
CORPOWER
OCEAN
SHARING DATA TO
ATTRACT INVESTORS

CORPOWER OCEAN & HIWAVE-5 PROJECT IN SHORT

- Developer (OEM) of **New high-efficiency Wave Energy Converters**
- **Started in 2010.** Offices in Sweden, Norway, Scotland & expanding in Portugal.
- Physics providing **competitive LCOE**, verified through step-by-step approach.
- Project developers & utilities engaged, including **EDP, Simply Blue Energy**
- Broad backing across Europe. **50+ MEUR** funding secured to date.

MIDROC SEB almi invest

Energimyndigheten eit InnoEnergy Knowledge Innovation Community European Commission icep Portugal Global wave energy SCOTLAND

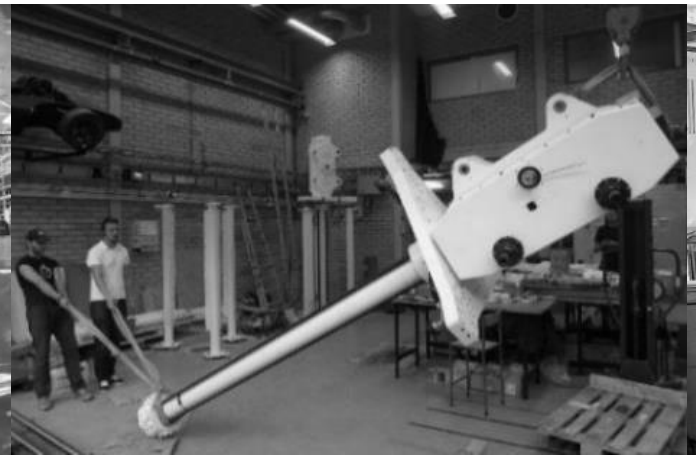
CORPOWER OCEAN

STRUCTURED PRODUCT VERIFICATION

2012-2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
STAGE 1 **Concept** Validation 500kEUR 3 people TRL 2 -> 3	**STAGE 2** **Critical System tests** Dry- and tank testing 1.7 MEUR 5-11 people TRL 4 -> 5	**STAGE 3** **1:2 WEC** Dry and ocean testing 8.8 MEUR (SEA, KIC, WES, H2020) 12-23 people TRL 5 -> 6 WaveBoost - H2020 - 4MEUR	**STAGE 4** **Single Full Scale WEC** Dry and ocean demo 27 MEUR (Public+Private) 25-55 people TRL 6 -> 7	**STAGE 5** **Pilot array (4 WECs)** 30 MEUR (Public + Private) 55-65 people TRL 7 -> 8	**COMMERCIAL** **5-20 MW Farms** Working capital Revenues >100 people TRL -> 9							

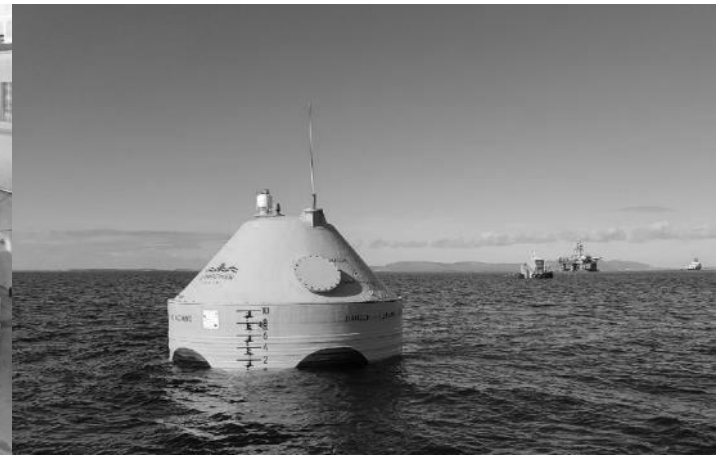
Product verification in 5 stages according to IEA-OES / Equimar best practice.

Scale 1:30



Scale 1:3

C3- Scale 1:2



C3 - Scale 1:2

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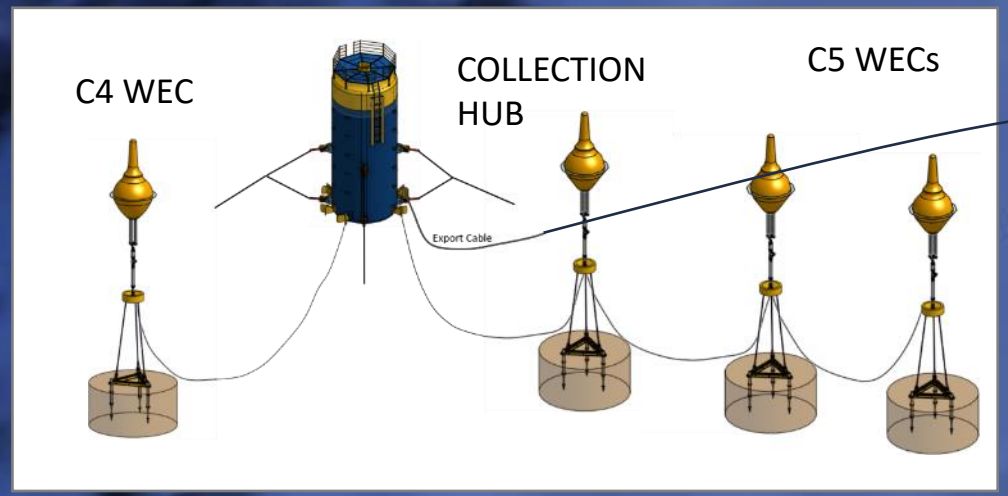
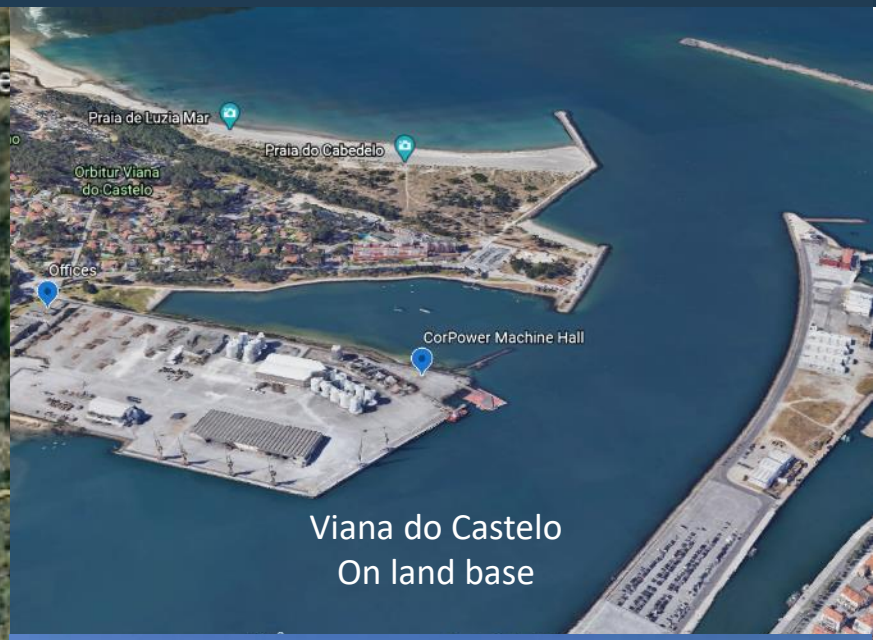
HIWAVE-5: ARRAY DEMONSTRATION @ AGUCADOURA





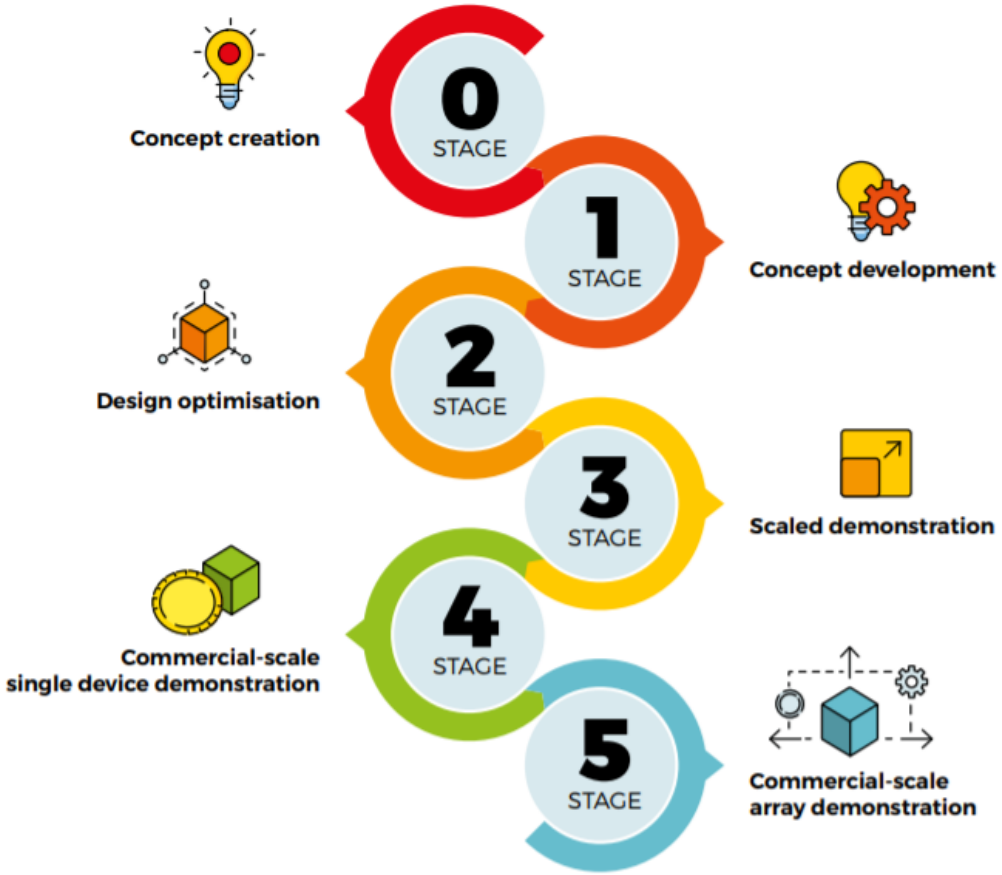
Viana do Castelo
On land base

Agucadoura
Substation

PRODUCT: 10MW+ CLUSTERS

TECHNO-ECONOMICS METRICS TRACKING PERFORMANCE TO PLAN

IEA-OES: [Evaluation and Guidance Framework for Ocean Energy Technology]



PRODUCT ROADMAP

Product roadmap

Based on LCoE Model v1.32

	Year	2021	2023	2026	2027	2028	2029	2030	2032	2035	2040	2045	2050
	Generation	G1	G3	G5	G8	G9	G11	G12	G13	G14	G15	G16	G17
	Device name	C4	C5	C6	C8	C9	C11	C12	C13	C14	C15	C16	C17
YIELD	Availability	%	65	82	88	90	90,8	92,2	93	94	94,5	95	95	95
	Device rating	[kW]	300	300	350	350	350	380	400	400	400	440	440	440
	# units per MW	[#]	3,33	*3,33*	2,86	2,86	2,86	2,63	2,50	2,50	2,50	2,27	2,27	2,27
	Gross Capacity factor	%	41%	*41%*	43%	45%	46%	48%	62%	62%	62%	62%	62%	62%
	Capacity factor (losses & avail. subtracted)	%	25%	*31%*	34,8%	37%	38%	40,4%	53%	53%	53%	54%	54%	54%
	Net AEP per unit*	MWh	656	*820*	1066	1130	1165	1346	1840	1860	1870	2069	2069	2070
	Net AEP per MW installed capacity	MWh/MW	2187	*2733*	3047	3228	3330	3542	4600	4650	4676	4702	4703	4704
COST	Total CAPEX per MW	MEUR/MW	21	*7,8*	5,2	3,9	3,3	2,9	2,8	2,6	2,3	2,1	1,9	1,8
	O&M-cost (per year and MW)	kEUR/MW/y	1057	534	221	173	125	93	77	67	58	50	46	43
TIME	Asset life	Years	n/a	20	20	20	22	25	25	25	25	30	30	30
	Installed capacity (cumulative)	[GW]	0,0003	*0,0012*	0,0048	0,04	0,08	0,3	0,6	1,2	2,5	5	10	20
	Installed # devices (cumulative, approx)	[#]	1	4	18	114	224	830	1 598	3 134	6 206	11 791	22 962	45 304
	Farm size (typical)	[MW]	0,3	1	5	15	30	90	200	400	700	1000	1500	1500
	Units per Farm (typical)	[#]	1	*4*	15	43	86	237	500	1000	1750	2273	3410	3410
	WACC (Weighted Average Cost of Capital)	[%]	n/a	*10%*	9%	7%	7%	6%	6%	5%	5%	5%	5%	5%
	LCOE**	EUR/MWh	n/a	n/a	252	171	129	92	68	50	43	40	36	33

* Rev 1.32

DATA ROOM – COMMERCIAL & TECHNICAL DUE DILIGENCE

- Business Plan
- Customer agreements
- Financials
- Grid balancing
- IP portfolio
- Product verificaton track record
- Project finance
- Project plan
- Scientific background
- Valuation analysis
- CorPower - intro deck - Mar2021_i
- CPO Executive summary - July 2020
- Document index
  Författare: Patrik Moller

- TDD1 C4 WEC final design report
- TDD2 Stage 1-3 product verification
- TDD3 Target Metrics HiWave-5
- TDD4 Certification plan for prototype certificate
- TDD5 C4 PTO sub-systems test report
- TDD6 Scaled deployment experience in EMEC

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LEGAL DUE DILIGENCE – DATA ROOM EXAMPLE

- 1. Corporate Documents
- 2. Accouting Documents & Financial Arrangements
- 3. Employees and consultants
- 4. Relevant agreements and Commitments
- 5. Permits from Authorities
- 6. Intellectual Properties
- 7. IT and Database Matters
- 8. Insurance, Health & Safety and Environment
- 9. Litigation and Disputes
- 10. Legal Supplement Feb 2021
- CorPower DD Register Apr 2021
  Författare: Theres Wolgast

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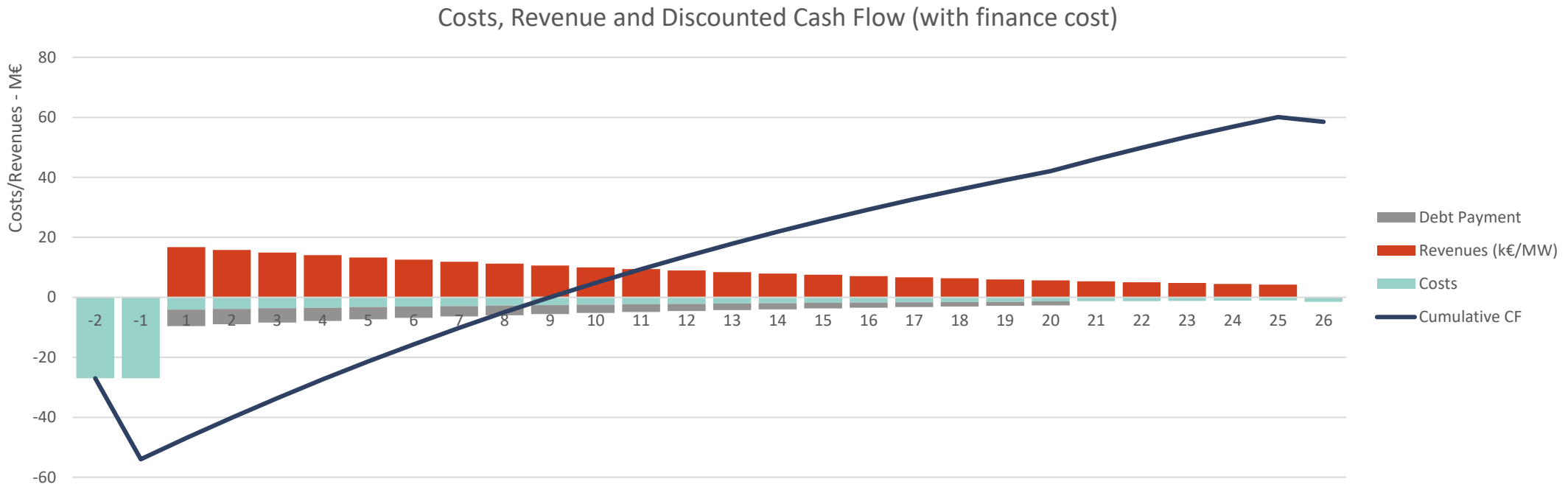
THIRD PARTY CERTIFICATION - FOR WARRANTY PROVISIONS

The Stage 4-5 program has been designed to **deliver a bankable product**.
For this the C5 machines will be certified over at least 8000 hours of operation.

- Prototype certification of C4 WEC (Stage 4)
- Type certification of C5 WECs (Stage 5)
- Power performance statement - IEC TS 62600 (Stage 4 & Stage 5)
- Availability / Machinery breakdown statement (Stage 5)
- Instrumentation, data & uncertainty statement (Stage 4 & 5)
- Post ocean deployment inspection statement (Stage 4 & 5)
- Design load statement – measured vs predicted (Stage 4 & 5)

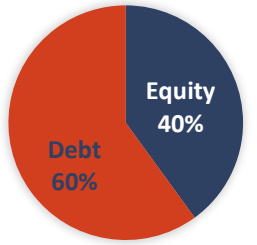
Certification and performance assessment: DNV WavEC Offshore Renewables EMEC THE EUROPEAN MARINE ENERGY CENTRE LTD

PROJECT FINANCE EXAMPLE: 50 MW– 100 EUR / MWH FIT



	Project	Equity	
Total Costs	209 257	**170 321**	k€
Total Electricity	2 351 934	**1 889 969**	MWh
Total Revenue	290 876	**228 882**	k€
Cost of Energy	88,97	**90,12**	€/MWh
NPV	81 619	**58 560**	k€
IRR	9,2%	**14,1%**	%
Payback time	13	**9**	years

FINANCING BREAKDOWN



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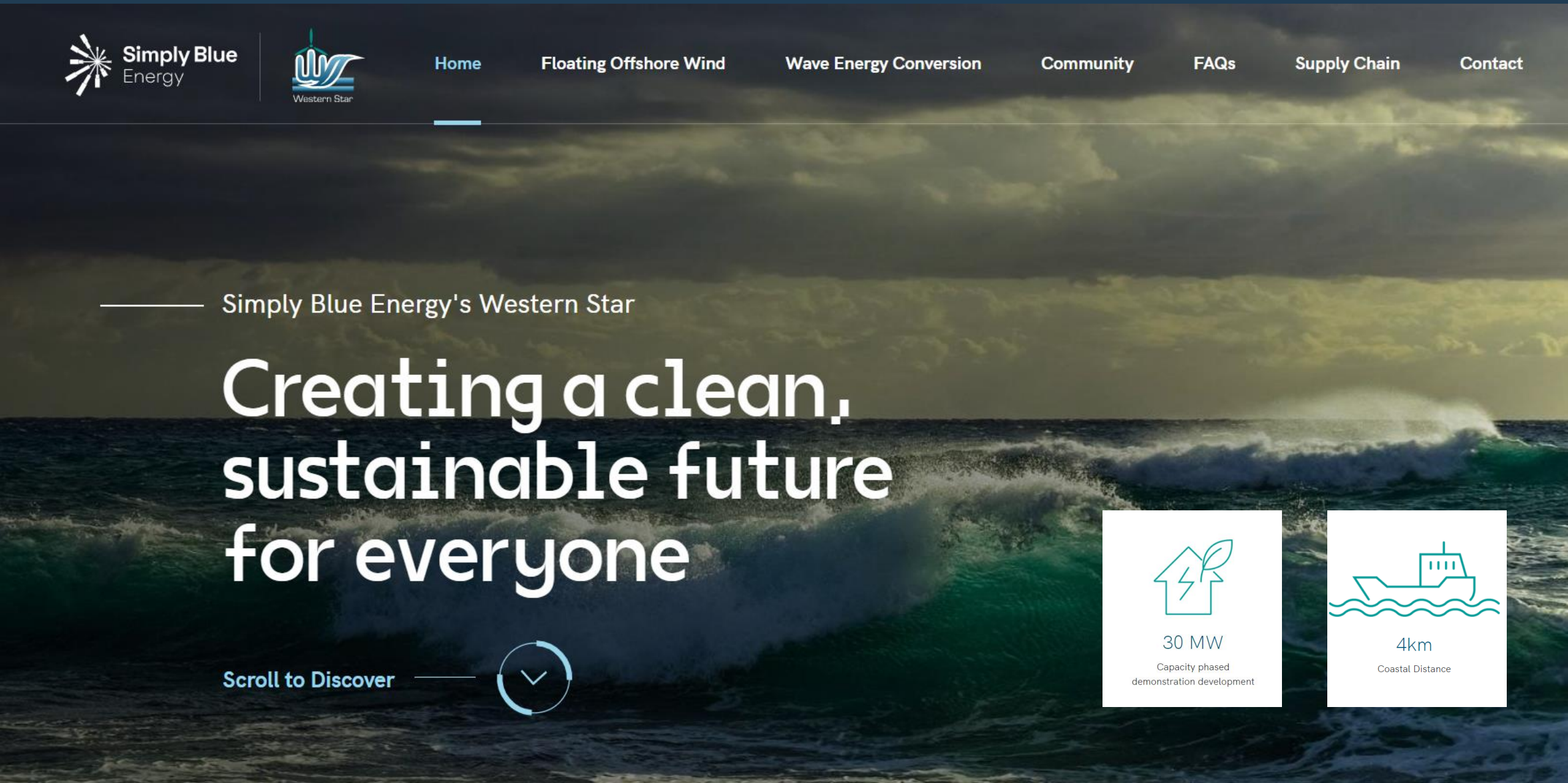
WESTERN STAR – SIMPLY BLUE ENERGY



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THANK YOU

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