industrial Technology Development Organization).

Approval In Principle (AIP) by Class NK

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