



THE BLUE ECONOMY

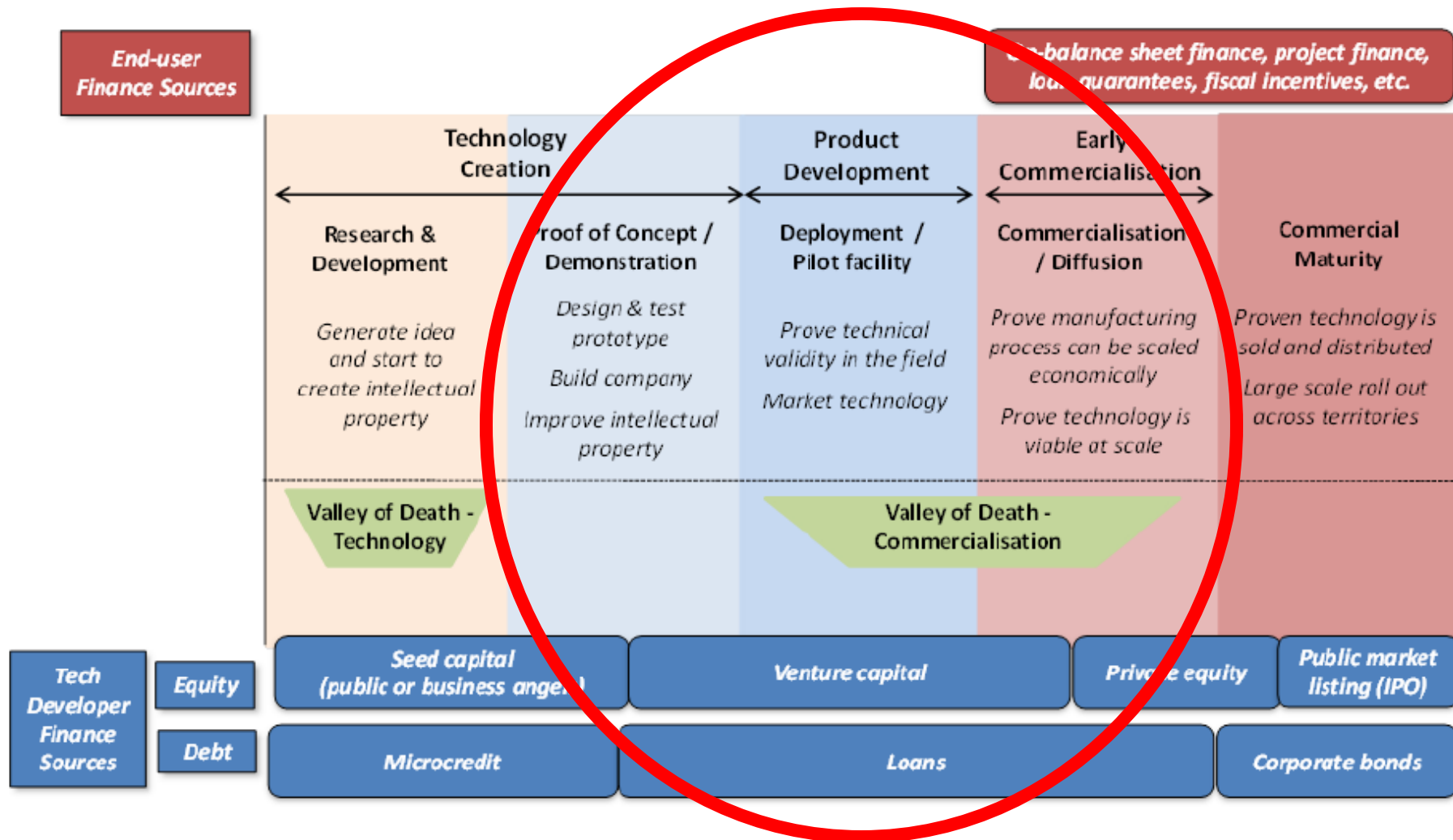
EASME STUDY TO SUPPORT INVESTMENT FOR THE
SUSTAINABLE DEVELOPMENT OF THE BLUE ECONOMY

**Presentation to European
Parliament Intergroup**

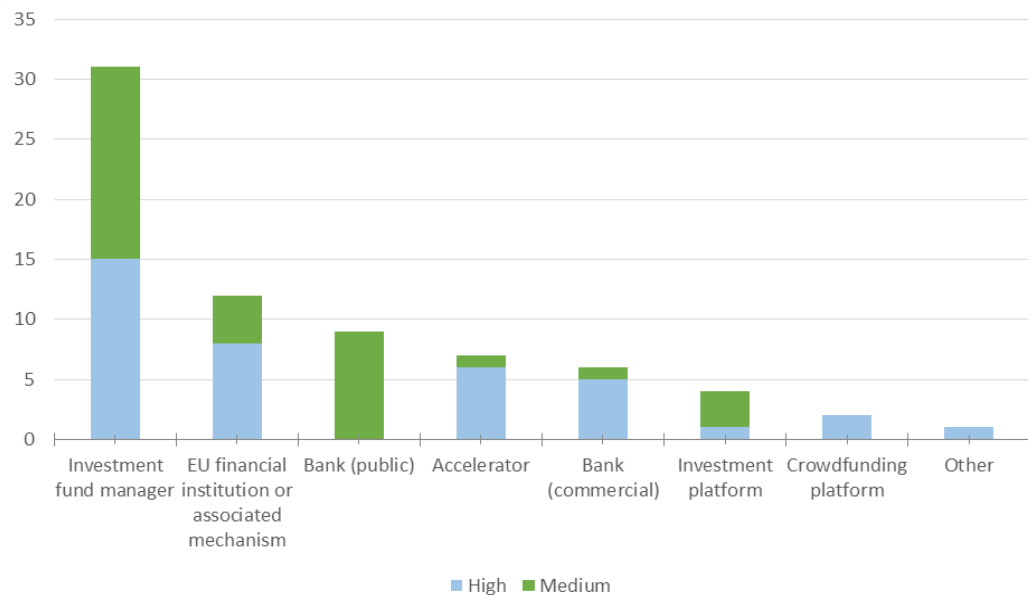
Martin Poulsen, Acacia
Sustainable Business Advisors

30th January 2019

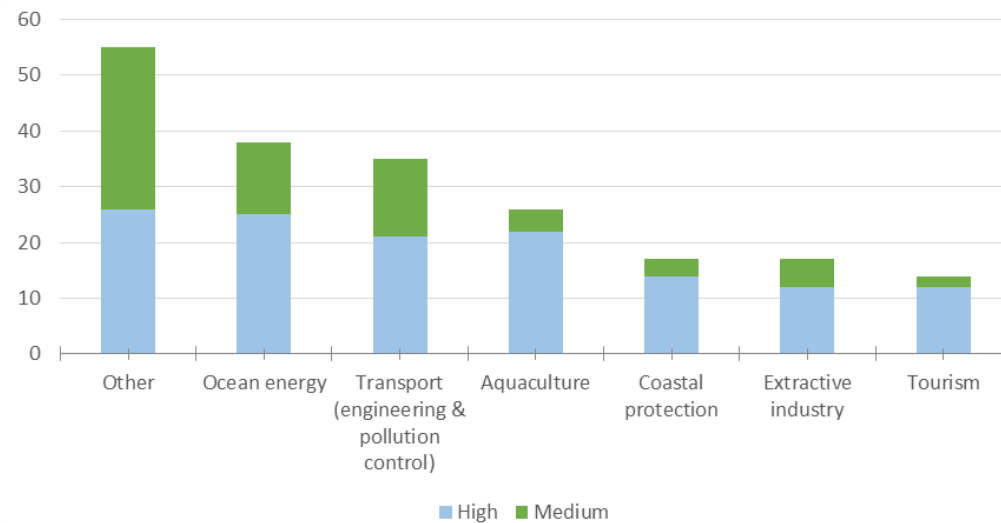
THE FINANCING PROCESS



EXISTING BLUE ECONOMY FINANCE PLATFORMS



Highly relevant in blue and medium relevance in green



Highly relevant in blue and medium relevance in green

Among the 72 organisations identified as relevant to the Blue Economy, only 17 have an exclusive focus on the Blue Economy

SUMMARY OF BLUE ECONOMY FINANCE GAPS

	Notes	Blue Economy sectors						
		Coastal protection	Extractives	Renewable Energy		Seafood	Tourism	Transport
				Offshore Wind	Ocean Energy			
Size of annual investment need	1,2,3,4,5	Medium	Low	Very High	Low	N/A	N/A	Medium
Annual investment need (Range €bn)		3.1 to 7.8	1	22.5 to 30.8	0.8			5
Typical investment need (€bn)		4.7	1	8.3	0.8			5
No of market actors	6	Medium	Medium	High	Low	High	Medium	High
Total actors mapped		17	17	38		26	14	35
Highly relevant actors		14	12	25		22	12	21
Medium relevant actors		3	5	13		4	2	14
General availability of funding	7,8	Limited	Uncertain	Good	Poor	Good	Limited	Good
Total Investment need / market actor (€m)		276	59	218	21	Uncertain	Uncertain	143
Scale of supply deficiency vs investment need	9	High	Low	High	High	Uncertain	Uncertain	Medium
Scale of allocation implied through BEIP	10,11	High	Low	Medium	High	Medium	Medium	Low

SCALE OF BLUE ECONOMY FINANCING NEED REQUIREMENT IS SIGNIFICANT

Sectors	Scale of investment needed	Type of investment needed
Aquaculture	No recent aggregated data available.	Lack of credit financing in the Mediterranean countries.
Transport	European seaports (EU-27) currently face substantial investment needs of around EUR 48 billion (EUR 5 billion annually) for the period 2018 – 2027.	Lack of investment capacity for technological development in the shipping industry.
Blue tourism	No aggregated data available.	Tourism SMEs have limited or no access to credit for investments and innovation.
Coastal protection	The environmental threats posed by climate change (e.g. sea level rises) call for big investments in coastal protection against erosion — the minimum cost of not adapting to climate change, for example, is estimated at EUR 100-250 billion for the EU as a whole.	
Blue biotechnology	No recent aggregated data available.	<ul style="list-style-type: none"> • Money for investment is available but scattered across various sources, so attempts to centralise funds are being made.
Offshore wind	European offshore wind energy industry alone needs to attract EUR 90 billion to EUR 123 billion by 2020.	<ul style="list-style-type: none"> • Although the sector is reaching maturity in Europe and the number of deals being signed is increasing, important investment are still needed to scale up emerging technologies (e.g. floating turbines) and the enabling infrastructures.
Ocean energy	The investment needed through to 2030 amount to EUR 7 billion in Europe.	<ul style="list-style-type: none"> • What is lacking is a critical mass of finance to further develop the sector and scale it up to a fully commercial dimension.

RECOMMENDATION TO ESTABLISH A BLUE ECONOMY FUND

Establish a dedicated Blue Economy Fund

Recommended size +/- EUR180m

The fund should include a co-investment functionality

Clear strategy to ensure funds reach sectors with highest demand

Platform to be enhanced by additional grant-funded features:

- Technical assistance to supported intermediaries
- Technical assistance to potential end beneficiaries
- Market making functions (matchmaking via Blueinvest, demand stimulation)
- Advocacy

CASE STUDY 1: MARINE RENEWABLE COMPANY



Technology

Convertors draw energy from wave power using floaters that rise and fall with the up and down motion, lifting force, change of water level, hydraulic air lock, and incident flux of waves.

Floats are attached by robust arms to many types of structures including: breakwaters, piers, poles, floating and fixed platforms.

The system automatically recognizes upcoming storms and locks the floaters in storm protection modes

Transmission- The motion of the floats is then delivered to shore by a subsea cable.

Hydro pneumatic system (located on land, just like a regular power station), converts the energy from this motion into fluid pressure, which is used to spin a generator, producing electricity.

Company

Completed its wave tank and field testing in the Black Sea, and currently has an installed R&D power plant outside of EU

100kW grid-connected power station in EU port

Currently building 5MW grid-connected power station

Low construction costs (EUR1million per 1MW)

130MW international pipeline

2nd fund-raising round in April, 2017, and successfully raised \$3 Million

CASE STUDY 2: FISH NET PLASTIC RECYCLING COMPANY

Technology

Convert polymers reclaimed from used fishing gear into Filament or granulated plastics for 3D printing

- Technical Innovation - Novel net washing & shredding process
- Operational Innovation - Distributed processing model
- Business Innovation - Funding model

Company

Limited company based in Cornwall, UK

2017- raised £210k by crowdfunding (407 shareholders, 19 countries)

2018 – raising £750k for manufacturing plant



CASE STUDY 3: SHIPPING ENERGY EFFICIENCY COMPANY



Technology

- Flettner Rotor to increase efficiency of commercial ships
- Rotor Sail Solution is ten times more efficient than a conventional sail and requires no extra crew
- “Push button auxiliary wind propulsion” from the bridge.
- Allows the main engines to be throttled back, saving fuel by between 5 and 30%

Company

Based in Norway

2013 – 2015 Industrial Pilot

2015 Commercial operations – first commercial client Maersk (delivered 2018)

2018 – two deliveries Viking Lines delivery 2019/20

Active sales discussions – EUR80m

Quotations outstanding EUR65m

