



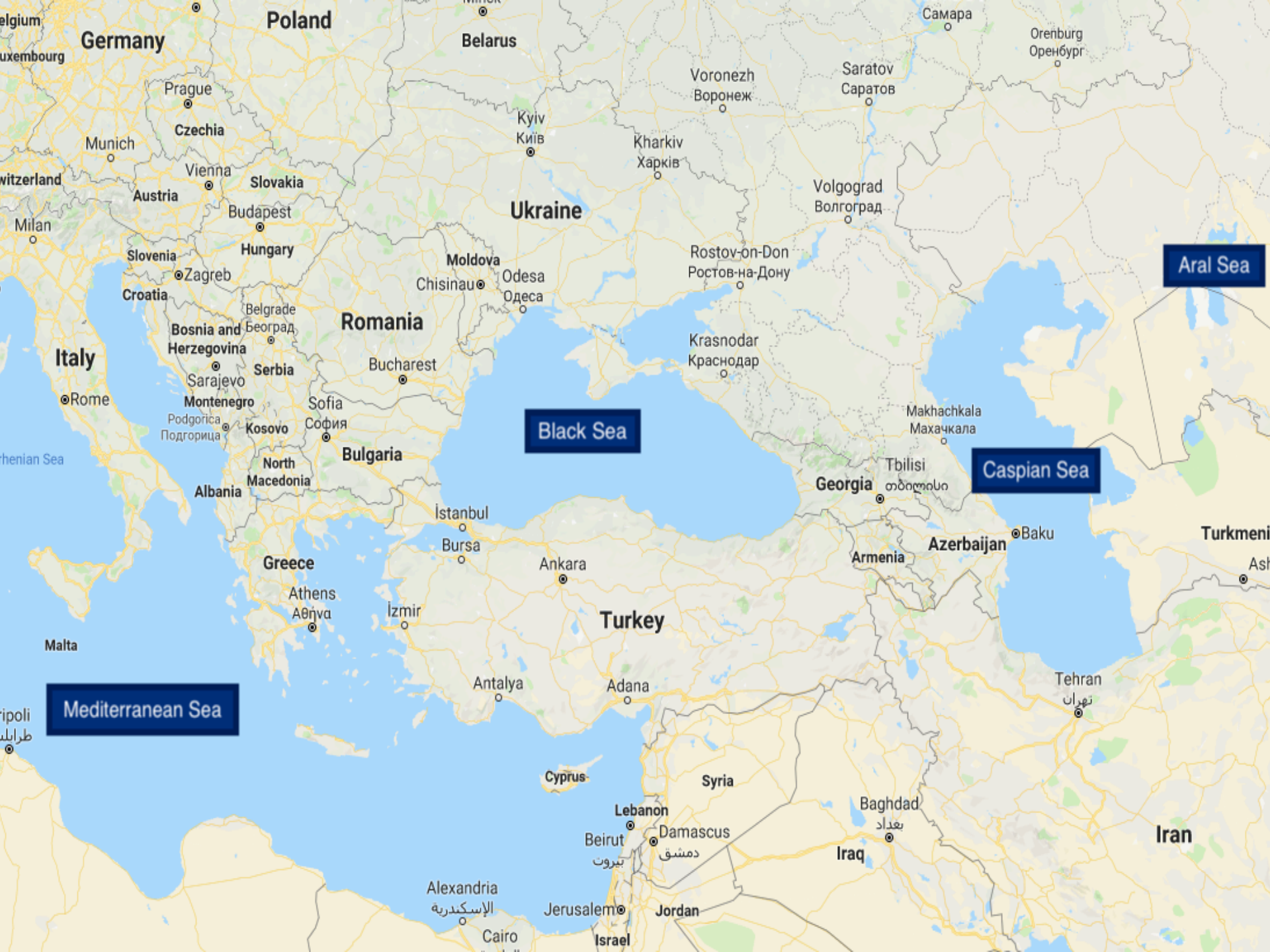
The UN SDSN 4-Seas Project:
Mobilizing Science Driven Sustainable Blue Growth
The Mediterranean Sea
The Black Sea
The Caspian Sea
The Aral Sea

Supported by SDSN Greece and SDSN Black Sea

The 4-Seas Project: The Blue Sustainability Transition

- The ocean and seas cover more than **70% of the planet's surface**, regulate the Earth's climate, produce a large proportion of the oxygen in our atmosphere and are the major source of food proteins for over a billion people.
- However, it is increasingly affected by **global changes, including climate change**, and degraded marine ecosystems are under persistent and growing risk of **further damage** from microbiological and chemical pollution, overexploitation, and climate change.
- The **interactions** between ocean and human health are numerous, complex and yet largely unknown to the major part of the public, the stakeholders and the scientific community.
- The **purpose** of the “4-SEAS PROJECT” is to **provide a SUSTAINABILITY TRANSITION PLAN** to protect oceans from degradation and to **make explicit** the various benefits that the Ocean can bring to the health and wellbeing of populations.
- The future state of the global ocean will largely determine the future health and wellbeing of everyone!





**What kind of Growth
do we need?**

Sustainable Growth:

Organizing principle for
meeting human
development goals, **while**

sustaining the ability of
natural systems to provide
the natural resources and
ecosystem services , **upon
which**

the economy and society
depend.

Environmental Sustainability

Economic Sustainability

Social Sustainability

**Sustainable development meets
the needs of the present, without
compromising the ability of
future generations to do the
same.**





- We are on course for disastrous +3C.
- We have **12 years left** until the point of no return. Most of us will still be alive then!
- Urgent and unprecedented changes are needed to reach the target. The target is affordable and feasible. The final tick box is political/policy will!

- **Transforming our world: the 2030 Agenda for Sustainable Development**

10 OCTOBER 2018 REPORT Intergovernmental Panel on Climate Change (IPCC):

Urgency of limiting global warming to +1.5 C.

Beyond which risk of drought, floods, extreme heat and poverty for hundreds of millions of people, will significantly increase.



Policies on marine protection



Agenda 2030, SDG 14

Sustainable use and conservation of the oceans, require effective strategies and management to combat the adverse effects of overfishing, growing ocean acidification and worsening coastal eutrophication.

GOAL 14

CONSERVE AND SUSTAINABLY USE THE
OCEANS, SEAS AND MARINE RESOURCES FOR
SUSTAINABLE DEVELOPMENT



Marine Strategy Framework Directive - 2008/56/EC

- Aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020
- Aims to protect the resource base upon which marine-related economic and social activities depend
- Integrates: environmental protection, sustainable development, ecosystem approach & marine biodiversity protection
- Requires each Member State to develop a strategy for its national marine waters
- Follow adaptive management approach



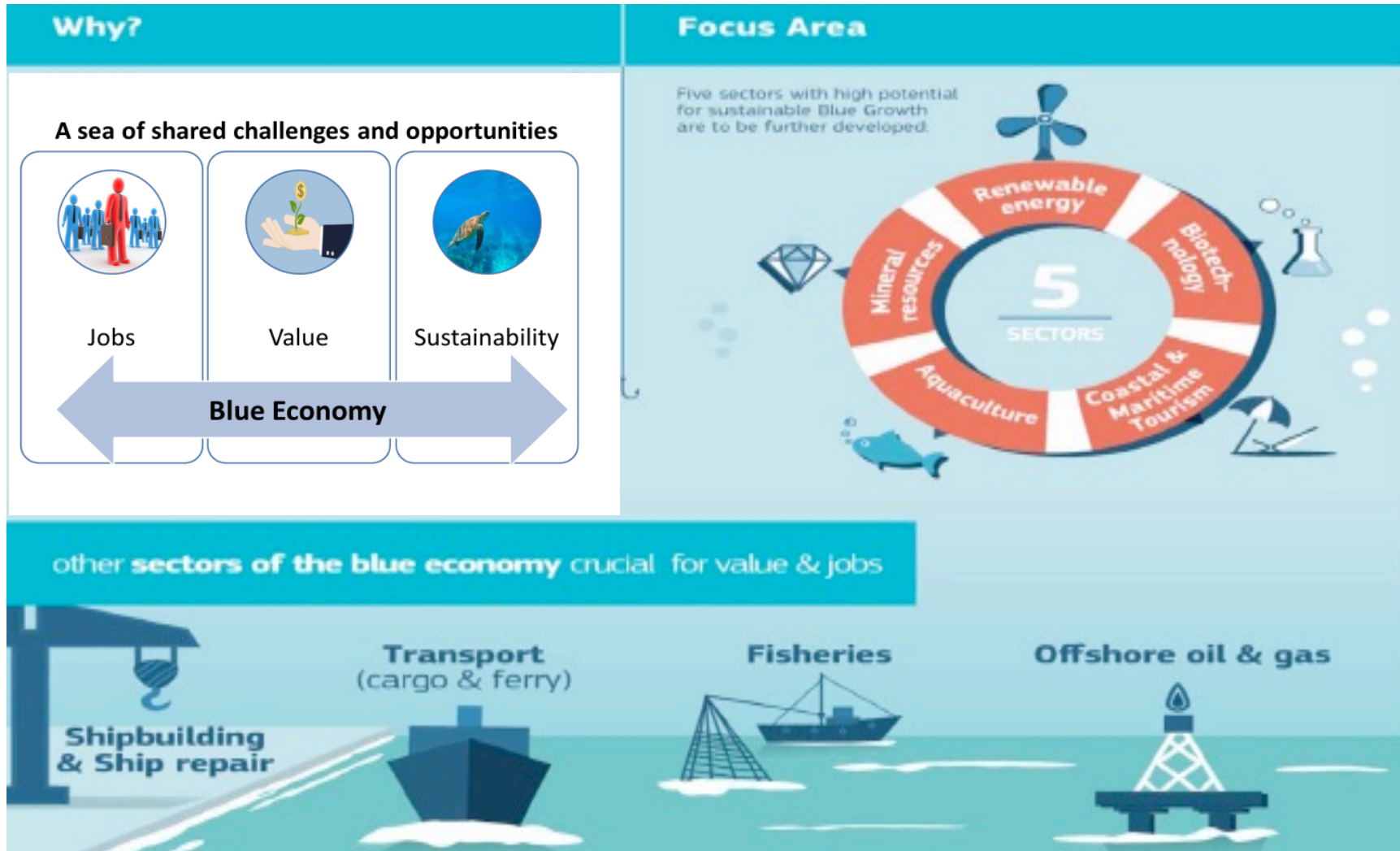
Maritime Spatial Planning


Directive 2014/89/EU

- Encompasses public initiatives on how to use the sea space in line with societally agreed goals, values and targets
- Aims to reduce conflicts, encourage investment, increase cross-border cooperation, protect environment
- Moves from traditional single sector planning to a more integrated approach to the planning of the sea
- Maritime Spatial Plans need to refer to land-sea interactions, ecosystem based approach, ICM, stakeholders involvement

European Blue Growth Initiative

Long term strategy of the EU to support sustainable growth in the marine and maritime sectors: smart, sustainable and inclusive growth.





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The UN SDSN 4-Seas Project: Med-Black-Caspian-Aral Seas, from source to sea

AIMS:

- **RESEARCH:** To develop and support sustainable growth pathways in coastal and marine sectors, from source to sea, of the 4-seas project.
- **REPOSITORY:** To create an open-access data-base with relevant: research and innovation projects, policies and stakeholders of the 4-seas project region.
- **INNOVATION:** To incentivize innovation to facilitate the sustainability transition in the region of the 4-seas project through our collaboration with the Innovation Community and [EIT Climate KIC](#).
- **POLICY:** To develop links between EU WFD, MSFD, Blue Growth Initiative, Agenda 2030 and other Policy Initiatives, by developing policy alternatives to support land-sea synergies in the implementation of the sustainability transition in the 4-seas project region.

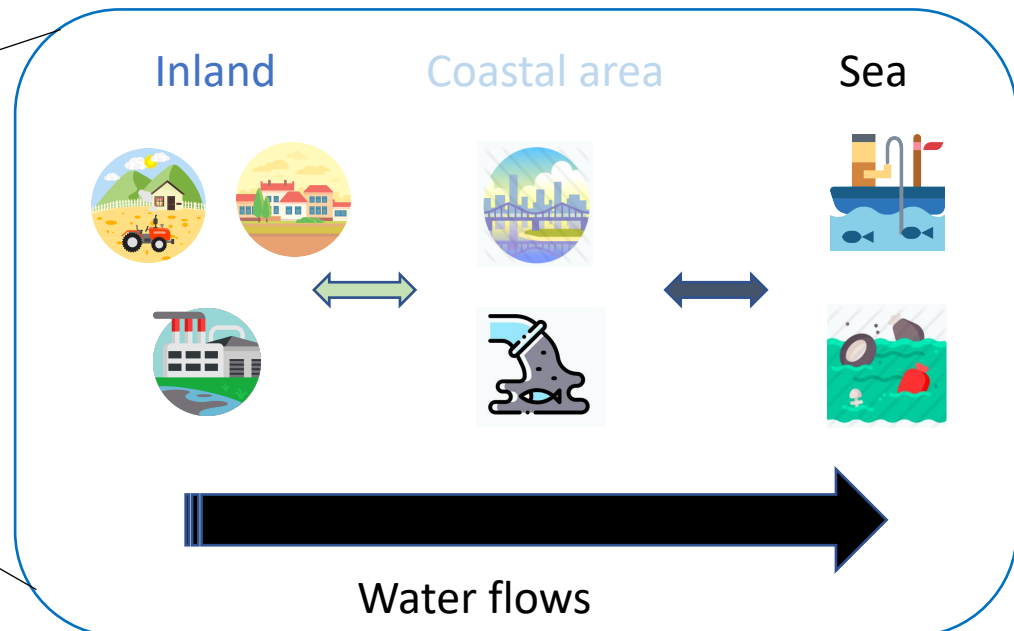
Project Layer 1 - Land-Sea Ecosystem

At a river basin scale, land-based ecosystems and coastal & sea ecosystems are directly linked through water flows.

In the same way, land-based activities (agriculture, forestry, industries & urbanisation) are directly impacting land ecosystems and coastal & sea ecosystems.

Coastal & seas regions concentrate populations and economic activities but also environmental stresses & pollutions. On the other hand rural hinterlands face depopulation, economic recession while still environmentally impacting coastal regions.

River Basin ecosystem

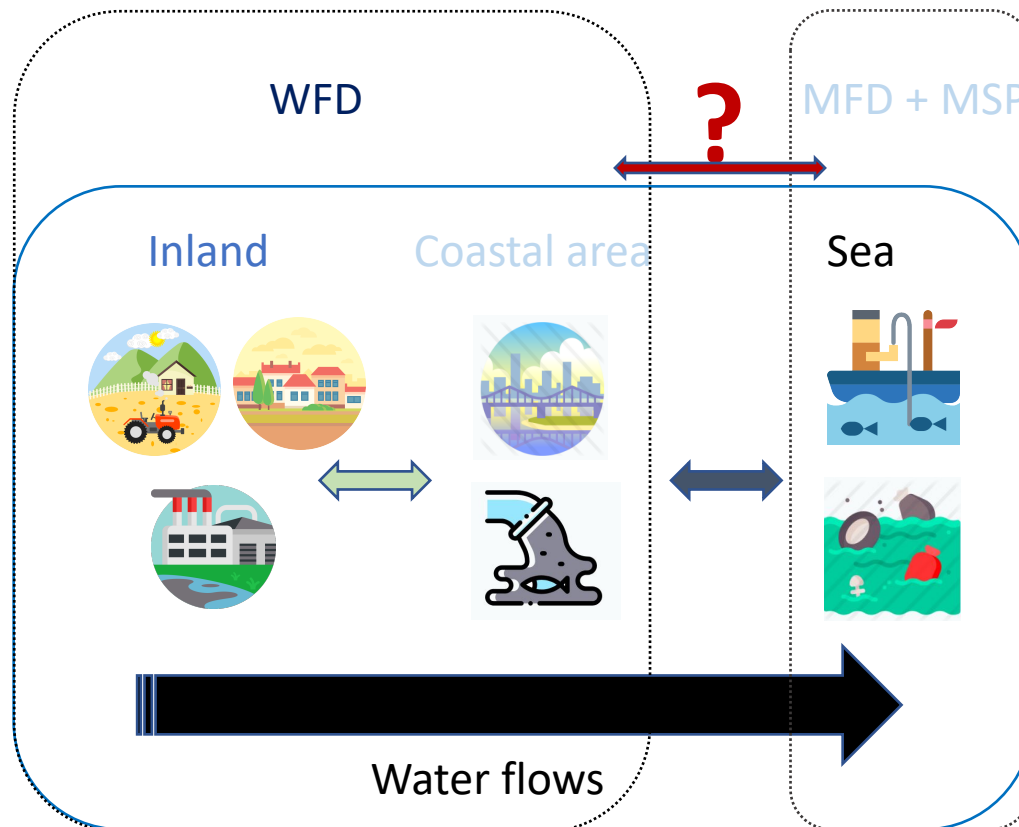


Project Layer 2 - Land-Sea EU Policy Framework

The EU Water Framework Directive seeks to reach the Good environmental status of rivers while the EU Marine Strategy Framework Directive targets the good environmental status of EU marine waters but the two legislations lack interconnections.



Land – Sea
Ecosystem

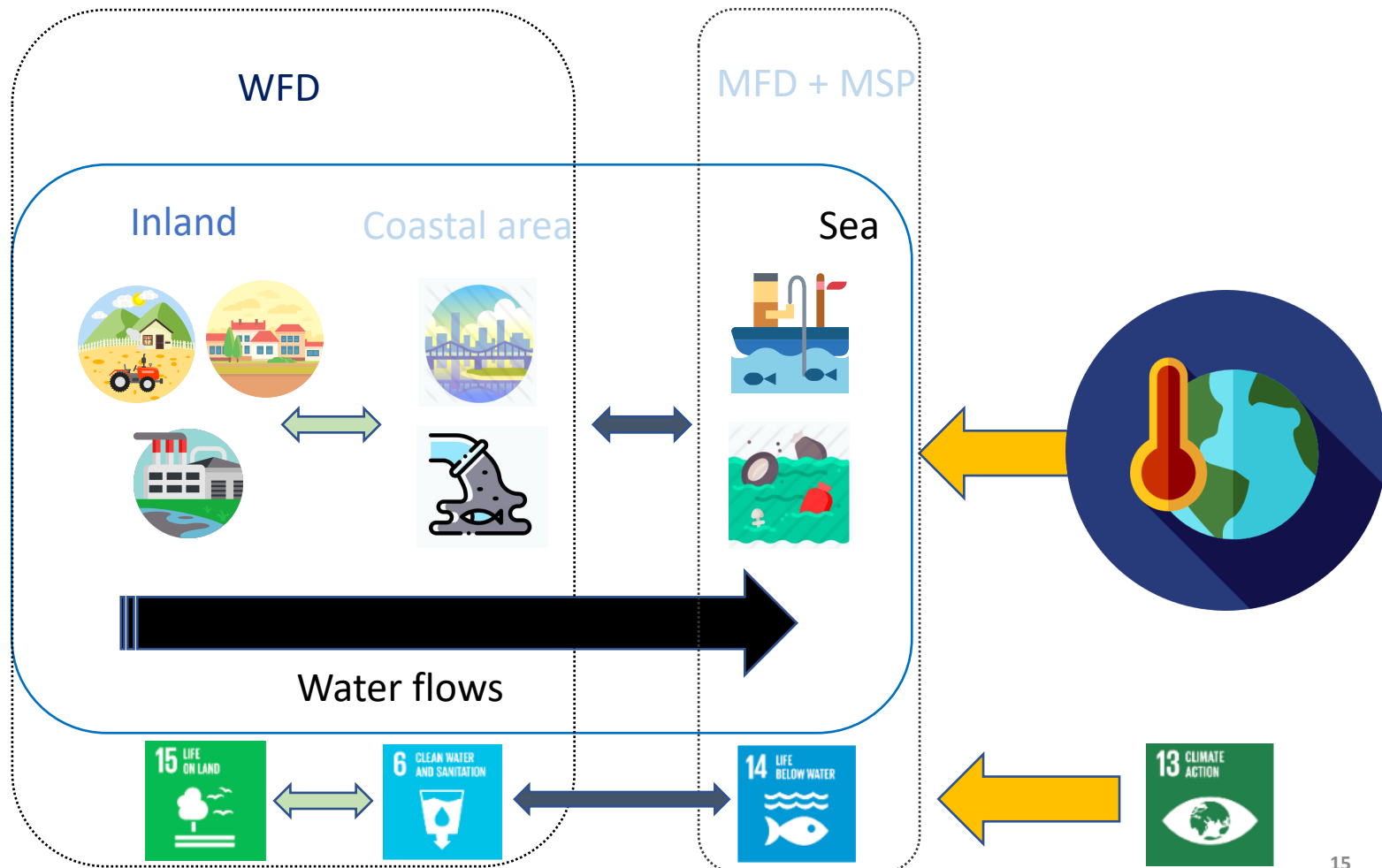


Project Layer 3 - Land-Sea system and the SDGs

In a wider context the 2030 Agenda for Sustainable Development set goals for sustainable use of freshwater (**SDG 6**), seas (**SDG14**), and terrestrial ecosystems (**SDG 15**) as well as taking urgent actions to combat climate change (**SDG13**).



Land – Sea
Ecosystem



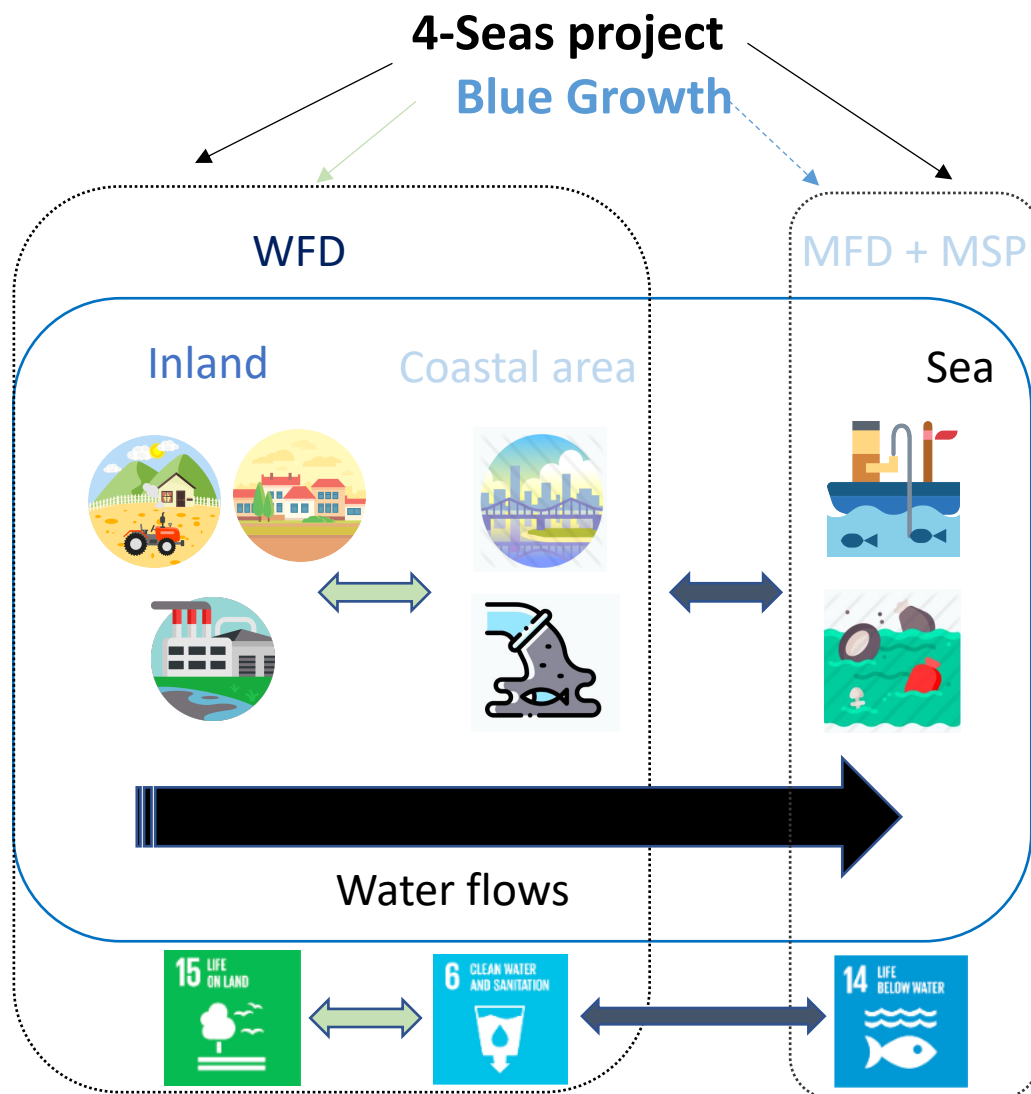
PROJECT OVERVIEW:

The UN SDSN 4-Seas Project: Mobilizing Science Driven Sustainable Blue Growth The Mediterranean– Black – Caspian – Aral Sea

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Land – Sea
Ecosystem



Ongoing UN SDSN Greece Blue Projects



Past UN SDSN Greece Blue Projects in the last 5 years



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