



Decade Collaborative Centre for Coastal Resilience and the Ocean Decade

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2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development



UN Decade
Collaborative Centre
for COASTAL
RESILIENCE



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DEPARTMENT OF PHYSICS AND ASTRONOMY
"AUGUSTO RIGHI"



Regione Emilia-Romagna

The UN Decade of Ocean Science for Sustainable Development

THE OCEAN DECADE

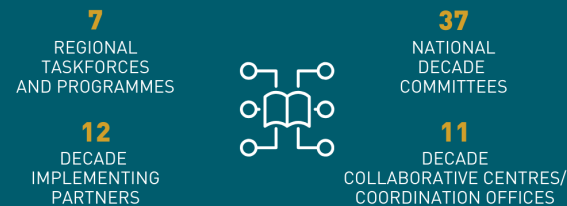
in a snapshot

As of September 2023

ENDORSED OCEAN DECADE ACTIONS



REGIONAL AND NATIONAL COORDINATION

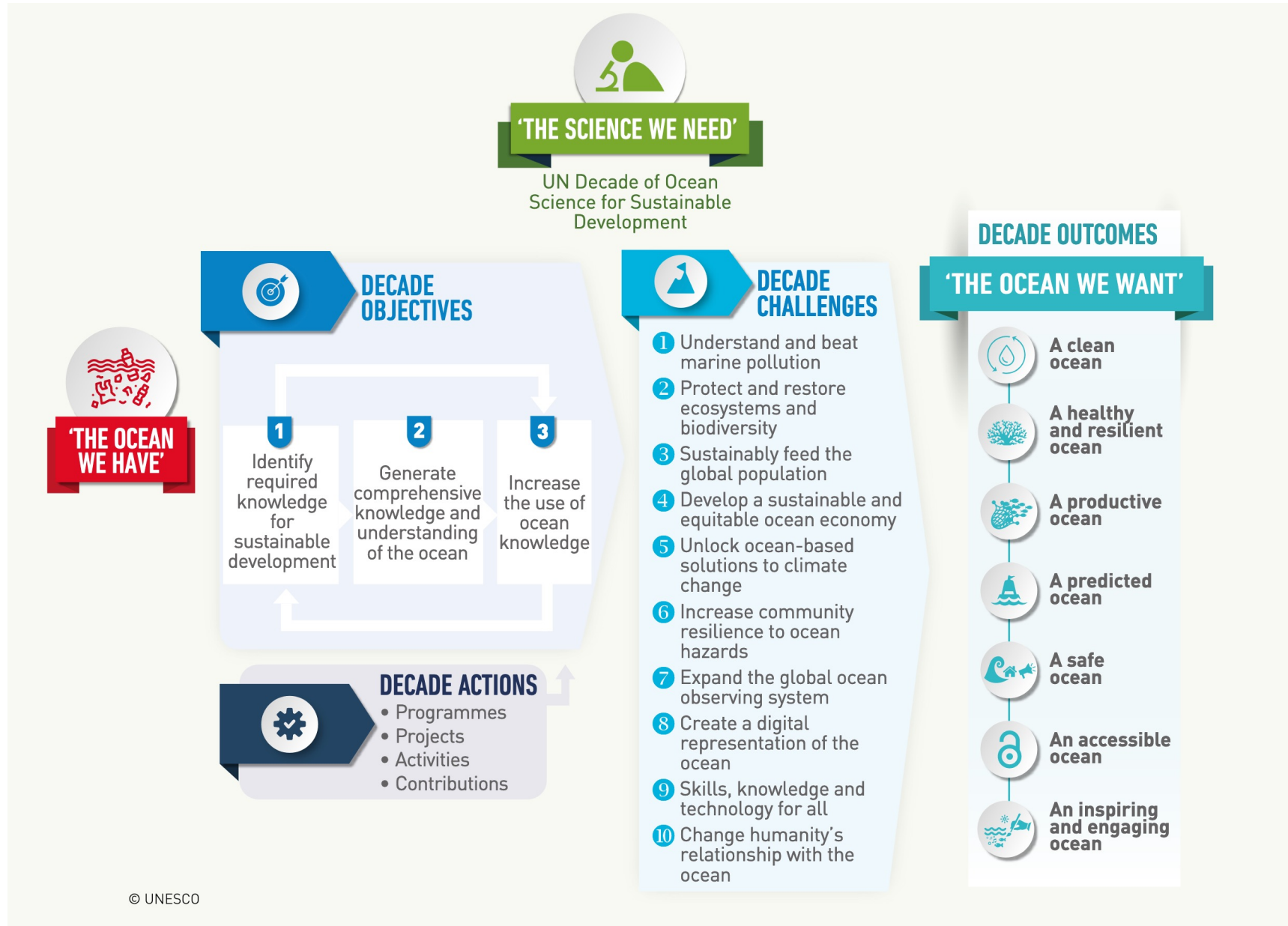


ENGAGEMENT AND OUTREACH

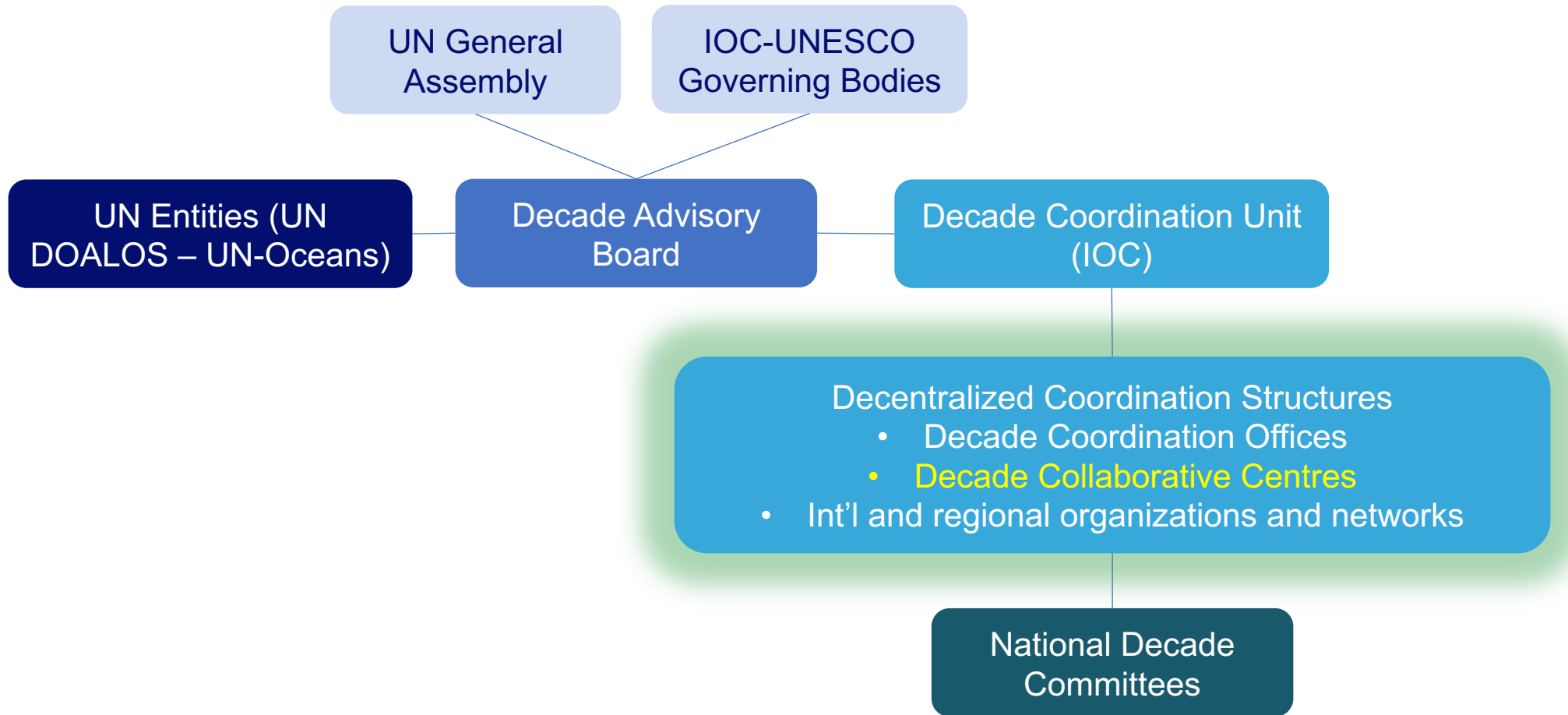


The UN Decade of Ocean Science for Sustainable Development (2021-2030) ('the Ocean Decade') is a **framework for scientists and stakeholders from diverse sectors** to develop the scientific knowledge and the partnerships needed to accelerate and harness advances in ocean science to achieve a better understanding of the ocean system, and **deliver science-based solutions.**

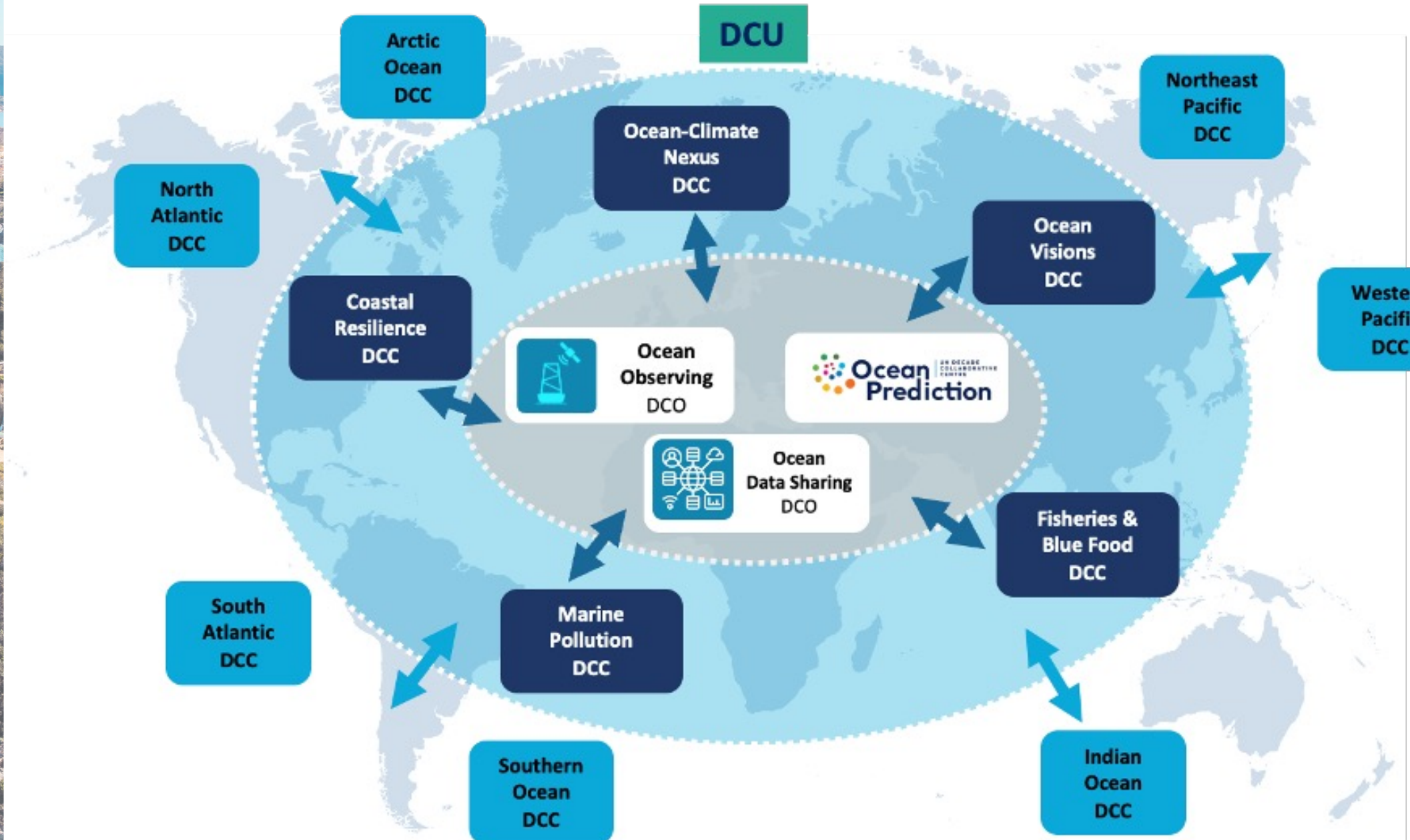
The UN Decade of Ocean Science for Sustainable Development



Decade governance and coordination framework



Decade Governance and coordination framework



GLOBALLY, during the 1900-2015 there have been:

121

EXTREME STORM SURGE EVENTS

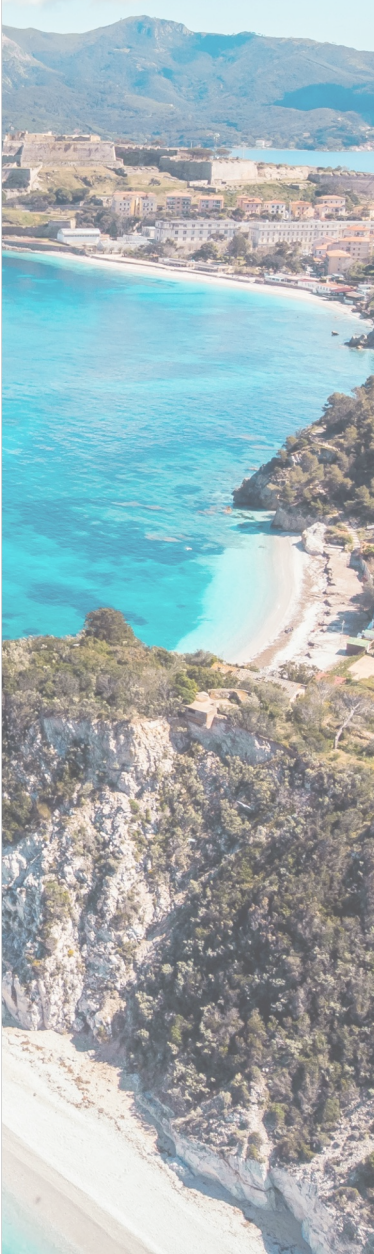
172 500 000

PEOPLE AFFECTED

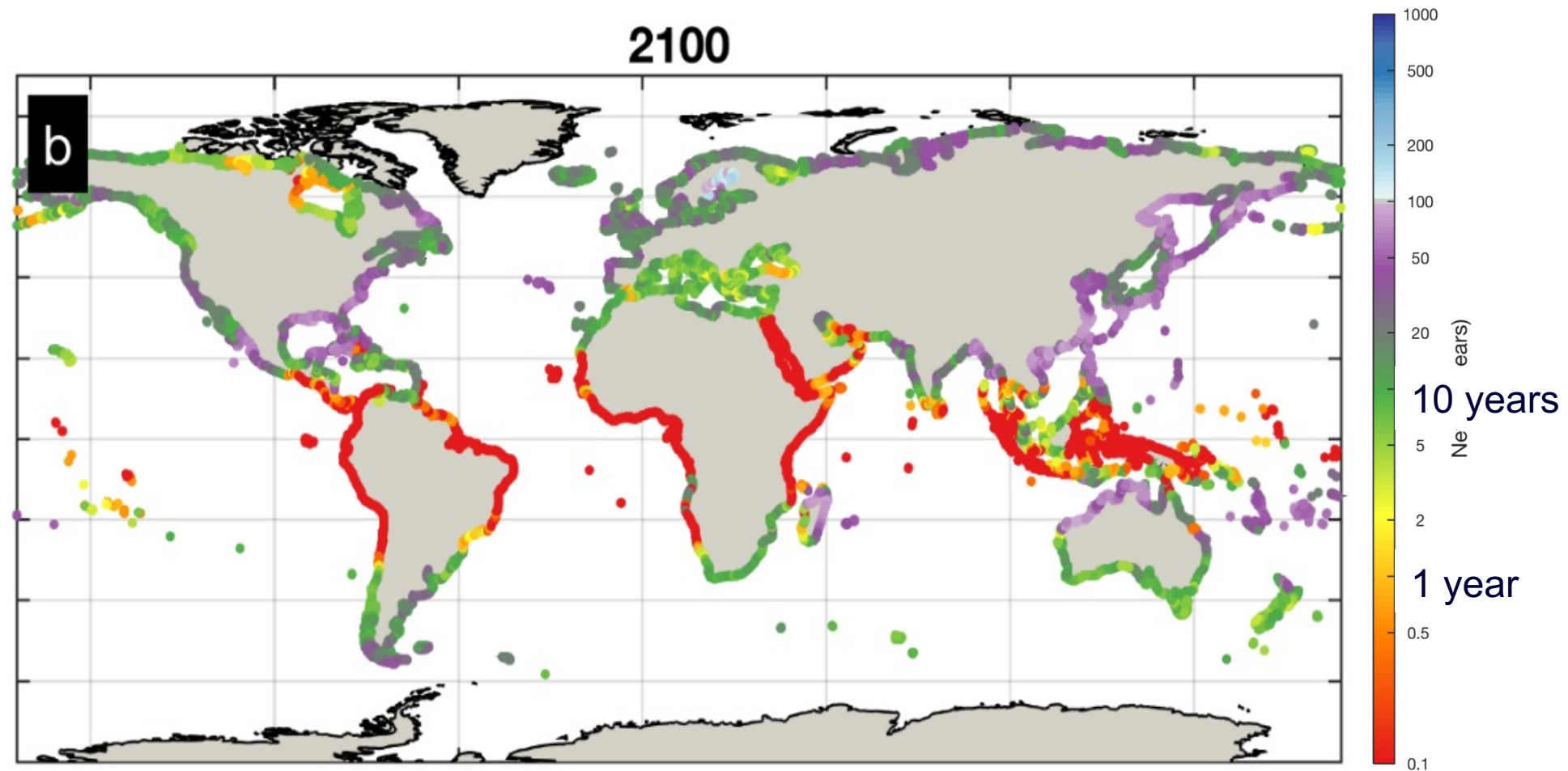
967 000

FATALITIES

FROM: L. M .Bouwer and S. N Jonkman 2018 Environ. Res. Lett. 13 014008



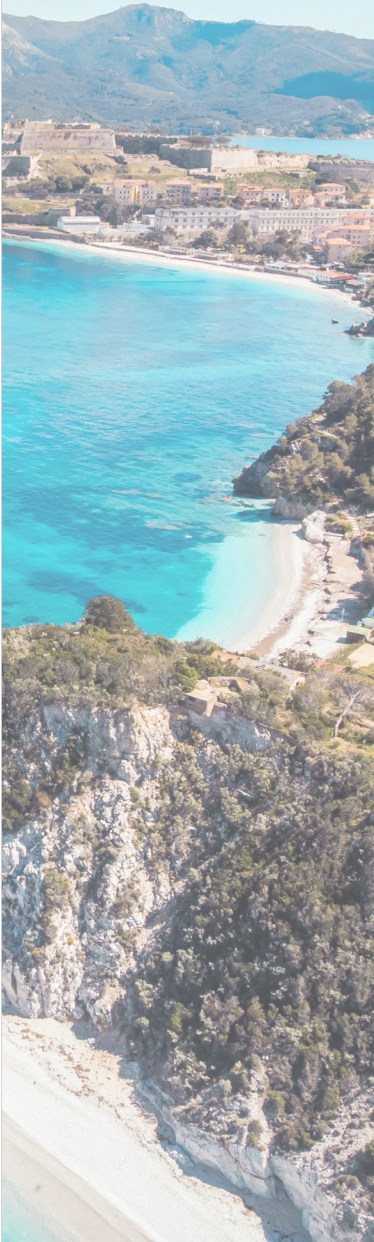
The future: how frequent will become the present 100 yr sea level extremes?



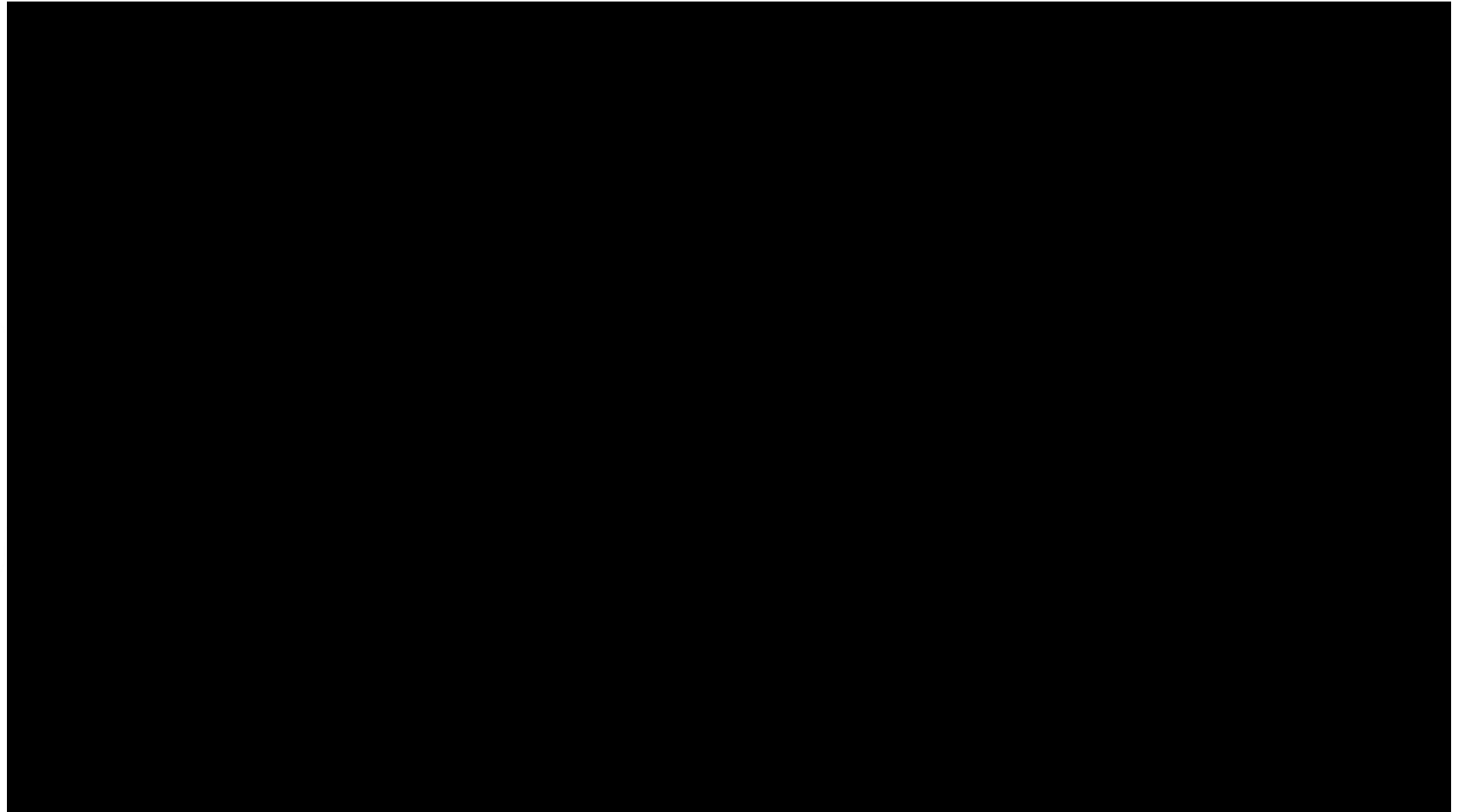
From: Vousdoukas et al., Nature communication, 2018

**HOW DO WE
PREPARE?**

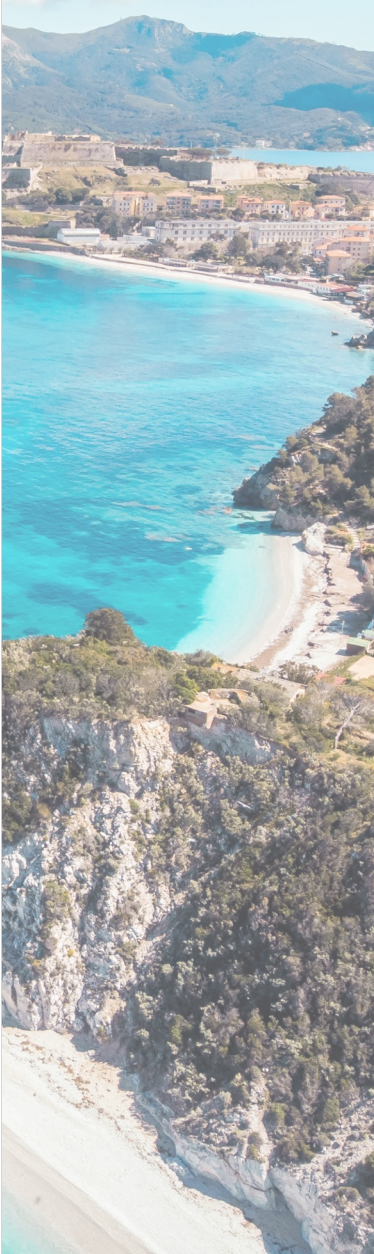




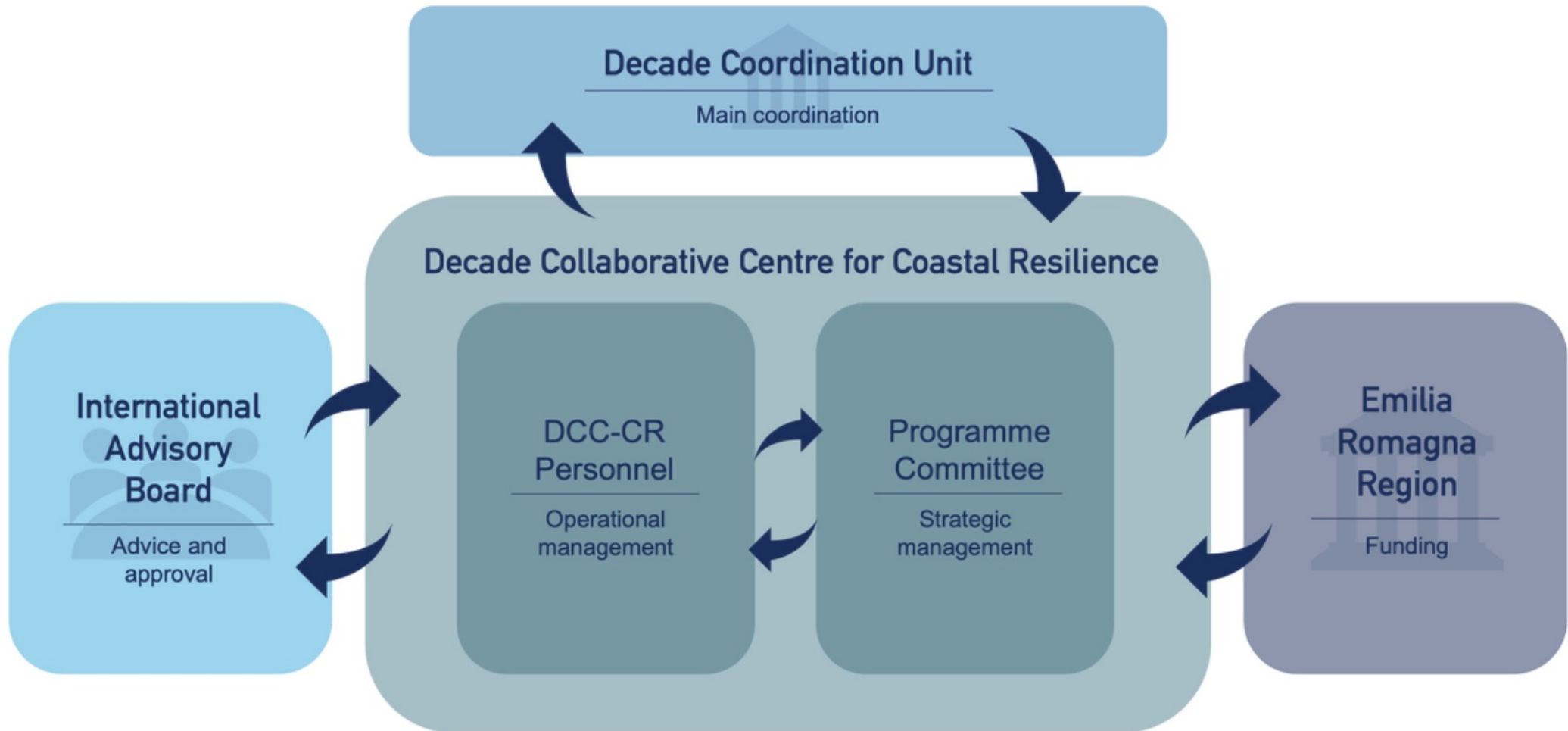
The Decade is developing the new science: high-fidelity coastal models

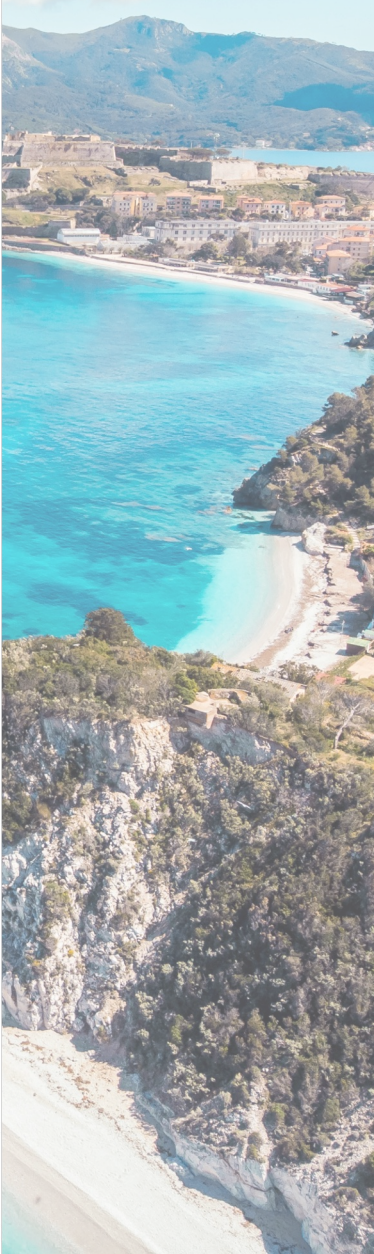


The main mission of the Decade Collaborative Center for Coastal Resilience is to **strengthen the connection** between the new science and technology developed in the Ocean Decade and coastal stakeholders, implementing innovative **co-design practices** for coastal resilience.



DCC-CR's governance





DCC-CR's Staff



Nadia Pinaridi
Director



Michela Marcatelli
Junior Programme
Specialist



Maria Anna Mancino
Administrative and
Secretarial Support



Chief Scientist
Andrea Valentini



Sara Pasqualetto
Senior Communication
Officer



Junior Assistant
To be announced



Programme expert
To be announced

DCC-CR Affiliated Decade Programmes

Global Estuaries Monitoring Programme

City University of Hong Kong

Ocean Cities Network

Institut de Ciències del Mar
(Spain)

MegaDelta Programme

East China Normal University

The Ocean Decade Tsunami Programme

IOC-UNESCO

Global Ocean Corps and Conveyor

University of Michigan (USA)

SciNMeet

Italian Oceanographic
Commission (COI)

SMARTNET

ICES/PICES (Denmark/USA)

CoastPredict

University of Bologna/CMCC

Ocean Biomolecular Observing Network

Partnership for Observation of
the Global Ocean (POGO)

Blue Climate Initiative

Blue Climate Initiative/Tetiaroa
Society

Global Ocean Oxygen Decade

GEOMAR (Germany)

SUPREME

NOAA (USA)

FishSCORE 2030

Gulf of Maine Research
Institute (USA)

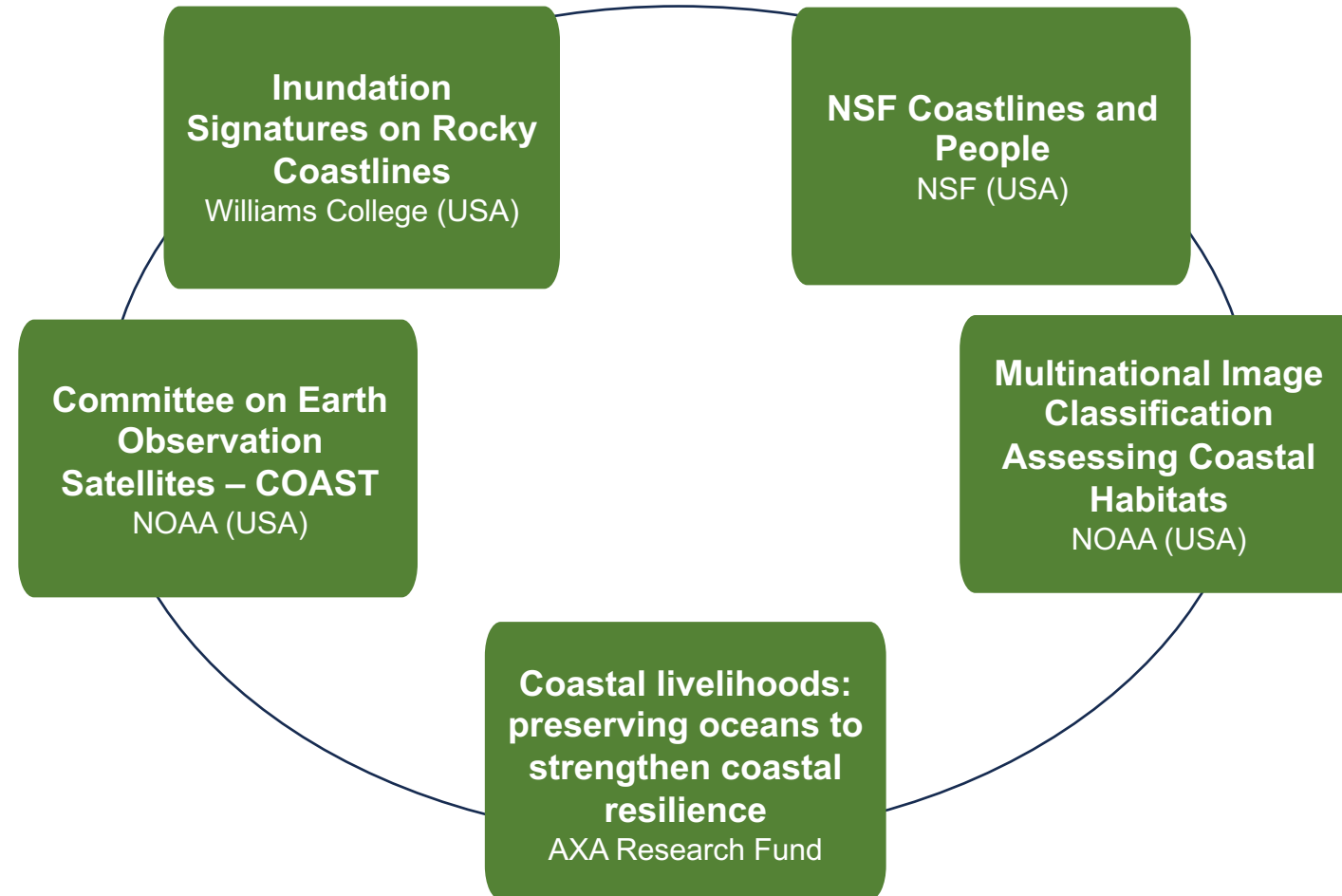
Global Ecosystem for Ocean Solutions

Ocean Visions and Future
Seas (USA)

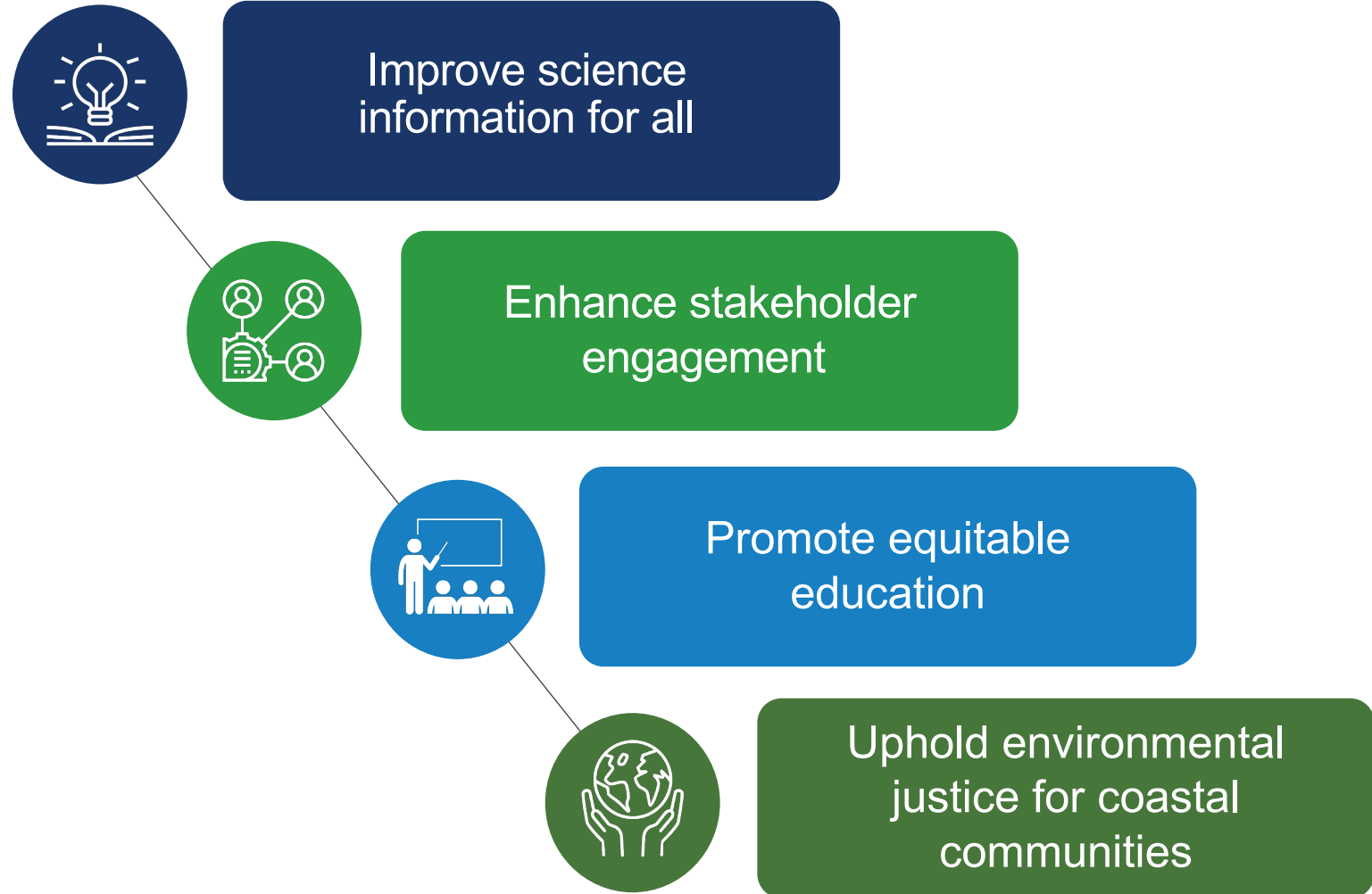
Observing Together: Meeting Stakeholder Needs and Making Every Observation Count

GOOS (UNESCO)

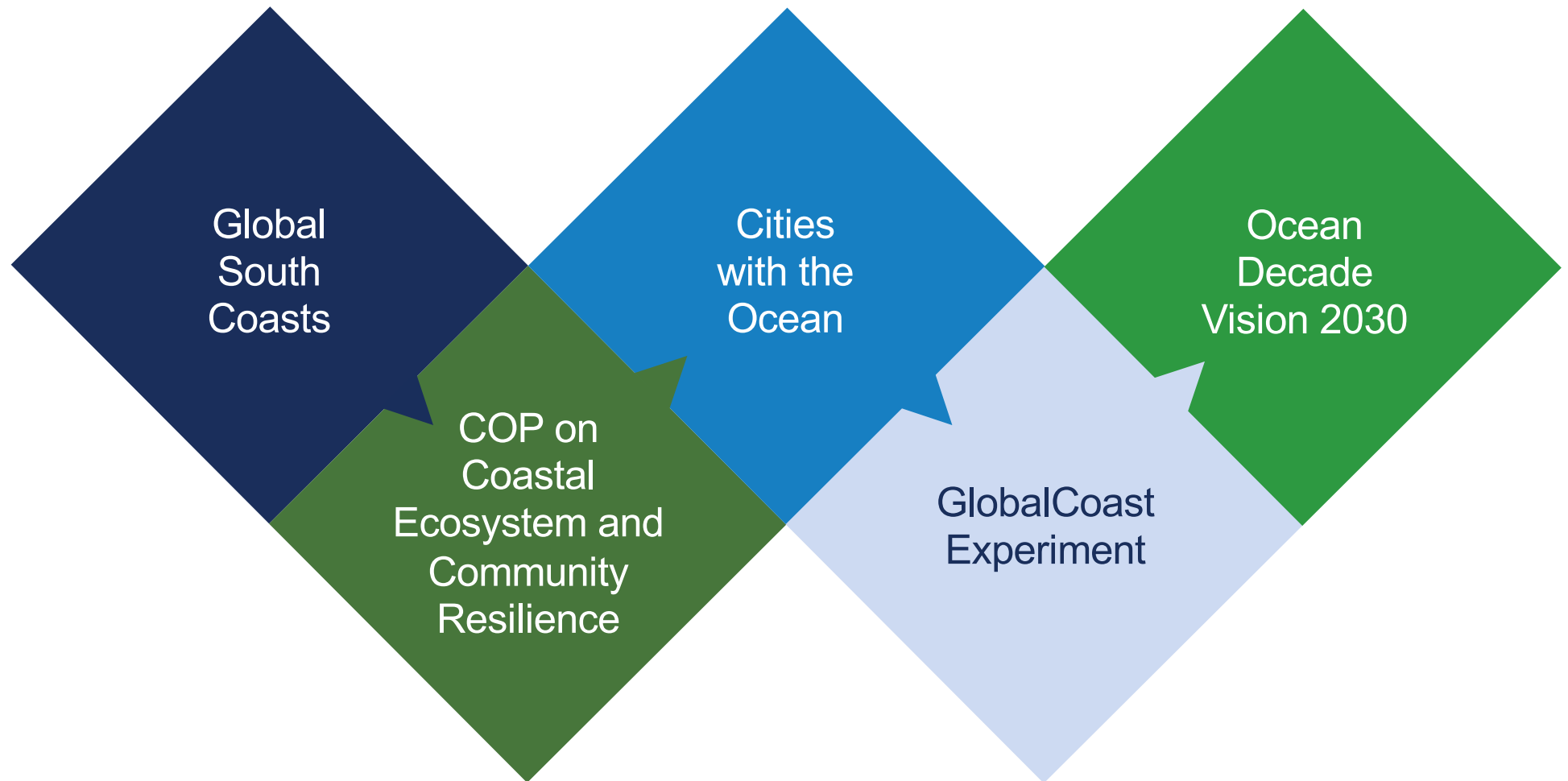
DCC-CR Affiliated Decade Contributions

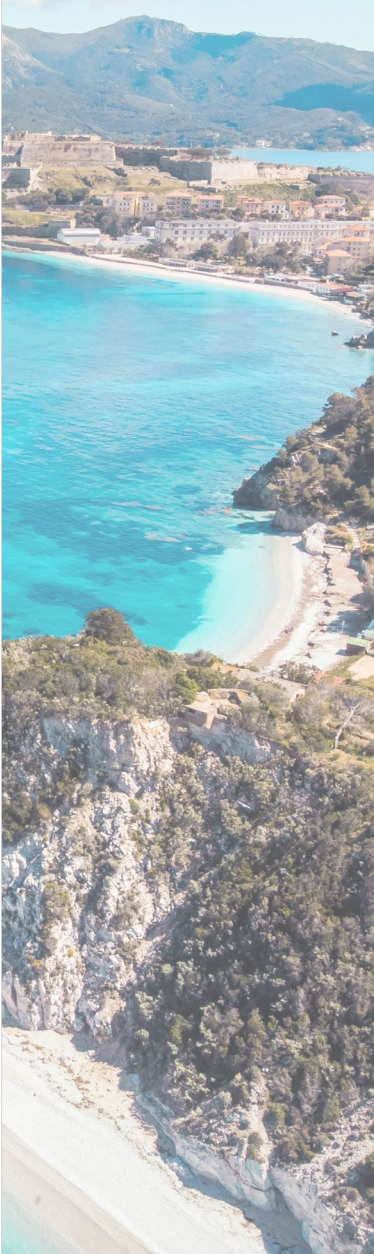


DCC-CR's Strategic Objectives – Timeframe 2023 - 2027



DCC-CR's Cross-cutting activities





DCC-CR Cross-cutting activities:

Cities with the Ocean – UN Ocean Decade Initiative

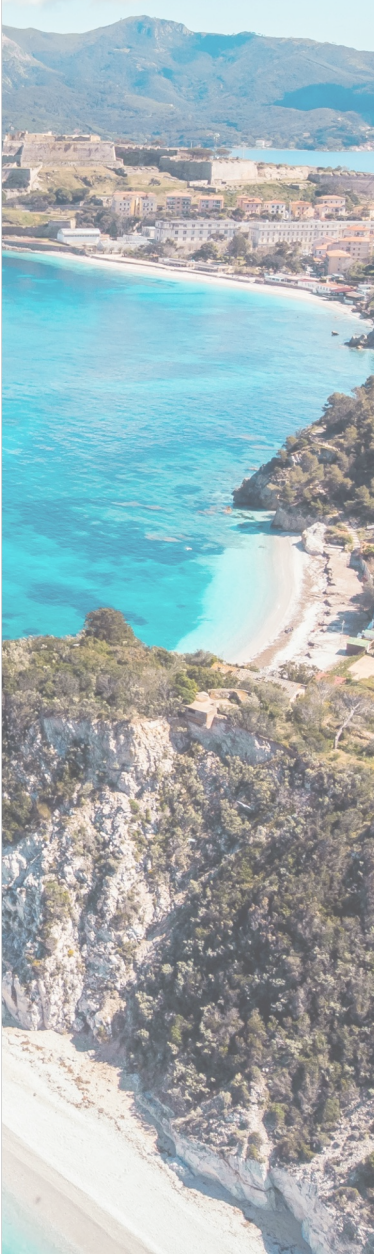
- Create a platform to connect coastal cities and Decade Actions, **assess their needs** and develop an **ocean science toolbox**



Town Hall @ Ocean Sciences

20 February 18-23, 2024

**organized by DCC-CR for Coastal Cities to meet with
the science community**



DCC-CR Cross-cutting activities:

Increase resilience to ocean hazards White paper

Outcome 1: Design 'people-centred' multi-hazard early warning systems

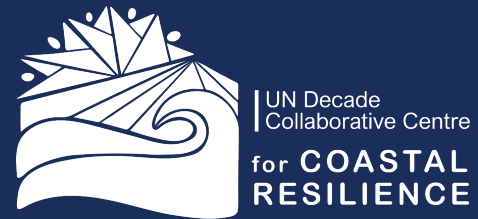
Characteristics:

- Stakeholder engagement
- Responsibility sharing
- Accessible communication
- Institutional capacity building

GOAL:
**A safe ocean
where life and
livelihoods are
protected
from ocean-
related
hazards**

Outcome 2: Design adaptation planning strategies to increase coastal resilience

Use the new data from the Ocean Decade to prepare updated plans and solutions, also in view of the Marine Spatial Planning process



<https://centri.unibo.it/dcc-cr/en>

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The Decade Collaborative Centre for Coastal Resilience is a departmental centre of the University of Bologna and it is funded by the Emilia-Romagna Region.



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