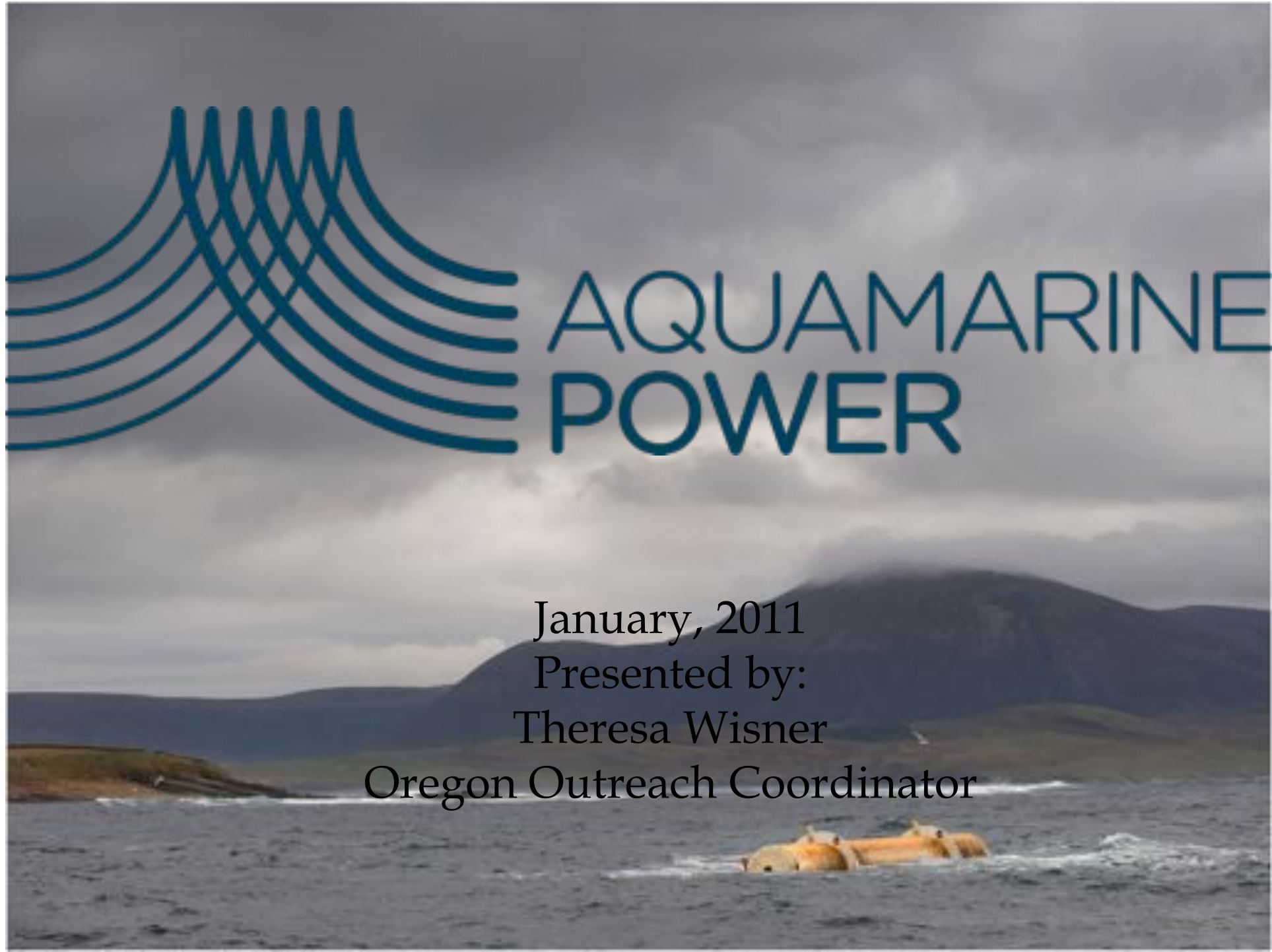


The logo for Aquamarine Power features a stylized graphic of several blue, curved lines that resemble waves or power lines, arranged in a fan-like pattern. To the right of this graphic, the words "AQUAMARINE" and "POWER" are stacked vertically in a bold, blue, sans-serif font.

AQUAMARINE POWER

The background of the slide is a photograph of a coastal landscape. In the foreground, there is a body of water with a yellowish-orange buoy or marker. In the middle ground, there are rolling hills and mountains under a cloudy, overcast sky.

January, 2011
Presented by:
Theresa Wisner
Oregon Outreach Coordinator

Aquamarine Power is a wave energy company, with head offices in Edinburgh, Scotland and further operations in Orkney and Northern Ireland, as well as Newport, Oregon, USA.





An aerial photograph of a coastal landscape. In the foreground, a blue body of water shows a small, cylindrical wave energy converter (Oyster) floating on the surface. The middle ground features a green, hilly coastline with scattered buildings and a small pond. The background consists of rolling hills under a cloudy sky.

The company is currently developing its flagship technology, an innovative hydro-electric wave energy converter, known as Oyster. Aquamarine Power's goal is to develop commercial Oyster wave farms around the world.

April 2003

DEVELOPMENT OF OYSTER BEGINS

Researchers at Queen's University Belfast begin developing Oyster wave power technology.

February 2005

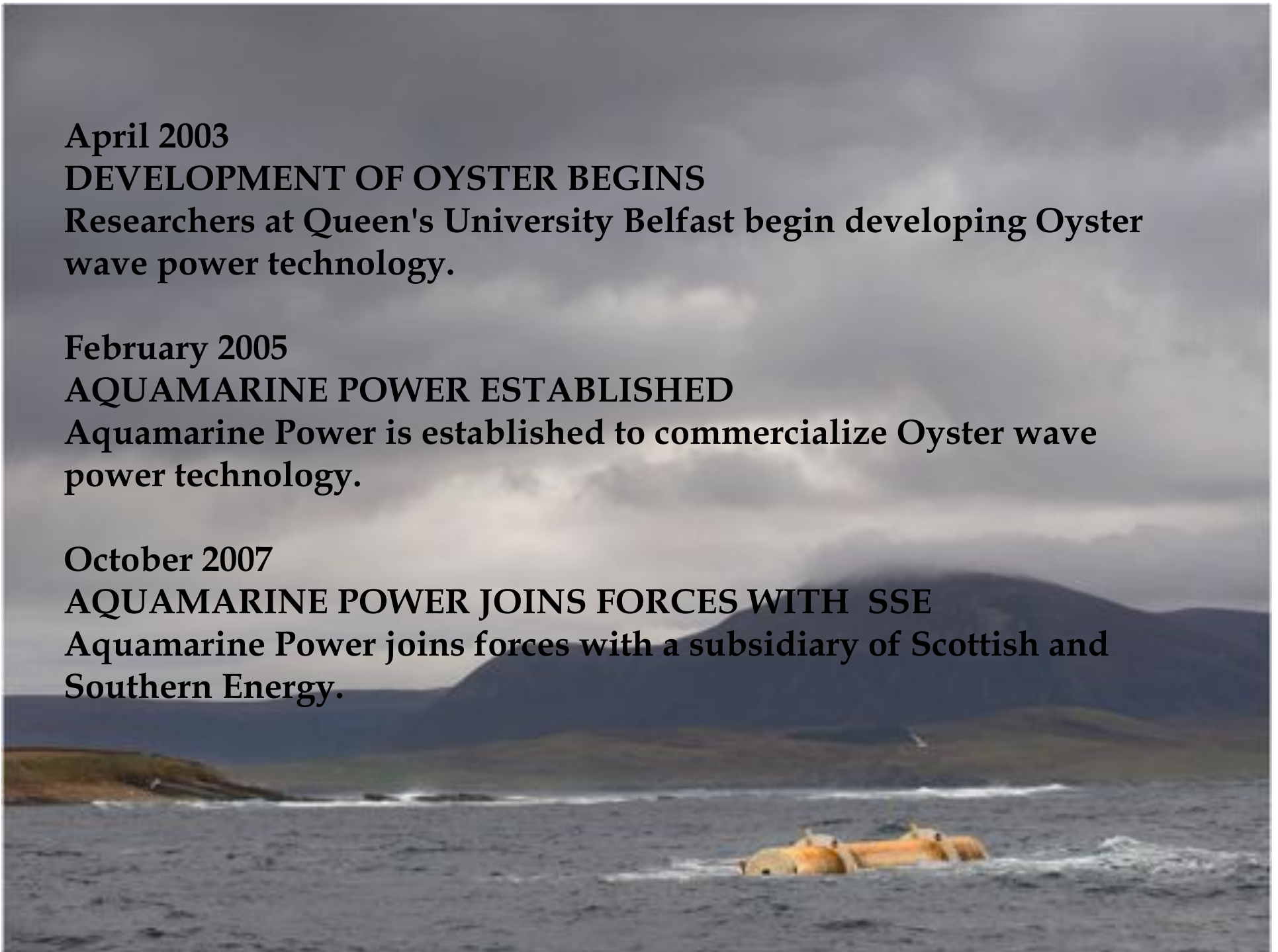
AQUAMARINE POWER ESTABLISHED

Aquamarine Power is established to commercialize Oyster wave power technology.

October 2007

AQUAMARINE POWER JOINS FORCES WITH SSE

Aquamarine Power joins forces with a subsidiary of Scottish and Southern Energy.





August 2008

APPOINTMENT OF MANAGEMENT TEAM

Aquamarine Power appoints an experienced management team led by CEO Martin McAdam.

October 2008

FABRICATION OF FIRST OYSTER COMPLETED

Aquamarine Power completes fabrication of the first full scale 315kW Oyster wave power device.

February 2009

JOINT VENTURE WITH SSE RENEWABLES

Aquamarine Power sign deal to develop 1GW of Oyster wave power farms with SSE Renewables.

The background of the slide is a photograph of a coastal landscape. In the foreground, a yellow wave energy converter is partially submerged in the water, with white foam from the waves around it. The middle ground shows a dark, rocky coastline. In the background, there are large, dark mountains under a cloudy, grey sky.

August 2009

SUCCESSFUL OYSTER INSTALLATION

Aquamarine Power completes installation of the first Oyster off the coast of Orkney, Scotland.

November 2009

OYSTER CONNECTED TO GRID

Oyster is launched by Scotland's First Minister and begins producing power to the grid.

March 2010

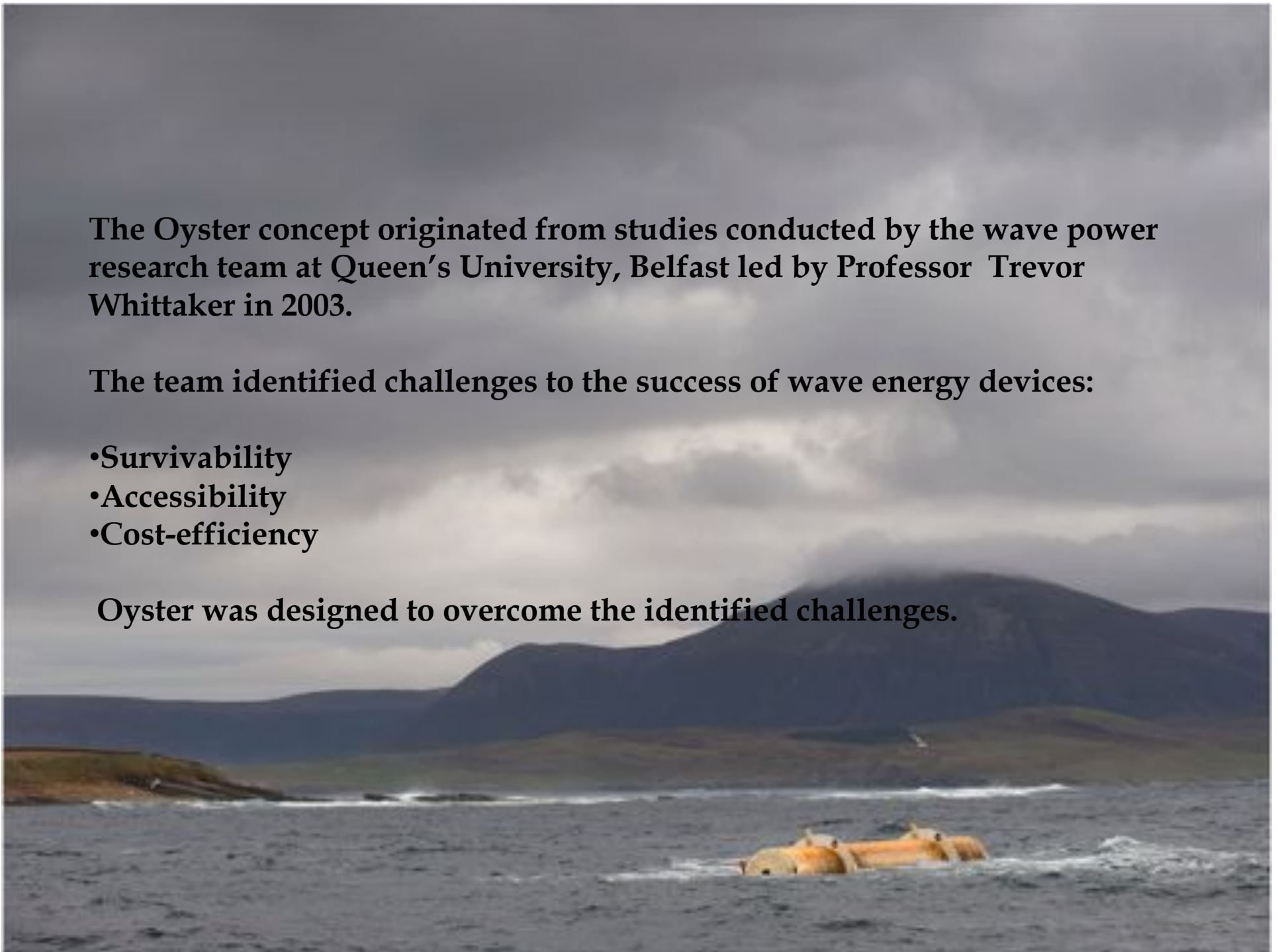
Aquamarine Power secures exclusive rights to develop first 200MW Oyster wave power farm.

The Oyster concept originated from studies conducted by the wave power research team at Queen's University, Belfast led by Professor Trevor Whittaker in 2003.

The team identified challenges to the success of wave energy devices:

- Survivability**
- Accessibility**
- Cost-efficiency**

Oyster was designed to overcome the identified challenges.



Survivability:

Oyster is a simple hinged flap, it ducks under the largest waves so it doesn't have to shut down to survive extreme weather conditions.

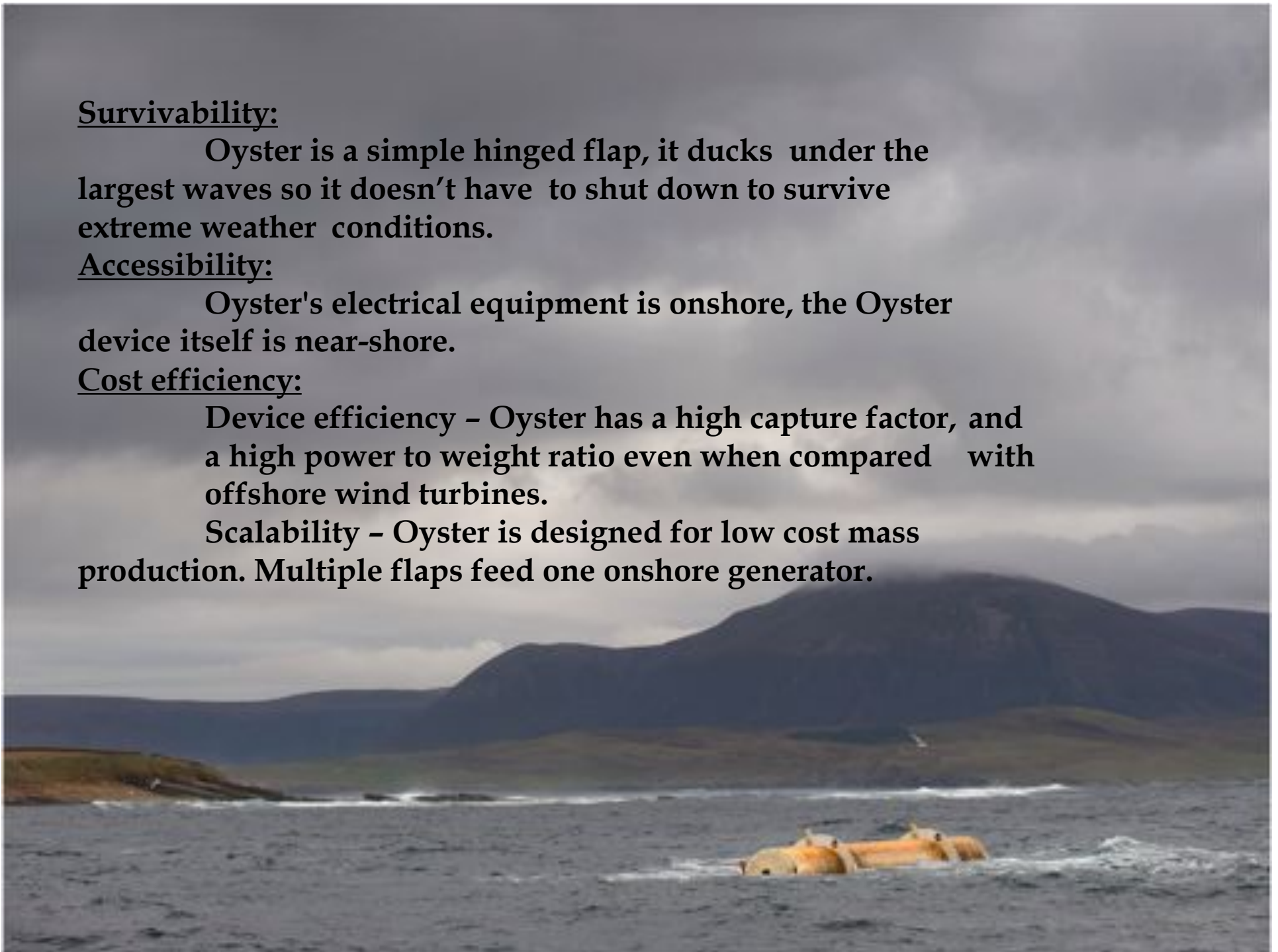
Accessibility:

Oyster's electrical equipment is onshore, the Oyster device itself is near-shore.

Cost efficiency:

Device efficiency - Oyster has a high capture factor, and a high power to weight ratio even when compared with offshore wind turbines.

Scalability - Oyster is designed for low cost mass production. Multiple flaps feed one onshore generator.

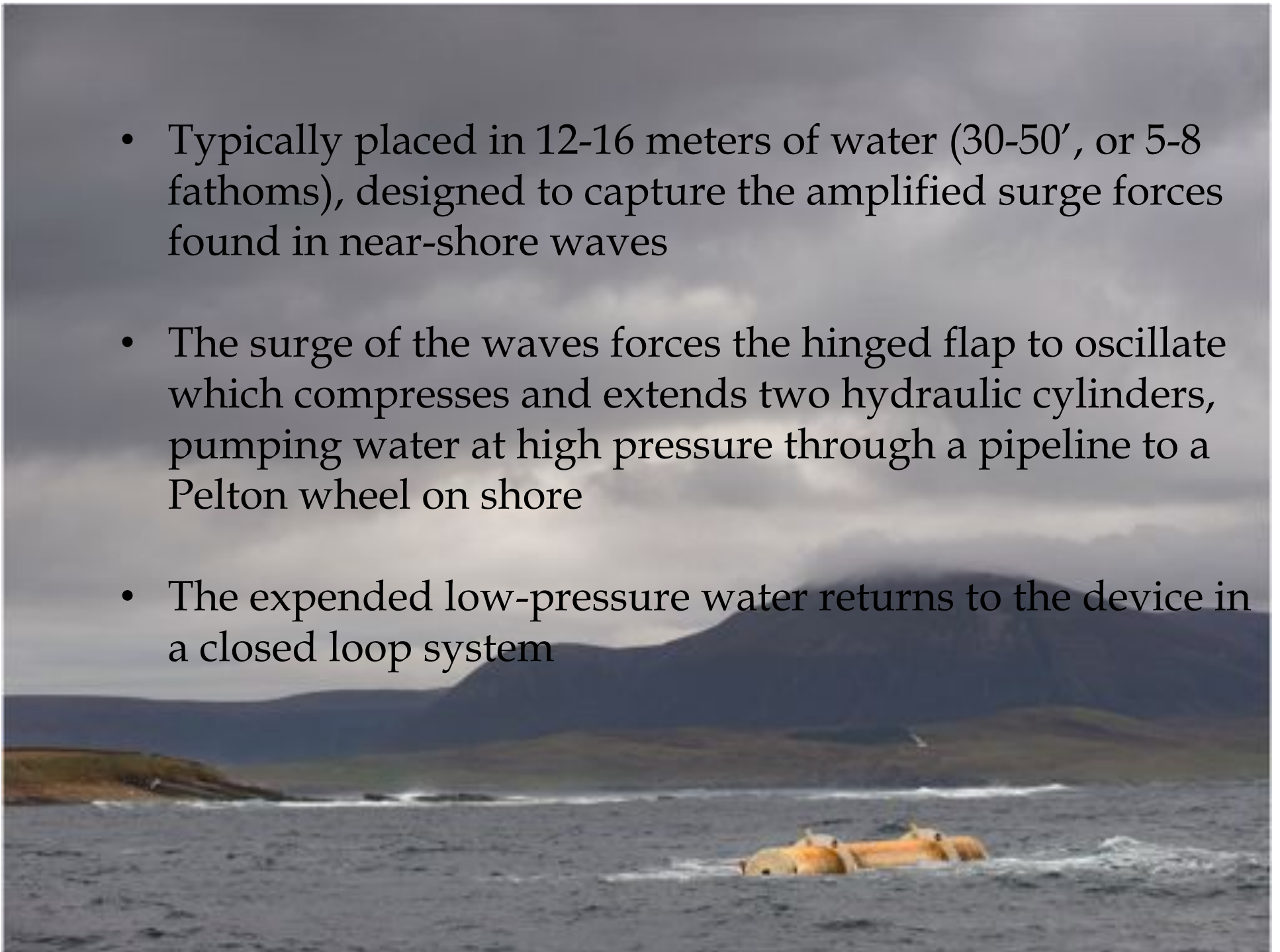






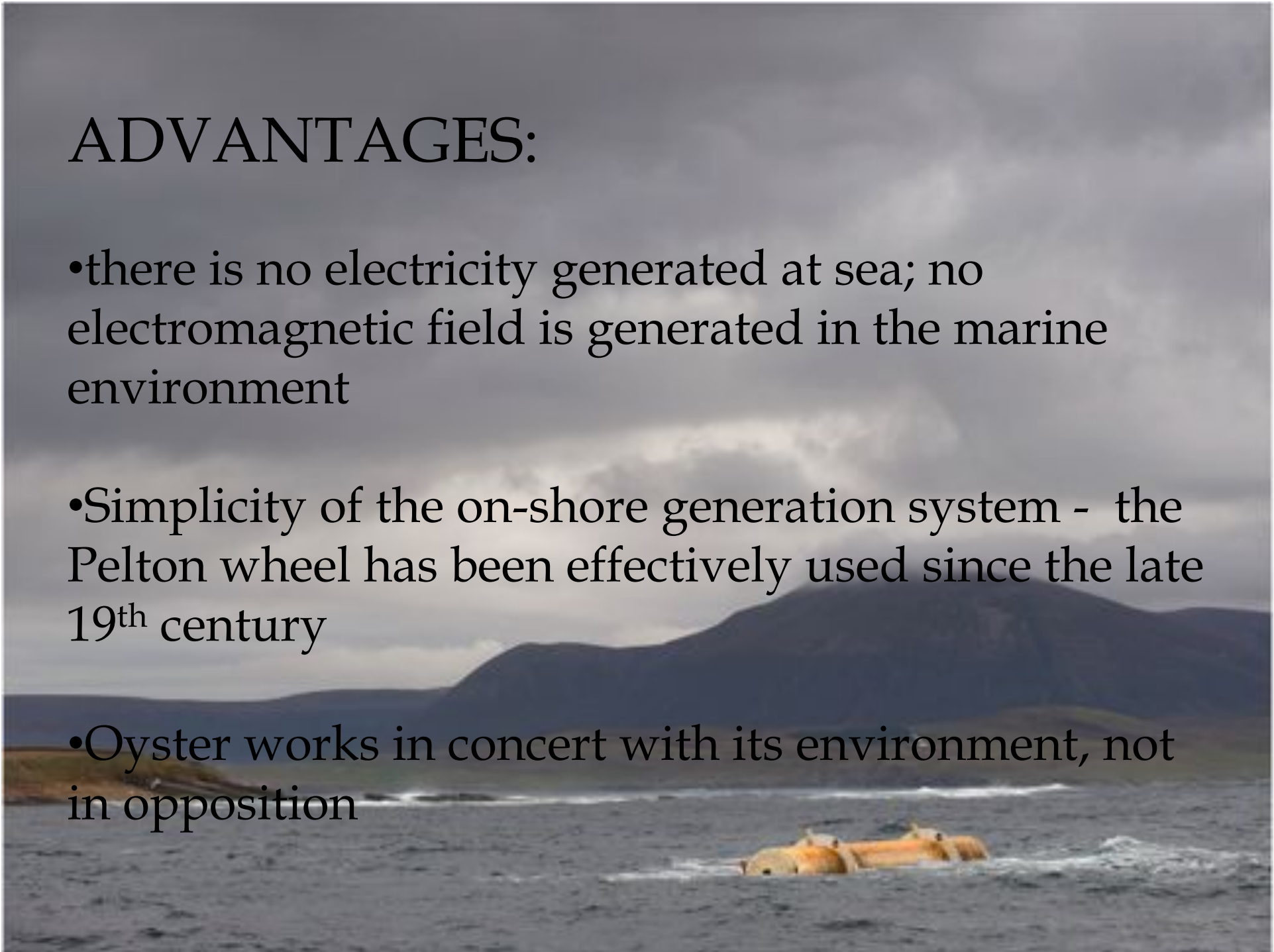


- Typically placed in 12-16 meters of water (30-50', or 5-8 fathoms), designed to capture the amplified surge forces found in near-shore waves
- The surge of the waves forces the hinged flap to oscillate which compresses and extends two hydraulic cylinders, pumping water at high pressure through a pipeline to a Pelton wheel on shore
- The expended low-pressure water returns to the device in a closed loop system



ADVANTAGES:

- there is no electricity generated at sea; no electromagnetic field is generated in the marine environment
- Simplicity of the on-shore generation system - the Pelton wheel has been effectively used since the late 19th century
- Oyster works in concert with its environment, not in opposition



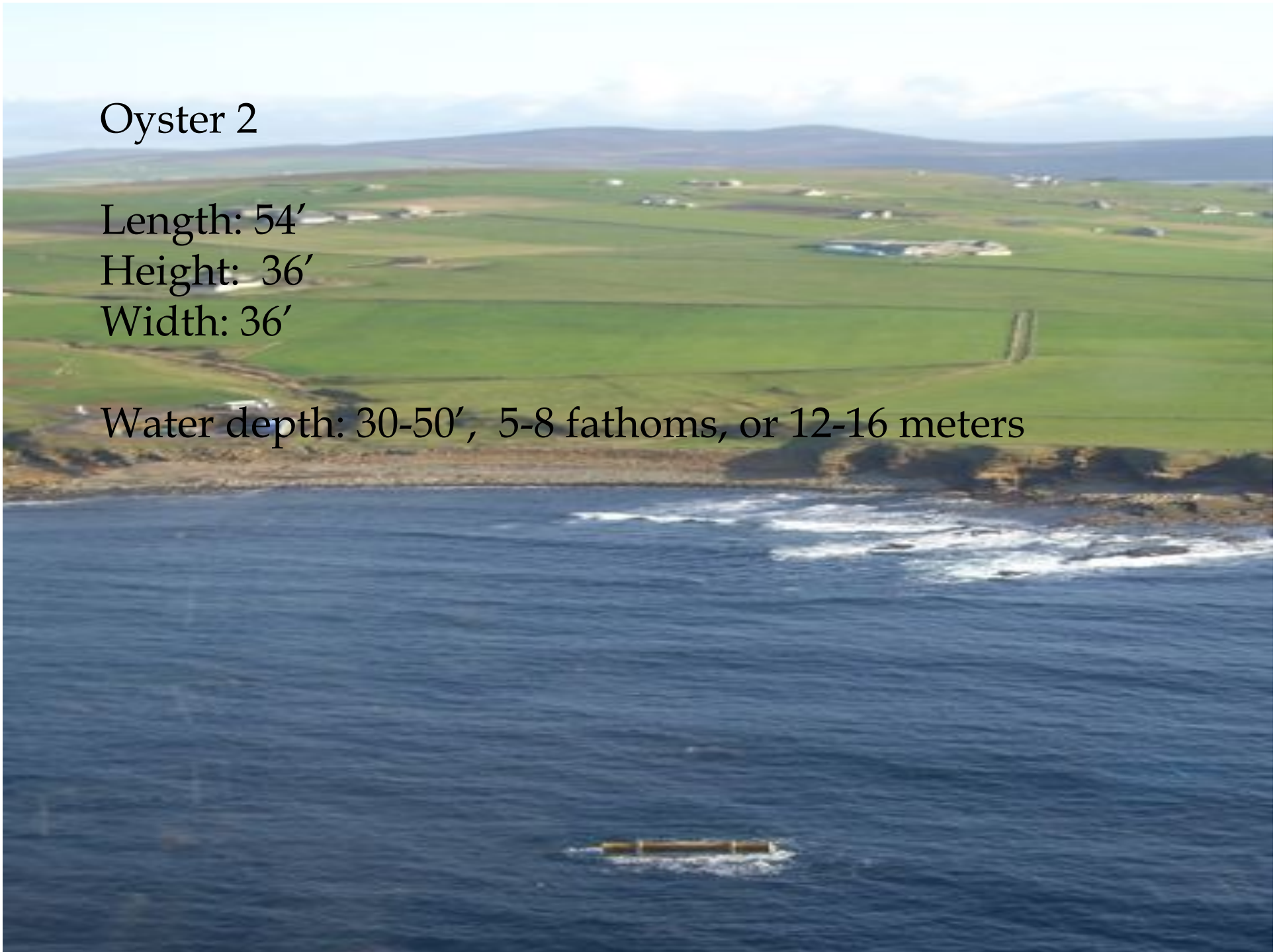
Oyster 2

Length: 54'

Height: 36'

Width: 36'

Water depth: 30-50', 5-8 fathoms, or 12-16 meters



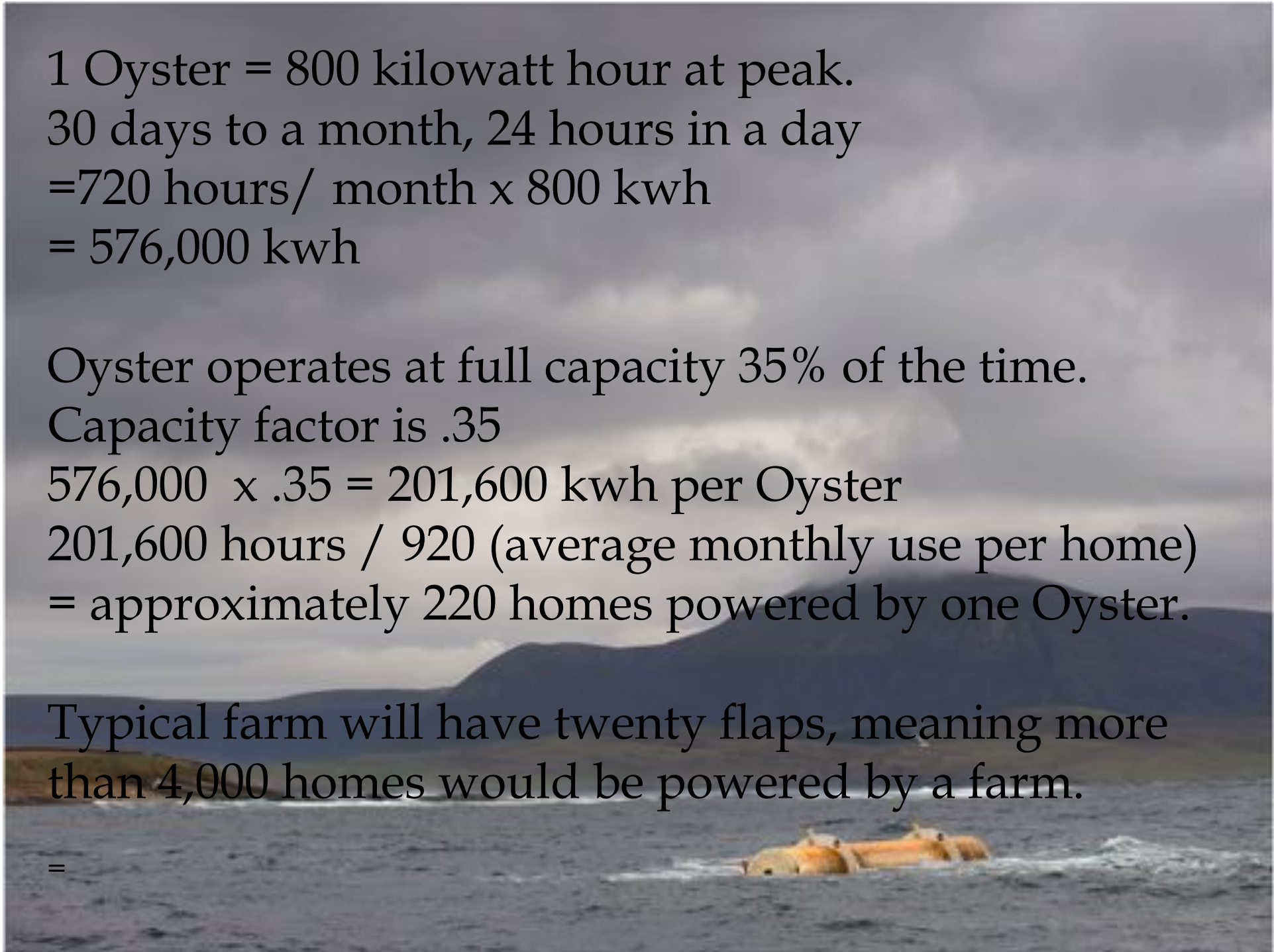
1 Oyster = 800 kilowatt hour at peak.
30 days to a month, 24 hours in a day
=720 hours/ month x 800 kwh
= 576,000 kwh

Oyster operates at full capacity 35% of the time.
Capacity factor is .35

$576,000 \times .35 = 201,600$ kwh per Oyster
201,600 hours / 920 (average monthly use per home)
= approximately 220 homes powered by one Oyster.

Typical farm will have twenty flaps, meaning more than 4,000 homes would be powered by a farm.

=





Next Steps:

- **Lease agreement with Department of State Lands to secure seabed for testing.**
- **Acoustic Doppler Current Profiler in water by June 2011 for 12-24 months**
- **Continued community outreach and education**
- **Environmental Studies**
- **Permitting**
- **3 flap demonstration project in the water by 2013**

MAPS



Contact:

Theresa Wisner

541-234-4869

theresa.wisner@aquamarinepower.com

PO Box 2075

Newport OR 97365

