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29 NOVEMBER 2021

Economic Opportunities From Offshore Wind Power

AUSTRALIA AND REGIONAL SUPPLY CHAIN DEVELOPMENT

The Oceanex Team

Oceanex Energy's ownership is comprised of Andy Evans, Peter Sgardelis and a large international investor with significant experience in infrastructure development and construction and leading advisory experience in renewable energy (especially offshore wind). Together, the ownership team brings local and global knowledge and experience in establishing and growing the offshore wind industry in Australia with strong financial experience and support to grow a thriving new industry for Australia and New Zealand.

CEO

Andy Evans

Andy Evans is the CEO and a founder of Oceanex Energy and also the former CEO and a co-founder of the Star of the South (proposed 2GW offshore wind farm off the coast of Victoria).

CDO

Peter Sgardelis

Peter Sgardelis is the Chief Development Officer and a founder of Oceanex Energy and also the former COO and a co-founder of the Star of the South.

The Oceanex Proposal for Australia and NZ

Oceanex is proposing to develop a minimum of 5 projects off the coast of NSW and WA with generation capacity exceeding 10,000MW and up to 3 projects off the coast of New Zealand with a generation capacity exceeding 3,000MW. Each project is strategically located close to a strong offshore wind resource within proximity industry and employment centres, key electricity load bases and key grid infrastructure with upcoming capacity and availability

The Oceanex Proposal for Australia

	Foundation	Area km²	Indicative MW	Distance shore	Ports	Commencement	Completion
Hunter / Newcastle	Floating	495	2000	30 km	Newcastle, 68km	2028	2031
Illawarra / Wollongong	Floating	493	2000	27 km	Port Kembla 40km	2028	2031
Ulladulla	Floating	496	2000	21 km	Port Kembla, 99km	2030	2033
Eden	Floating	493	2000	18 km	Port Kembla, 315km	2032	2036
Bunbury	Fixed	494	2000	32 km	Fremantle, 52km	2033	2037

(Indicative figures and dates only)

The Oceanex Proposal for New Zealand

	Foundation	Area km²	Indicative MW	Distance shore	Ports	Commencement	Completion
Taranaki A	Floating	499	1000	20km+	Port Taranaki	2028	2031
Taranaki B	Fixed	497	1000	20km+	Port Taranaki	2028	2031
Waikato	Floating	498	1000	20km+	TBD	2030	2033

ALL PROJECTS

Potential Economic and Regional Benefits for Australian Projects

Oceanex Proposal: Development and construction of 5 projects with a generation capacity of 9,000MW+. Projects proposed off the coast of Newcastle, Illawarra, Ulladulla, Eden and Bunbury

A$40b

Estimated capital expenditure for 5 priority projects (10,000MW) PLUS >$200m development expenditure per project for up to 7 year period

3,000+

Estimated direct jobs per project during the construction period of 3-4 years (per project)

35-65%

Estimated local content used to construct offshore wind during construction period

300

Estimated local jobs per project during the operations and maintenance period (30 years)

ALL PROJECTS

Potential Economic and Regional Benefits for New Zealand Projects

Oceanex Proposal: Development and construction of 5 projects with a generation capacity of 3,000MW+. Projects proposed off the coast of Taranaki and Waikato

NZ$12b

Estimated capital expenditure for 3 projects (3,000MW) PLUS >$200m development expenditure per project for up to 7 year period

3,000+

Estimated direct jobs per project during the construction period of 3-4 years (per project)

35-65%

Estimated local content used to construct offshore wind during construction period

300

Estimated local jobs per project during the operations and maintenance period (30 years)

ALL PROJECTS

Potential Economic and Regional Benefits

Regional development opportunities

Offshore wind builds on existing industry capabilities in regional centres and can set them up to be Asia Pacific leaders in a new, technology-driven industry of the future

Offshore wind provides an opportunity for workers and communities to transition due to coal-fired power closures using complementary and new skill sets

Offshore wind offers an economic stimulus and long-term employment opportunities for communities looking to transition industries and recently impacted by COVID19 and forecast closures.

Offshore wind utilises the existing regional ports, transmission, roads & manufacturing infrastructure already in place and can enable other large-scale new and existing industries (including hydrogen).

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Why Offshore Wind for Australia and New Zealand?

Offshore wind provides large-scale clean, reliable, affordable electricity that creates huge new investment and jobs to transform Australia and NZ and their key regions. Offshore wind provides many benefits that differentiate it from other large infrastructure projects and proposed new sources of electricity generation including:

ELECTRICITY RELIABILITY AND SECURITY

Large electricity supply and network reliability with generation that meets peak demand periods. Wind blows longer/stronger at sea.

MEETING KEY GOVERNMENT OBJECTIVES

Assisting Governments meet policy goals whether environmental, energy, employment, investment, social or otherwise.

DOWNWARD PRESSURE ON PRICES

Places downward pressure on electricity prices due to large injections of electricity supply into the market when the market needs power at peak times

MARKET ACCESS USING EXISTING GRID

Utilisation of robust grid transmission infrastructure - grid close to offshore wind resource where projects planned to take advantage of upcoming grid availability

LARGE INBOUND INVESTMENT

Global investment in offshore wind to increase 15-fold by 2040 - attractive for long-term, local and international investors.

INNOVATION / NEW INDUSTRIES - HYDROGEN

Enable acceleration of large hydrogen and electric transport industries and be a leader in progressing global floating foundation technology for offshore wind

ENERGY IN RIGHT PLACES - AVOID COMPETING USE

Flexibility of site location to avoid environmental issues, and competing land use, visual and noise-based issues more familiar with land-based projects

R&D / EDUCATION LEADERSHIP

Chance for R&D and education leadership by developing regional education, training and centres of excellence for Asia Pacific region

EMPLOYMENT STIMULUS FOR DECADES

Utilising a strong history in energy generation, ports and marine industries to transition to new related industries with shared skillsets

Utilise Existing Supply Chain (& Develop)

KEY INFRASTRUCTURE - EQUIPMENT SUPPLY

Steel Production

Tower Manufacture

Metal Furnace Operators
Tenders, Pourers and Casters
Metal Fabricators/Fitters
Supervisors/Operating Workers
Welding and Brazing Workers
Mining Machine Operators
Industrial Truck/Tractor Operators
Inspectors/Testers/QA

Foundation Manufacture

As above

Substation Manufacture (Offshore)

As above

Substation Manufacture (Onshore)

As above

DEVELOPMENT ACTIVITIES

Engineering Design

Key Infrastructure Design
Wind Farm Layout
Grid/Connection Engineers

Environmental & Planning Studies / Approval

Benthic, Ornithological, Bathymetry, Flora/Fauna Studies
Planning – Marine (Cth) And Land (State)

Stakeholder Management

Community Development Managers
Project Officers
Communications Officers

Procurement

Office Management Strategic Sourcing Managers/Officers

INSTALLATION / OPERATIONS & MAINTENANCE

Wind Turbine and Foundation Installation

Maintenance/Repair,(300ft Local Workers, Industrial Engineers, Health And Safety, Ship/Boat Captain Operators, Miscellaneous Plant/System Operators, Marine & Land Logistics, Warehouse Managers/Workers

Subsea Cable Installation

As above

Balance of Plant Installation

As above

Wind Farm Operations

As above

Wind Farm Maintenance

As above

SUPPORT SERVICES

Procedures

Strategic Sourcing – Domestic & International
Office/Warehouse Management

Legal

Corporate/Project Lawyers And Assistants
Contract Management

Accounting / Finance

Finance Controllers
Purchasing Managers/Officers
Cost Analysts/Consultants

IT

Software Development
Document Control

Project Planning

Project Management Officers

Energy System Benefits

1. OFFSHORE WIND PROVIDES A NEW AND DIVERSE LARGE-SCALE ENERGY SUPPLY TO REPLACE SHORTFALL DUE TO FORECAST COAL-FIRED POWER STATION CLOSURES (IN NSW AND WA) AND SUPPORT NEW ENERGY INTENSIVE INDUSTRIES

Forecast closure of 25,000MW of coal-fired electricity generation Australia-wide over the next 28 years with 10,000MW+ of closures in NSW by 2035 and almost 2,000MW in WA.

Replacement of like-for-like coal-fired power stations will be uneconomic and not meet environmental requirements. Offshore wind is a feasible part replacement given large-scale and higher capacity/generation factors especially relative to other proposed new energy sources.

2. OFFSHORE WIND DOES NOT COMPETE FOR LAND THAT MAY BE USED FOR OTHER PURPOSES – ESPECIALLY RESIDENTIAL ALONG THE NSW, WA AND NZ COASTLINES AND FOR INDUSTRIAL AND AGRICULTURAL PURPOSES

Offshore wind does not compete for land otherwise used for residential, agricultural or industrial purposes.

In addition, coastal land is prohibitively expensive for ‘land hungry’ solar farms (1MW = 2ha) and too close to communities for 200m tall wind turbines. Offshore wind does not compete for land in highly populated areas or where land can be used for other beneficial purposes, however it does tap into the strong existing transmission system that is used to move power in these areas.

3. OFFSHORE WIND ACCESSES AVAILABLE GRID AND EXISTING INFRASTRUCTURE LOCATED CLOSE TO COAL MINES AND GENERATORS WHICH ARE IN PROXIMITY TO ESPECIALLY NSW AND WA’S COASTLINE

Existing grid transmission is built mainly around coal generators, which are located within 100km of the coastline (ie, near offshore wind resource). With many forecast coal closures, there is an opportunity to access grid that will become available over the next decade.

Offshore wind generates close to demand of a growing Australian and NZ population living close to the coastline (85% of Australia and NZ’s population live within 50km of the coastline) and supported by necessary infrastructure

4. OFFSHORE WIND BLOWS FOR LONGER AND IS STRONGER, AT PEAK DEMAND TIMES, ENSURING A MORE RELIABLE GENERATION SOURCE THAN OTHER FORMS OF ELECTRICITY. CAPACITY FACTORS OFTEN EXCEED 50%.

Offshore wind production is normally at its peak when system/market demand is at its highest. This is usually when the late afternoon sea breezes are blowing or during times of prolonged heat when the cooling ‘southerly busters’ come from the coast.

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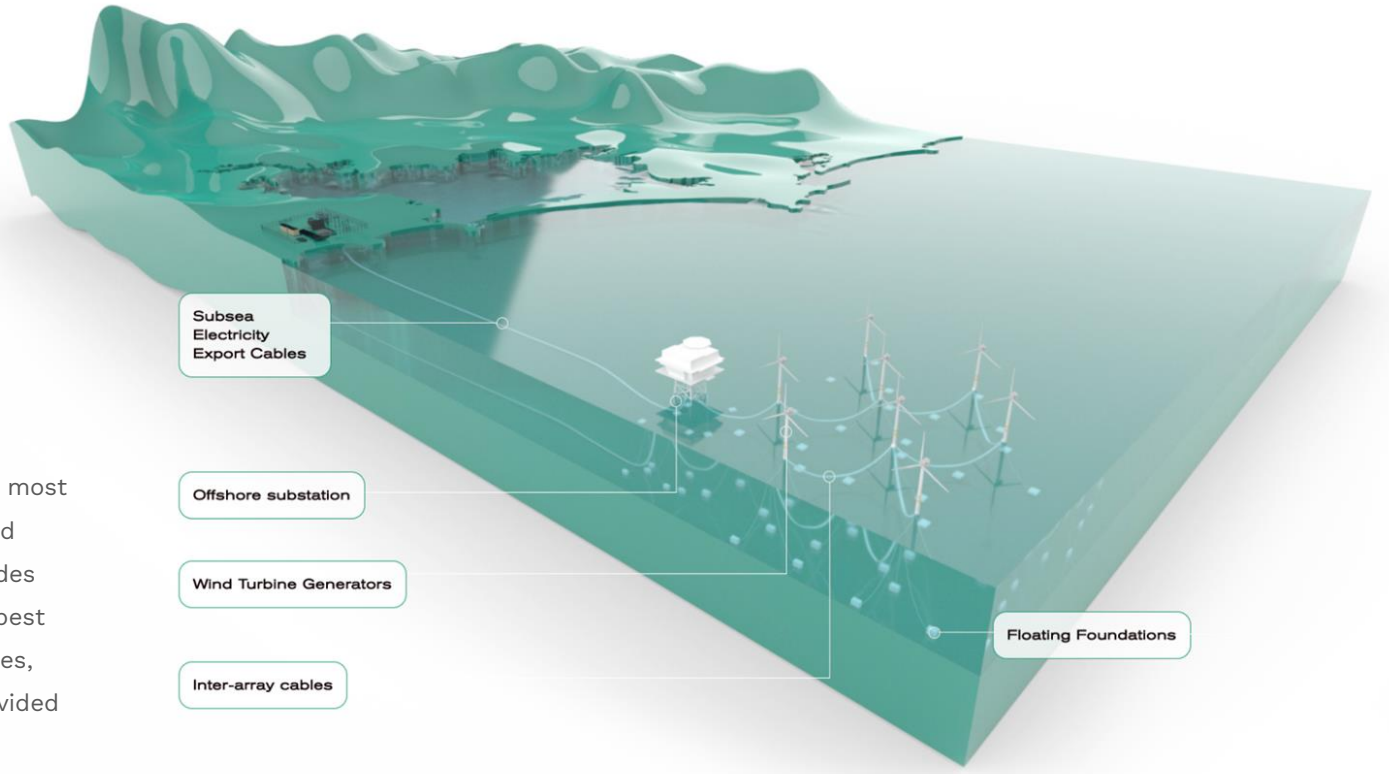
WHY?

Strong Wind Resource off Coastline

Strong wind resource located close to available grid connection (from existing infrastructure freeing up from coal power station closures) to transmit electricity to existing large electricity markets

What an Offshore Wind Farm Looks Like

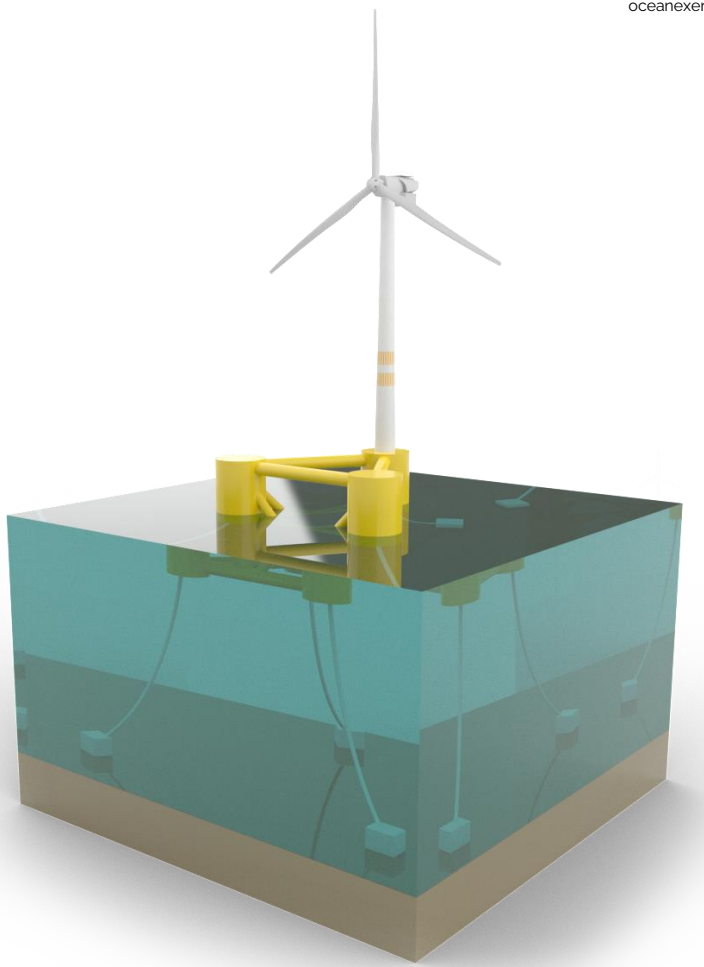
The prevalence of deep water off most of the Australian and New Zealand coastlines (over 50 metres) provides flexibility to locate projects that best utilise the excellent wind resources, grid access and the potential provided by the advancement of "floating foundation" technology which is developing quickly.



Potential of Floating Foundation Technology

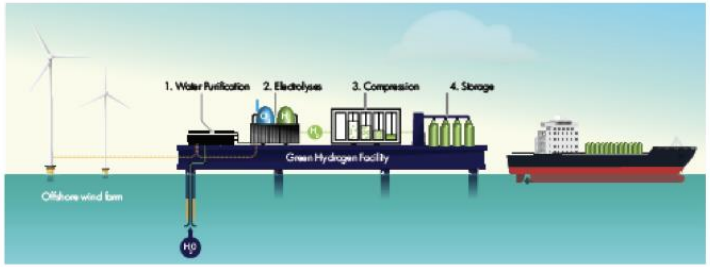
The majority of the Oceanex portfolio has been designed to deploy floating foundations (>50m water depth) which, when combined with excellent wind resources and developed regional industries, are perfect to host such projects. Benefits include:

- Access to more Ocean Site Locations
- Increased Local Industry Opportunities
- Reduced Seabed Impact
- Leverage Existing Industry Expertise (especially offshore oil & gas

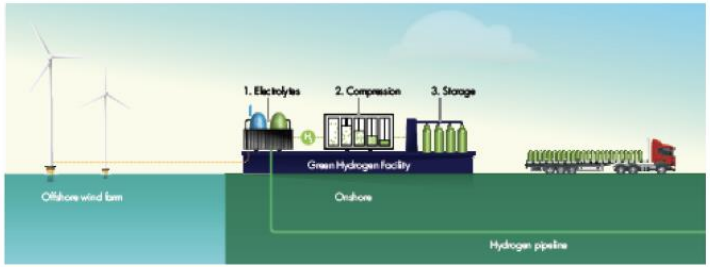


Potential of Offshore Wind to Produce Hydrogen

Offshore wind to hydrogen solution 1(a)



Offshore wind to hydrogen solution 1(b)



Offshore wind to hydrogen solution 2

Status of Australian Projects

For All our Australian Projects, We have undertaken the following work and completed the pre-feasibility phase and are actively in the feasibility/development phase:

- ENVIRONMENT & PLANNING STUDY
- WIND RESOURCE ASSESSMENT STUDY
- GRID SYSTEM CAPACITY AND AVAILABILITY STUDY
- STRONG GOVERNMENT RELATIONS
- KEY EXISTING INFRASTRUCTURE STUDY
- FLOATING FOUNDATION ASSESSMENT STUDY
- COMMENCED A SUPPLY CHAIN CAPABILITY AND OPPORTUNITY STUDY
- IN-DEPTH STAKEHOLDER ENGAGEMENT
- INITIAL PORT FACILITY STUDIES

Status of New Zealand Projects

For All our New Zealand Projects, We have undertaken the following work and are still in the pre-feasibility phase:

- HIGH-LEVEL ENVIRONMENT & PLANNING STUDY
- HIGH-LEVEL WIND RESOURCE AND GRID ASSESSMENT STUDY
- STAKEHOLDER MAPPING AND ENGAGEMENT STRATEGY STUDY
- EARLY STAGE GOVERNMENT RELATIONS
- SITE IDENTIFICATION AND LOCATION STUDY
- FLOATING FOUNDATION ASSESSMENT STUDY

Further Studies

There will be many more studies to commence as part of the formal environmental impact assessment process (Federal and State-based planning approvals in Australia and New Zealand) and required under the regulatory framework that will apply under applicable offshore electricity legislation (Offshore Electricity Infrastructure Act in Australia and whether amendment of Resource Management Act and/or other Acts or new legislation in NZ), as well as significant stakeholder engagement which is critical for each project's success.

Timeline

2012

First offshore wind developer established

(Offshore Energy/Star of the South – includes the Oceanex Energy Co-Founders)

2015

First offshore wind project introduced to governments (Star of South)

Introduction by OEPL of first project (Star of the South) to Australian and Victorian Governments

2019

First offshore wind Exploration Rights provided by Australian Government and introduction to New Zealand Government

Granting of first offshore wind rights in Australia (Exploration Licence granted in respect of Star of the South)

2020

Oceanex Energy created to progress portfolio of projects off Australia and New Zealand

To facilitate development of an offshore clean energy industry, the Cth Government formally started the process to develop a regulatory framework to enable offshore renewable energy projects.

2021

Australian Government introduces Regulatory Framework to enable offshore wind projects

Next Steps

2021

Commencement of Offshore Clean Energy Infrastructure Act (Cth) ('Offshore Act')

Start Detailed Feasibility Studies under Feasibility Licence from Cth (subject to approval)

Ongoing

Detailed Feasibility of Projects (commenced in 2020)

Ramp-up of feasibility studies and industry and supply chain development in NSW, WA and NZ to support vibrant offshore wind farm industry

Development expenditure of offshore wind projects often >$200m per project for up to 7-year period

2028

Final Investment Decision

Decision to construct first offshore wind farm in NSW (and potentially NZ). Application for Commercial Licence under Offshore Act which allows construction, operation and maintenance for 30 years

Commence Construction on First Offshore Wind Project

Commence construction of first offshore wind farm in Oceanex portfolio.

Location to be confirmed from within Oceanex portfolio

2030

First Power from Offshore Wind Generated in NSW (and potentially NZ)

2030+

Delivery of further offshore wind projects in NSW, WA and NZ

Deliver portfolio of projects in NSW and WA to have over 9,000MW operational by 2036+

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