

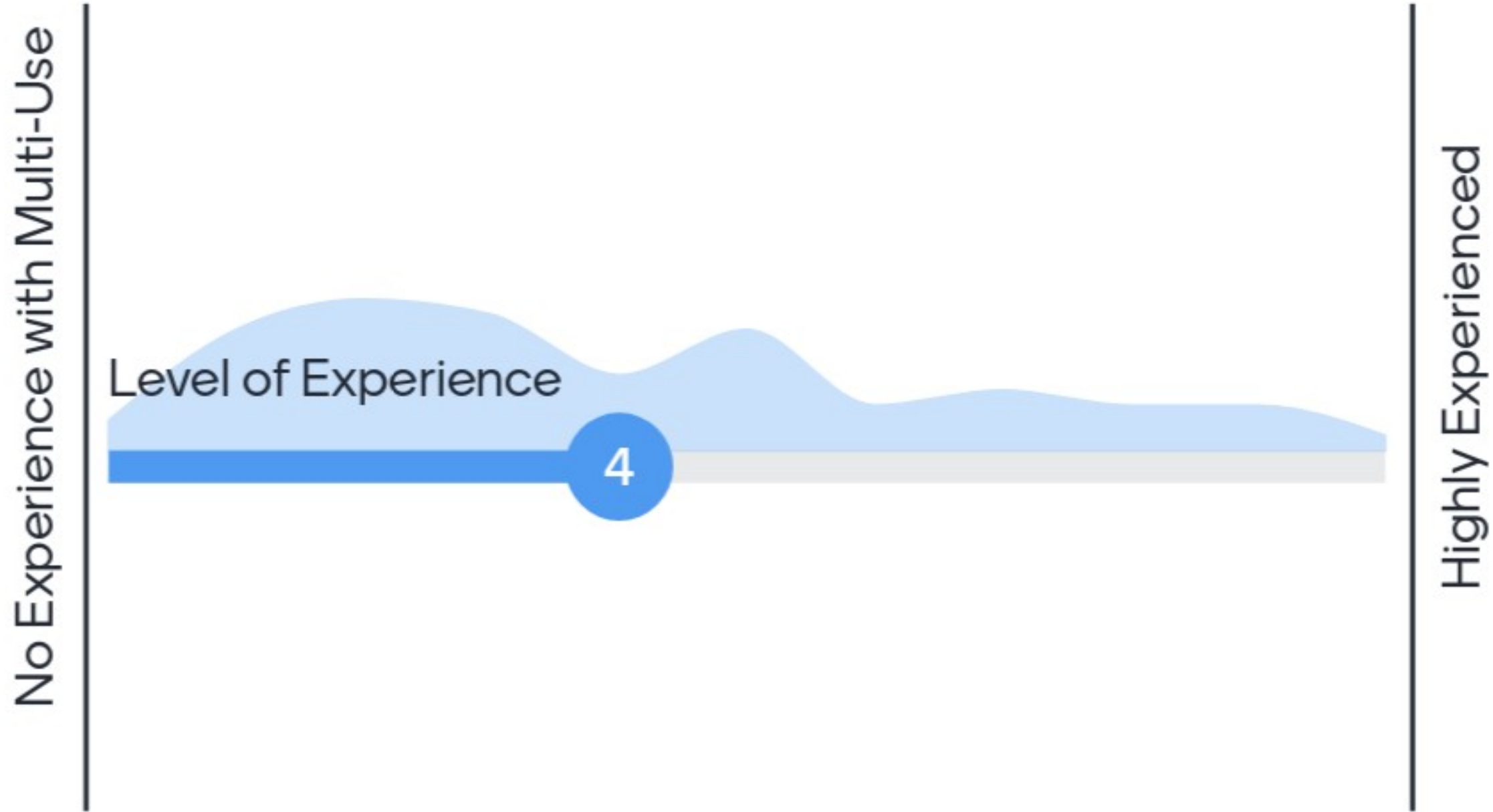
# From Which Country Are You Coming From?



## In Which Sector Are You Working?



# How Experienced are you in Multi-Use





# What Words Come to Mind When Thinking About Multi-Use? (3 answers max)



# What Multi-Use Combinations Have You Heard of or Worked With?

energy-aquaculture

restoration - aquaculture- wind

Maribe

aquaculture, wind energy and restoration

energy with aquaculture

fish and energy production

aquaculture-wind

tourism, energy, aquaculture

fisheries - offshore wind farms -aquaculture  
- tourism



# What Multi-Use Combinations Have You Heard of or Worked With?

wind-solar; wind-seaweed

wind and wave energy

wind energy and aquaculture

Tourism, UCH & Environmental protection

wind/aquaculture/fisheries

wind-aquaculture

Windfarms in combination with seaweed  
and shellfish

Seaweed - fish cages

aquaculture-energy





# What Multi-Use Combinations Have You Heard of or Worked With?

Offshore wind - aquaculture - tourism

Offshore wind and aquaculture

Fish/ Shellfish and combined with seaweed

aquaculture and wind energy

Aquaculture and energy

living & energy floating port & energy & aquaculture

Wind and aquaculture

fishing and aquaculture and reef restoration

Fisheries and offshore wind (mostly not succesful)



# What Multi-Use Combinations Have You Heard of or Worked With?

energy - wind

Algae wind

Solar energy wind energy

Energy - Aquaculture

Aquaculture integration in wind park

offshore wind - aquaculture -  
conservation/restoration

offshore wind - aquaculture - nature  
development

Off-shore WIND - AQUACULTURE

Integrated multitrophic aquaculture





# What Multi-Use Combinations Have You Heard of or Worked With?

Solar PV, wind, desalination, wave

wind, wave and aquaculture; restoration and energy;

wind and wave; wind and aquaculture; wind and tourism;

renewable energy - aquaculture  
renewable energy - passive fisheries

tidal energy and wind

Aquaculture-energy-

Aquaculture, wind farm

tourism - offshore wind

Windenergy and Aquaculture  
Windenergy and tourism



# What Multi-Use Combinations Have You Heard of or Worked With?

renewable energy and aquaculture  
tourism and renewable energy

offshore wind PV aquaculture wave

aquaculture, environmental protection and  
tourism

wind-wave-solar; aquaculture; storage

Wind and hydrogen, wave and wind, wind  
and aquaculture

floating wind-aquaculture  
fixed wind - aquaculture  
fisheries-energy

Aquaculture and offshore wind farms

aquaculture and wind energy production,  
tourism and aquaculture and energy  
production

Offshore Wind - Aquaculture; Cables -  
Pipelines; Different types of aquaculture  
together (polyculture)



# What Multi-Use Combinations Have You Heard of or Worked With?

Wind Energy Seaweed fishery

Energy, aquaculture, artificial reefs  
restoration, scientific, observation

RENEWABLE ENERGY

fisheries and offshore wind





# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

energy and aquaculture

wind-solar

Energy-Aquaculture

aquaculture and offshore windfarms

tourism and nature protection

energy-aquaculture

reef restoration and offshore energy

Wind & Aquaculture

tourism - underwater culture heritage



# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

Energy-seaweed

wind-wave-aquaculture-storage

Energy-Aquaculture

RENEWABLE ENRGY

Solar energy

energy (wind/wave/solar) and living

Aquaculture & (alternative) energy

offshore wind farms+fishing

aquaculture and energy sector



# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

Offshore wind with conservation

energy - aquaculture

energy and wind

Windenergy and Aquaculture

Tourism and small-scale fishery

Aquaculture, solar energy, wind energy

offshore wind/ mussel or seaweed aquaculture; offshore wind/ fisheries

Wind aquaculture, wind and wave energy

wind/tidal/solar energy + aquaculture + tourism





# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

wave and wind energy and aquaculture

fisheries and wind

Wind and aquaculture

energy and desalination

wind-wave-hydrogen-solar-aquaculture

Energy - aquaculture  
Aquaculture - tourism  
All of the above  
with nature protection

aquaculture - wind

Wind and nature protection

restoration / blue carbon



# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

Solar - wind - shellfish - nature

offshore wind - aquaculture - nature protection/restoration

Wind Energy and Aquaculture / Wind and Wave Energy

offshore wind and fisheries, hydrogen

Wind - Solar - Waves - Aquaculture

AQUACULTURE-WIND

offshore wind and wave energy; offshore wind and aquaculture

Energy - Seaweed Aquaculture - Tourism - Research Base

Aquaculture with other activities (many options) wind - solar wind - nature



# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

Energy and Aquaculture

energy and aquaculture

passive fisheries - offshore energy - aquaculture

wind- watersport

Potting, tourism, recreational angling, wind energy, aquaculture

Wind, aquaculture, science observation, education and training, tourism

offshore renewables, extractive aquaculture, passive fisheries, nature conservation/restoration

combination of commercially mature technologies

Offshore energy - Aquaculture; Fixed offshore energy with other renewables; offshore energy - conservation; conservation - fisheries; conservation - aquaculture; renewables - tourism;





# Which Multi-Use Combinations Do You Believe May Have A Strong Potential In The European Union?

offshore wind + seaweed tourism + restoration

small scale fishery and tourism

offshore wind and tourism



# What Other Multi-Use Projects Are You Aware Of?

MUSICA

The Blue Growth Farm

MUSES H2020

MULTIFRAME

energy - aquaculture

MPVAqua

Space@Sea, MUSES, the Blue growth Farm

MUSES

MUSICA - MUSES



# What Other Multi-Use Projects Are You Aware Of?

EDULIS

Noordzeeboerderij

MUSES

Floating PV

MUSICA - EcoWind Water

MERMAID

The Rich North Sea

Seaweed-Fish/Shellfish aquaculture

Edulis (past), Musica





# What Other Multi-Use Projects Are You Aware Of?

combined heat and power  
production

INTERREG project WIER & WIND

MARIBE

Space@ses

MUSICA, Tropos, Mermaid

Mermaid

Muses, Mermaid, Tropos, Musica,  
Leanwind, Impaqt

IMTA

edulis



# What Other Multi-Use Projects Are You Aware Of?

MERMAID - MARIBE

Edulis, symapa

MERMAID

SOMOS, TROPOS, YDRIADA,  
PLOCAN, MUSICA, BlueGrowth Farm,

MUSICA, MUSES, UNITED

MUSES

6 different nature and windfarm  
initiatives (NL)

MUSICA

Community of Practice Multi-use  
(NL)



# What Other Multi-Use Projects Are You Aware Of?

-

MUSES

Less conflicts!

greater appropriation of sea space



# What do you think could be the positive impacts on local communities from developing multiple activities on the same site (wind & solar & mariculture)

more labour opportunities

creation of local jobs

jobs

more local work

jobs

(new) employment

power ecological projects with renewable energy

jobs

local incomes





# What do you think could be the positive impacts on local communities from developing multiple activities on the same site (wind & solar & mariculture)

local jobs

Prosumer and new skills/careers

more local work

acceptability

Diversity in employment opportunities

Investment to rural (often deprived) communities and additional employment opportunities

reduced use of nearshore space, jobs, local seafood

Leading to sustainable exploitation of marine environment

OPPORTUNITY OF EMPLOYMENT AND SOCIAL DEVELOPMENT



# What do you think could be the positive impacts on local communities from developing multiple activities on the same site (wind & solar & mariculture)

Greater trust in public institutions / democracy where agreement is reached for efficient use of the sea through multi-use.

Sustainability of energy source, better social understanding of the importance of environment, job opportunities, local food consumption

involvement

Extra Job opportunities, local food

Job opportunities, local products

Space optimization - jobs - renewable energy sources

Creating jobs and community benefits by improving the local roads / internet / etc etc

job opportunity, national products, less ecological footprint

maintaining fisheries villages and culture



# What do you think could be the positive impacts on local communities from developing multiple activities on the same site (wind & solar & mariculture)

Greater level of support as activities not spread so more aesthetically acceptable

local food

growth of local economy, new professionalisms, food available

Allow more marine industries at the same time

Sharing perspectives from different sectors; job opportunities;

more jobs in the same area ecosystem services for extra income increase attractiveness of area for investment

Exposure, Green dealing, labour, out of sight activities.

Awareness that all is linked at sea

more sustainable resources / nature restoration





# What do you think could be the positive impacts on local communities from developing multiple activities on the same site (wind & solar & mariculture)

Economic benefits/employment diversity/reduced use of marine area/improved trust and co-operation between sectors

Direct and indirect employment

increase employment opportunities, education/training/change of career potentials/increase sustainable use of area (smaller area for human activities)

New jobs





# What are the main challenges that multi-use may be facing with regard to local acceptance?

visual pollution

involvement of the right kind of stakeholders

environmental concerns

In fishermen communities: how do they benefit if they lose their ground?

legislation not in place for long term restoration projects

visual impact

environmental risks

Impact on environment

horizon pollution



# What are the main challenges that multi-use may be facing with regard to local acceptance?

re-education of employees to fit the job

visual impact

Misunderstanding of the assets and oversizing of the constraints

Negative public perception for one sector cross-contaminating views of the other sector

loss of fishing space ?

acceptance between stake holders

Environmental impact is not accepted

fishing opposition, environmental concern

Uncertainty about the impacts



# What are the main challenges that multi-use may be facing with regard to local acceptance?

Environmental impact, horizon pollution, industrializing the sea, stakeholder involvement.

Competition with local fisheries or other, environmental concerns

credible businesscase

insufficient awareness

conservatism of local people

discrepancy of what/where is local, who are the stakeholders to engage

Interference in normal use

ENVIROMENTAL RISKS

communities with high reliance on fisheries can see it as a threatenvironmental impact



# What are the main challenges that multi-use may be facing with regard to local acceptance?

Resistance on new offshore wind areas, conflicts between the users and between large and small companies

environmental impact

environmental concerns, loss of recreational space

more pollution local as more activities

Resistance to change in general. Worry that progress / investment is delayed / not made through introduction of complexity.

Resistance of fishermen

reduction in traditional fishing jobs due to reduction in space

Distrust between sectors.

Offshore Wind - if visible - still a challenge // Conflict with fishery will also remain unless fishermen involved in new jobs





# What are the main challenges that multi-use may be facing with regard to local acceptance?

Lack of understanding as to benefits and challenges

impact on the fishing grounds / pollution

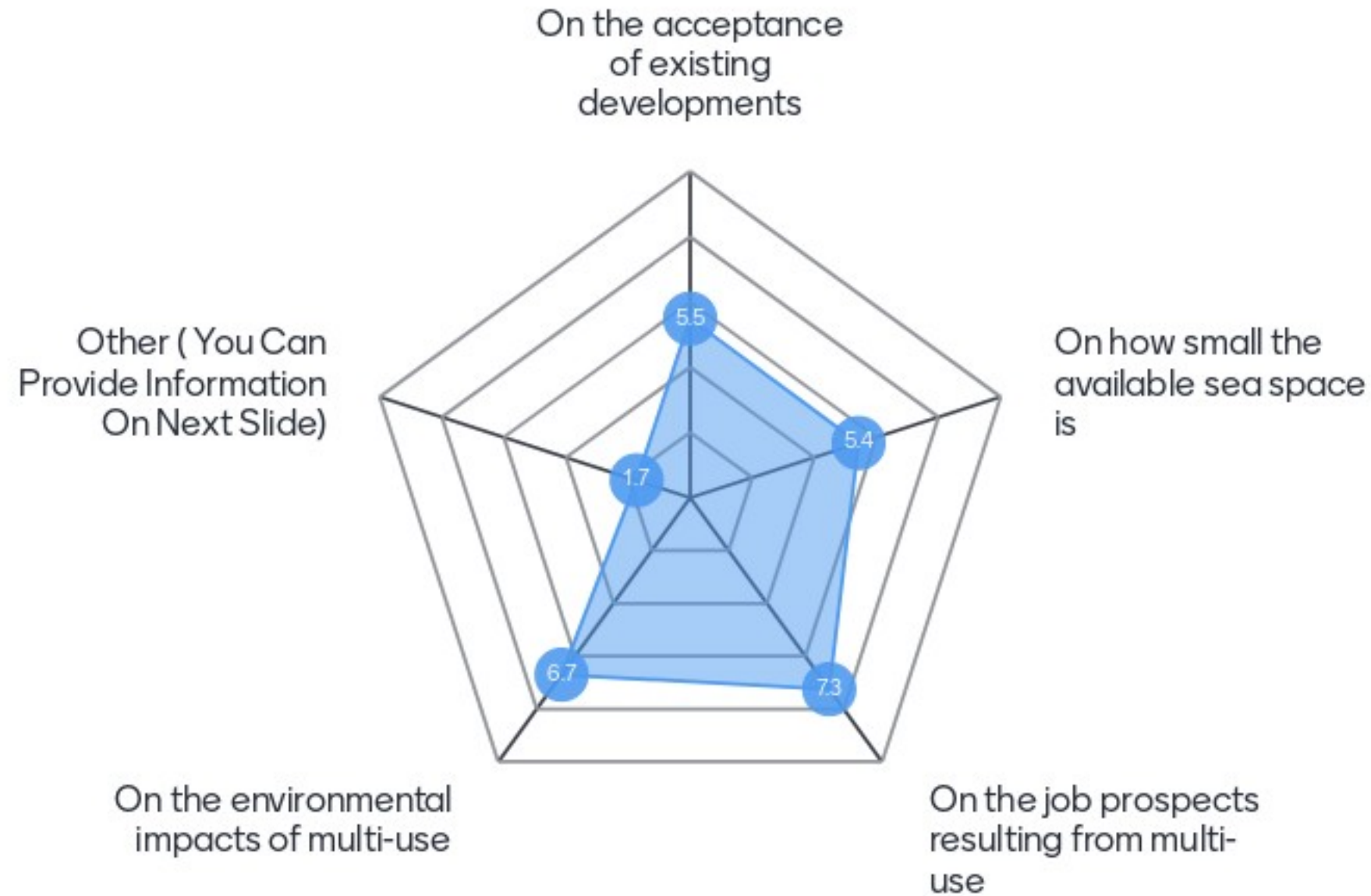
visual aspects, concentrated pollution, lack of involvement

stakeholder implications, stakeholders communication, unadapted regulations between the activities

Nothing



# What does the local acceptance of future multi-use project implementation depend upon the most?



# If You Selected Other In The Previous Question, What Is That Other?

Distance to shore

-

Fisheries

legal

safety

Understanding of the real benefits to community

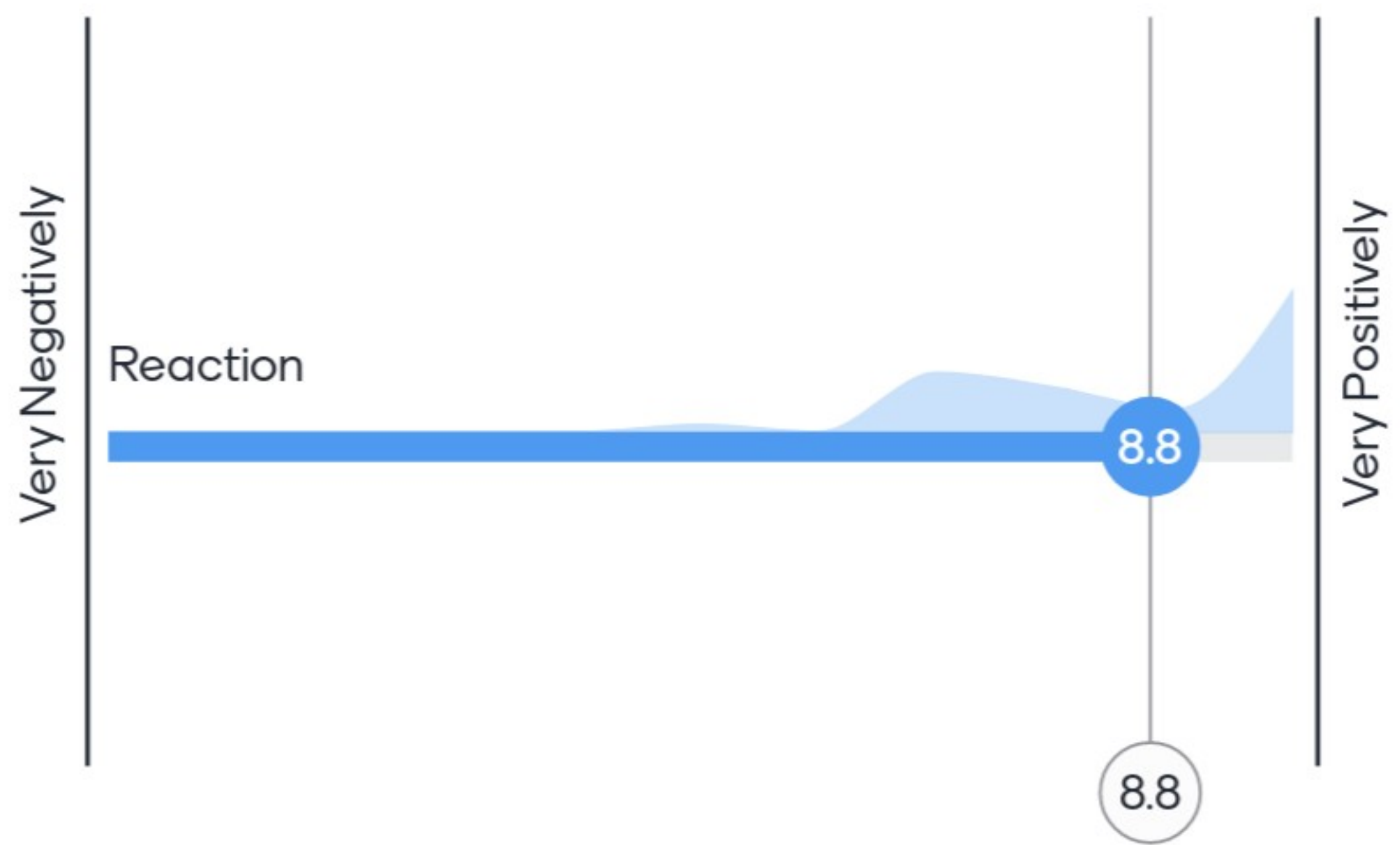
Communication to local community

The type of multi use

Usefulness for several stakeholders

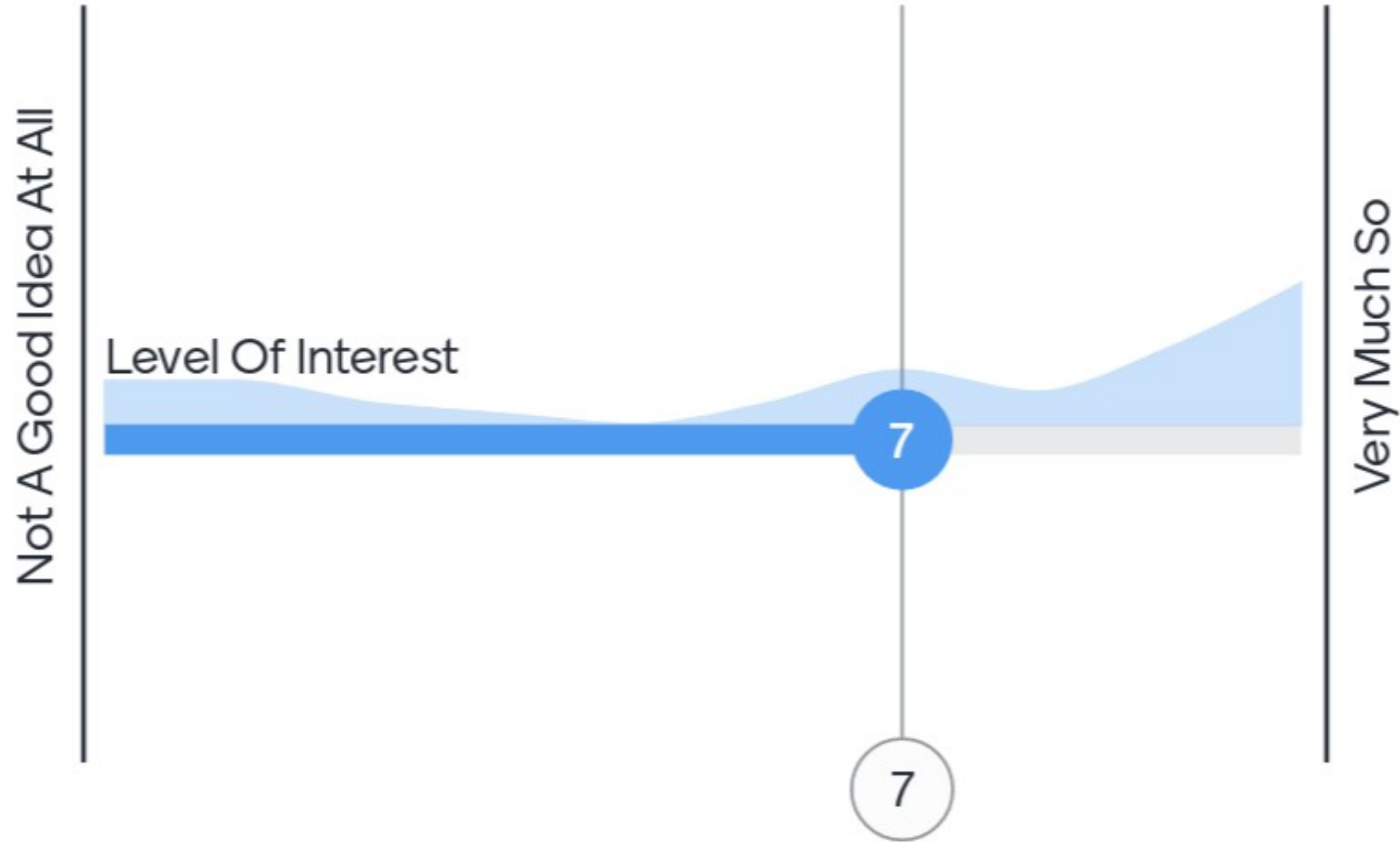


# How would you react if an offshore wind farm in your area would be accepting additional activity such as mussels farming?





# Would boat tours to offshore wind farm attract you as a tourist?



# What Do You Think Is The Best Way To Involve Local Communities And Ensure Their Acceptance?

Co ownership

have them involved in creating an artist impression

Financial benefit

Involve them and keep them well-informed

have them as owner

Make money for the community

Workshops together

Cooperative

Co-create, share benefits



# What Do You Think Is The Best Way To Involve Local Communities And Ensure Their Acceptance?

engage at educational level -- schools

educational activities

SOCIETAL AWARENESS PLAN

Involvement from the start

interact with them during all stages of development

communicate the positive aspects (also for environment)

Community events and discussion opportunity

shared ownership opportunities; investment to local skills development; utilisation of local supply chain

Tranparent information since the beginning



# What Do You Think Is The Best Way To Involve Local Communities And Ensure Their Acceptance?

talk with them, inform at an early stage, co-create with them

financial benefits

local events to inform about the activities, employ in the local community

Round tables, envolved from the beginning

Information about benefits and co-benefits

partnerships between the local communities and the companys

Educate on environmental benefits, social benefits / present local products / have them involved in desicionmaking

Early, open engagement that empowers those involved to have influence over decisions in the development process.

increase awareness, education





# What Do You Think Is The Best Way To Involve Local Communities And Ensure Their Acceptance?

school art competition

activities, e.g. courses

environmental education, round tables

encourage collective mentality among stakeholders

Early stakeholder engagement and co-create, education and job opportunities

face to face meeting

Education trips

open information starting in the planning phase

getting involved in local communities, getting to know them, let them know you and hear them out. If concerns can't be dealt with, explain why.

