SOLARDUCK

ELECTRIFYING THE WORLD WITH OFFSHORE FLOATING SOLAR

OFFSHORE FLOATING SOLAR

The natural evolution

Net zero

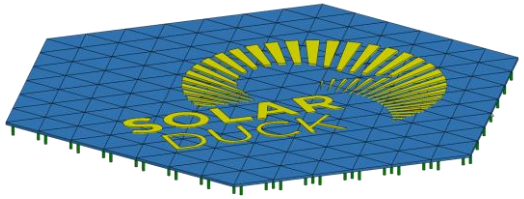
+

Solar power

+

Land scarcity

=



Utility Scale
Offshore Floating Solar

TARGET MARKETS
Geographies and segments

- Coastal Megacities
- Diesel powered islands
- Large coastal factories
- Offshore operators (FPSO, Oil rigs)
- Desalination and Hydrogen production
- Maritime e-charging solutions
- Offshore farming

KING EIDER

World's First certified Offshore Floating Solar system

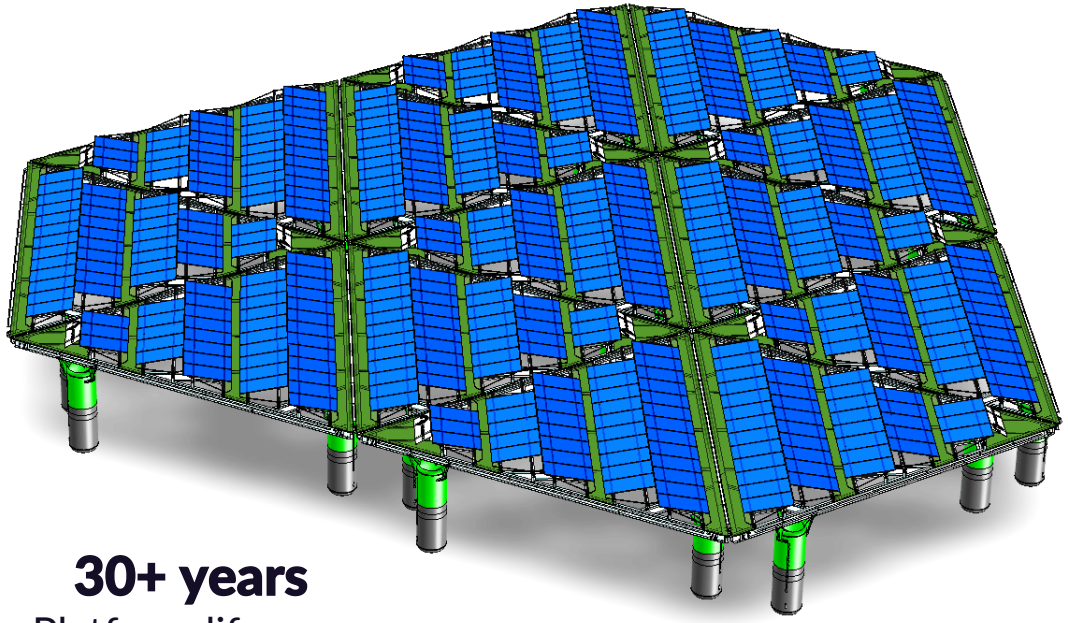
- Full-Scale pilot
- Elevated triangular solution
- 4x 16x16x16m
- 65 kWp
- BV & NEN approved
- Insured
- Grid connected
- Revenue generating
- Operational since April 2021 in NL

UNIQUE SELLING POINTS

The renewable solution to land scarcity

- Safe Operation
- Reliable & Efficient Shape
- High Energy Output
- Low Ecological Impact
- Minimal Wear & Tear
- Optimal Transport
- Energy Storage

SSHE 3-4
Hurricane resistance



30+ years
Platform lifespan

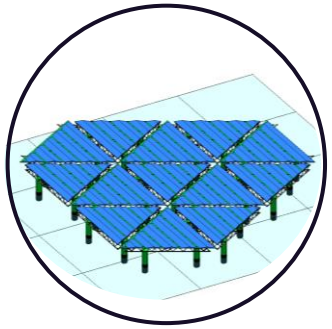
Hs = 7+ meters
Wave resistance

SCALING UP
Rapid progress towards commercialization

Near term: Tech de-risking (2022)

Validation & Certification

Offshore pilot

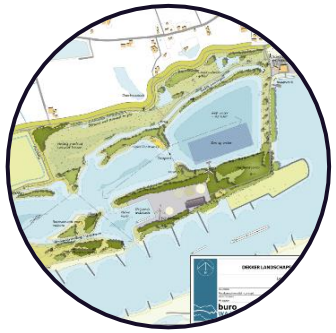


- Tank tests
- Structure and cost optimization

- Launch large offshore pilot in 2022
- Installed in Ostend, Belgium

Medium term: Commercialization (2023 ->)

Proof of target LCOE

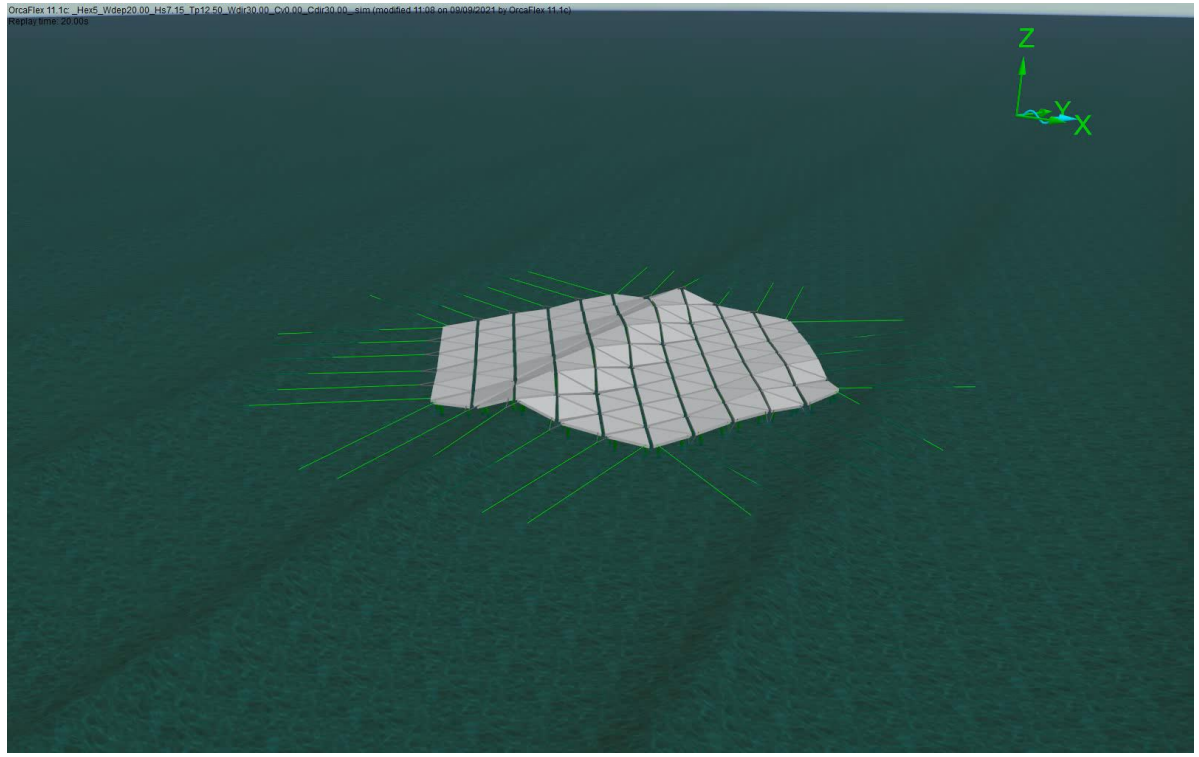


Range of projects

- Design and test assembly line
- Set up industrialized operations and prove target LCOE
- Five-year target to sell +300 MWp p.a.

RECENT TECHNOLOGICAL PROGRESS

Validation of simulations



10 MWp – ULS - Hmax = 13,5m

Validation tests - Hmax = 13,5m - Cork, Ireland

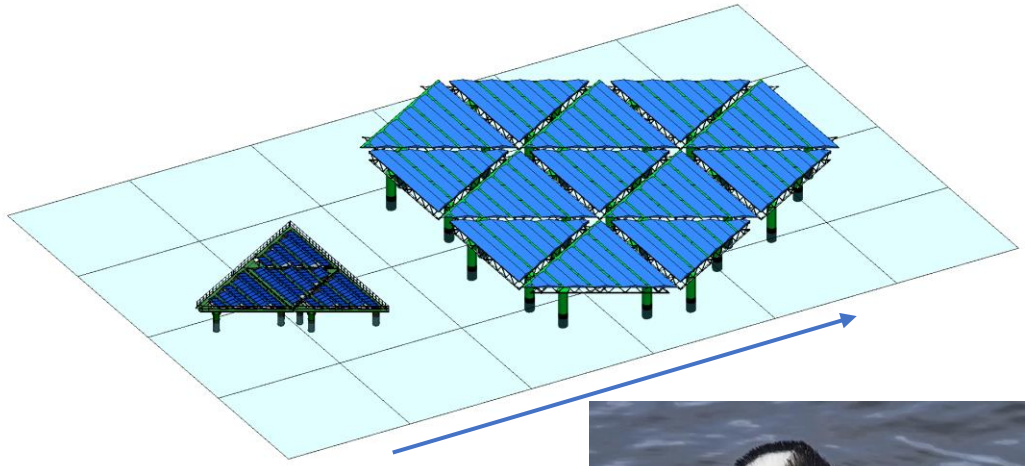
MEGANSER
OFFSHORE PILOT

Main Objective Offshore Pilot

- Pilot operating in an operational environment at pre-commercials scale to validate (couplings, structure, mooring, output, maintenance, etc)

Key Parameters

TRL level:	5 > 7
MRL level:	3 > 5
Panels per platform:	150
Size:	~900 kWp
Units:	13
Length side:	29 m
Waves:	Hs = 7,3 m
Wind:	V = 32 m/s
CO2 reduction:	455 ton per year
Households:	265



Offshore wind farm HKN & HKW ready

OFFSHORE WIND VS SOLAR

The right choice in the sun belt

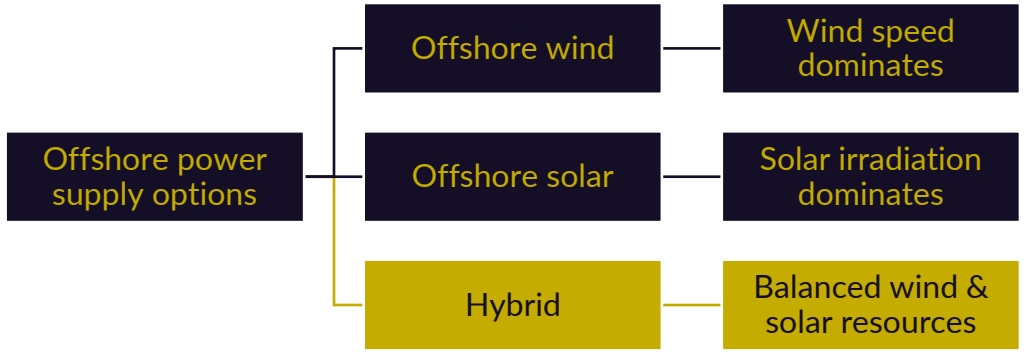
Solar outperforms Wind:

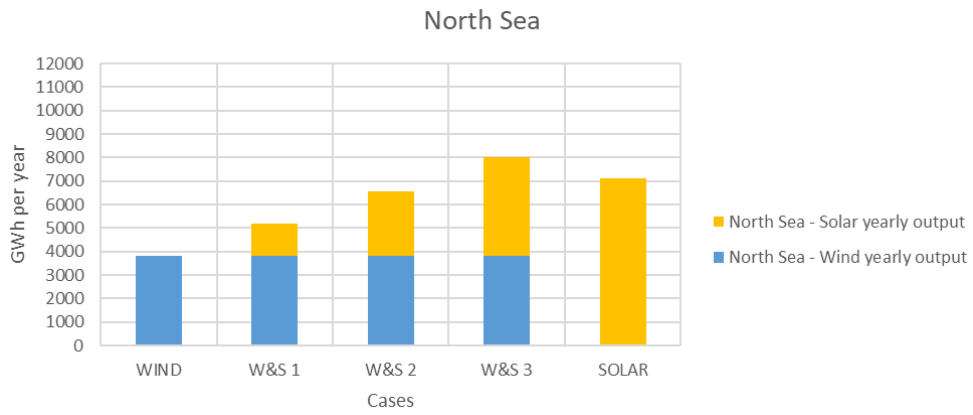
- > 8x Higher Energy Density [MWP/km2]
- > 4x Higher Energy Generation [GWh/km2]
- < 2x Lower Levelized Cost of Electricity

OFFSHORE SOLAR - NORTH SEA
Multi-use benefits

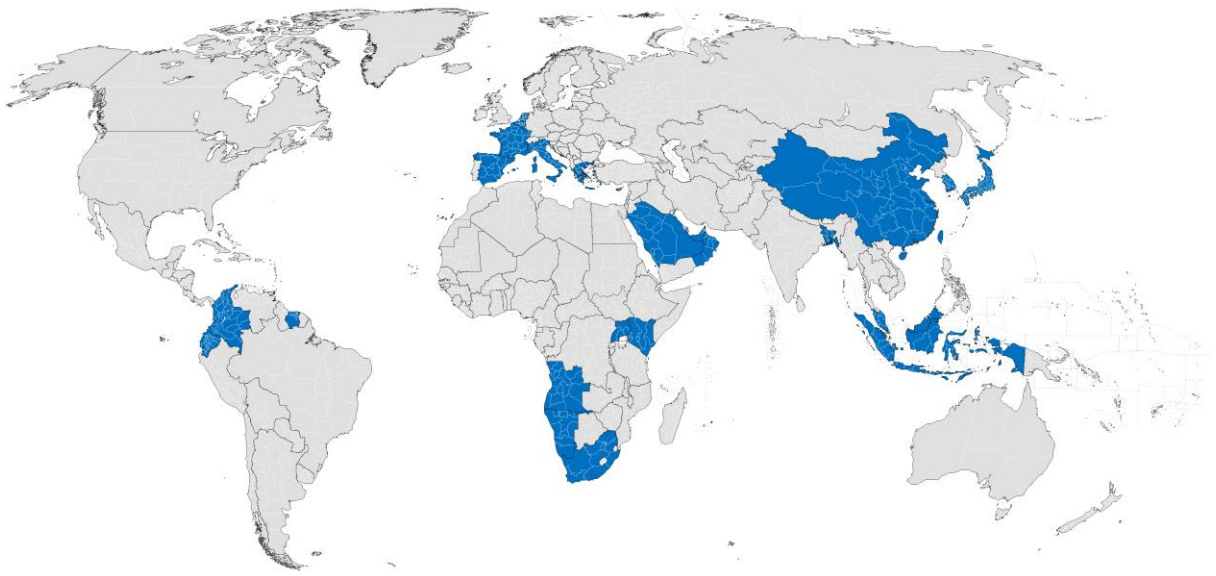
Why combine both:

- Mounting opposition of the population against onshore solar
- Land scarcity constraints onshore
- Grid availability constraints onshore
- Limited use of space per GWh compared to Offshore Wind
- Multi-use results in grid stability
- Array and export cable curtailment is low
- 8-10% higher irradiance than onshore solar
- 3-6% additional output due to cooling effect
- Distribute ecology impact





TRACTION
Rapidly developing market



2(+2)
MoU's

>30
NDA's

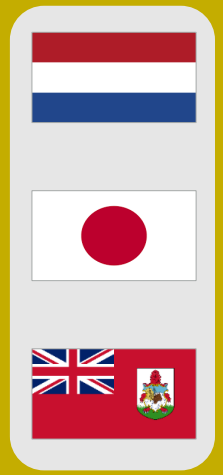
80
Leads

1.5
GWp

€1.4+
Bn

Market Forecast

- Market potential > 4000 GWp
- Inland floating solar > 3 GWP within 6 years
- Quick conversion into commercial projects



PONDERA

gigaSPG
SOLAR POWER GENERATOR

SOLARDUCK

JOIN OUR MOVEMENT TO SAVE 1.000.000 TONNES OF CO_2 BY 2030