

Welcome

OPPORTUNITIES



Figuur 1: Maripark design - design by Joost Fluitsma

AGENDA

Intro Maripark

Marijn Rabaut

Blue Cluster

Kinnie De Beule

Blue Cluster

EU policy and multi-use compendium

Céline Frank

DG Mare, EC

Semi Submersible Mussel Farm

Eric Wakkée

OOS Int.

Business & Multi-use PITCHES

Timothy Vanagt

ORG

Luca Barbetti

IMDC

Charlotte Gruber

GLUON

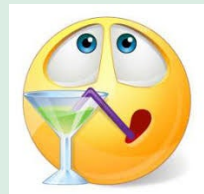
ROLE PLAY

All

Panel

All

APERERO

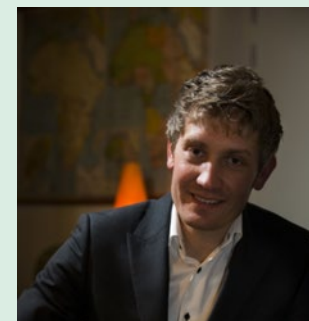


All!

Towards a MARIPARK

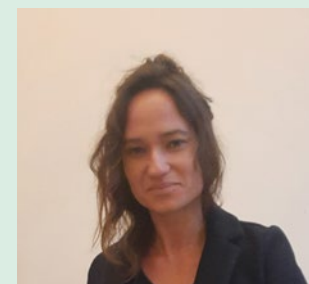
Marijn RABAUT

International marine policy manager and MSP expert



Kinnie DE BEULE

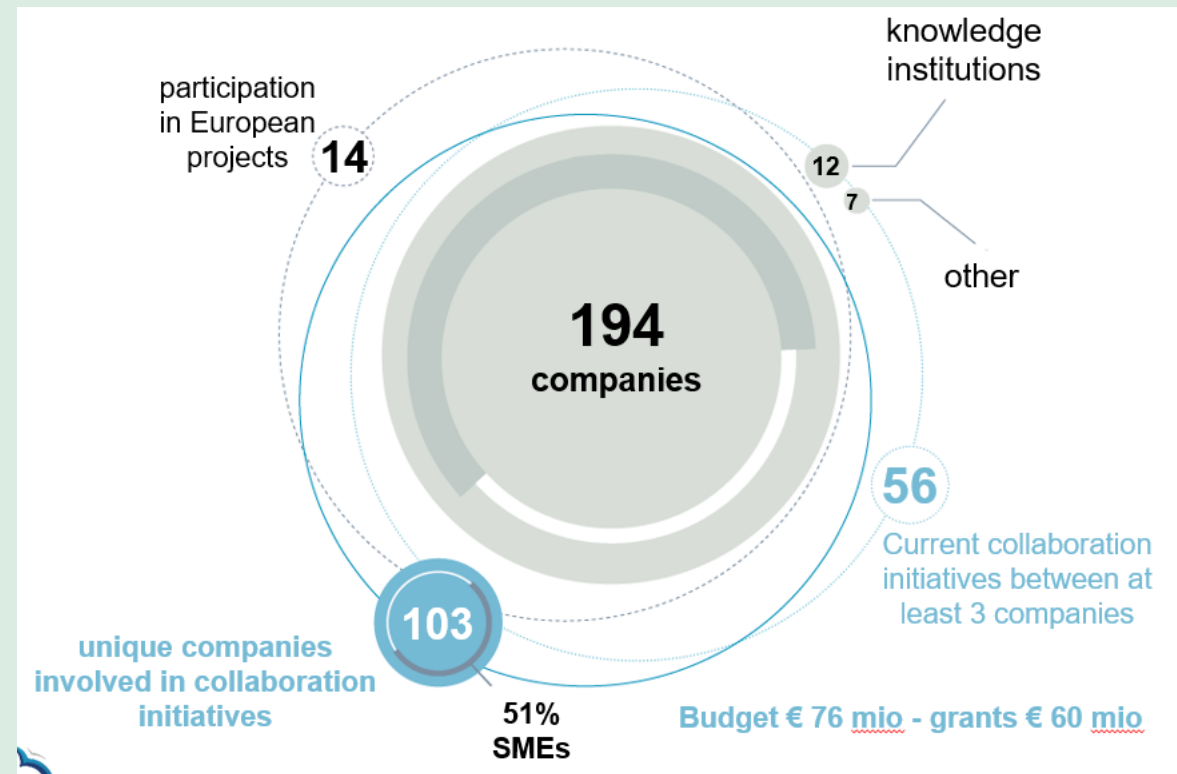
Innovation & EU project manager



Blue Cluster



Blue Cluster & offshore innovation



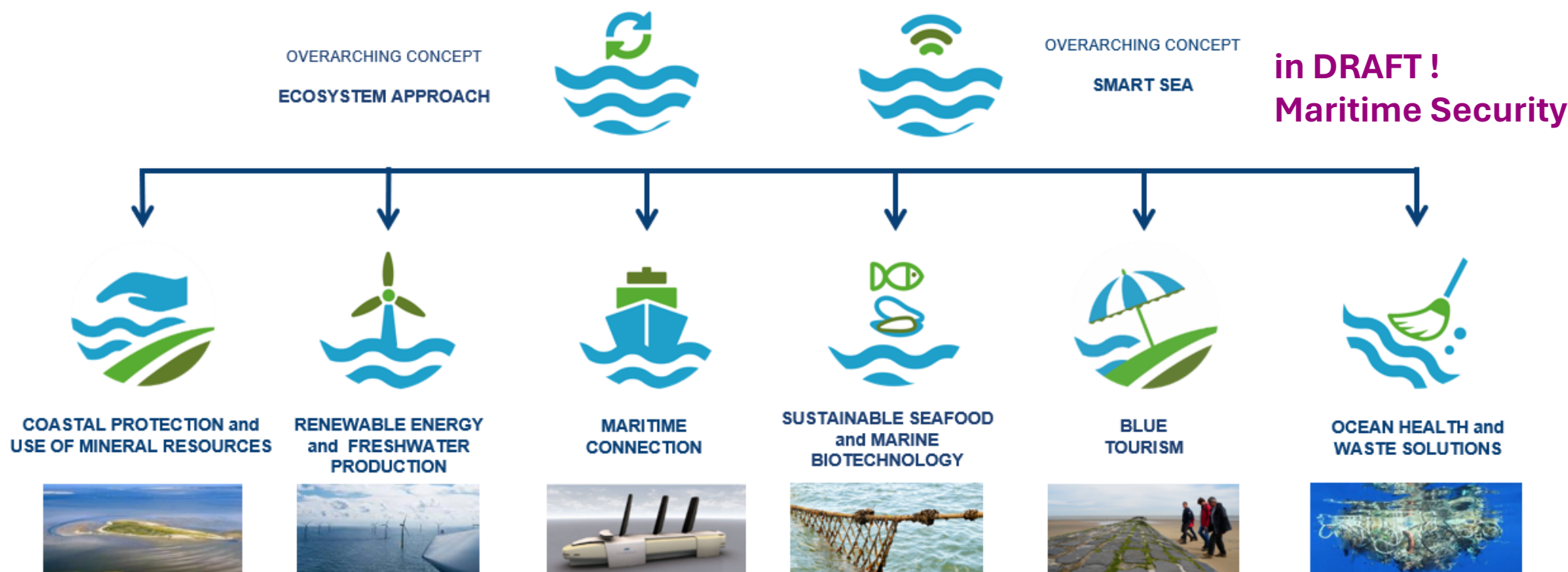
Project creation, policy advise, networking events, blue sessions, support companies, create consortia, stimulate sustainable blue economy

In which areas are we active?

6 focus areas

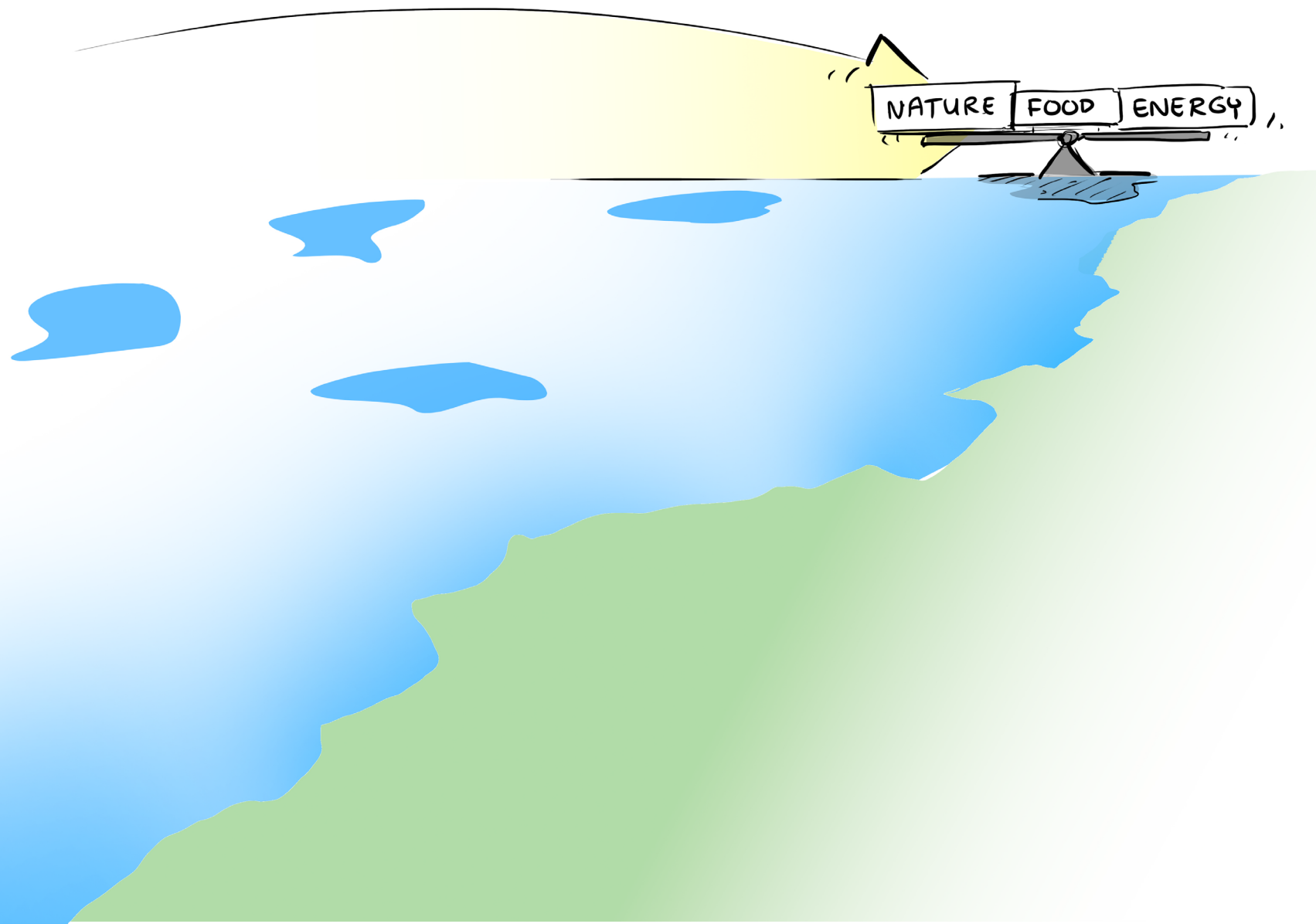
2 cross-sectional areas

A roadmap for each area

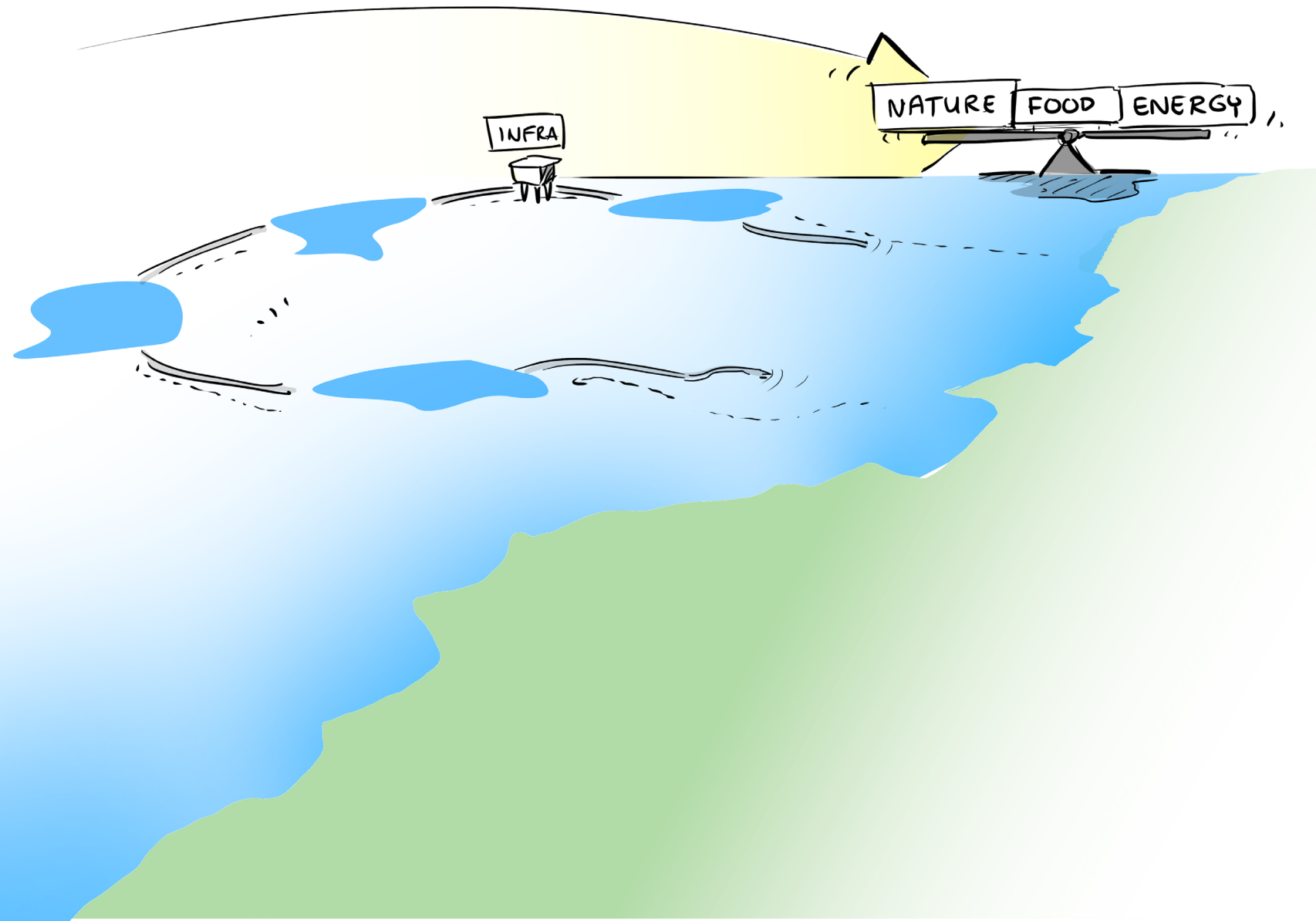




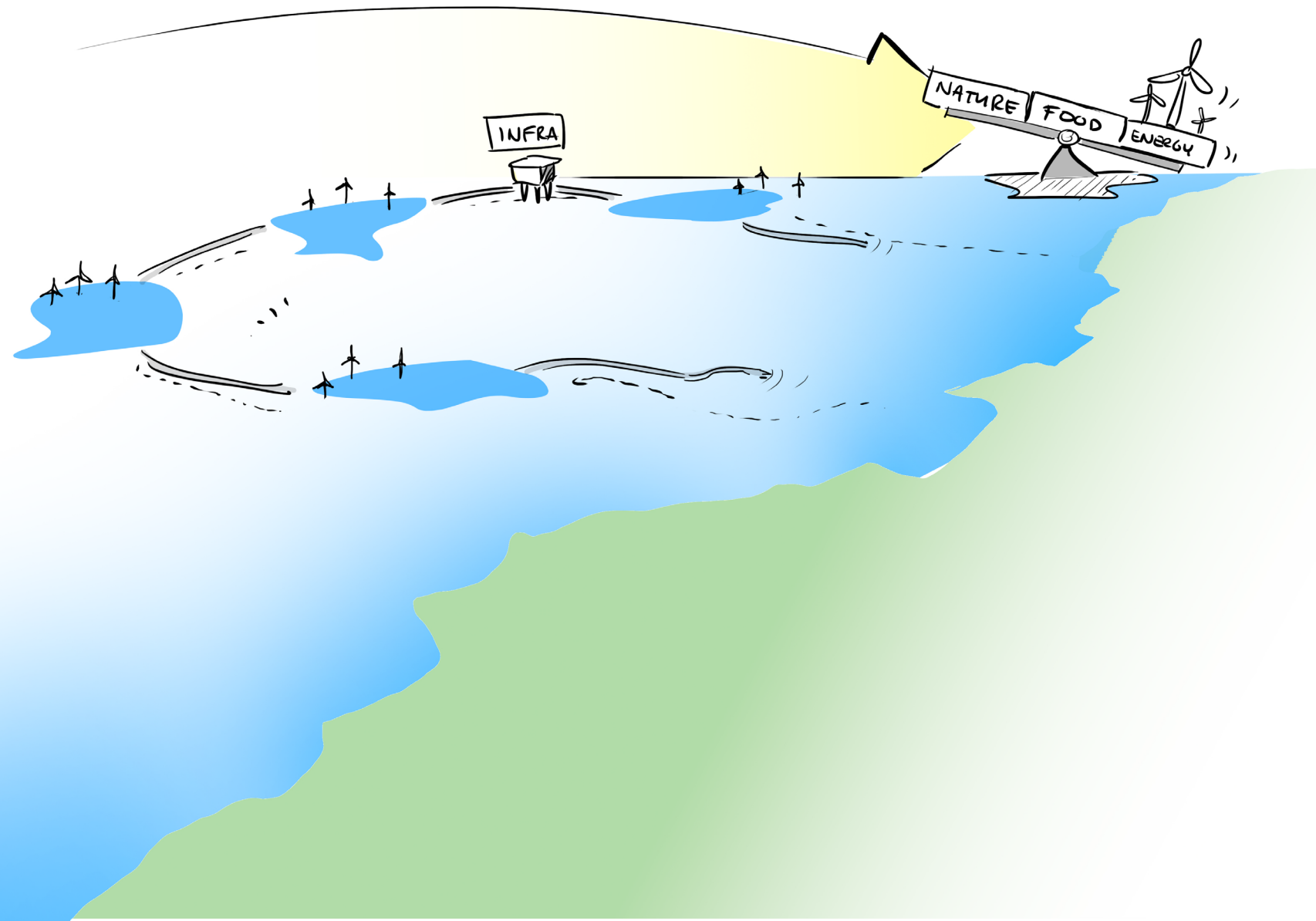
MARIPARK



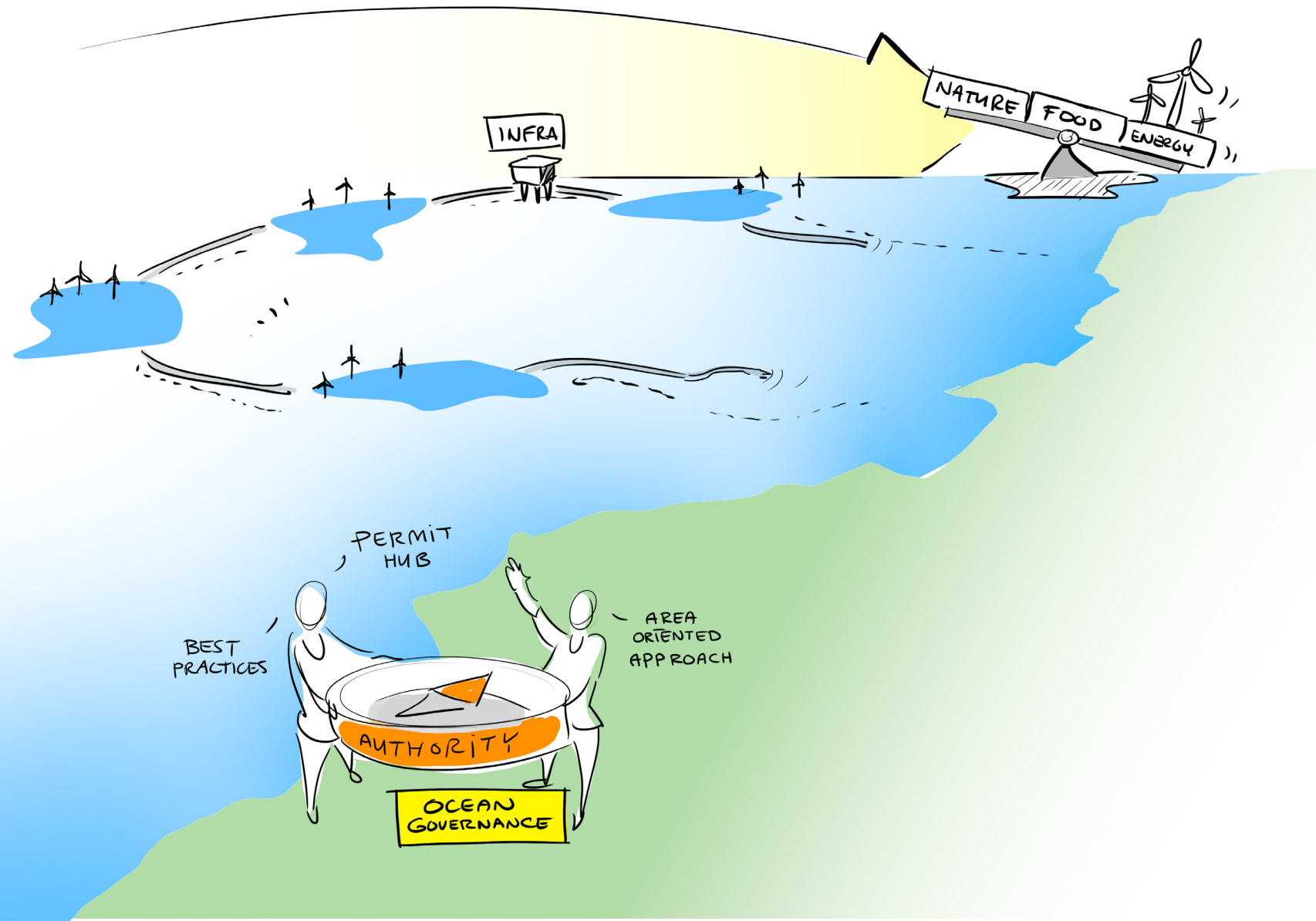
MARI PARK



MARI PARK

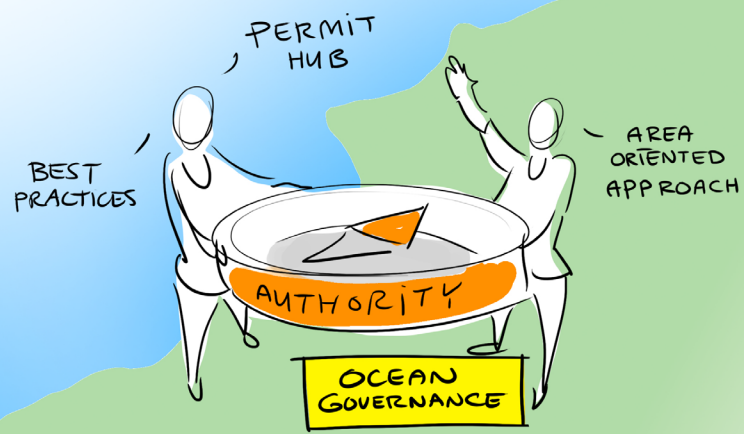
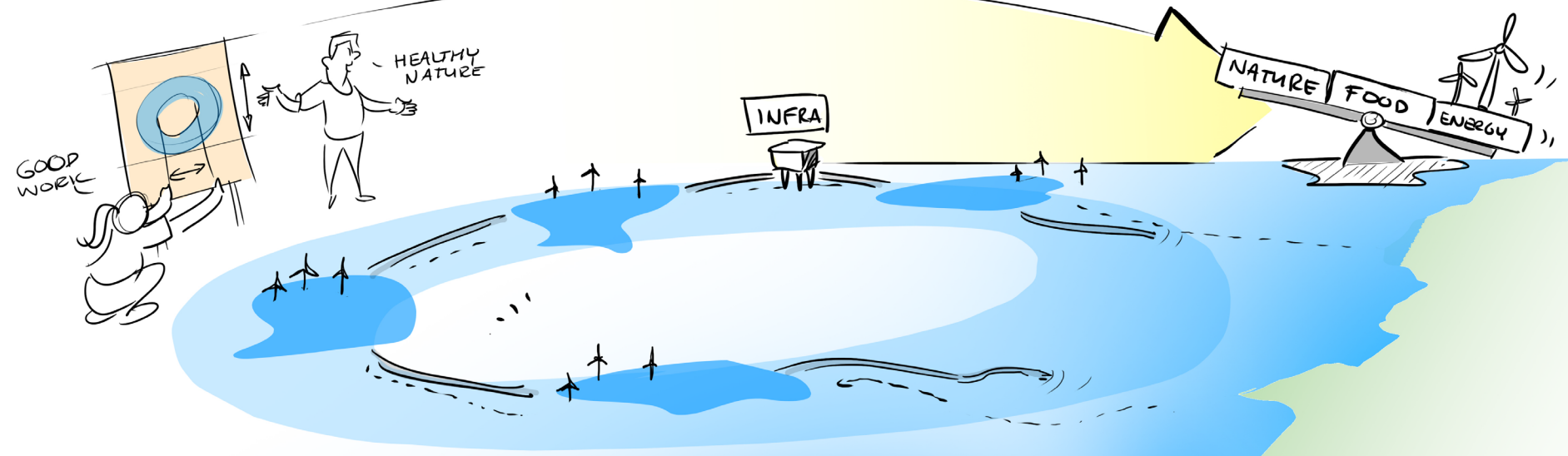


MARi PARK



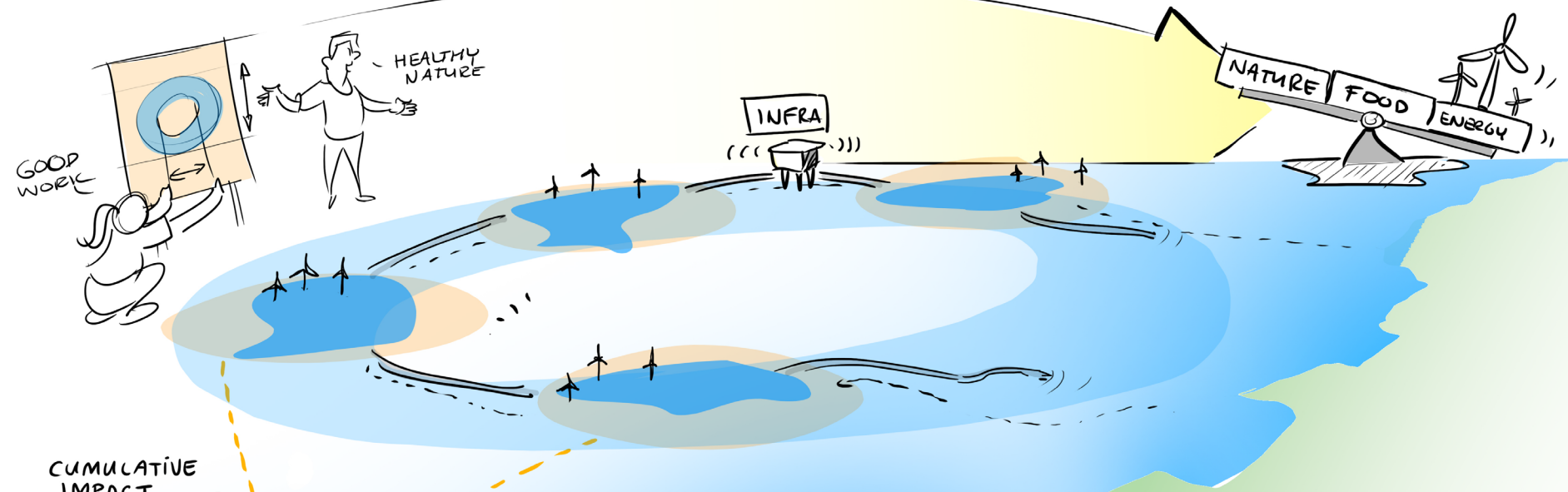
MARi PARK

ECOSYSTEM-BASED
APPROACH



MARIPARK

ECOSYSTEM-BASED APPROACH

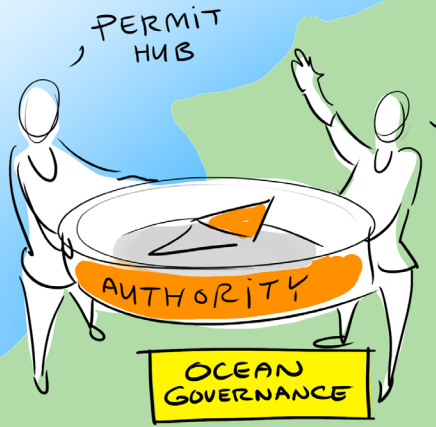


CUMULATIVE IMPACT



DATA SHARING

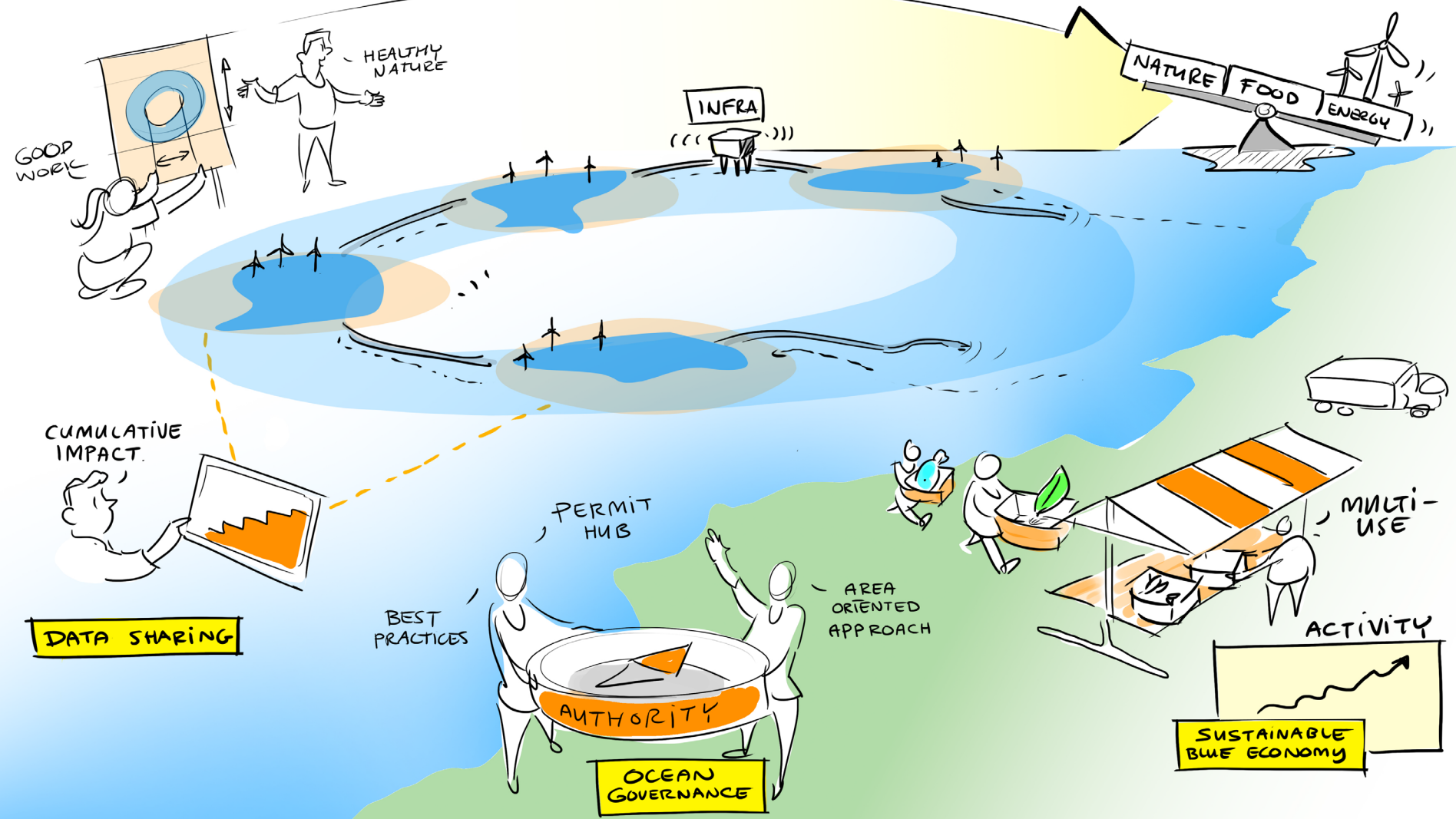
BEST PRACTICES



AREA ORIENTED APPROACH

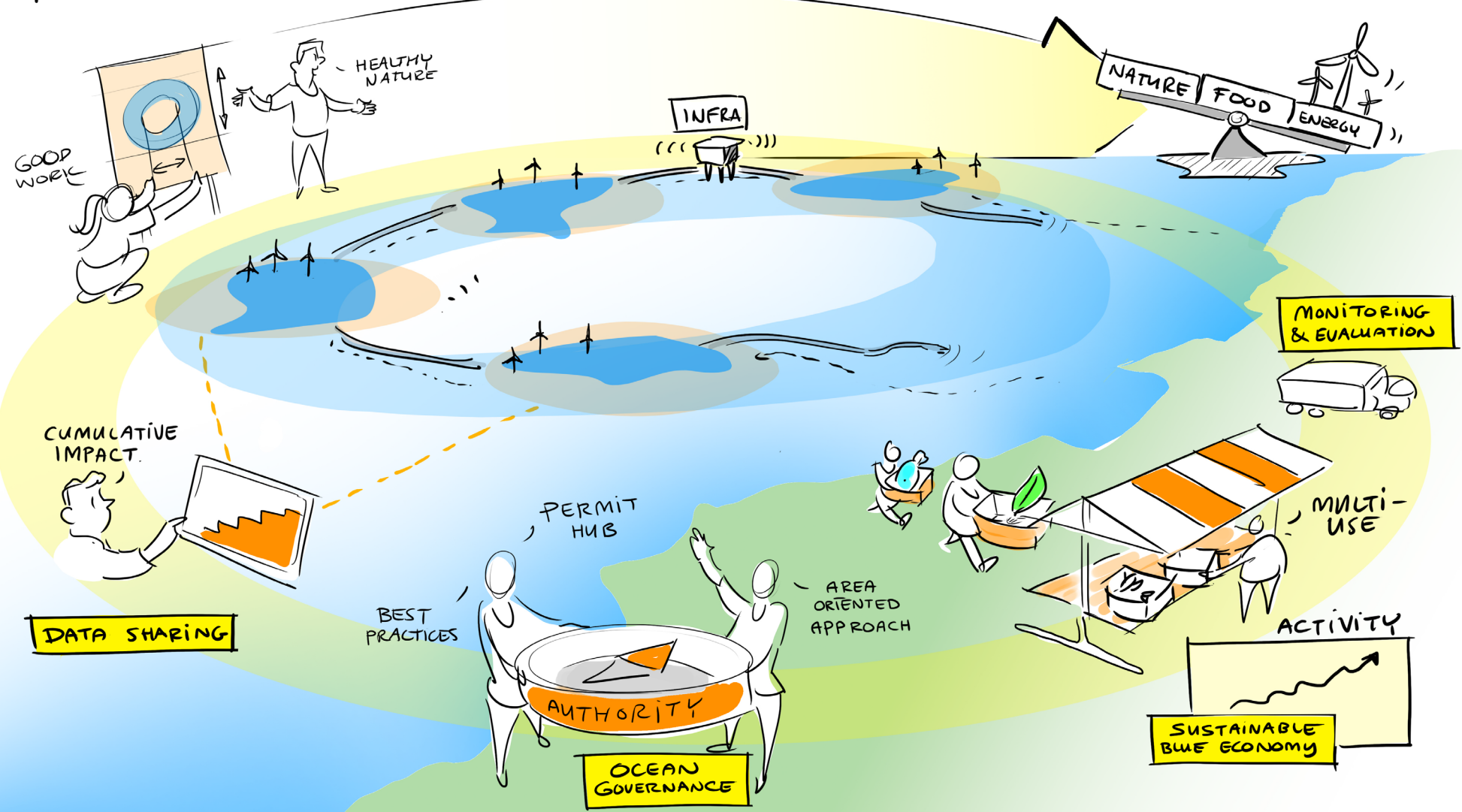
MARI PARK

ECOSYSTEM-BASED APPROACH



MARi PARK

ECOSYSTEM-BASED APPROACH



DATA SHARING

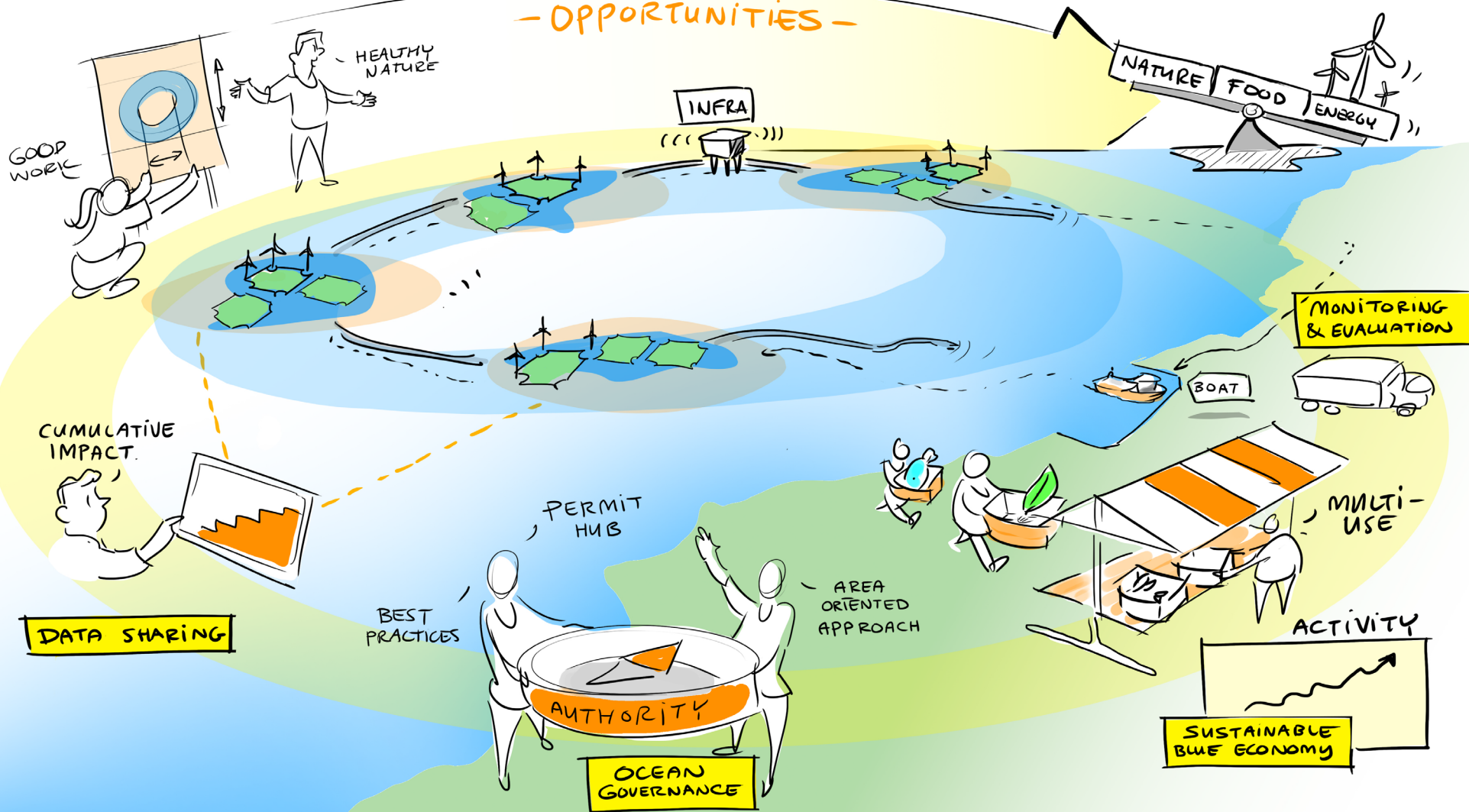
SUSTAINABLE BLUE ECONOMY



MARi PARK

ECOSYSTEM-BASED
APPROACH

- OPPORTUNITIES -



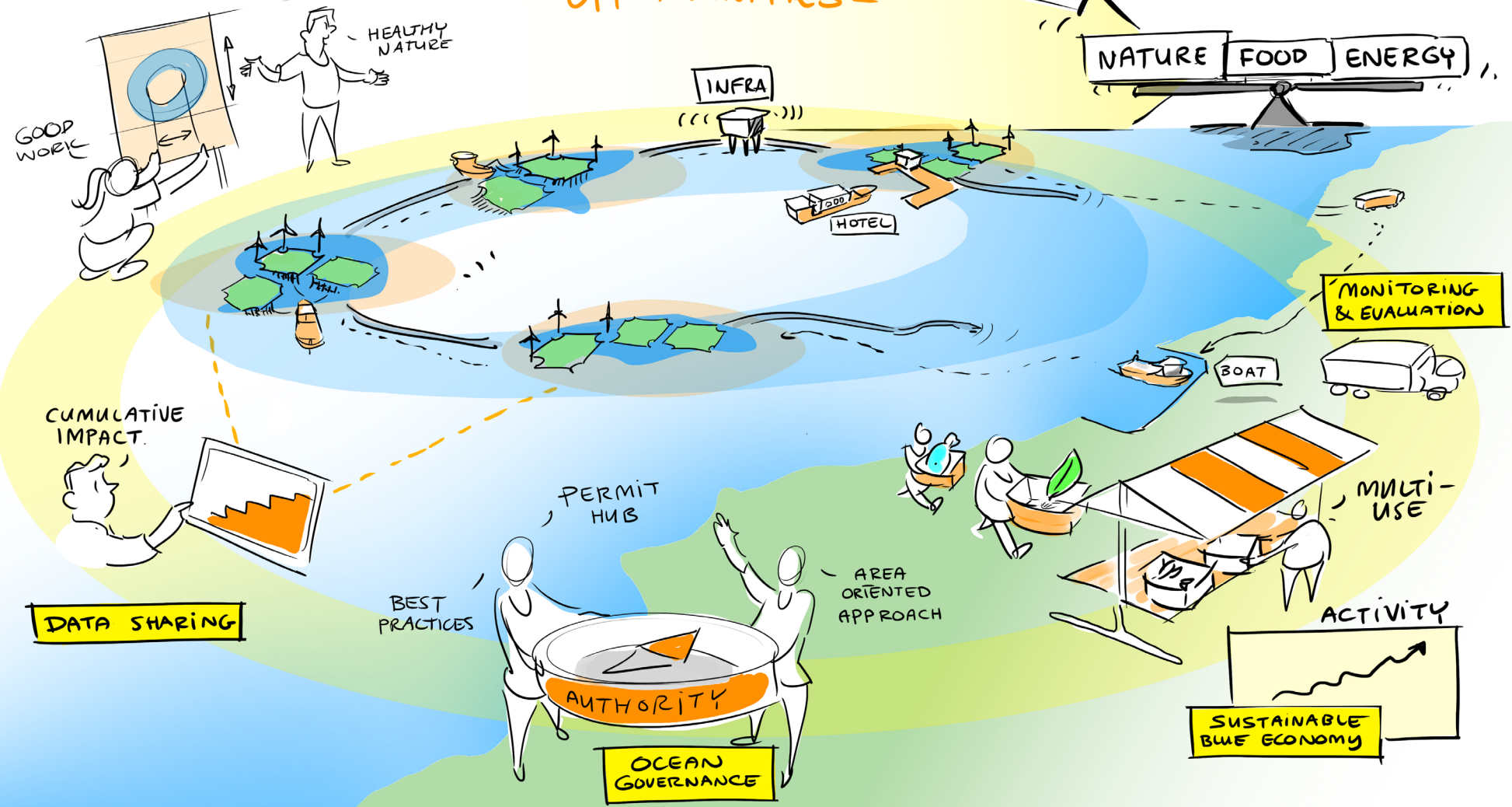


MARi PARK

ECOSYSTEM-BASED APPROACH

- OPPORTUNITIES -

NATURE FOOD ENERGY



DATA SHARING

BEST PRACTICES

OCEAN GOVERNANCE

MONITORING & EVALUATION

MULTI-USE

ACTIVITY

SUSTAINABLE BLUE ECONOMY

EC steers towards Sustainable Blue Economy multi-use

“A Green Recovery for the Blue Economy – Transforming the EU's Blue Economy for a Sustainable Future

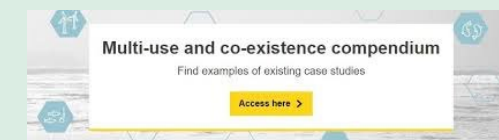
- develop offshore renewable energy, decarbonise maritime transport and green ports
- Circular: fishing gear design, ship recycling and decommissioning of offshore platforms
- green infrastructure for biodiversity and landscapes, tourism and coastal economy



“European Green deal, Climate law, Renewable energy directive, Energy efficiency directive, Re-power EU, Carbon border adjustment mechanism, transition fund, Biodiversity strategy, Farm to Fork, Nature restoration Law, Sustainable aquaculture, Horizon Mission Oceans, Seas and Water (...).”

[Co-existence and multi-use of activities | The European Maritime Spatial Planning Platform \(europea.eu\)](https://europea.eu)

Multi-use -> Maripark

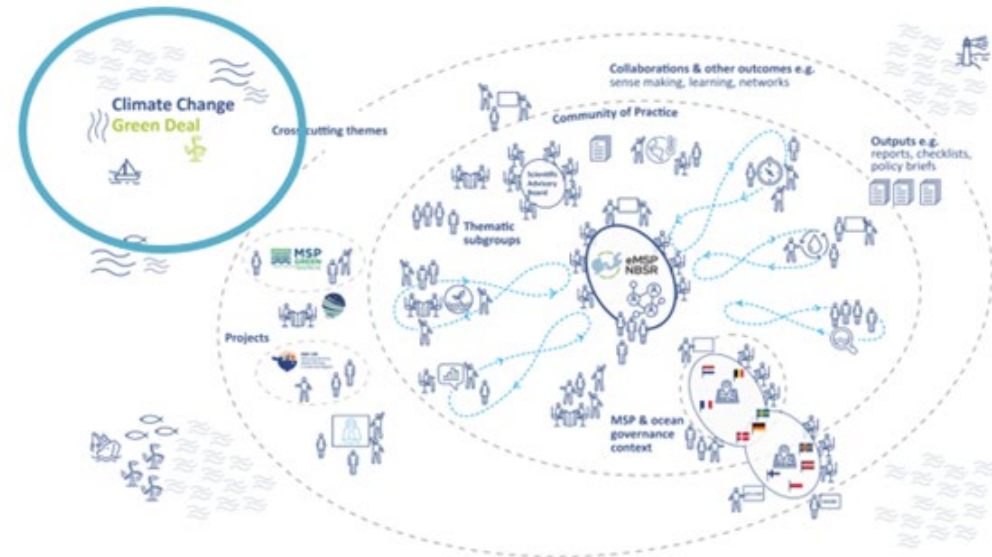


eMSP-NBSR and policy advise zonation in MSP



Introduction into eMSP NBSR

- Five learning strands & CoP's
 - Ocean Governance
 - Ecosystem Based Approach
 - Sustainable Blue Economy
 - Monitoring & Evaluation
 - Data Analysis
- Climate Change
- CoP learning





Emerging Ecosystem-based
Maritime Spatial Planning
Topics in the North and Baltic
Sea Regions



Co-funded by
the European Union

Policy Brief

Towards a sustainable blue economy



Published in January 2024



Download
your copy!



De-risk entrepreneur

MARIPARK

- Basic physical infrastructure
- Shared physical infrastructure (anchors, docking, sensors, smart systems monitoring and evaluation, data, ...)
- Integrate optimal Smart seas and security (internet, data, energy, human safety)
- Shared sea transport and carbon neutrality
- Circular use of resources where possible
- As a stepping-stone towards marine nature restoration (connecting the area, breeding, foraging)
- Cost-effective and sustainable
- Overarching body dedicated to managing and optimising multi-use initiatives
- Governance: Central authority for the efficient management and maintenance of these initiatives
- Optimal permits and regulations – one-stop info through Maripark

Brand new MARIPARK Blueprint & business opportunity overview



APPENDIX / 02 PORTFOLIO

Blue economy business opportunity overview

APPENDIX / 02 PORTFOLIO

Blue economy business opportunity overview

APPENDIX / 02 PORTFOLIO

Blue economy business opportunity overview







1 2 3

1 2 3

FEASIBILITY

FINANCIAL VALUE

STAKEHOLDER VALUE

Business opportunity	Fit for economic zone	Environmental impact	Technology readiness ¹	Political strategy fit	Social acceptance	Financial potential	Maripark synergy potential	Key socio-economic factors ²	Other factors	Potential scope Maripark
 Lobster cages and/or hatchery (P. elephas & H. Gammarus)	<ul style="list-style-type: none"> ✓ Temperature ✓ Sea depth ✓ Nutrients ✗ Hard substrate 	<ul style="list-style-type: none"> ✗ No CO₂ / No₂ capture ✗ No filtration Indigenous species 	<ul style="list-style-type: none"> Moderate 	<ul style="list-style-type: none"> Biodiversity North Sea Programme 	<ul style="list-style-type: none"> Unknown, but expected positive 	<ul style="list-style-type: none"> Dependent on scalability ✓ High financial value 	<ul style="list-style-type: none"> ✓ Capex synergies ✓ Opex synergies 	<ul style="list-style-type: none"> ✓ Job creation ✗ GDP impact 	N/A	✗
 Bivalves, oysters / blue mussels ³	<ul style="list-style-type: none"> ✓ Temperature ✓ Sea depth ✓ Nutrients ✓ Resilient species 	<ul style="list-style-type: none"> ✓ No capture ✓ Water filtration ✓ Indigenous species 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> Biodiversity Climate positive North Sea Programme 	<ul style="list-style-type: none"> Expected positive from general public ✗ Negative from mussel industry 	<ul style="list-style-type: none"> High scaling potential ✗ Possible too high to meet demand 	<ul style="list-style-type: none"> ✓ Capex synergies ✓ Opex synergies 	<ul style="list-style-type: none"> ✓ Job creation ✓ GDP impact 	N/A	✓
 Develop farming of new species and plants ⁴	<ul style="list-style-type: none"> ✗ Temperature ✗ Sea depth 	<ul style="list-style-type: none"> ✗ Invasive species 	<ul style="list-style-type: none"> Moderate 	<ul style="list-style-type: none"> Biodiversity Restore old nature 	<ul style="list-style-type: none"> Unknown, but expected mixed 	<ul style="list-style-type: none"> Depending on type of species and market 	<ul style="list-style-type: none"> ✗ Capex synergies ✗ Opex synergies 	<ul style="list-style-type: none"> ✗ Job creation ✓ GDP impact 	<ul style="list-style-type: none"> ✗ Less risk of invasive with CRISPR 	✗
 Sustainable tourism	<ul style="list-style-type: none"> ✓ Presence of attraction ✗ Sailable water 	<ul style="list-style-type: none"> ✗ Nature impact 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> Attract foreign tourism ✓ Educational purposes 	<ul style="list-style-type: none"> Mixed, but mostly neutral/positive 	<ul style="list-style-type: none"> Depending on form of tourism 	<ul style="list-style-type: none"> ✓ Capex synergies ✗ Opex synergies 	<ul style="list-style-type: none"> ✓ Job creation ✓ GDP impact 	N/A	✓
 Subsea data centers	<ul style="list-style-type: none"> ✓ Foundation ✓ Water temperature 	<ul style="list-style-type: none"> ✓ No freshwater use ✗ Nature impact ✗ Excess heat 	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> Datacenter sustainability targets 	<ul style="list-style-type: none"> Unknown, but expected positive 	<ul style="list-style-type: none"> More reliable circumstances ✓ Less energy for cooling 	<ul style="list-style-type: none"> ✗ Capex synergies ✗ Opex synergies 	<ul style="list-style-type: none"> ✗ Job creation ✗ GDP impact 	<ul style="list-style-type: none"> ✗ Can disrupt ecosystem 	✓
 Green power stations ⁵	<ul style="list-style-type: none"> ✗ Old infrastructure ✗ Space for cargo ships 	<ul style="list-style-type: none"> ✗ CO₂ ✗ Nature impact 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Climate-neutral shipping in 2050 	<ul style="list-style-type: none"> Unknown, but expected positive 	<ul style="list-style-type: none"> Early stage 	<ul style="list-style-type: none"> ✓ Capex synergies ✓ Opex synergies 	<ul style="list-style-type: none"> ✓ Job creation ✓ GDP impact 	<ul style="list-style-type: none"> ✗ Commercialization requires scale, not suitable for Maripark 	✗

Note: The selected business Sources of business
1/ Low = concept stage
2/ Includes impact on a
3/ Green in Maripark

THANK YOU

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European project manager
#MSP
#Multi-use
#Innovation
#SBE

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EU multi-use compendium: a repository on multi-use & co-existence at sea

Céline FRANK
policy officer EC, DG Mare





Blue Economy Science Summit – BESS 2024

How maritime spatial planning can support multi-use?

Céline FRANK

*European Commission,
DG MARE A2*

23 May 2024, Thermae Palace, Oostende

MARITIME SPATIAL PLANNING IN THE EU



41M€ under EMFF/EMFAF direct management (2014-2023)

A **pro-active** and **engaged** MSP **stakeholder community** is developing in the EU, providing a **point of reference** for best practice in MSP

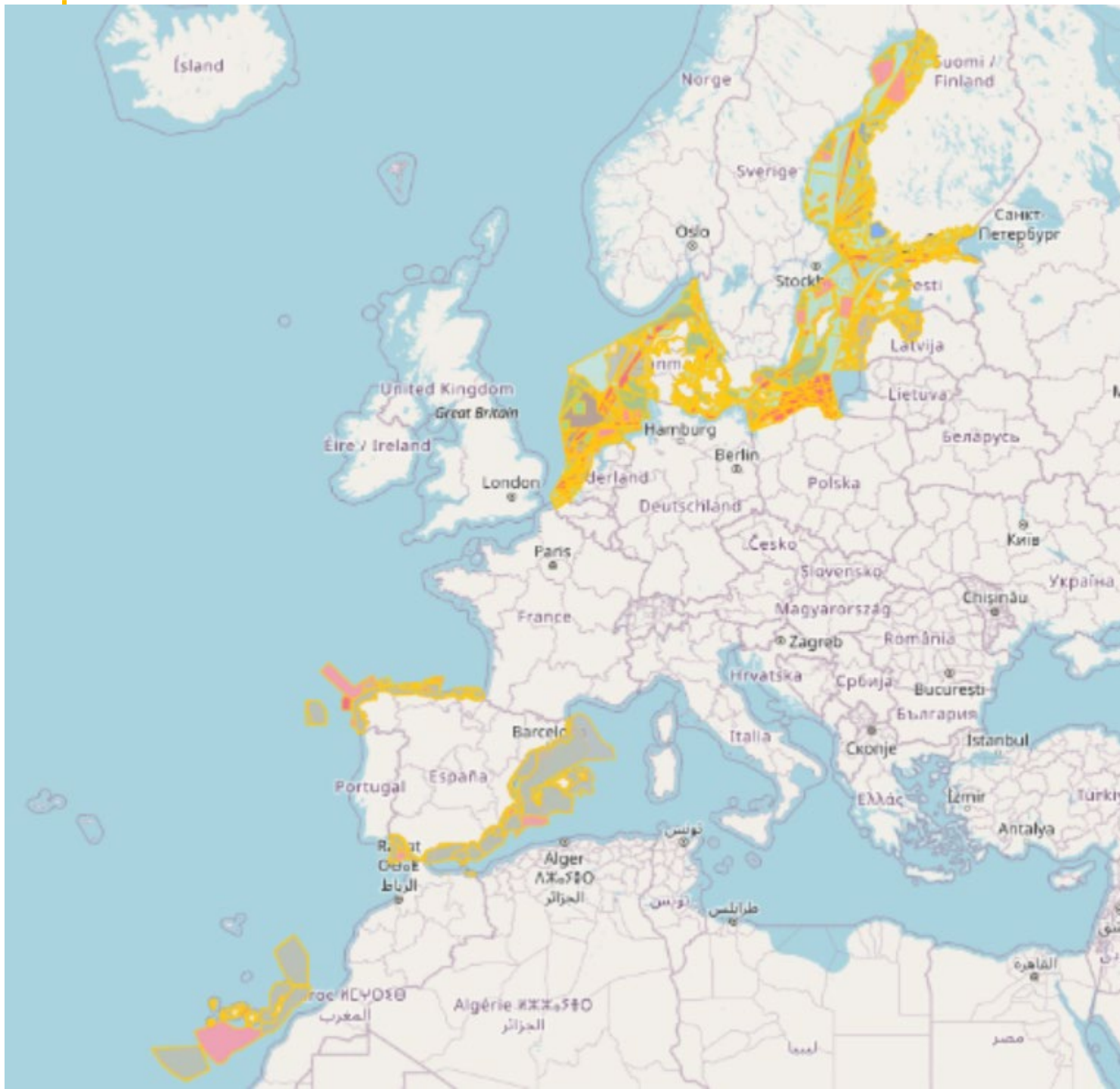
19 Maritime Spatial Plans by Member States in 2023

30 regional and cross-border projects under EMFF/EMFAF direct management since 2014

90% of the nationally adopted marine spatial plans are located in EU countries

Maritime spatial plans: Where do we stand?

- Maritime Spatial Planning Directive since 2014 - [1st COM report on implementation](#) in 2022, next one for 2026
- 19 national plans adopted - 3 infringement procedures
- Most plans identify space for offshore wind: binding or indicative
- Several MS are currently revising their plan to accommodate increased objectives for offshore wind
- Limited forward-looking perspective on MPAs, so far but some commitment to include national pledges for Biodiversity Strategy
- Limited areas identified for multi-use so far, but many pilot projects ongoing and several countries consider it in their revised plans



**10 plans uploaded
in EMODnet.**

→ We need more!



EMODnet



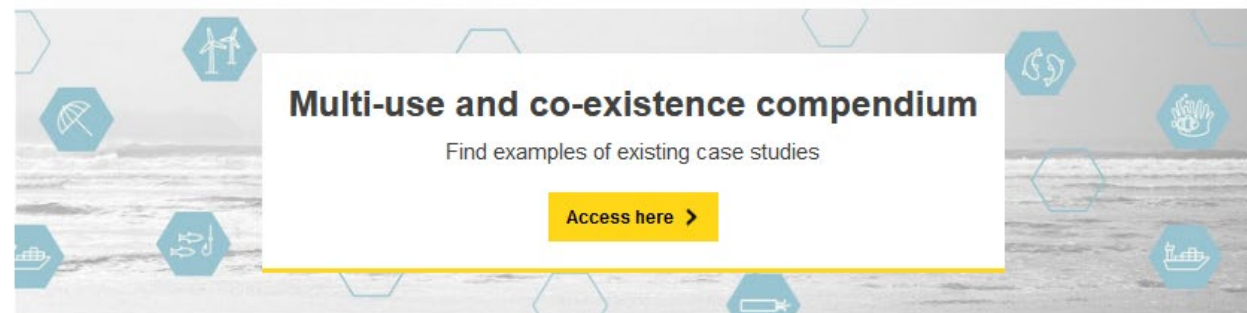
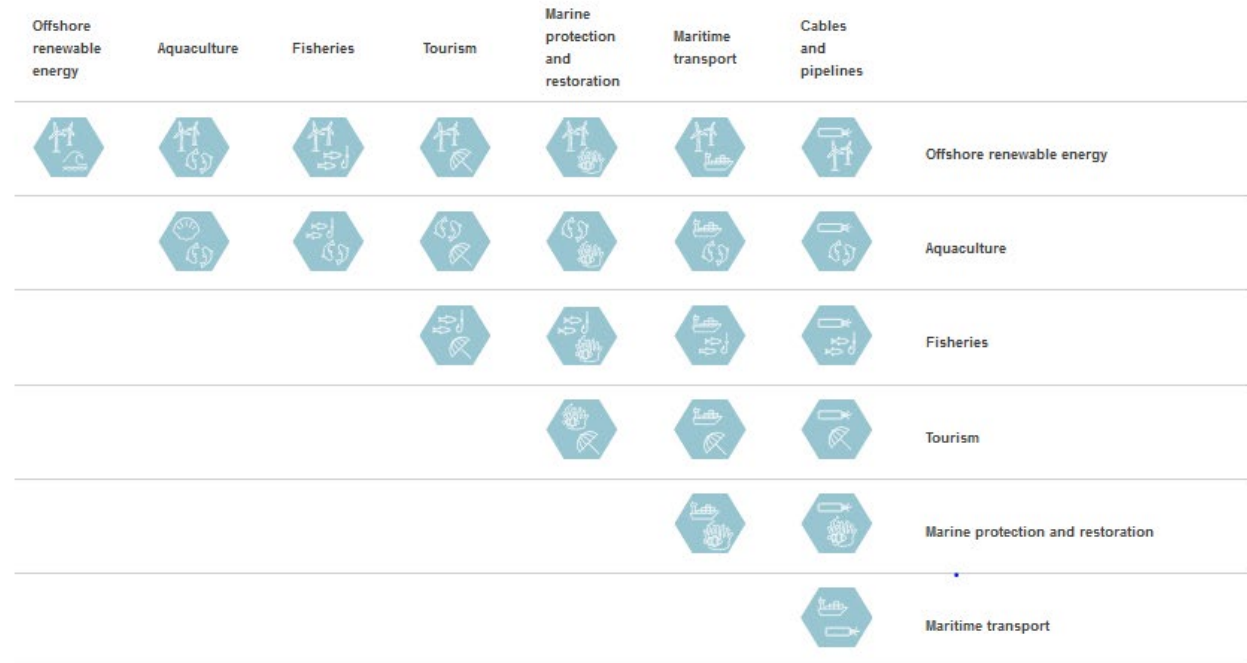
European Marine
Observation and
Data Network



European
Commission

Multi-use compendium online

- Multi-use encouraged in several Green Deal strategies
- Will have to become the norm in certain areas to combine all ambitions
- Certain combinations more feasible than others



CONTRIBUTE TO THE COMPENDIUM AND SUBMIT YOUR CASE STUDY HERE

Initiatives, knowledge, practices

- Pilot projects on aquaculture (mussels), restoration – potential for offshore aquaculture
- OW and fisheries: Increased involvement of the sector in MSP
- Multi-technologies: OW and floating solar, wave and floating wind
- OW and defence activities: High political and strategic issue
- Growing interest for non-price criteria in auction: energy – ecology
- Offshore Coalition for Energy and Nature: industry and NGOs
- European Environmental Agency study: [Mapping potential environmental impacts of offshore renewable energy](#)
- Several EU-funded projects on multi-use ongoing, e.g. UTFARMS, Aquawind, EU-SCORES, etc.

Useful links

- EU MSP platform online: <https://maritime-spatial-planning.ec.europa.eu>
- Multi-use compendium: <https://maritime-spatial-planning.ec.europa.eu/msp-resources/co-existence-and-multi-use-activities>
- EMODnet: <https://emodnet.ec.europa.eu/geoviewer/>
- [Report on MSP implementation](#)
- MSPGlobal: <https://www.mspglobal2030.org/>

Thank you

Contact: celine.frank@ec.europa.eu



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Semi Submersible Mussel Farm

Eric WAKKEE
Advisor, OOS SMF



03-0001 - NanoZoom - Intro2 - NL (youtube.com)



SSMF OOS Cees Leenaars | Semi Submersible Mussel Farm
youtu.be



Phase 01A: The pilot / test project



.O.O.S.
group

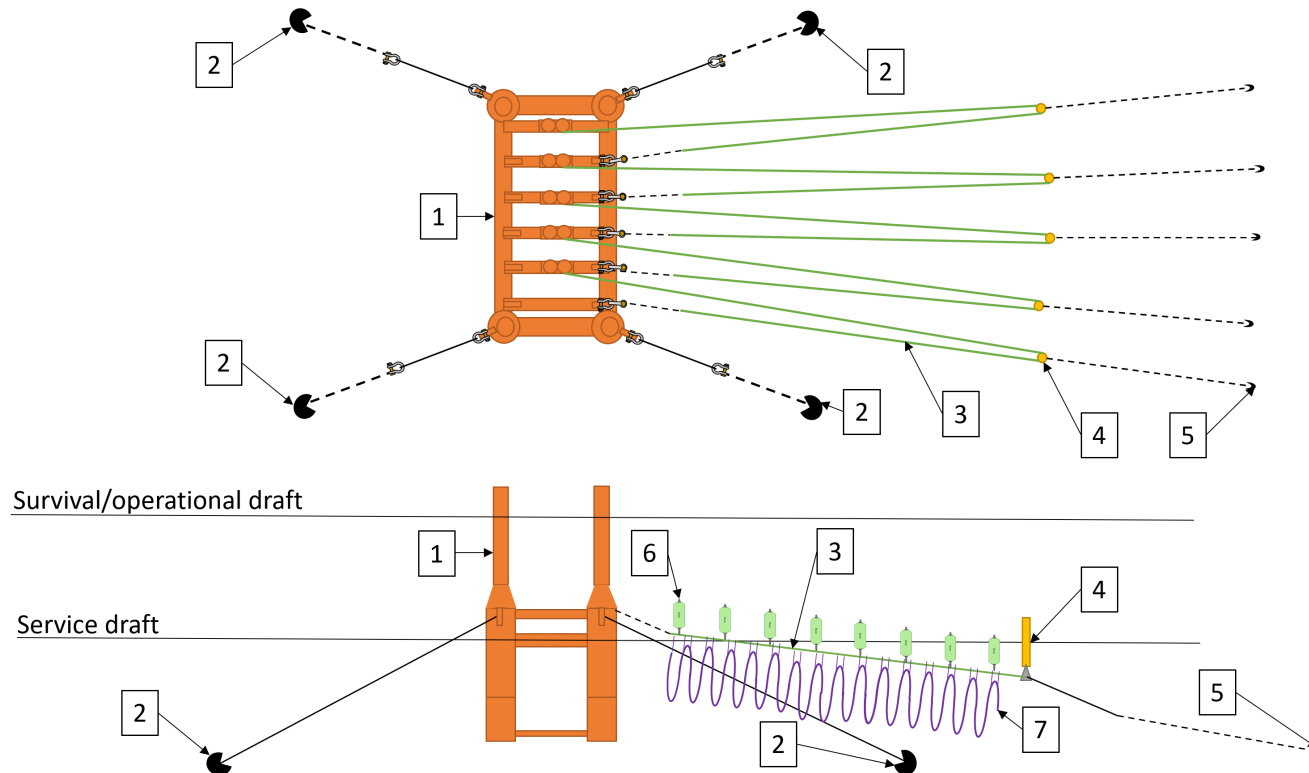


Deltares Model Test



Phase 01B: The pilot / test project

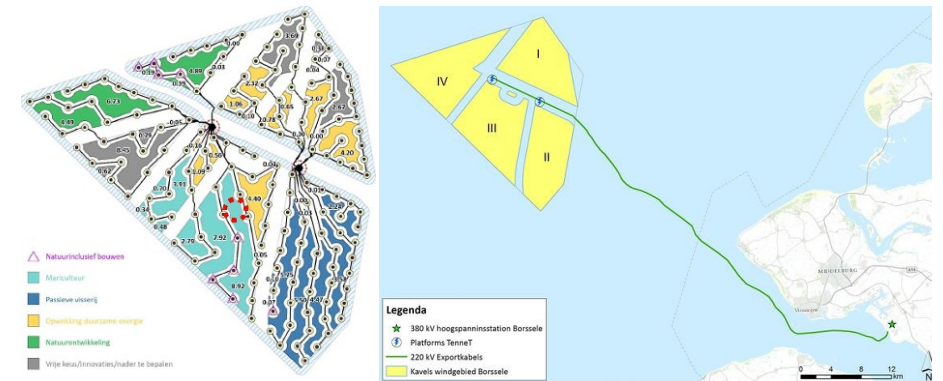
Real-Time Test



The purpose:

Small-scale testing of the concept involving research into:

- Technical feasibility and behaviour
- Mussel growth on the open sea (offshore)



Testlocation:

- Windfarm Borssele 3

Planning:

- Mei 2024-> 2026



.O.O.S.
group

Phase 02: De Semi Submersible Mussel Farm

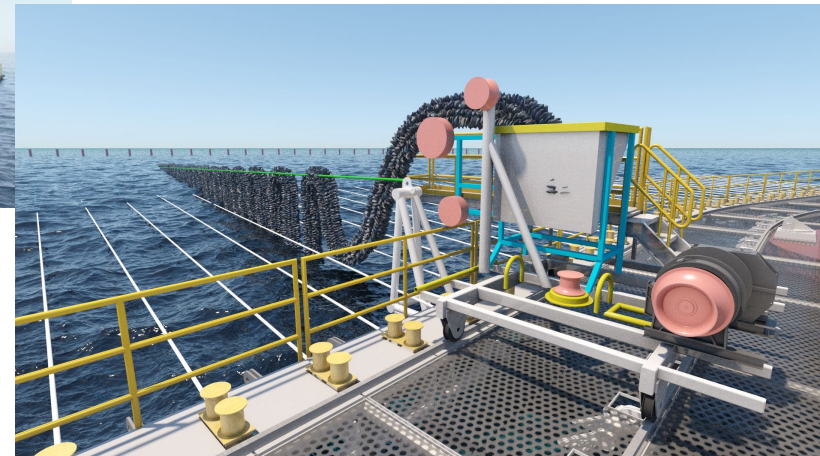
“OOS CEES LEENAARS”

The purpose:

Facilitating, technically and logistically, mussel farmers in the cultivation of mussels on the open sea

Planning:

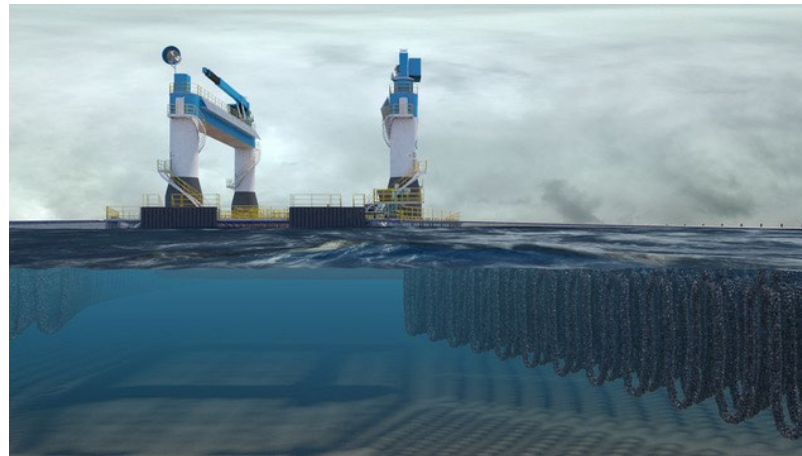
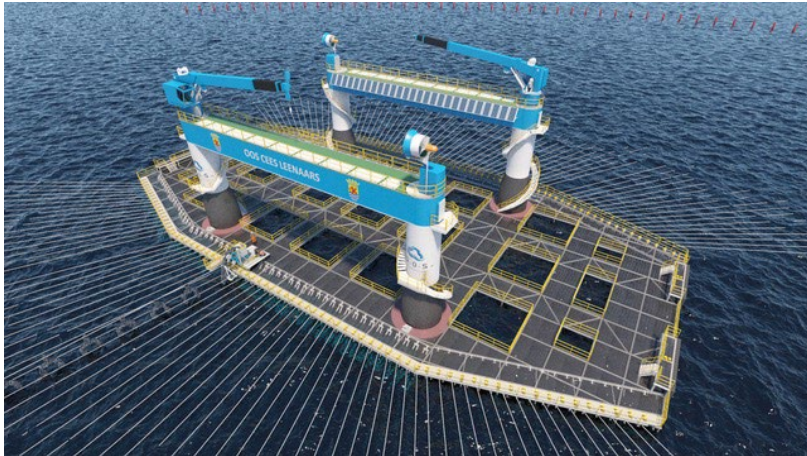
2026 -> 2027



Phase 02: Investment costs SSMF “OOS CEES LEENAARS”

Dimensions:

- Dimension SSMF 72 mtr x 36 mtr (L x B)
- Number of longlines (double) 72 - 300 mtr (single)
- Total length longlines 43.200 mtr
- Mussel ropes 0,40 mtr c.t.c. length 8 mtr
- Total length of mussel rope 864.000 mtr



Thank you for your attention



. O . O . S .
group



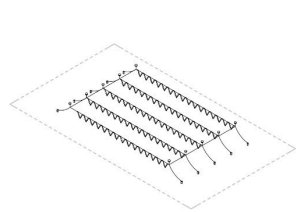
BUSINESS and Multi-Use (artistic) opportunities

Timothy Vanagt, ORG

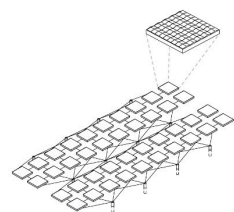
Luca Barbetti, IMDC

Charlotte Gruber (GLUON) and
Frans Snijkers, VITO

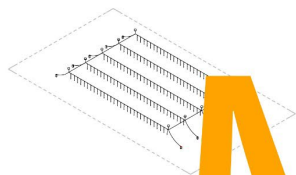




Longline aquaculture



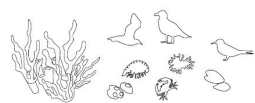
Solar energy



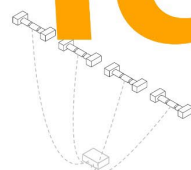
Dropper aquaculture



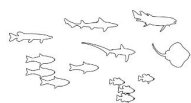
Wind energy



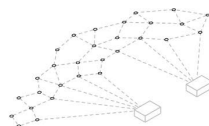
Sea flora



Wave energy

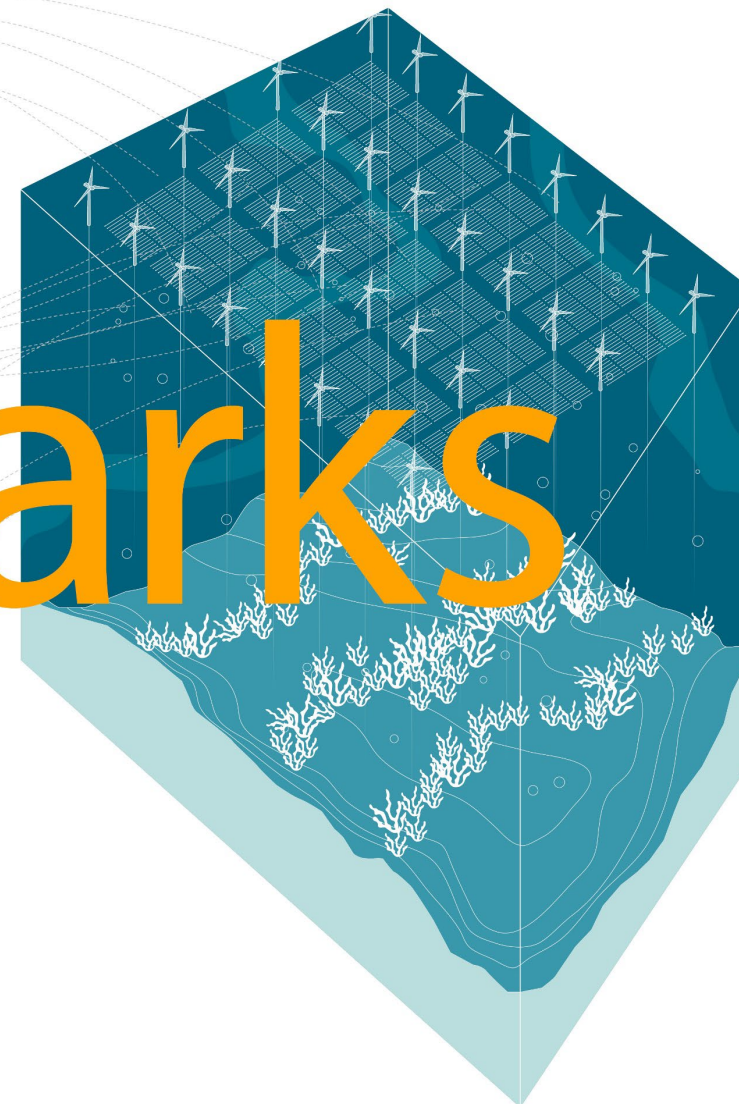


Fishery



Hydrogen storage

MariParks

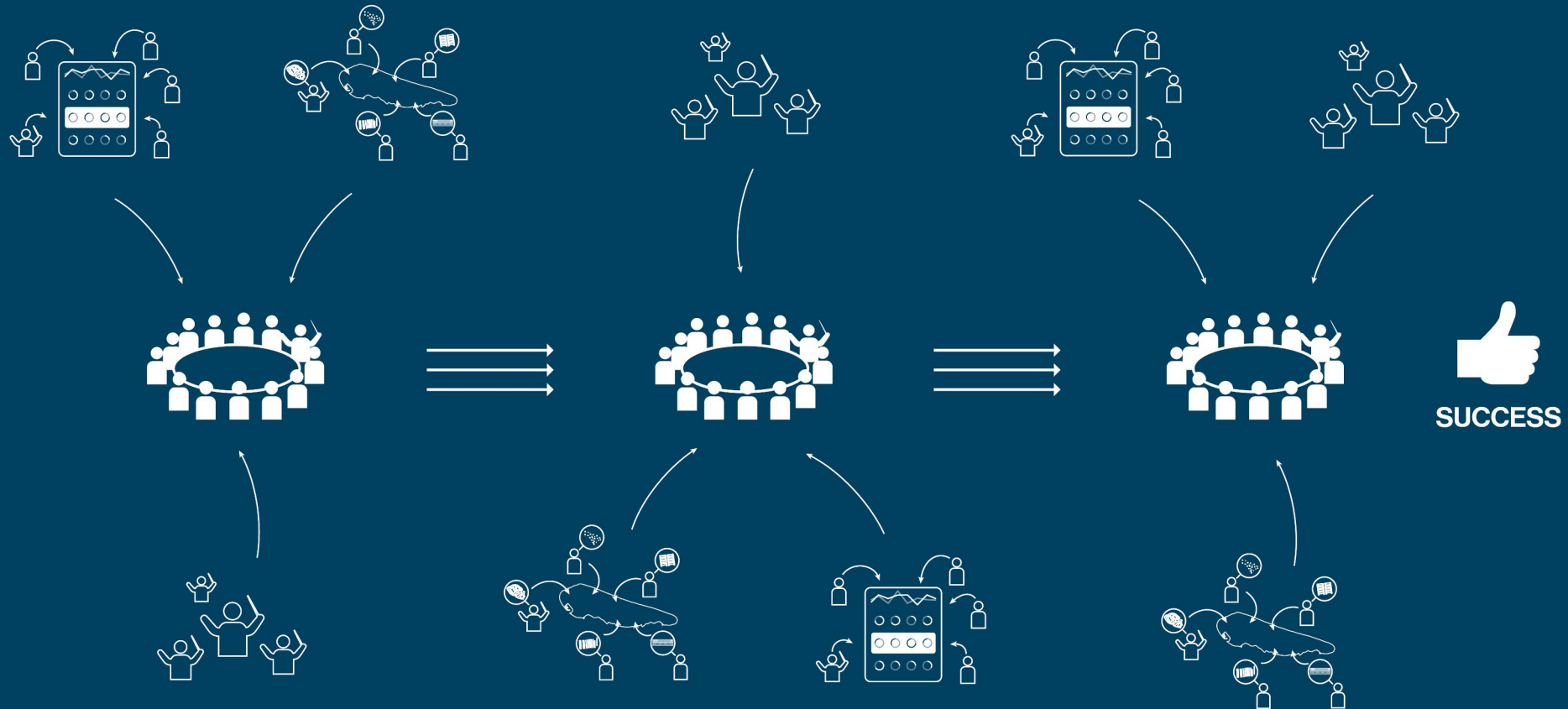


The challenge?

Chained network effects

Co-creation via work benches

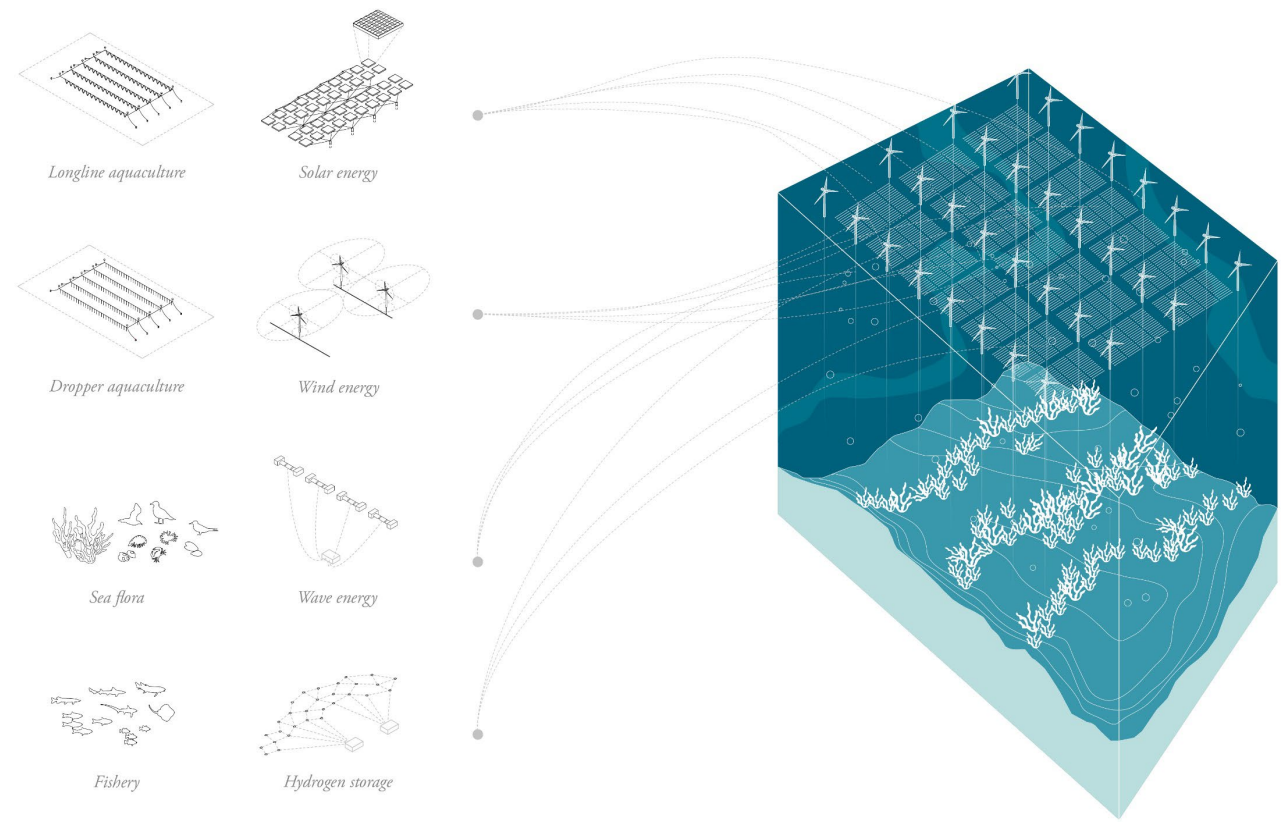
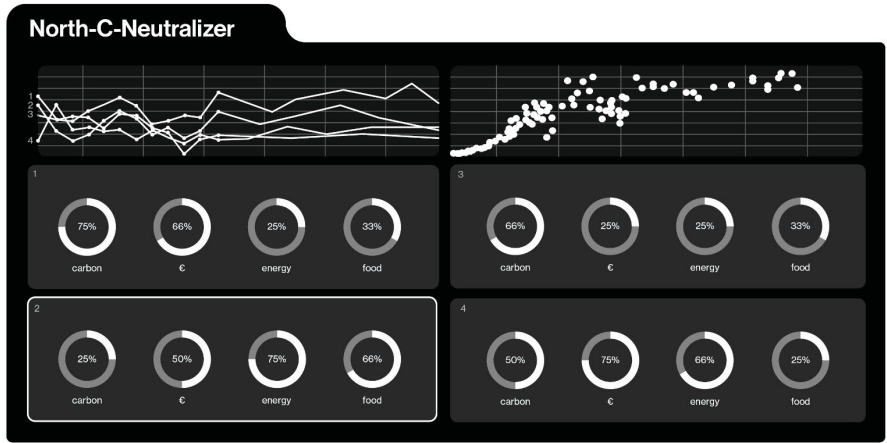
Activate collective intelligence



Understand the relation between action in one disciplinary field of knowledge, onto the next one. Understand the second-order effects of our decisions.

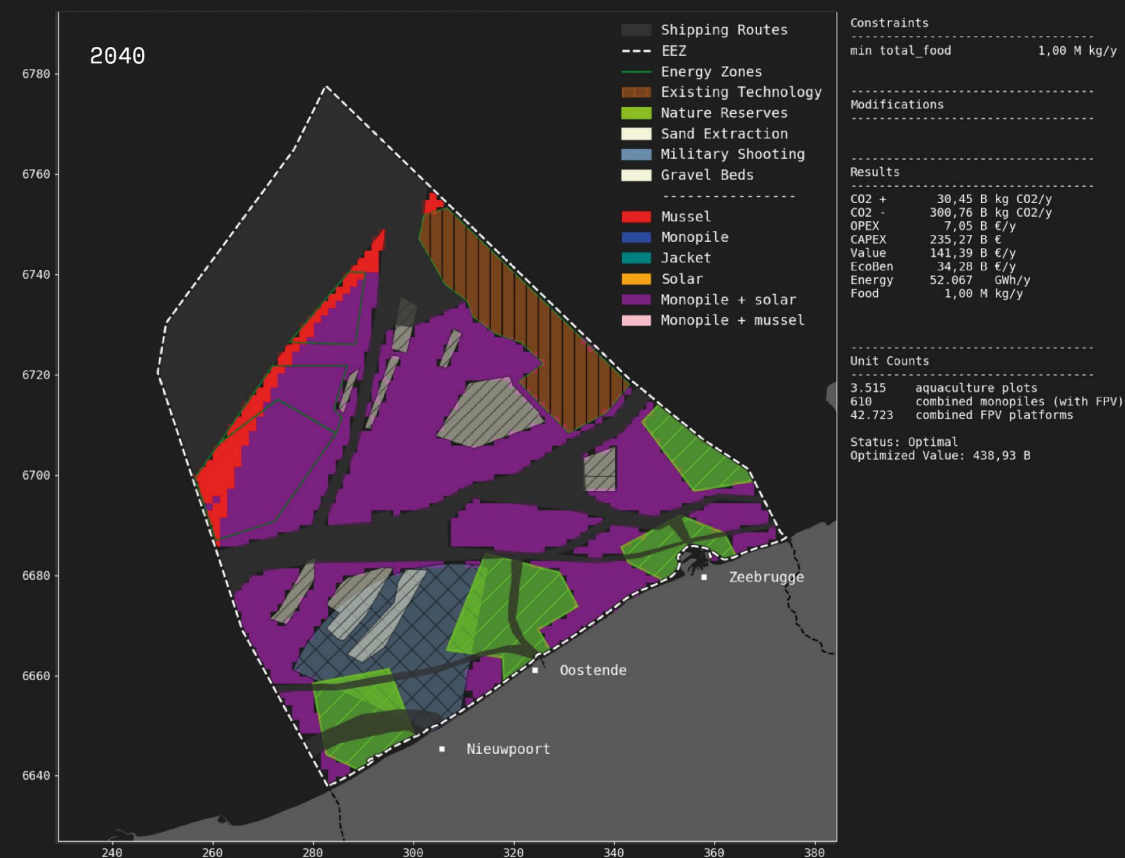
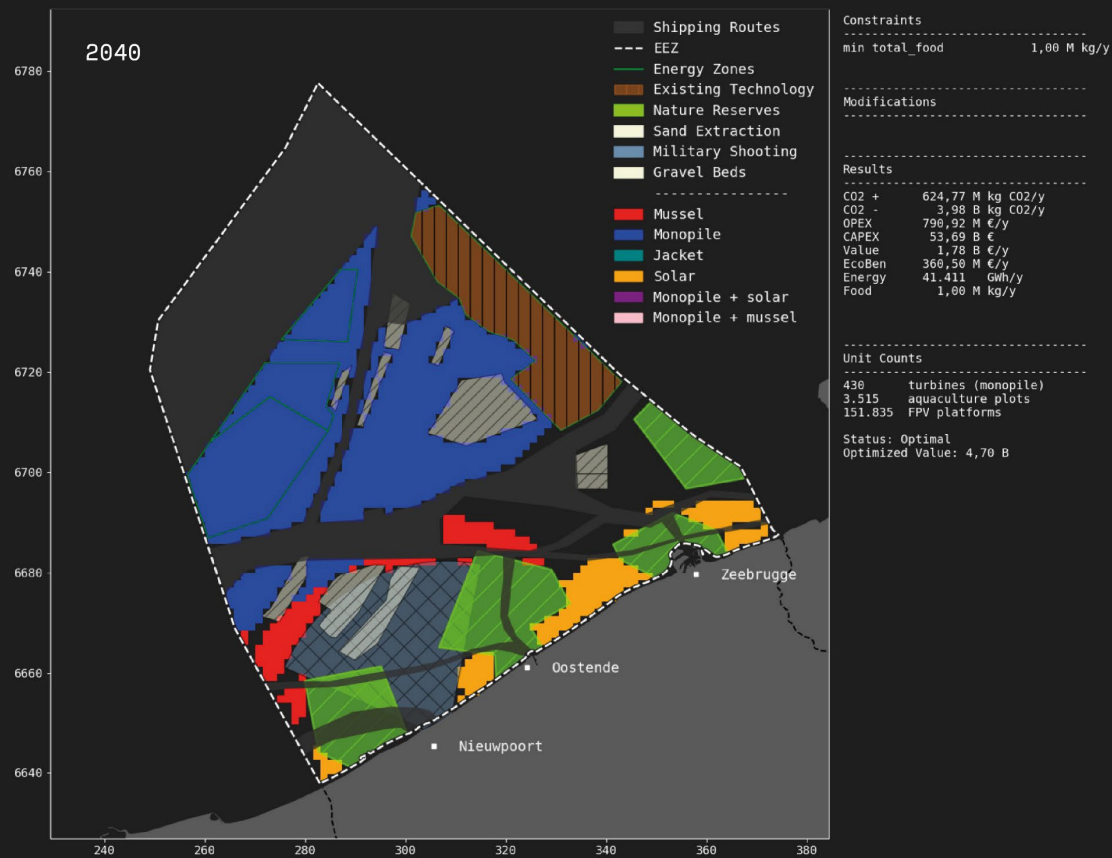
North C Neutral

Automated model to design balanced multifunctional MSPs (MariParks,...)



North C Neutral

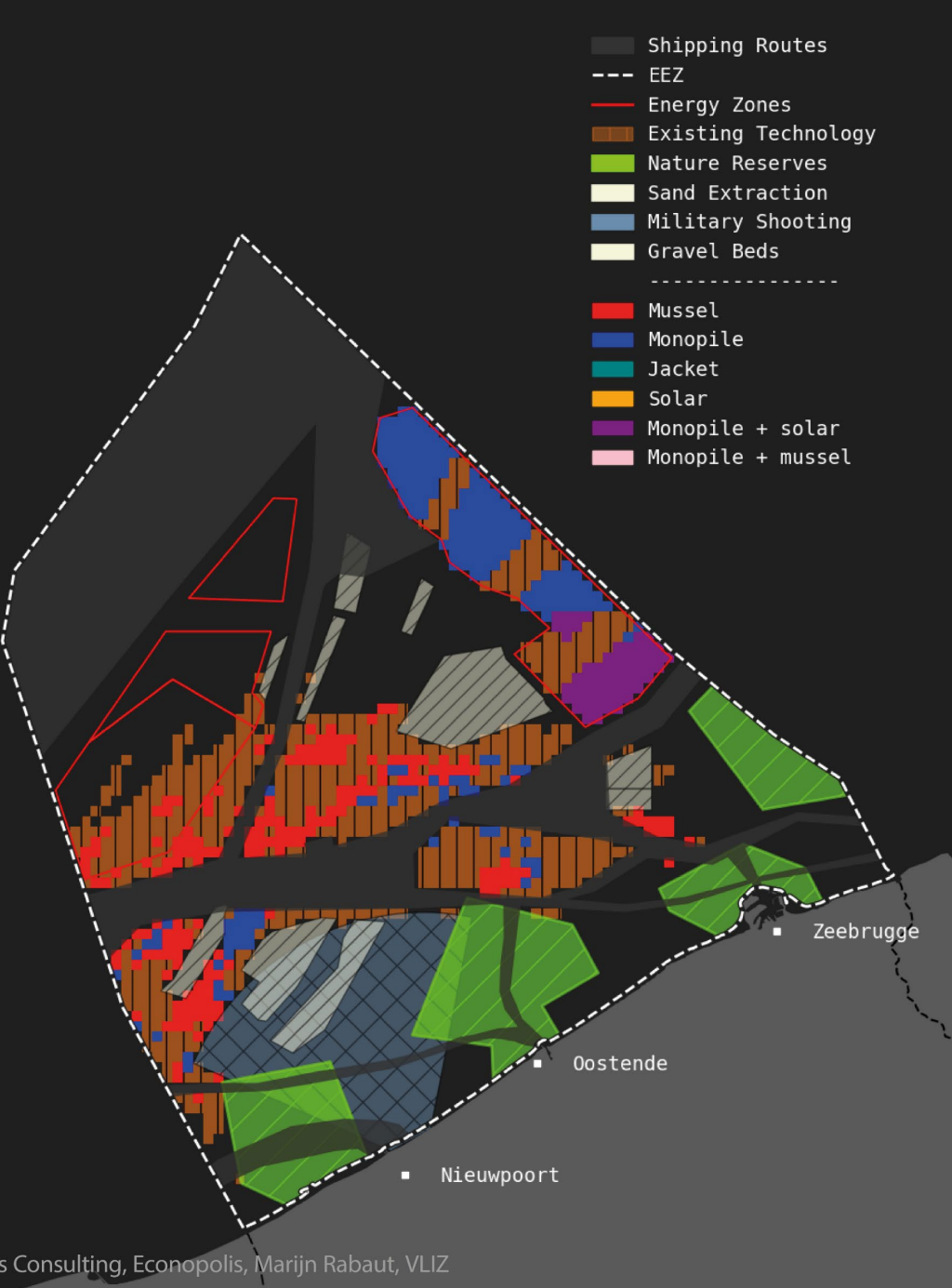
Automated model to design Carbon neutral MSP's



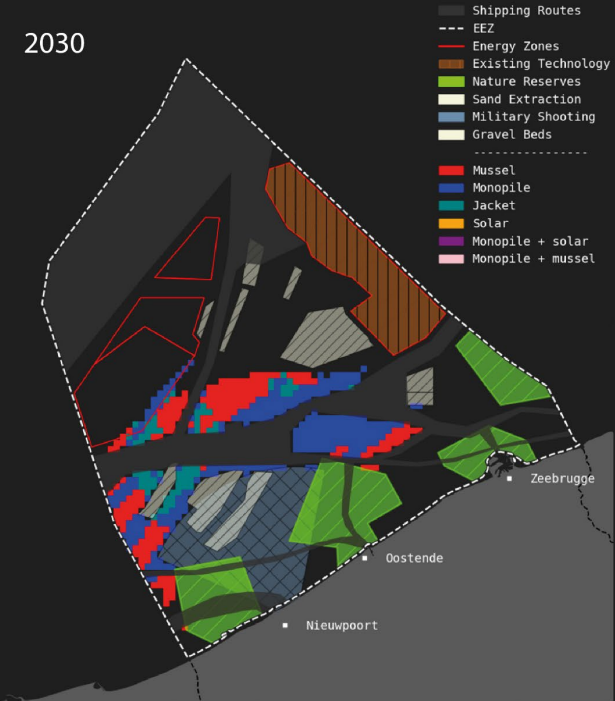
Scenario for maximum carbon mitigation while taking stakeholder preferences into account (f.e. wind turbines at certain distance offshore).

Scenario for maximum carbon mitigation from a technological and economic point of view.

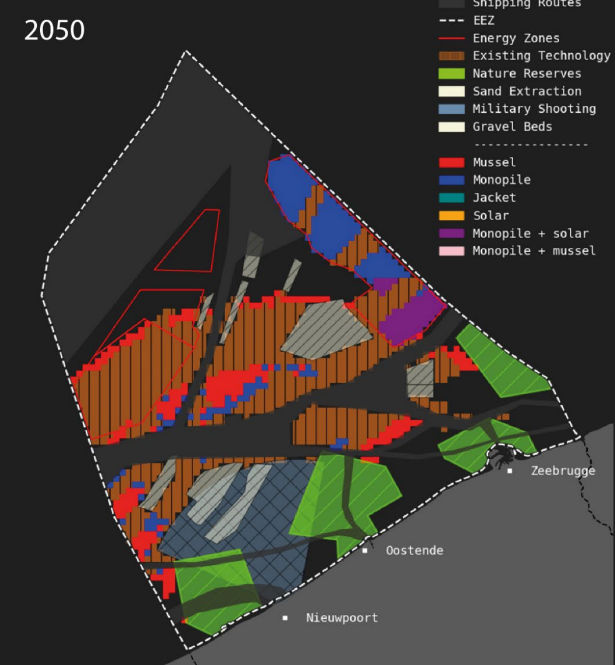
2080



2030



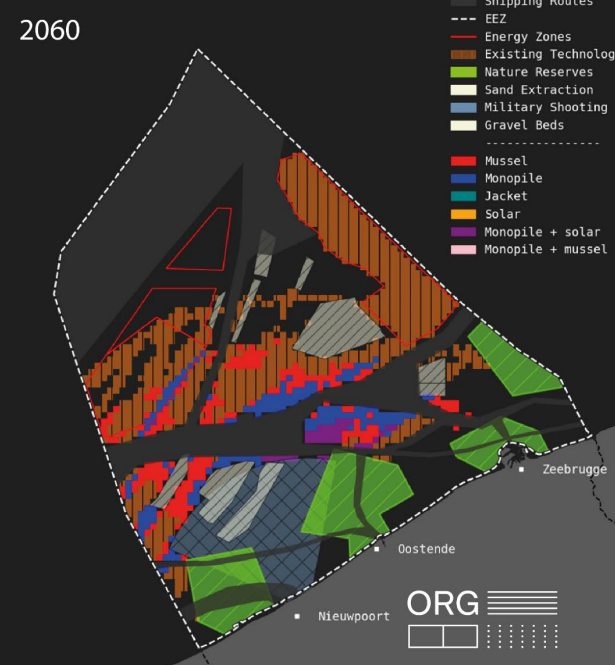
2050



2040



2060



Constraints

min total_food 10,00 M kg/y

Modifications

Results

C02 + 2,76 T kg C02/y
C02 - 13,13 T kg C02/y
OPEX 699,76 B €/y
CAPEX 15,01 T €
Value 6,16 T €/y
EcoBen 1,41 T €/y
Energy 3,16 M GWh/y
Food 10,00 M kg/y

Unit Counts

35.000 aquaculture plots
6.756.250 FPV platforms
26.450 combined monopiles (with FPV)
1.851.500 combined FPV platforms

Status: Optimal
Optimized Value: 17,23 T

Shipping Routes
EEZ
Energy Zones
Existing Technology
Nature Reserves
Sand Extraction
Military Shooting

Mussel
Monopile
Jacket
Solar
Monopile + solar
Monopile + mussel

3500

3400

3300

3200

3100

London

Amsterdam

Brussels

ORG

D4PV@Sea

Multifunctional renewable energy storage



i.c.w. DEME, Jan De Nul Group, innoviris.brussels, Vlaio, Econopolis, IMDC, Common Ground, Tractebel –Engie

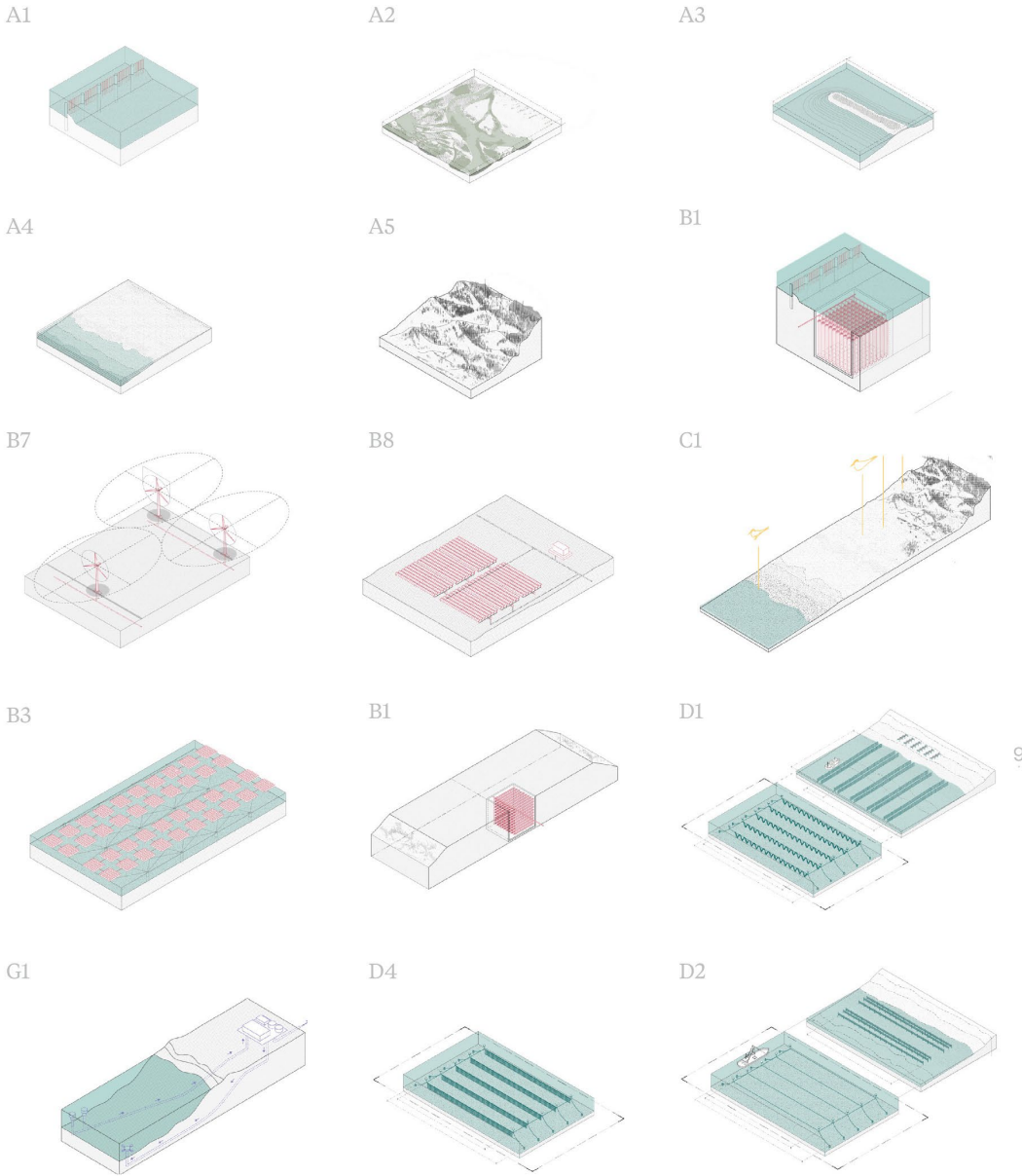


D4PV@Sea

Multifunctional renewable energy storage



Mock up of the Fact Sheets

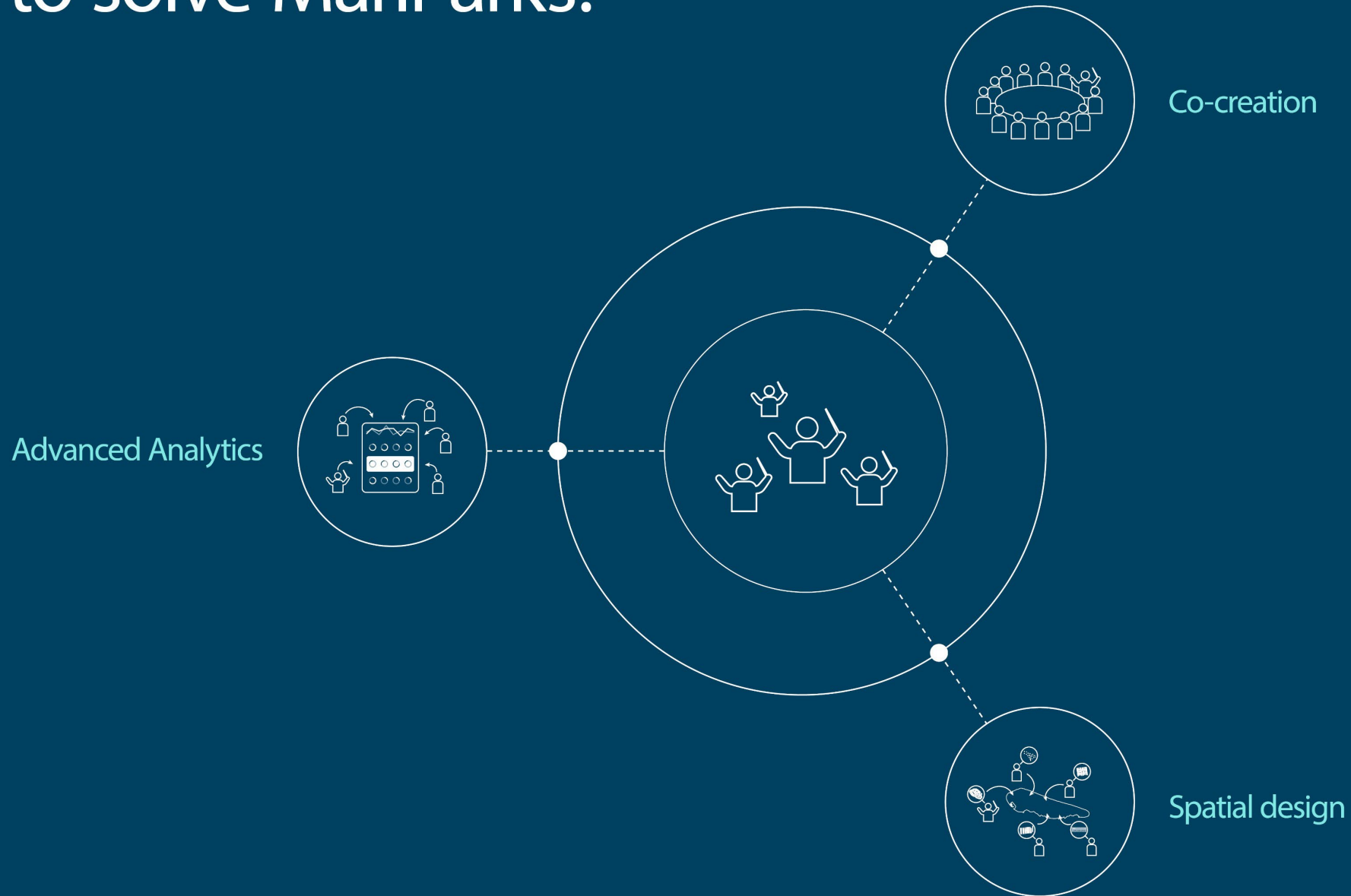


Princess Elisabeth Island

Nature Inclusive Design Strategy



Key to solve MariParks?



Our mission? Solve complex
transformational projects.



info@orgpermod.com
www.orgpermod.com

Multi Use Offshore

Blue Economy Science Summit 2024
Oostende, 23 May 2024

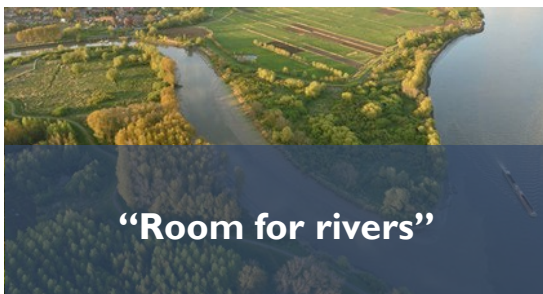
Luca Barbetti

luca.barbetti@imdc.be

+32 48 77 36 997



Our Activities



Roeland Adams – Product Manager



Arash Bakhtiari – Product Manager



Jaap de Groot – Product Manager



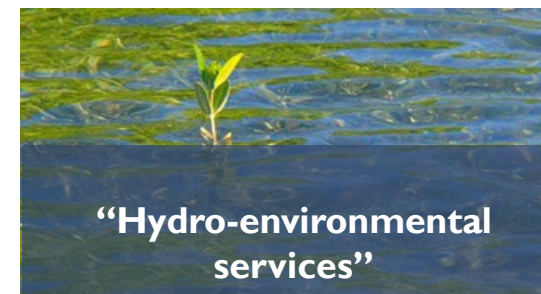
Luca Barbetti – Product Manager



Boudewijn Decrop – Product Manager



Maarten Foqué – Product Manager



Annelies Bolle – ad interim

A photograph of an offshore wind farm at sunset. The sky is a vibrant mix of orange, yellow, and red, with scattered clouds. Several wind turbines are visible in the distance, their silhouettes standing against the bright horizon. In the foreground, there is a rocky shoreline with green seaweed and some out-of-focus plants.

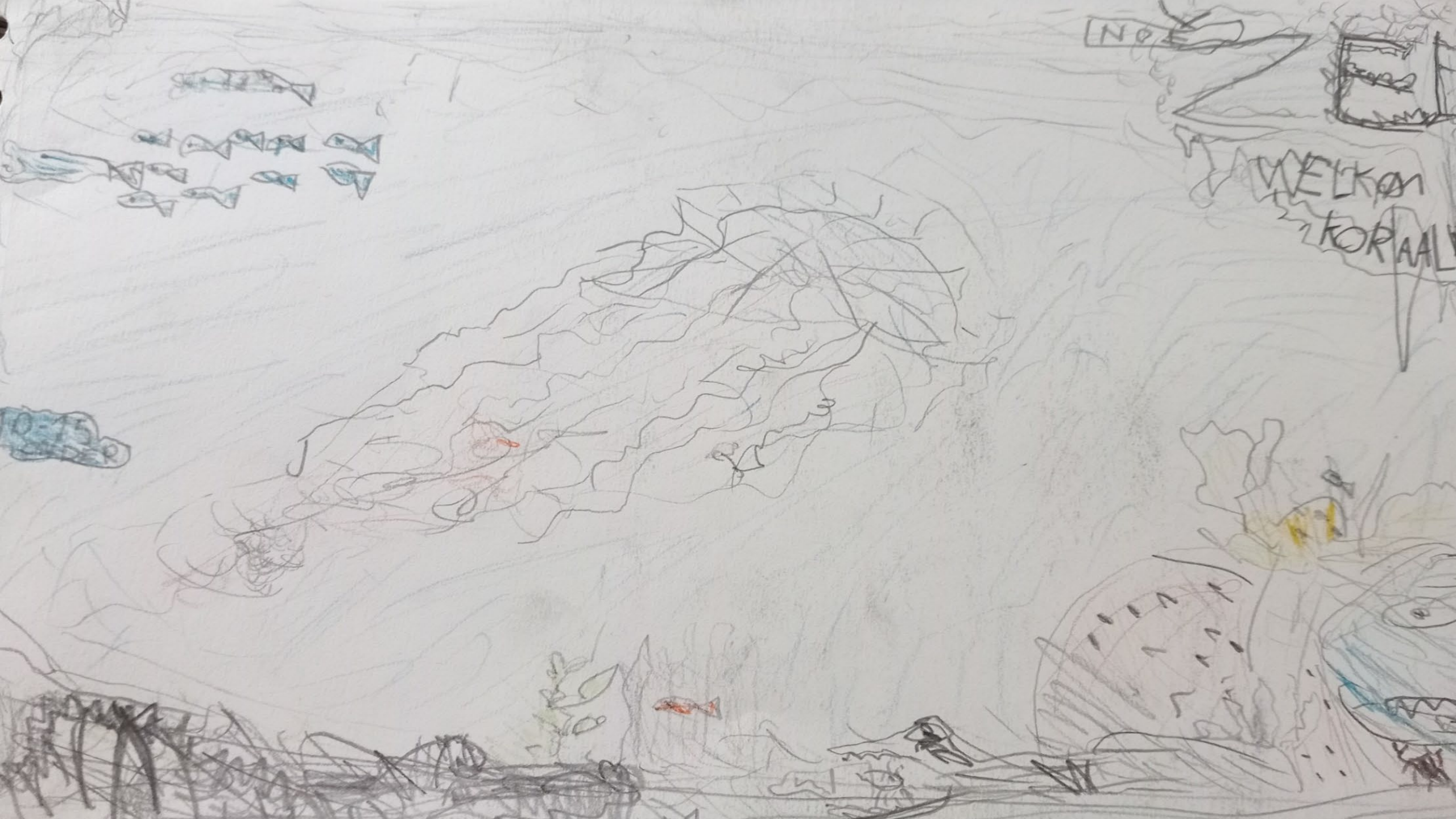
Blue Energy

Offshore wind
(fixed & floating)

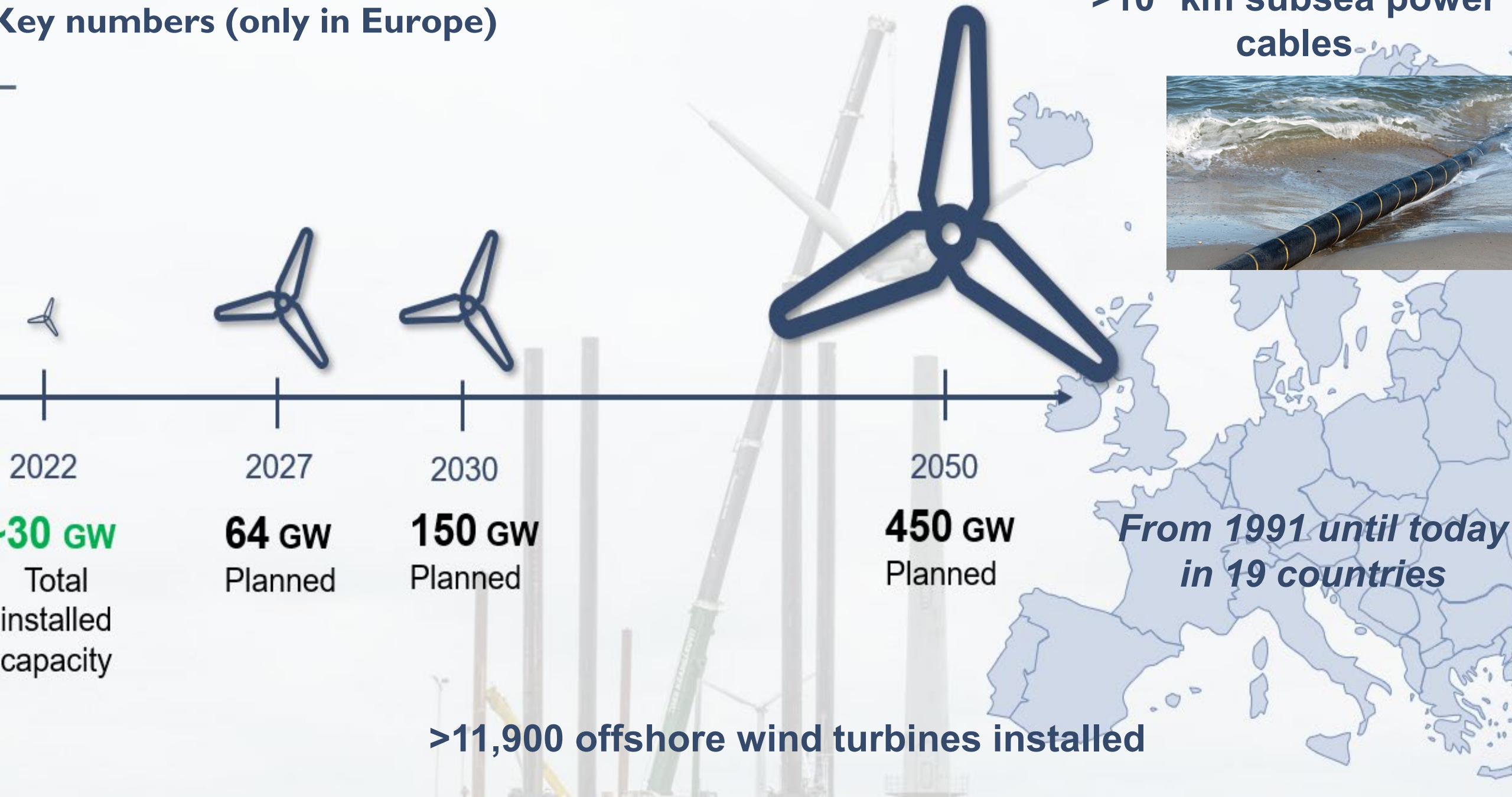
Subsea power cables
(AC & DC)

**Wave & Tidal energy,
Floating PV**

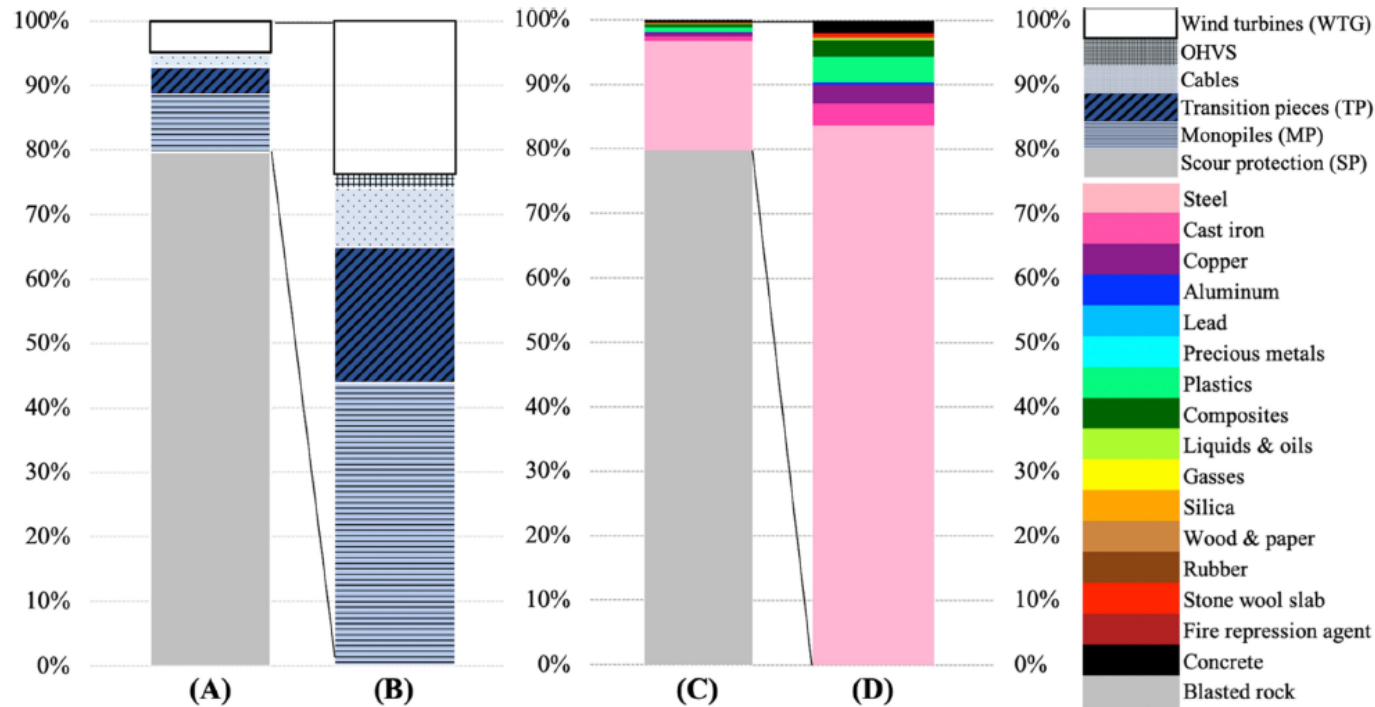
**Multi-use of
offshore space**



Key numbers (only in Europe)



Key numbers – only in Belgium



215MEUR



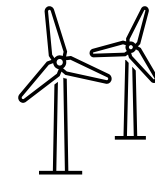
9 OHVS

234MEUR



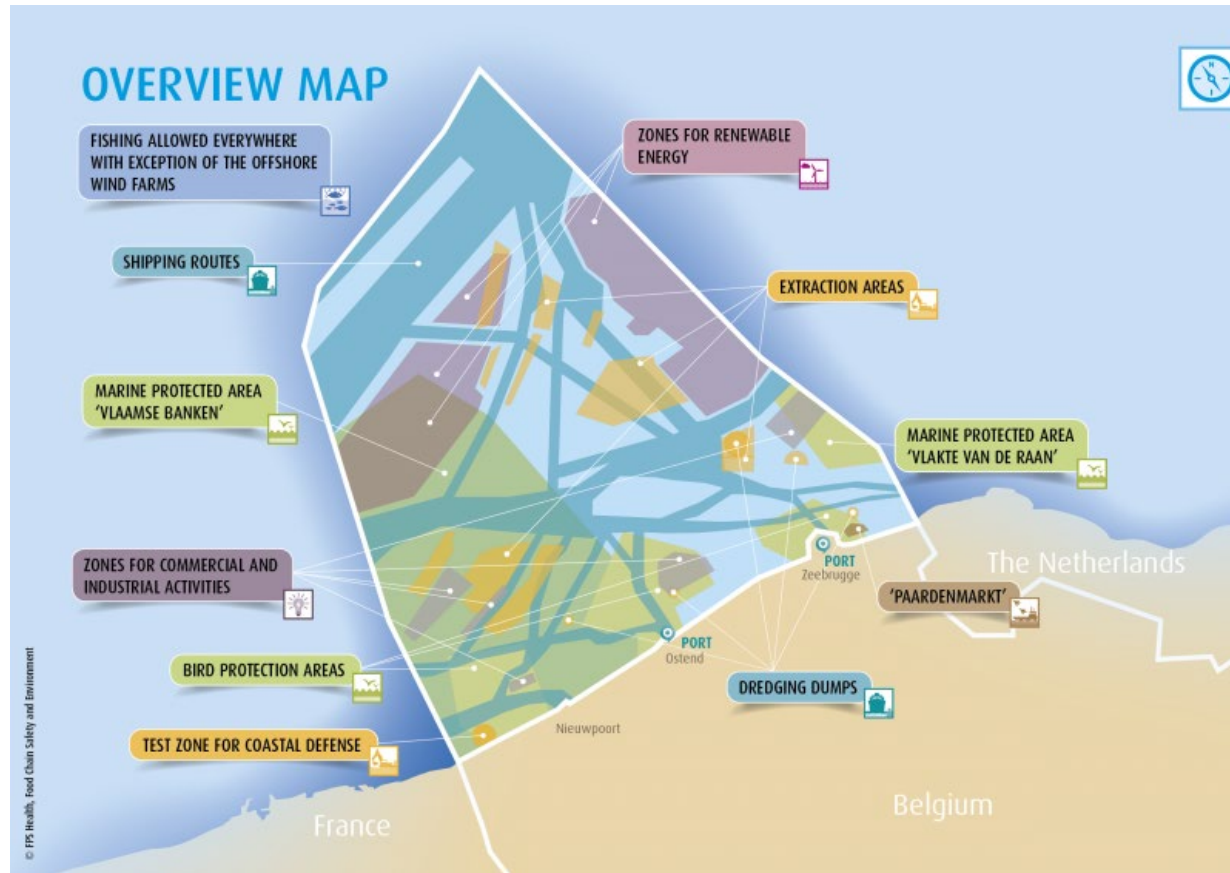
Max material
resale revenues

985MEUR

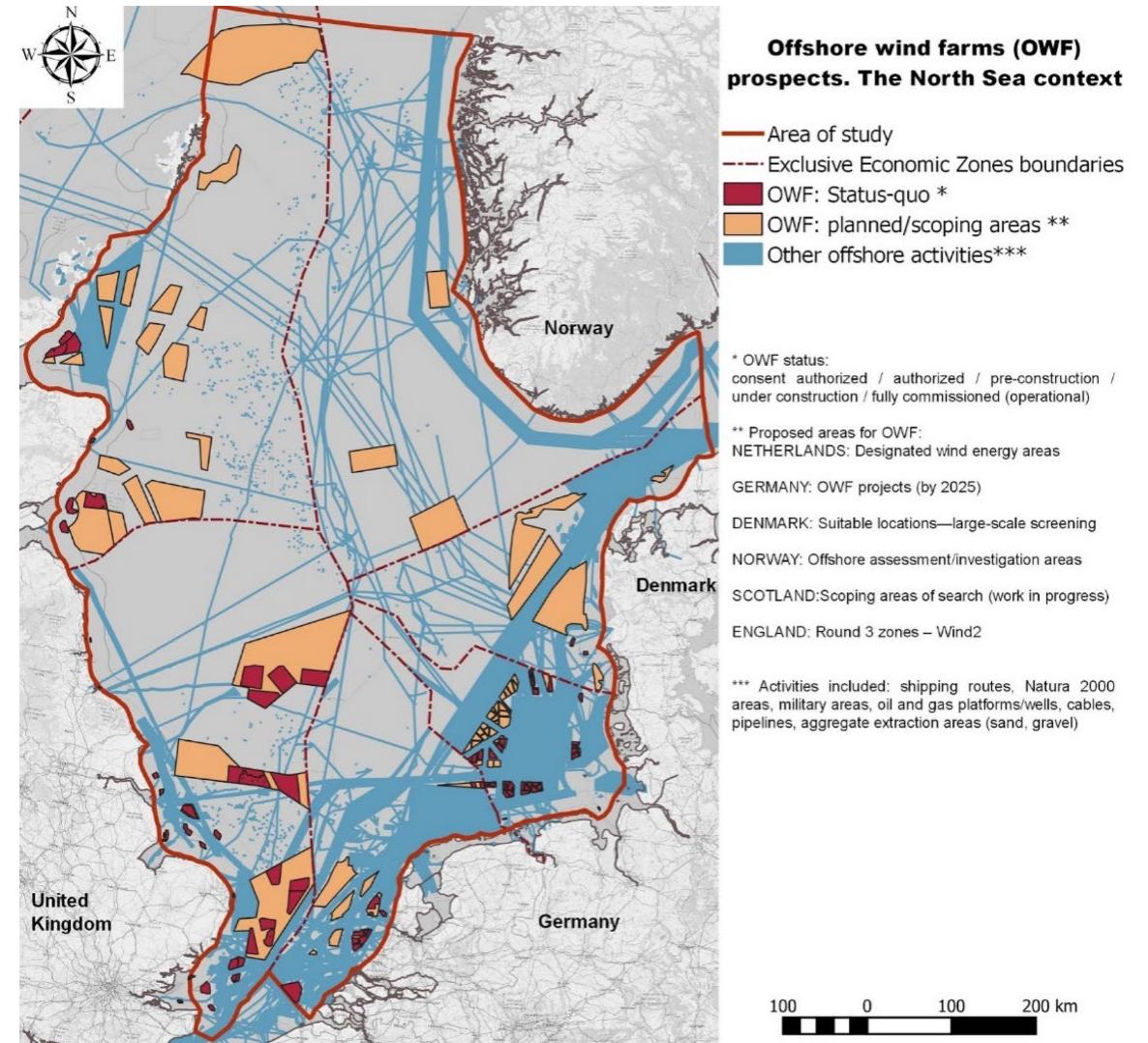


2.26GW of OWF assets
= 399 WTGs and foundations

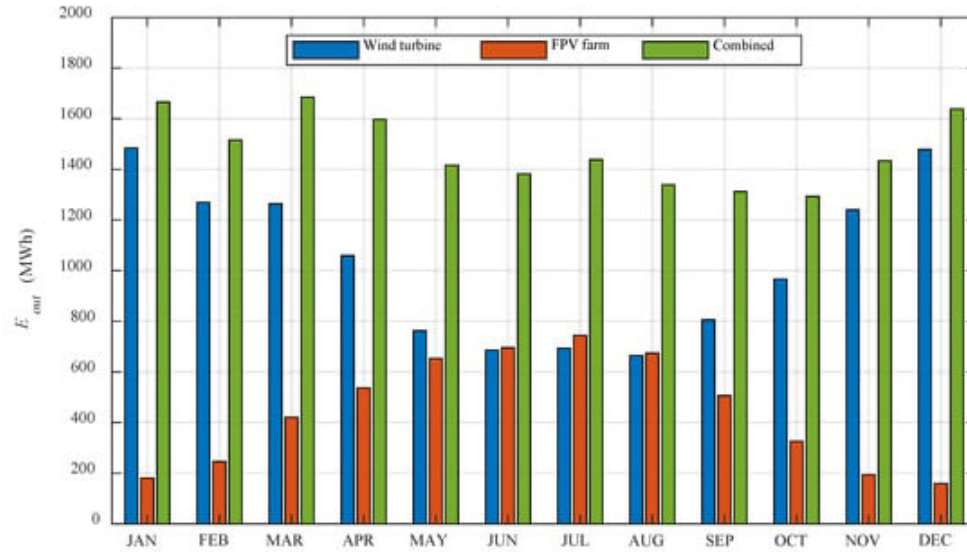
Why Multi Use (1/2)



Sources: <https://www.health.belgium.be/en/marine-spatial-plan>



Why Multi Use (2/2)



6.2 MW offshore wind turbine, a 5 MW FPV farm, and both combined.



Credit: Sinnpower

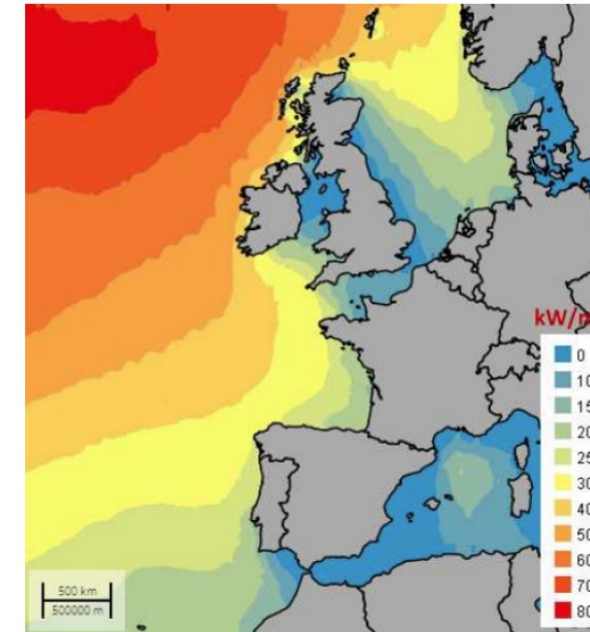
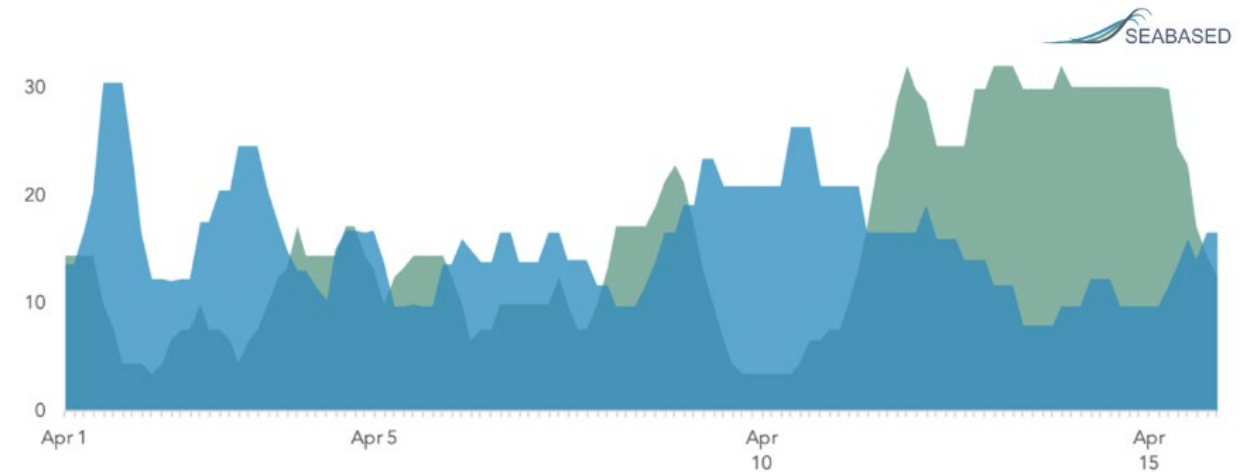


Figure 10: European distribution of the annual mean wave power, in kW/m



Cost reduction of combined offshore wind and wave energy wind: 20-25% (Reynaert & IMDC, 2024)

MP Multi-Use Project

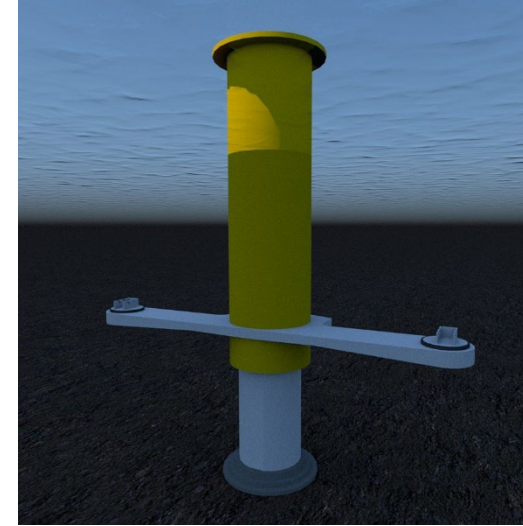
Multi-(re)-use scenarios for existing offshore infrastructure: a conceptual, economical, legal and structural reliability study



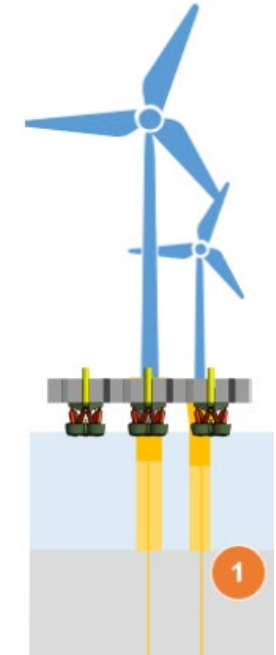
Source: Wave Trader



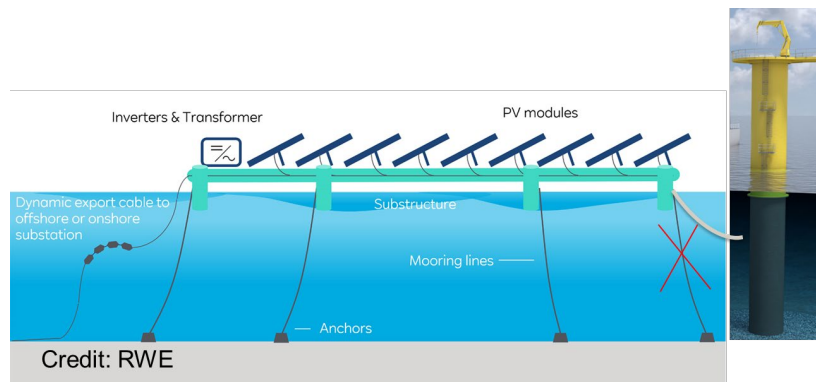
Source: Seacurrent



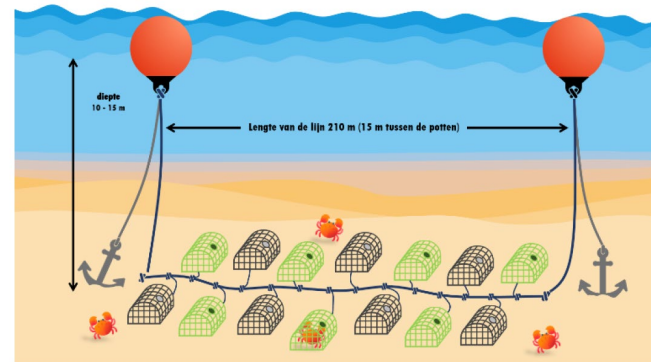
Credit: Strathclyde University



Source: AE-WaveHexapod



Credit: RWE



Offshore for Sure

3 pilot test and 2 Digital Twins of Ocean energy technologies (wave, tidal, floating PV and energy storage) in the North Sea (NL & BE)

- Duration: 2023-2027
- Budget: 9,9MEUR
- 15 partners
- BE' partners (Ugent, Howest, Parkwind, Ecopower, IMDC)
- NL' partners: BLUESPRING (NL), Deftiq (NL), Dutch Wave Power (NL), FLASC (NL), Oceans of Energy (NL), Rijkswaterstaat (NL), Tocardo (NL), Vereniging Zeeuwse Milieufederatie (NL), Water2Energy (NL), WorldClassMaintenance (NL).



Interreg
Vlaanderen-Nederland



Gefinancierd door
de Europese Unie

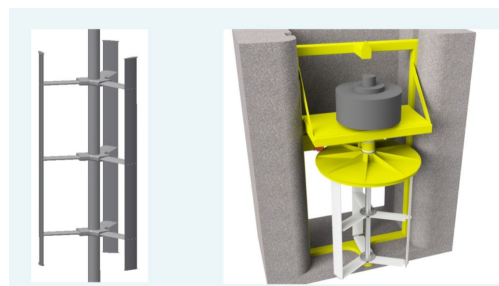
Offshore For Sure



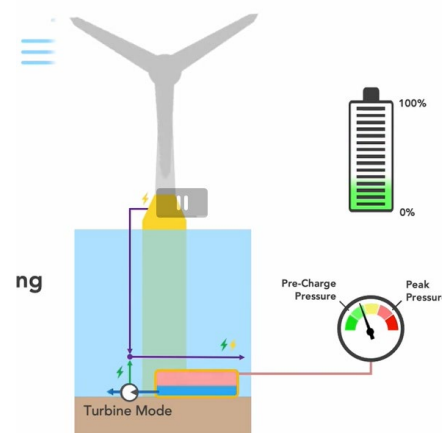
Dutch Wave Power



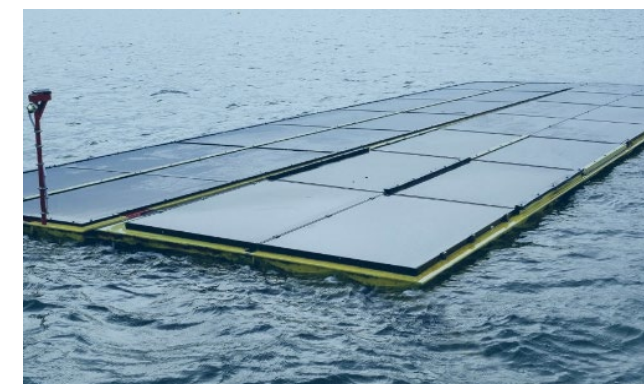
Tocado



Water2Energy



Flasc (converting electricity into hydraulic power)

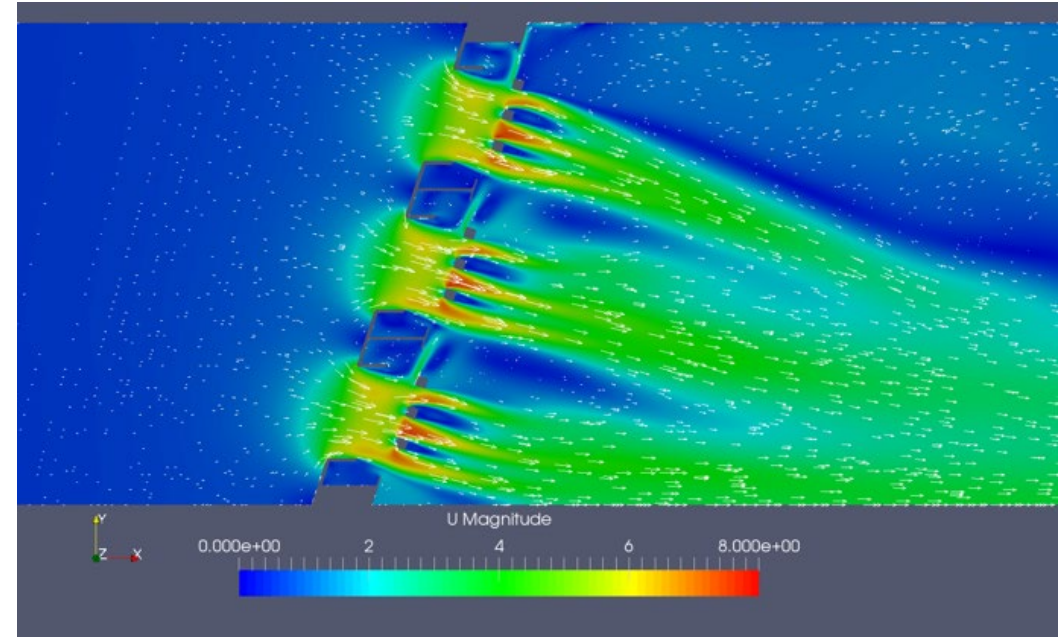


Oceans of Energy



IMDC's Role

- State of the Arts
- Project de-risking and HAZID
- Multi Criteria Decision Analysis
- CFD modelling
- Screening EIA
- Environmental testing plan
- Installation feasibility and support



Take away

We have one ecosystem
Multi-use & multi-purpose!
Reuse, recycle and reduce!



Contact us

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S+T+ARTS4WATERII – Ports in transformation

WWW.STARTSEU

#STARTSEU

S + T + ARTS



European
Commission

PARTNERS

1/ VITO, Belgium: <https://vito.be/en>



2/ GLUON, Belgium: <https://gluon.be/>

3/ WAAG Society, the Netherlands: <https://www.waag.org/en/>



4/ TBA21, Spain / Italy: <https://tba21.org/>

5/ Camargo foundation, France: <https://camargofoundation.org/>



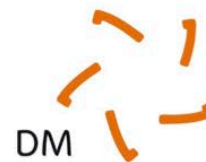
6/ OGR Torino, Italy: <https://www.fondazioneocr.it/en/foundation/ogr-torino/>

7/ ADAPT Research Centre (Dublin City University) / Beta Festival, Ireland: <https://www.adaptcentre.ie/> / betafestival.ie

8/ PINA, Slovenia: <https://www.pina.si/>

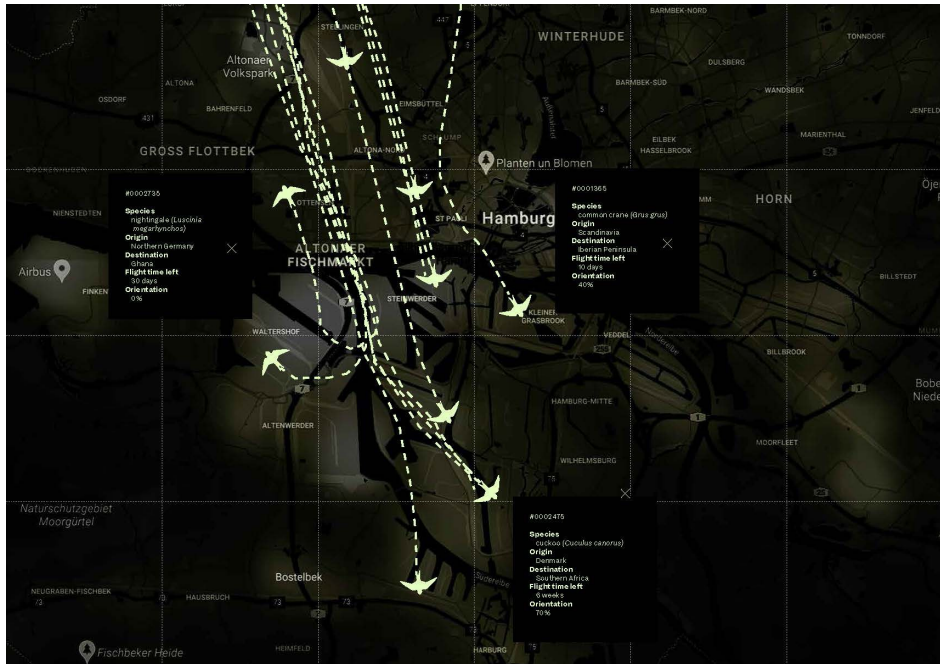


9/ Drugo More, Croatia: <https://drugo-more.hr/>



10/ Klima Biennale, Museum of Contemporary art of Vienna, Austria: <https://hundertwasser.com/en>





Courtesy of artist Claudius Schulze © <https://fids-openresearchlab.org>, Kummer & Herrman, Claudius Schulze

S+T+ARTS4WATERII

Artists' visionary creativity, exploring scientific expertise and/or digital technologies contributes to making port, waterways and coastal areas greener and more sustainable.

What if artists respond collaboratively and aesthetically to local challenges?



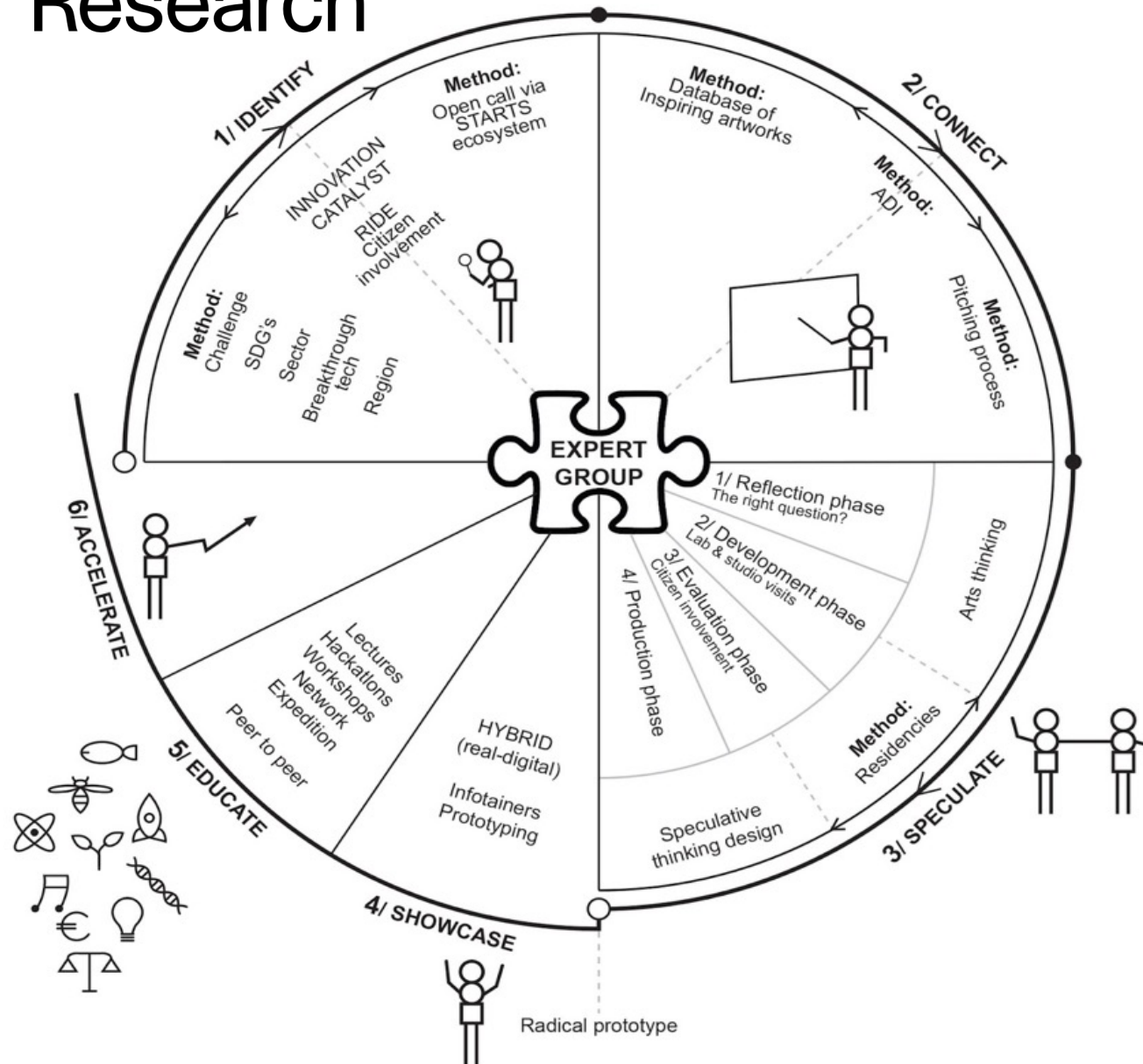
This edition is inspired and driven by initiatives such as:

- + The European Green Deal
- + The ESPO Green Guide: EU ports towards a green future
- + The AIVP Agenda 2030 for sustainable port cities
- + The recent EU Mission Charter to restore our oceans and waters
- + The 2015 UN Sustainable Development Goals (SDGs); SDG 6 (Clean Water and Sanitation), SDG 11 (Sustainable Cities and Communities), and SDG 14 (Life Below Water)



Quadruple helix:
policy – academic – industry – citizens





Residency Methodology



TIMELINE: WILL YOU BECOME AN EXPERT MEMBER?

Project: 22 months> January 2024 to November 2025

1/ Open Call & Artist Selection: May - August 2024

2/ Residency duration: 9 months> September 2024 to June 2025

3/ Exhibition phase: June 2025 to October 2025

THE OSTEND RESIDENCY

CHALLENGE #9: COASTAL CULTURE & SCIENCE AT SEA. PERFORMING A BRIDGE TO THE SYMBIOCENE_



Vito Water Climate Hub_
Marine@UGent_____
Blue Cluster_____

TAZ Theater aan Zee _____
De Grote Post_____
0.666 Social Circular Hub____



THANK YOU

Contact us:

charlotte@gluon.be

frans.snijkers@vito.be

WWW.STARTSEU

#STARTSEU

S + T + ARTS



European
Commission

MARIPARK – Role play

Innovation cycle project generation

Scenario 6 – Fishing and tourism in a wind farm

Scenario |

Its 2050 and the concept of a **Maripark** is approved as ideal solution for multi-use. What are the opportunities when we consider the fixed infrastructure as a growing place for nature and stepping stone/foraging areas. Where lie potential project topics?

Main objective to be reached

*Find a way of dealing with Fishing in a **Maripark** or, converting fishery into aquaculture. What is needed? Where can tourism benefit? Education?*

Identify future projects, who do we need in the consortium, what topic should be scientifically explored, what should be tested in the field?

With this event serving as the start of the regional innovation cycle, we want to generate project proposals needed to effectively implement a **Maripark**. Proposals that fit under the umbrella of the Mission Oceans: carbon neutrality and circularity, enabled by smart systems and digitalization. In the next mission arena project funding can be identified, as a closure of the regional innovation cycle.

Roles and objectives per role:

Role		Short explanation of the role	Objectives to reach + main arguments (as example)
1	Multi use park manager	As wind farm you find it too costly to start, too many uncertainties, the risks are too high of insurances perspectives. don't see win-win	
2	Fisherman	The fisherman wishes to fish as much as possible.	Profit, a sustainable business model, at sea. The fisherman is ok with changes, but wishes to stay at sea. This can also be in an aquaculture farm. However, the possibilities of fishing within (and related insurance and risks) should be explored and clear.
3	Chain manager	The chain manager is a relatively new function, this guy seeks for connections and synergies between activities, as a job.	For example, a fruit grower wishes to use his "peels" in another business, the chain manager looks at all operational business in the neighborhood, and makes connections to improve efficiencies and business models. The chain manager is a consultant, is aim is earning, and improving circularity.



PANEL - project ideas, consortia, gaps

Table panelists





WRAP – UP

THANK YOU





3rd MISSION ARENA

26-27 November 2024

Amsterdam



BLUE MISSION BANOS
Supporting the Mission
Ocean Lighthouse in the
Baltic and North Sea Basins

REGIONAL FOCUS ARENA 3

THE NETHERLANDS
BELGIUM
DENMARK | West
GERMANY | West
FRANCE | North

