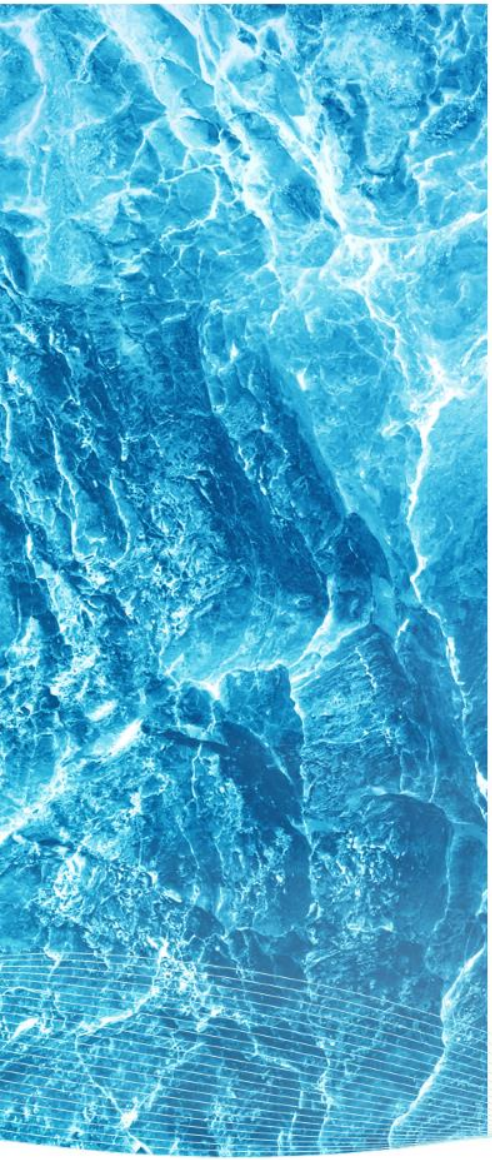


Marine Conservation under Twin-Crisis

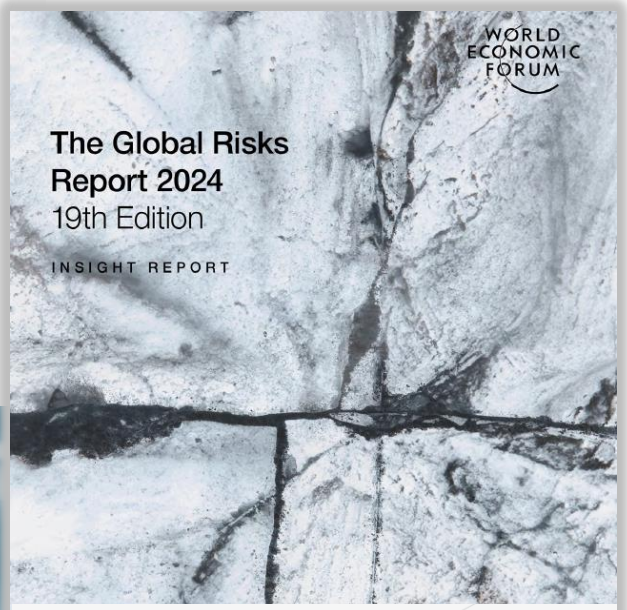
ST 2.6: Harmonizing Oceans: Transboundary Strategies for Climate Resilience in North-East Asia

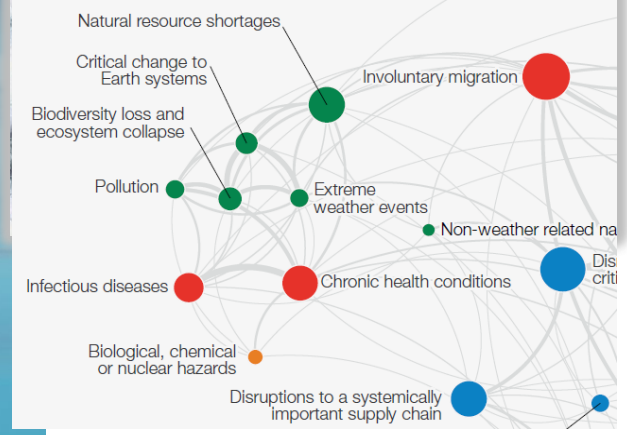
Jiyoon KIM jiyoon9887@kmi.re.kr
With Jungho NAM jhnam@kmi.re.kr
Korea Maritime Institute

7 November, 2024 / 2E01 VIP Room
Xiamen International Conference Center Hotel,
Xiamen, China

Twin Crisis : Climate change and Biodiversity loss

Natural ecosystems, past the point of no return?

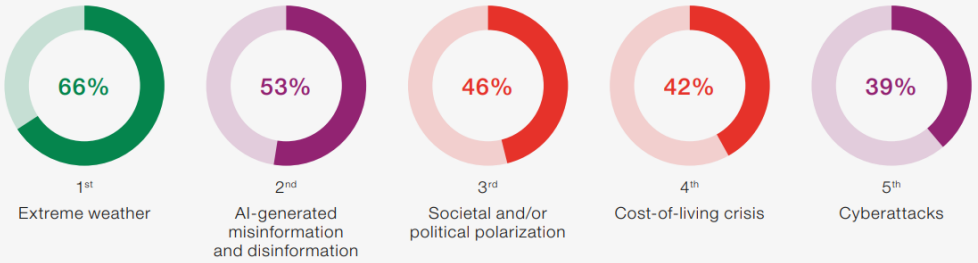




Current risk landscape

"Please select up to five risks that you believe are most likely to present a material crisis on a global scale in 2024."

Twin Crisis



Source
World Economic Forum Global Risks Perception Survey 2023-2024.

Natural ecosystems: past the point of no return

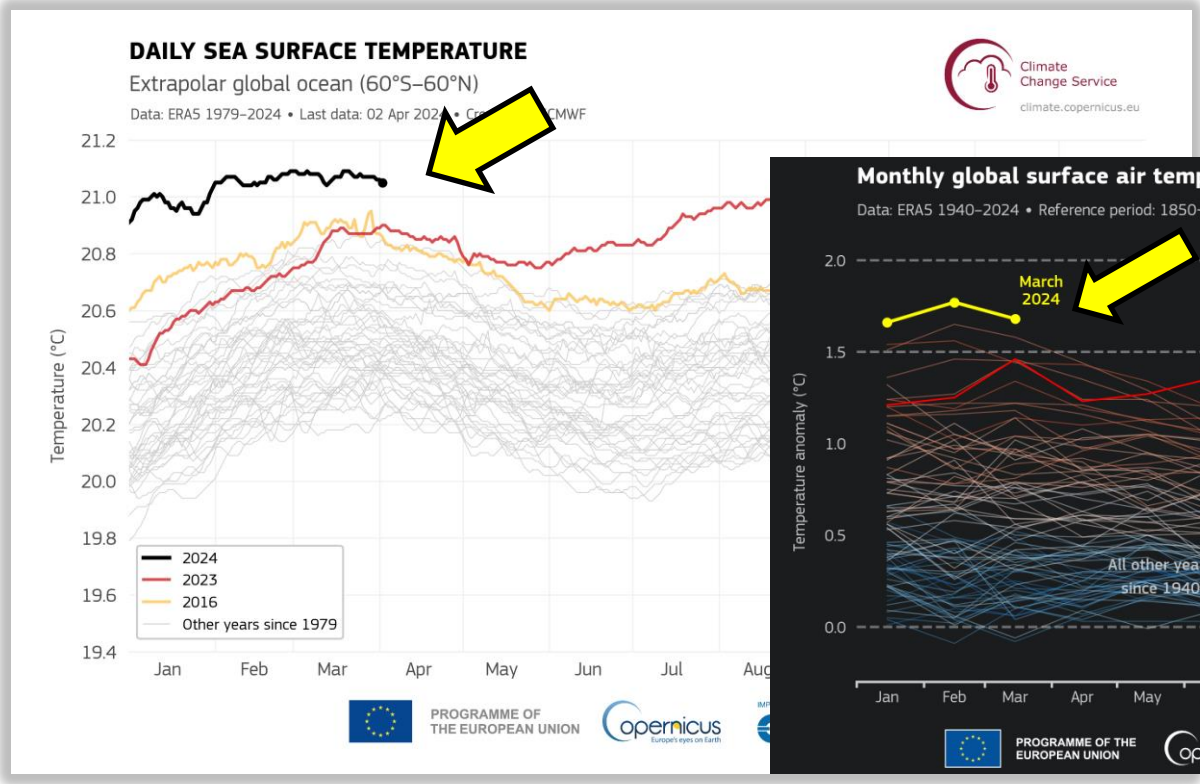
Global Change driven by Climate Change

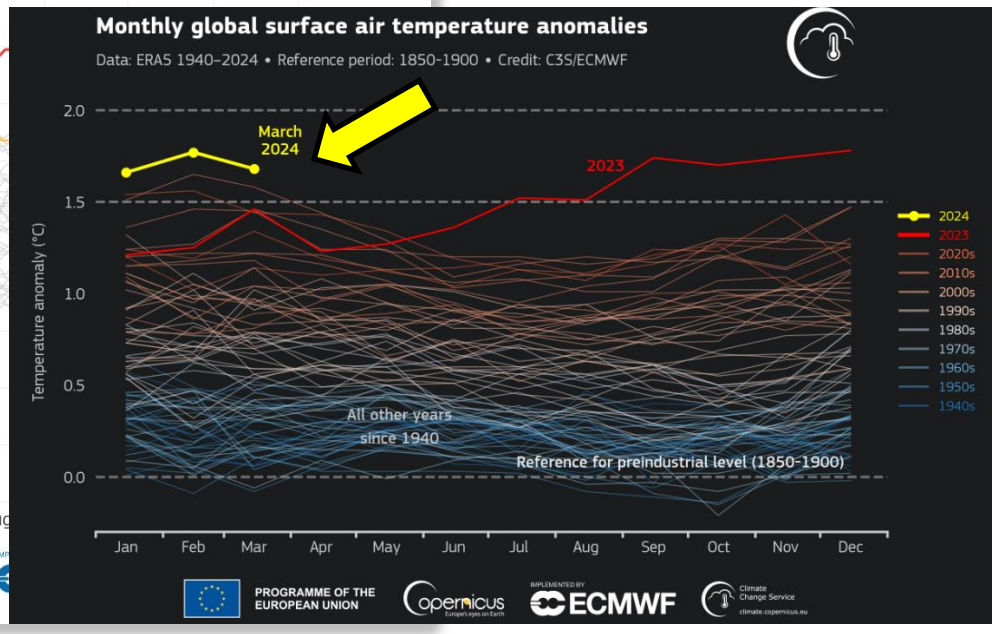
Accelerated Ocean Climate Change in 2024

FEBRUARY CLIMATE BULLETINS | NEWSFLASH

Copernicus: February 2024 was globally the warmest on record – Global Sea Surface Temperatures at record high

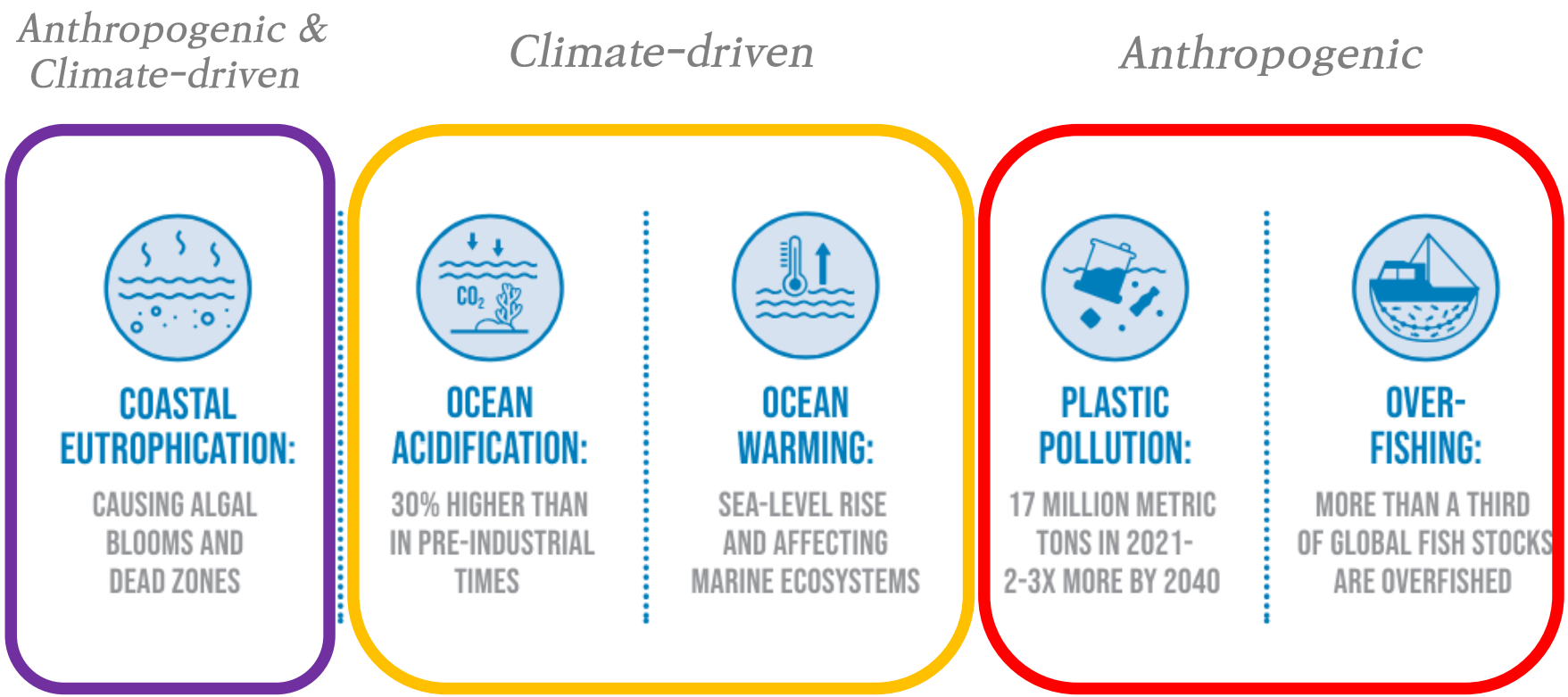
5th March 2024





Twin Crisis : Climate change and Biodiversity loss

Threats to Marine Ecosystems

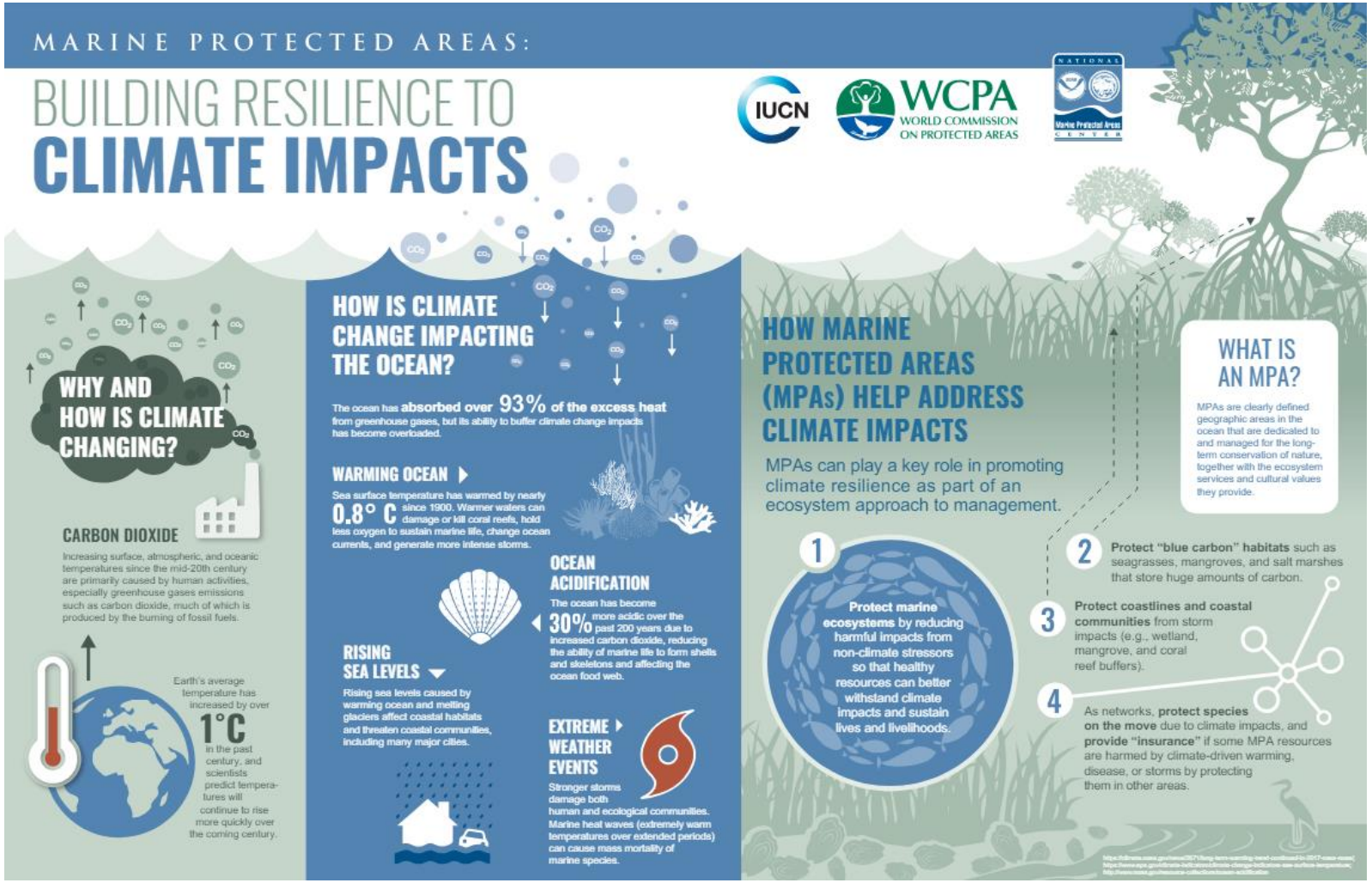


Resilience Enhancement is a KEY

UN, 2023, The sustainable development goals report 2023: special edition

MPAs are key to address Climate Impact

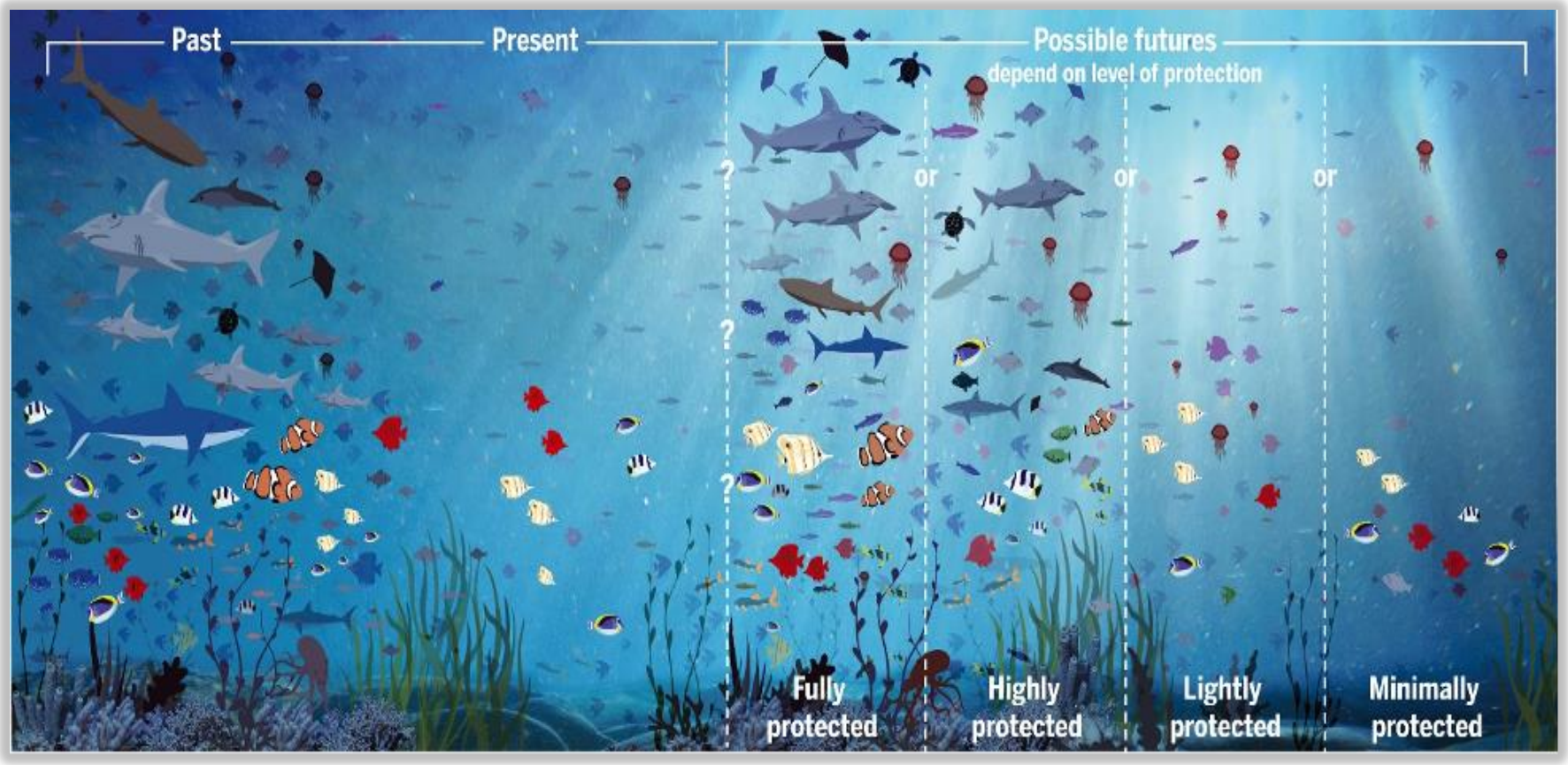
Benefits of MPAs



https://nmsmarineprotectedareas.blob.core.windows.net/marineprotectedareas-prod/media/docs/2018-mpa-cilimate-impacts-infographic.pdf

MPAs are key to address Climate Impact

Possible futures according protection levels



Grorud-Colvert et al. 2021, The MPA Guide

Global Society's Target

Strategic Plan for Biodiversity 2011–2020 and the Aichi Targets

https://www.cbd.int/sp/targets

Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

CONSERVE COASTAL AND MARINE AREAS

By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

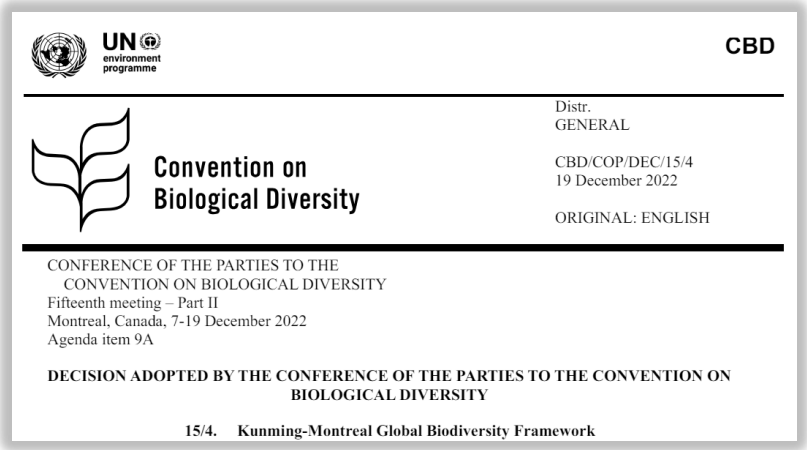
PROTECT AND RESTORE ECOSYSTEMS

By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

https://www.globalgoals.org/goals/14-life-below-water/

Global Society's Target

Kunming-Montreal Global Biodiversity Framework



UN environment programme

CBD

Convention on Biological Diversity

Distr.
GENERAL

CBD/COP/DEC/15/4
19 December 2022

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE
CONVENTION ON BIOLOGICAL DIVERSITY
Fifteenth meeting – Part II
Montreal, Canada, 7-19 December 2022
Agenda item 9A

DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

15/4. Kunming-Montreal Global Biodiversity Framework

CBD/COP/DEC/15/4 19 December 2022

Reducing threats to biodiversity

Restoration

Protection

TARGET 2

Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3

Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

Global targets for 2030

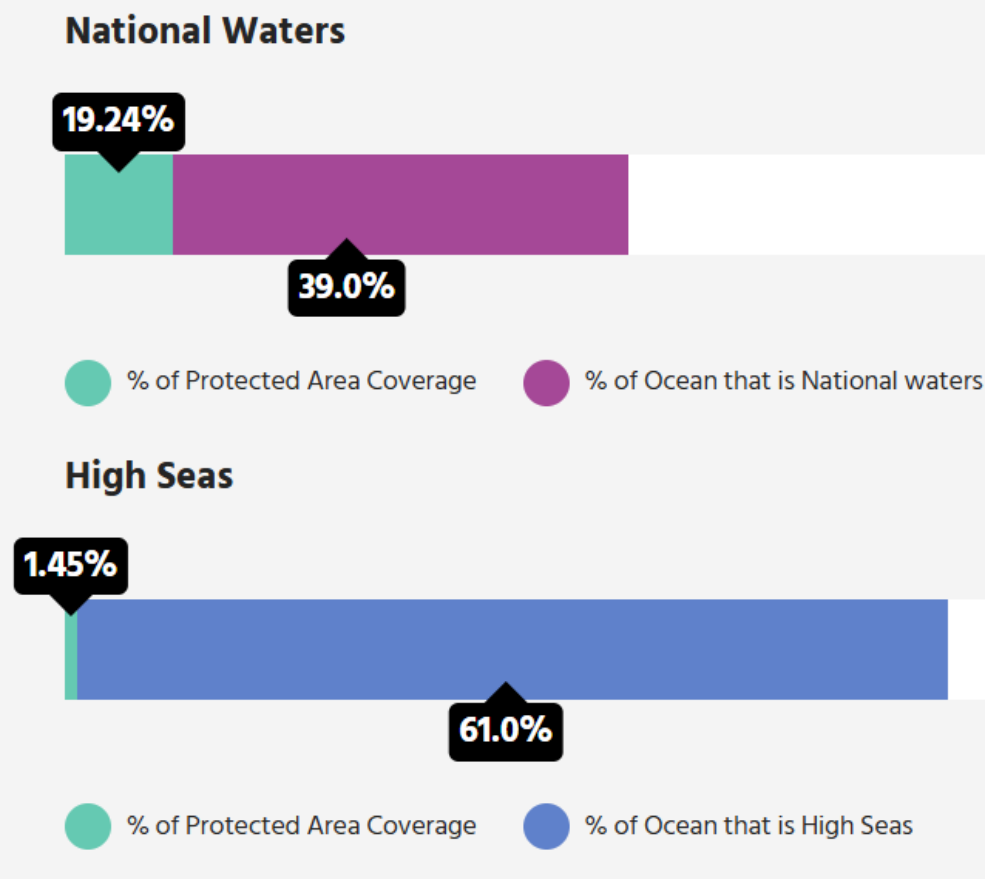
Total of 23 targets

MPAs Statistics

8.33%
Percent of the ocean covered by marine protected areas

18,888
Marine Protected Areas

30,251,228km²
Total area protected



https://www.protectedplanet.net/en/thematic-areas/marine-protected-areas

MPAs Statistics

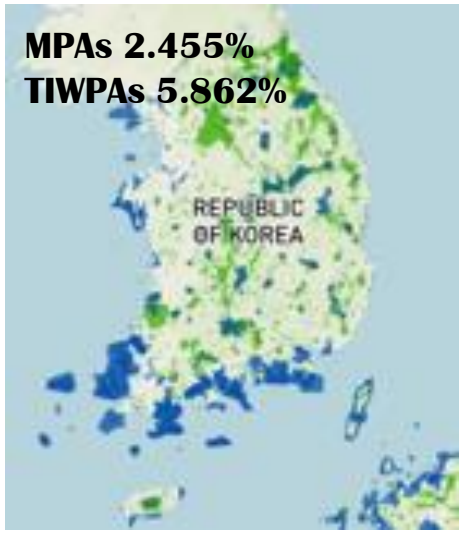
Republic Of Korea

3401
Total Protected Areas

479 With management effectiveness evaluations

- Terrestrial and Inland Waters Protected Areas
- Marine Protected Areas
- Other effective area-based conservation measures

0
Total Other effective area-based conservation measures



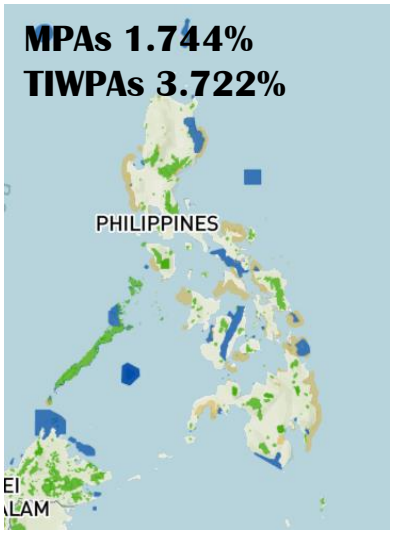
Philippines

273
Total Protected Areas

14 With management effectiveness evaluations

- Terrestrial and Inland Waters Protected Areas
- Marine Protected Areas
- Other effective area-based conservation measures

178
Total Other effective area-based conservation measures



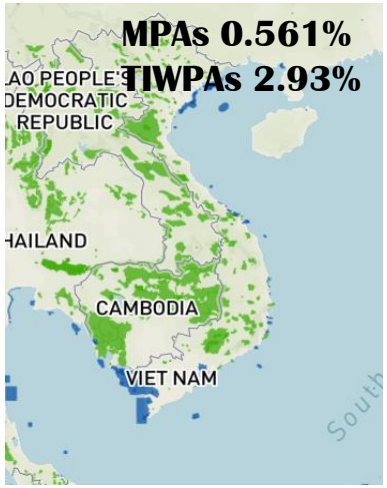
Viet Nam

209
Total Protected Areas

48 With management effectiveness evaluations

- Terrestrial and Inland Waters Protected Areas
- Marine Protected Areas
- Other effective area-based conservation measures

0
Total Other effective area-based conservation measures



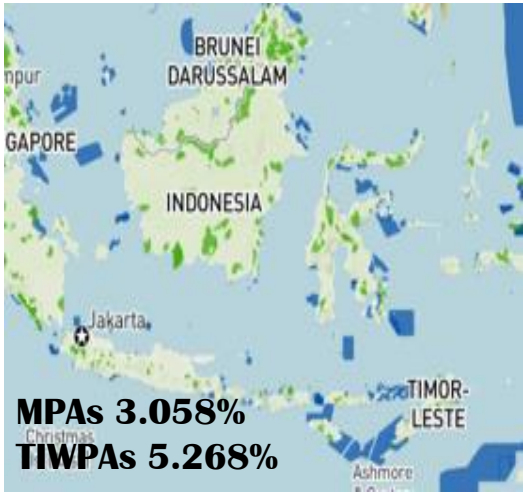
Indonesia

733
Total Protected Areas

254 With management effectiveness evaluations

- Terrestrial and Inland Waters Protected Areas
- Marine Protected Areas
- Other effective area-based conservation measures

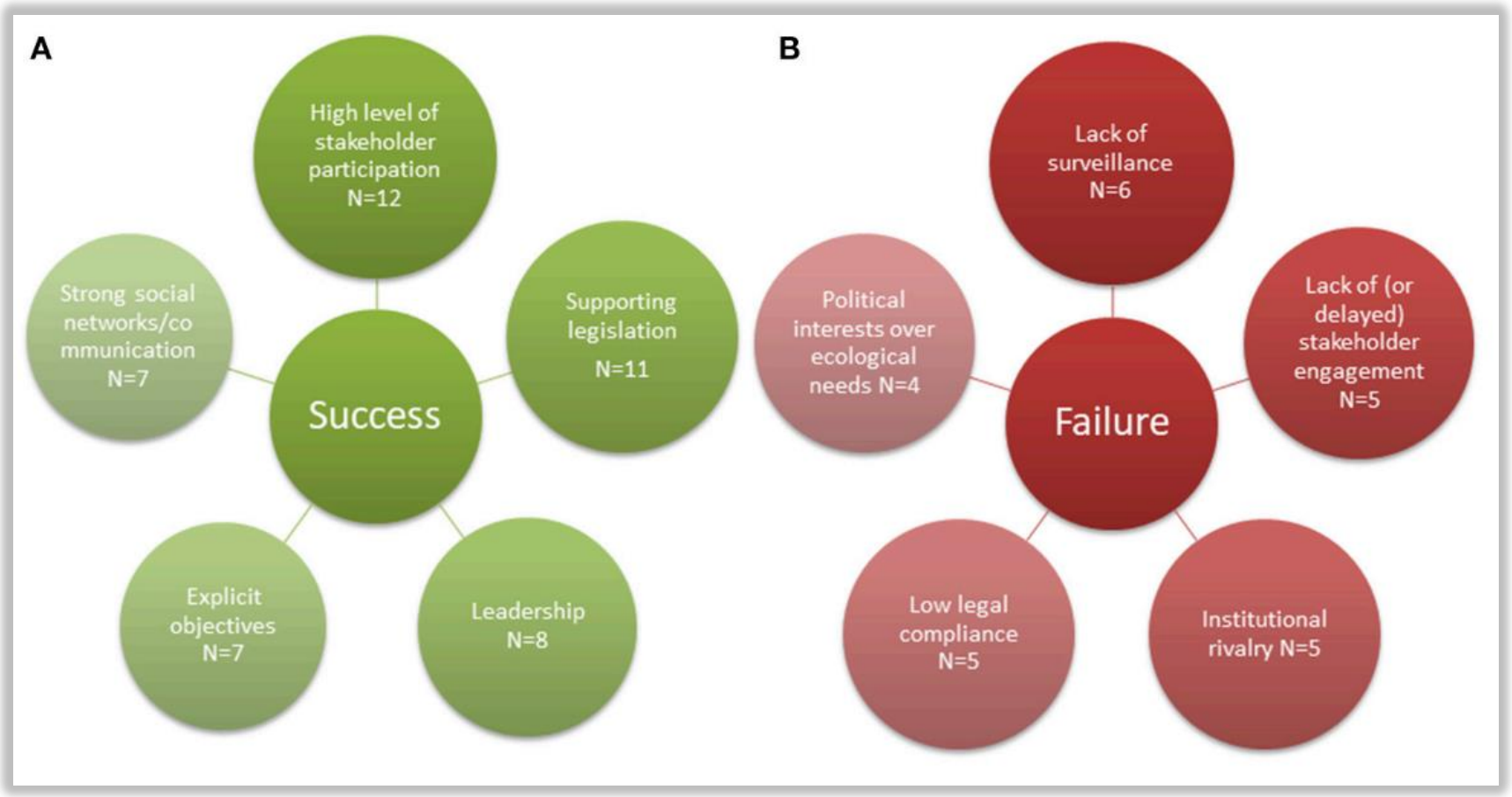
0
Total Other effective area-based conservation measures



UNEP-WCMC and IUCN (2024)
https://data.worldbank.org/country

MPAs Management Effectiveness

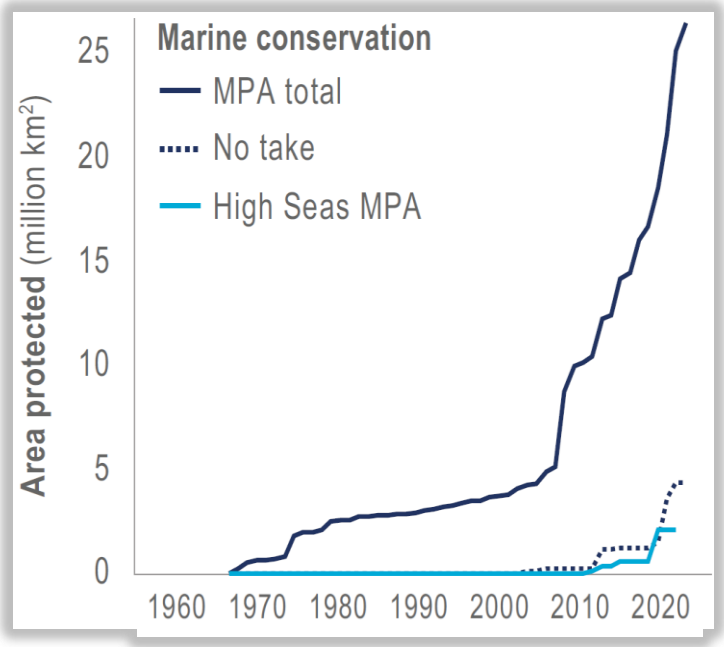
Top 5 factors of success and failure of MPAs



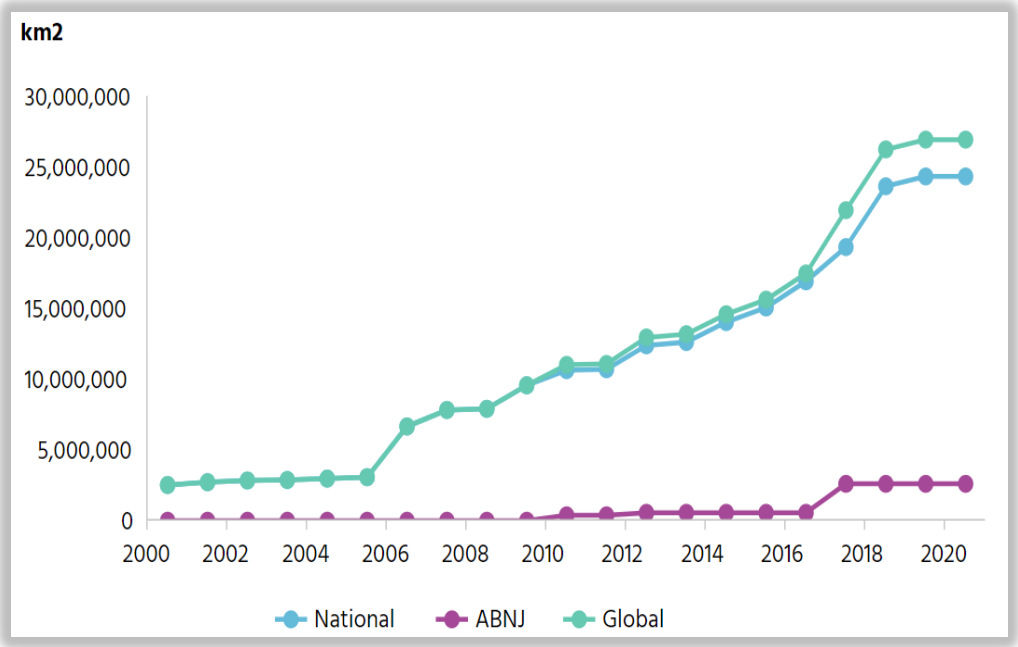
Giakoumi et al., 2018.

Global Society's Challenge

Long-term Trends of MPAs



Cooley et al., 2022, IPCC AR6 WGII

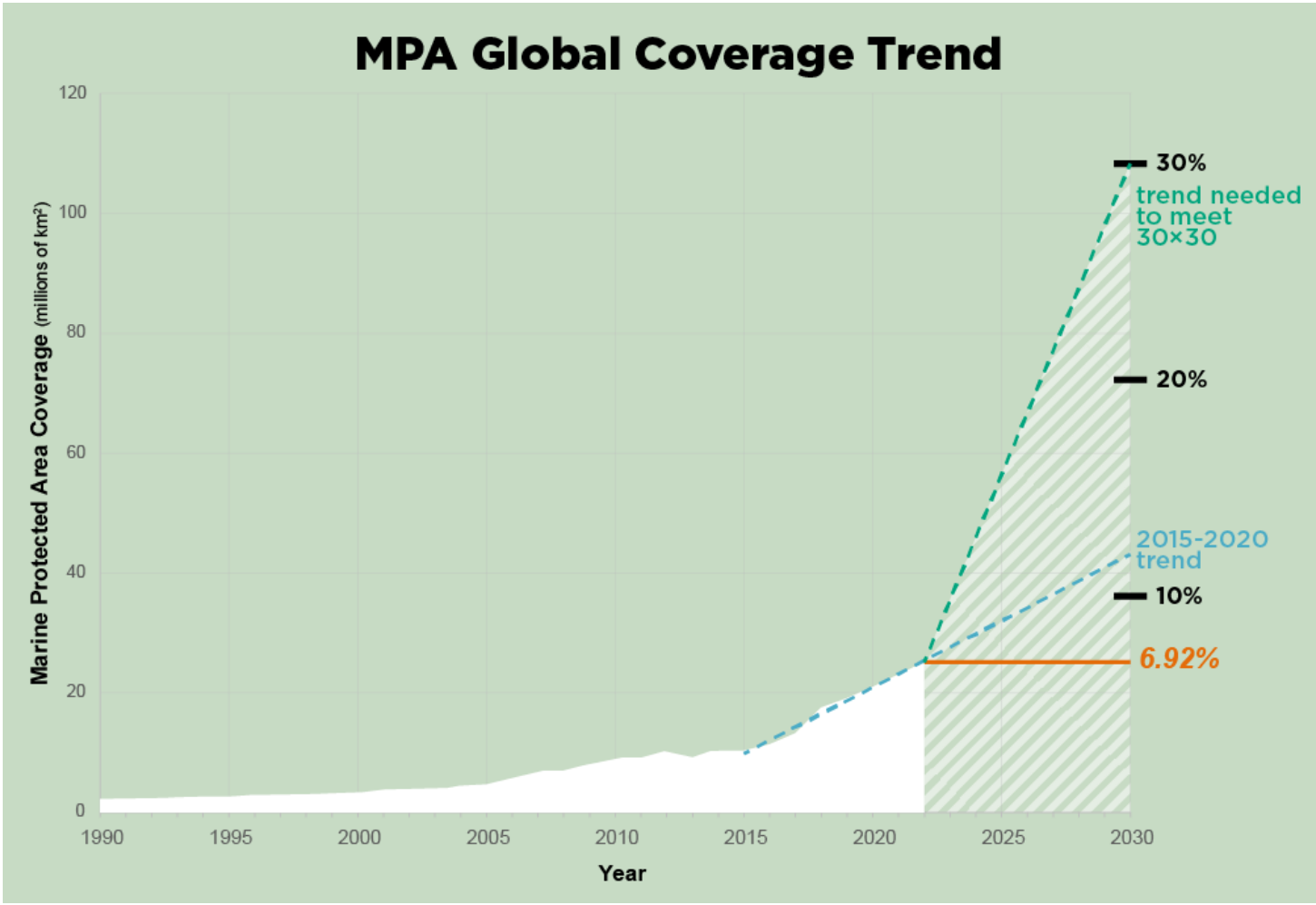


Growth in Marine Protected Area Coverage

https://www.protectedplanet.net/en/thematic-areas/marine-protected-areas

Global Society's Challenge

MPAs Projection



https://marine-conservation.org/on-the-tide/30x30_is_real_so_lets_protect_our_planet/

Ways forward

Transboundary Cooperation to address Twin-crisis

Coral Triangle
6 countries
1.2M ㎢

Wadden Sea
3 countries
UNESCO Site

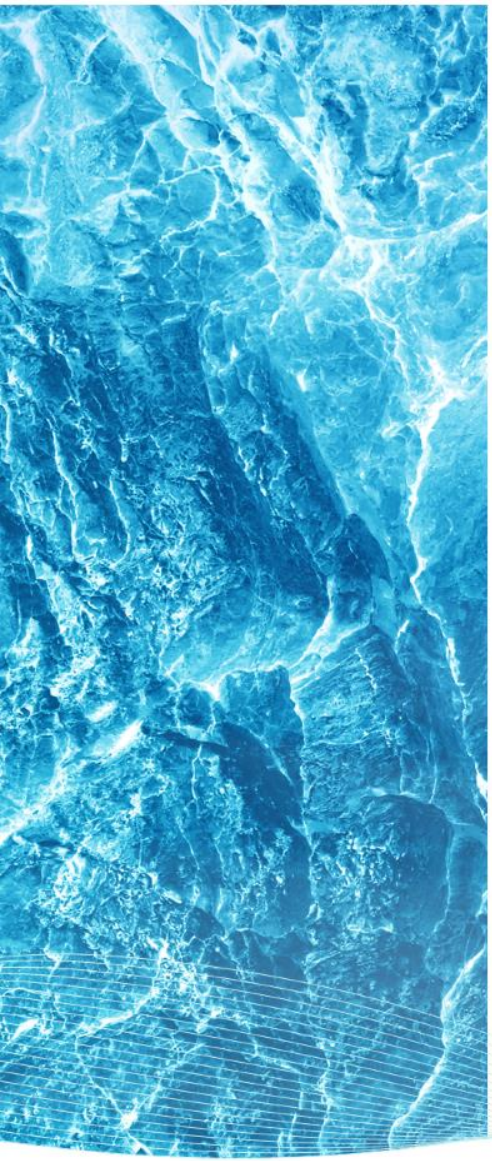
Pelagos
3 countries
87,000 ㎢

Red Sea
2 Countries
Peace Park

〈Success Factors〉

Clear Governance / Joint Monitoring / Data Sharing

Community Engagement/ International Support



Thank you

EAS CONGRESS2024 XIAMEN, CHINA 6-8 NOVEMBER

2024厦门国际海洋周 World Ocean Week in Xiamen

KMI 한국해양수산개발원 KOREA MARITIME INSTITUTE