



WestMED National Event – Italy

Italian National Hub and National Coordinator

Climate Change & MSP

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Online | 25-26 June 2020

WESTMED
blue economy initiative

Climate Change & marine and coastal areas



Annie Spratt, Unsplash

About the CC Facts (IPCC Special Reports)

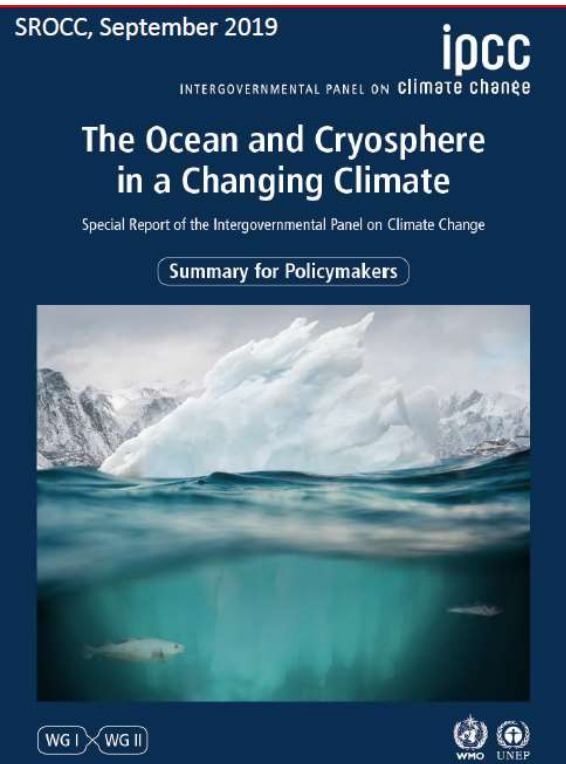
About the CC-related International Processes

About CC and the Sustainable Blue Growth

Climate Change & MSP

MSP plans are to contribute to resilience to Climate Change, taking into consideration climate-induced long-term changes

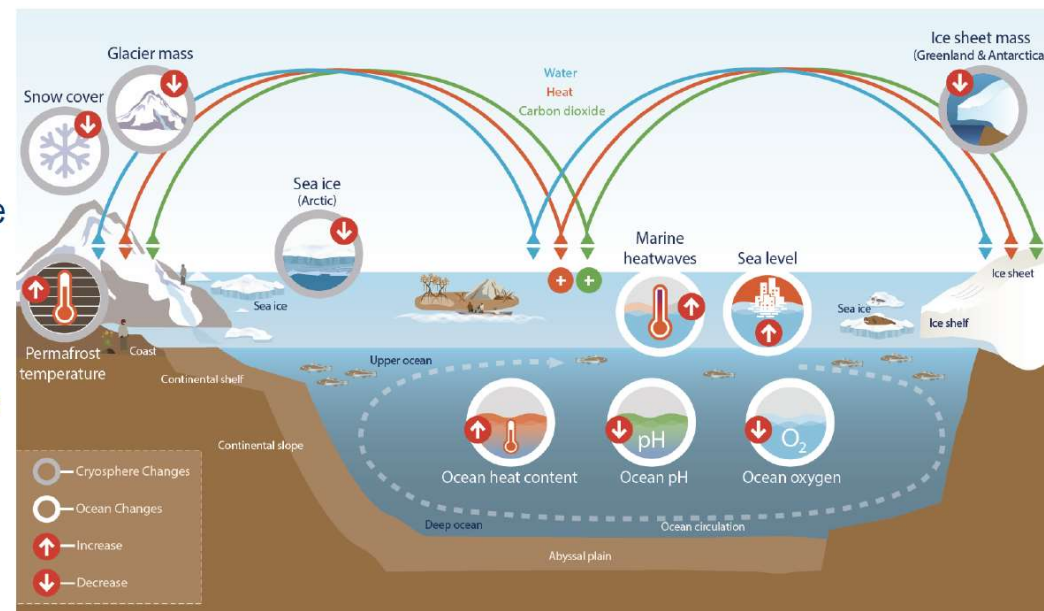
*"The main purpose of maritime spatial planning is to promote sustainable development and to identify the utilisation of maritime space for different sea uses as well as to manage spatial uses and conflicts in marine areas. (...) Member States need at least to ensure that the planning processes result in a comprehensive planning identifying the different uses of maritime space and **taking into consideration long-term changes due to climate change.**" (Paragraph 19, EU MSP Directive 2014/89/EU)*



Climate Change - Facts

SROCC in a nutshell

...on 80 % of the earth surface climate change affects the life sustaining systems - from the top of the mountains to the depth of oceans. These changes will continue for generations to come.



TS.2

Observed regional impacts from changes in the ocean and the cryosphere

Current background: unsustainable ocean uses



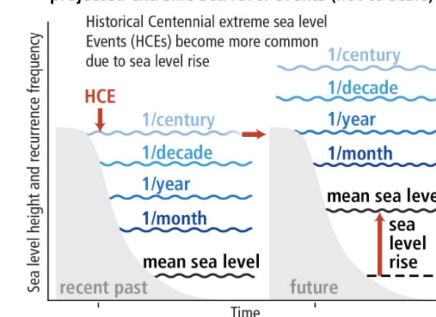
Attribution		Ocean												LEGEND	
Greenhouse Gases	Physical Changes	Arctic	EBUS ¹	North Atlantic	North Pacific	South Atlantic	South Pacific	Southern Ocean	Temperate Indian Ocean	Tropical Atlantic	Tropical Indian Ocean	Tropical Pacific	<div>Physical changes</div> <div>● increase</div> <div>● decrease</div> <div>● increase and decrease</div>		
		Temperature	●●	●	●●	●●	●●	●●	●●	●●	●●	●●		●●	
		Oxygen	●●		●●	●	●	●	●	●●	●●	●●		●●	
		Ocean pH	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●		●●	
		Sea ice extent	●●						●						
		Sea level	●	●●	●●	●●	●●	●●	●●	●●	●●	●●		●●	
Climate Change	Ecosystems	Upper water column	●●	●	●●	●●	●●	●●	●●	●	●●	●	●●	<div>Systems</div> <div>● positive</div> <div>● negative</div> <div>● positive and negative</div>	
		Coral		●				●●			●●	●●	●●		
		Coastal wetlands			●	●●	●●	●●		●●	●●	●●	●●		
		Kelp forest	●●	●●	●●	●●	●		●				●●		
		Rocky shores			●●	●●				●					
		Deep sea				●									
	Polar benthos	●●						●●					<div>no assessment</div>		
	Sea ice-associated	●●						●●							
	Human systems and ecosystem services	Fisheries	●●	●	●●	●	●	●	●	●	●●	●		●	
		Tourism	●●	●	●●					●	●	●		●	
Habitat services		●●	●	●●	●●	●●	●●			●●	●●	●●			
transportation/shipping		●●	●	●●	●	●	●			●●	●●	●●			
Cultural services		●●		●	●		●								
Coastal carbon			●●	●●	●	●	●		●	●●	●●	●●			

¹ Eastern Boundary Upwelling Systems (Benguela Current, Canary Current, California Current, and Humboldt Current); (Box 5.3)

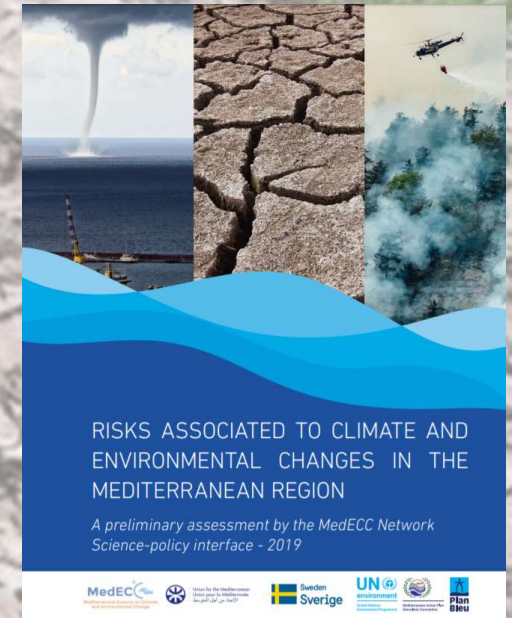


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(a) Schematic effect of regional sea level rise on projected extreme sea level events (not to scale)



The local situation in Italy and the Western Mediterranean



Adopted National Climate Change Adaptation Strategy:
In Italy the most significant expected impacts in the coming decades will be consequent to the exceptional rise in temperatures, to the increase in frequency of extreme weather events (heat waves, drought, episodes of heavy rainfall) and the reduction of average annual rainfall and flows annual rivers.



Climate Change impacts on Maritime Sectors

According to the analysis of Blue Growth needs and potential per country and the 5th report on the economy of the sea in Italy issued by CENSIS in 2015, largest maritime sectors are:



Tourism



Fisheries

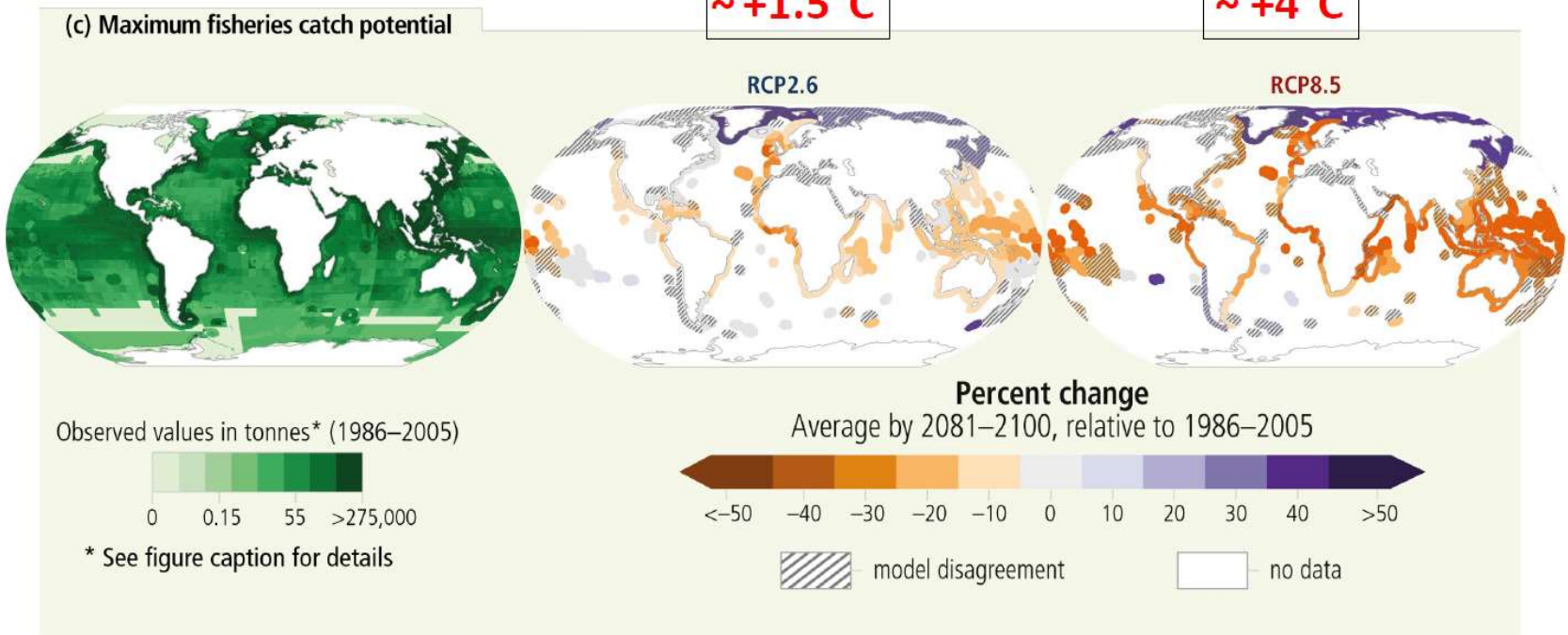


Shipping



Ports

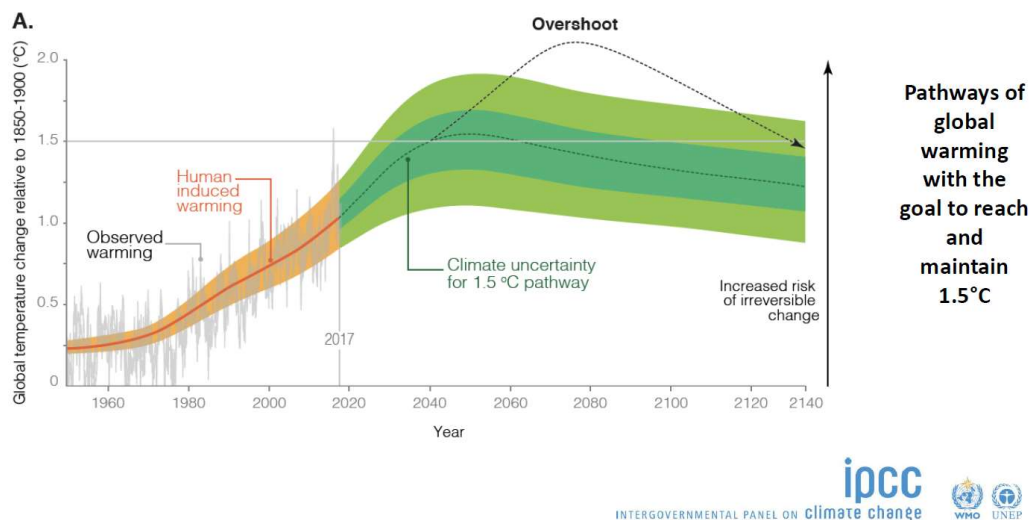
Projected changes, impacts and risks for fisheries as a result of climate change



"In Italy fisheries contribute about a fifth in value to the internal demand of fish products and Italy is the most productive in the Mediterranean. In Italy fishing has significant importance in historical, cultural and marine environment management terms. The nature of the future impacts of climate change on this sector deserves to be carefully analyzed." (translated from Italian - National Climate Change Adaptation Strategy)

Avoiding severity of Climate Change impacts for land and oceans

SR1.5



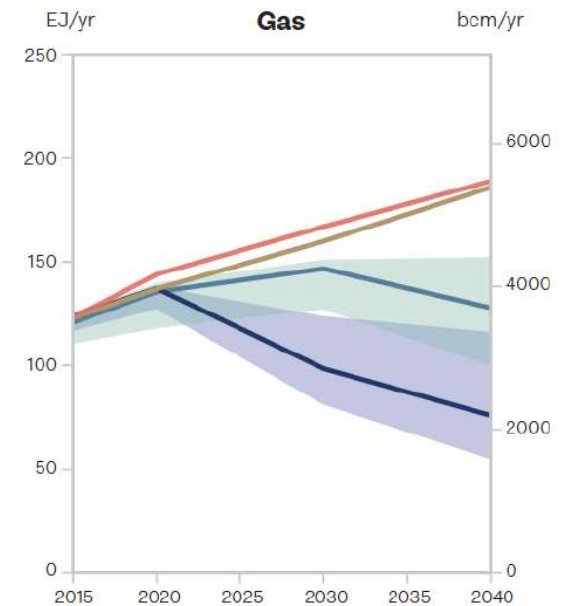
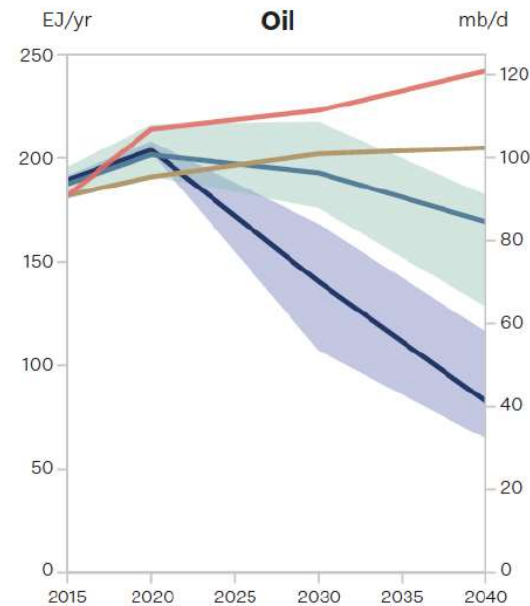
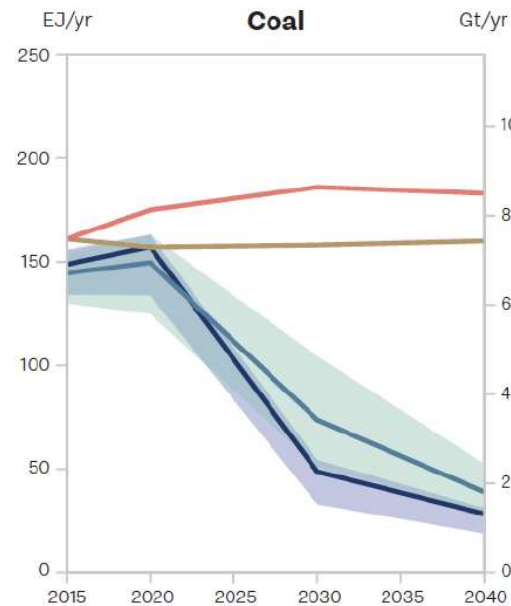
To limit warming to 1.5°C, CO₂ emissions would need to fall by about 45% by 2030 (from 2010 levels)

To limit warming to 1.5°C, CO₂ emissions would need to reach 'net zero' around 2050

The IPCC Special Report on the Ocean and Cryosphere (SROCC) from 2019 demonstrates that climate-resilient and sustainable development is only possible with immediate, drastic, coordinated and sustained mitigation measures to preserve the vital functions of the ocean, and emphasizes the urgent need for actions to reduce GHG emissions.



Production Gap



— Countries' production plans & projections
— Production implied by climate pledges

— Production consistent with 2°C
— Production consistent with 1.5°C

21.11.2019

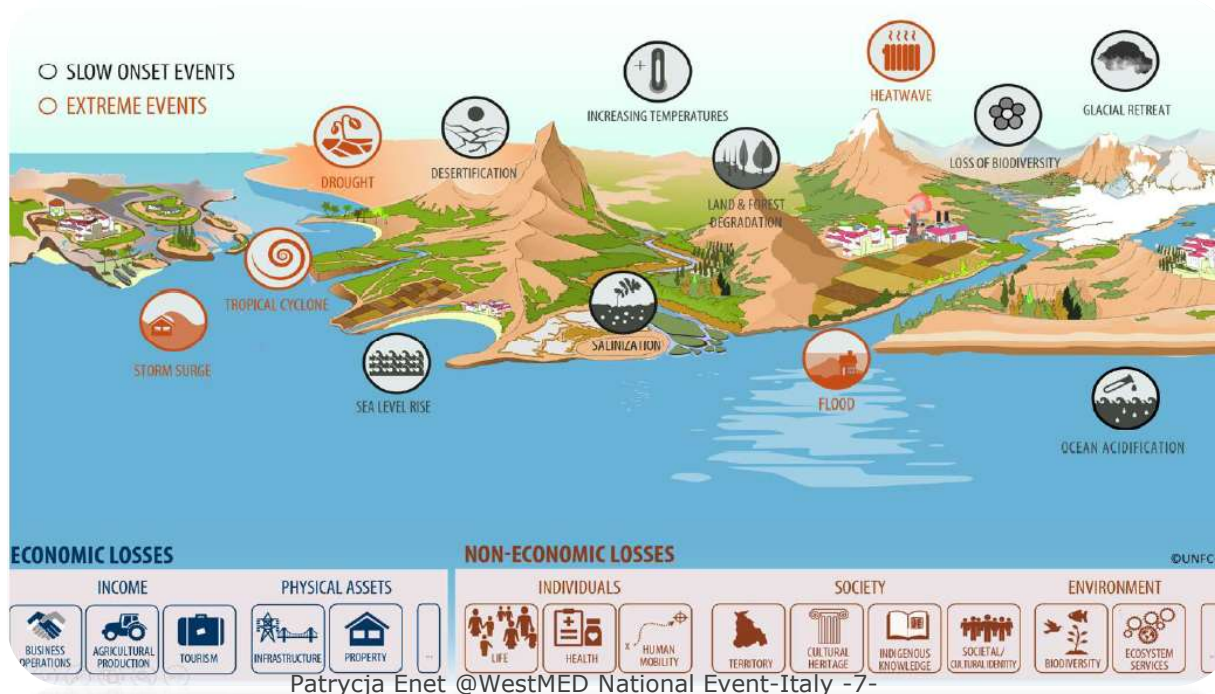
UNEP Production Gap Report 2019

CONTRA-ACTIONS

Climate Change in international processes



The UNFCCC Secretariat - Warsaw International Mechanism for Loss and Damage:
Loss and damage in the marine and coastal areas associated with the impacts of climate change



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Pic. source: Patrycja Enet@COP25

#TiempoDeActuar
#TimeForAction

Blue Economy MSP Planning of Maritime Activities



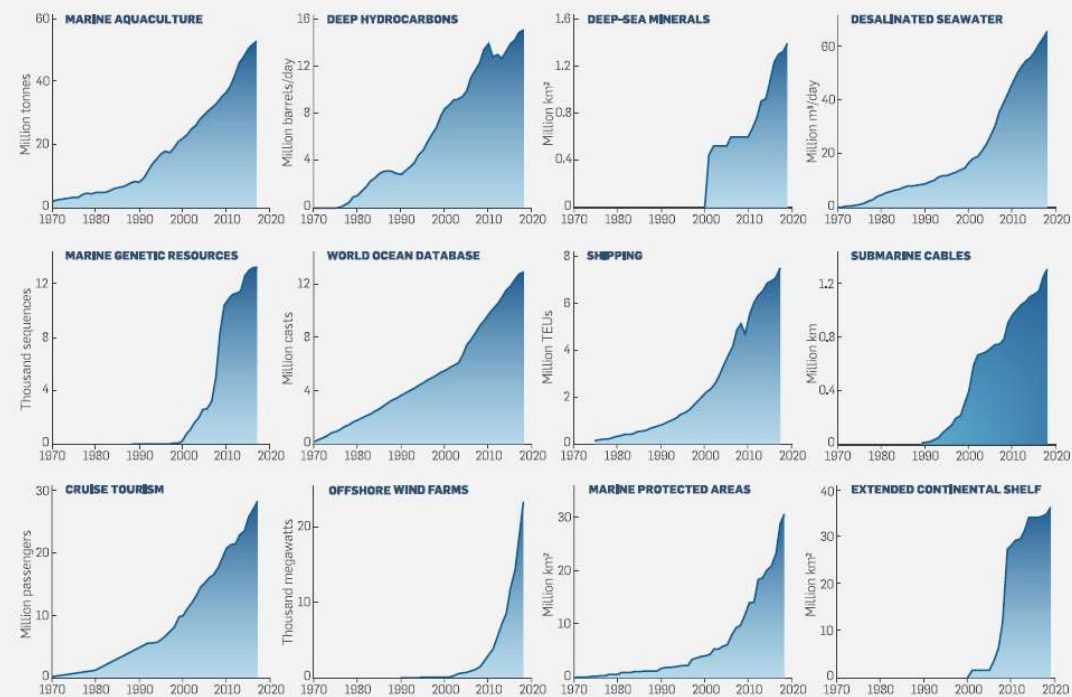
Artur Rydzewski, Flickr, CC BY 2.0



Frans Berkelaar, Flickr, CC BY 2.0



BLUE ACCELERATION



(Adapted from Jouffray et al., 2020)

According to many recent publications:

“MSP is all about the future, a way to look forward and to guide human action toward a vision for tomorrow’s ocean.” (Santoz *et al.* 2020)

Climate Change consideration in Maritime Spatial Plans



MSPglobal: Worldwide, some MSP initiatives mention climate change, e.g. in Morocco, Malta



The EU MSP Directive (2014/89/EU) highlights that MSPs are to contribute to resilience to climate change impacts, taking into consideration climate-induced long-term changes

*“(19) The main purpose of maritime spatial planning is to promote sustainable development and to identify the utilisation of maritime space for different sea uses as well as to manage spatial uses and conflicts in marine areas. Maritime spatial planning also aims at identifying and encouraging multi-purpose uses, in accordance with the relevant national policies and legislation. In order to achieve that purpose, Member States need at least to ensure that the planning process or processes result in a comprehensive planning identifying the different uses of maritime space and **taking into consideration long-term changes due to climate change.**”*

Blue Economy: - MSP & Climate Change -



Pic. source: Bas Kohler

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Roundtable discussion

“The importance of MSP and the challenge of Climate Change”

- **Blue** & **Green** -

Climate Change Mitigation

Climate Change Adaptation



What are the efforts of inclusion of Climate Change considerations in MSP?

What are the challenges of inclusion of Climate Change considerations in MSP locally?

What is a way forward with regards to the importance of MSP and the challenges of CC?

Thank you!

Patrycja Enet

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