

“Geospatial and the World Environment Situation Room:  
Environmental Data and Knowledge for Peace Development  
and Humanitarian Action”

**Status Data Strategy and WESR  
Road Map 2022-2025**

**UNOOSA – COPUOS 2021**  
30 August 2021 – Technical Presentation

**UN**   
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1972-2022

# Where we are coming from and where we are Now

# Data Strategy and WESR

## Transformation Pathways

Transformational Pathway I: Integrating Data and Knowledge, 'Acting as One' across UNEP

Transformational Pathway II: A Digital Transformation Platform, through Impact and a 'One Global Partnership'



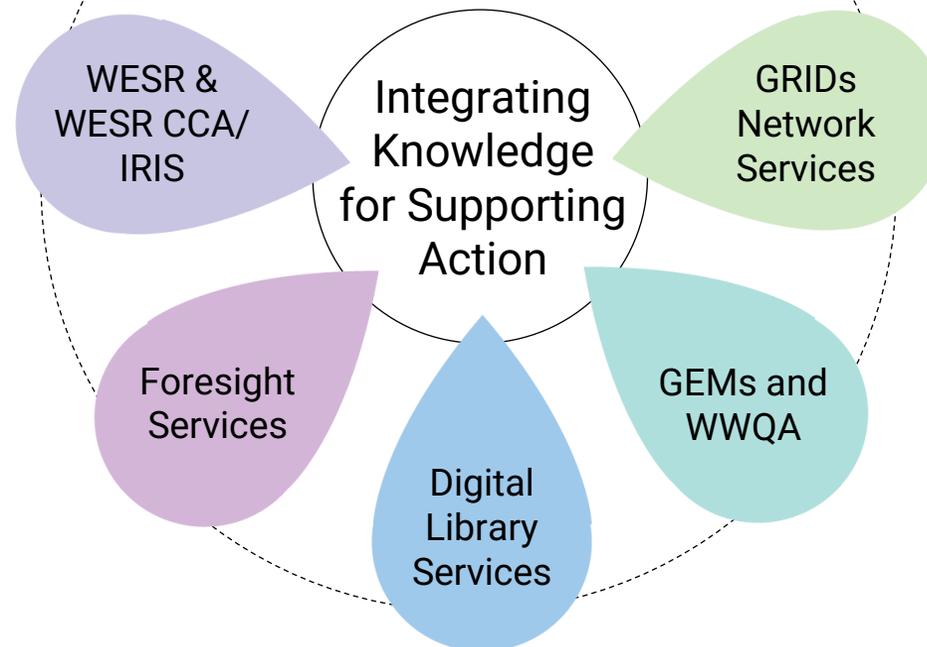
## Target Audience and Stakeholders

- Policy Makers
- Scientific Community
- International Organizations
- Business and Innovators
- Citizens and Civil Society

## ENVIRONMENTAL DATA FOR OUR FUTURE

### Key Lessons Learnt from the PAST

- Lack of needed level of Leadership
- Unrealistic Expectations
- A Centralized Approach to Data
- Lack of Sustainable Funding
- No *Scalability* without Partnerships



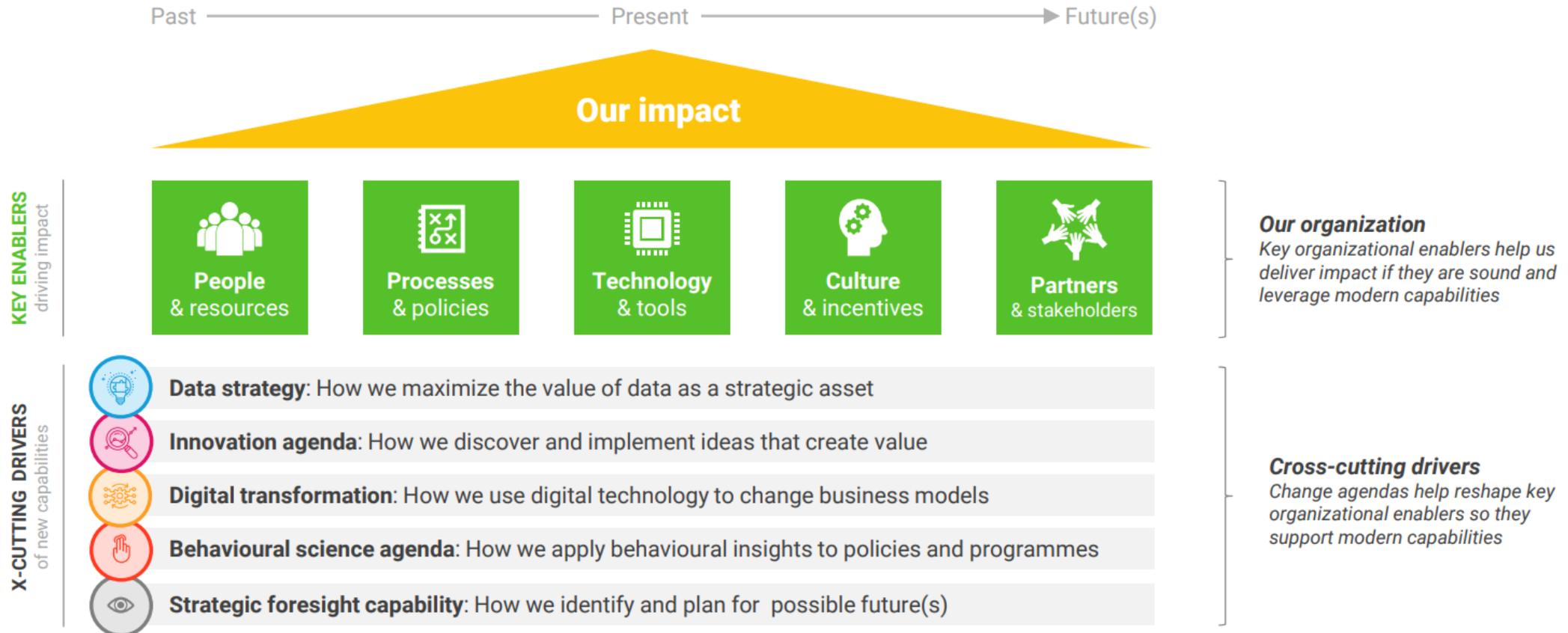
 **Integration**

 **Impact**

 **Partnership**

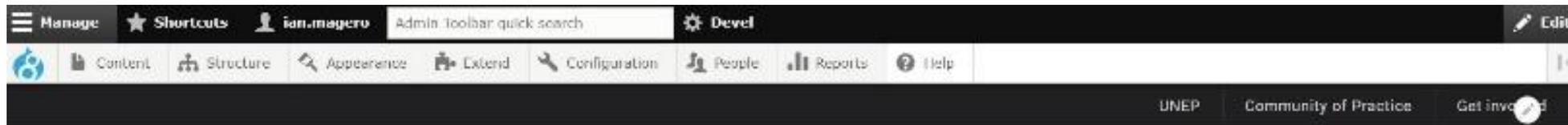
# Bringing Data, Innovation and Digital Transformation TOGETHER Data Strategy and WESR

## Cross-cutting agendas to build the capabilities of a 'next-generation UN'

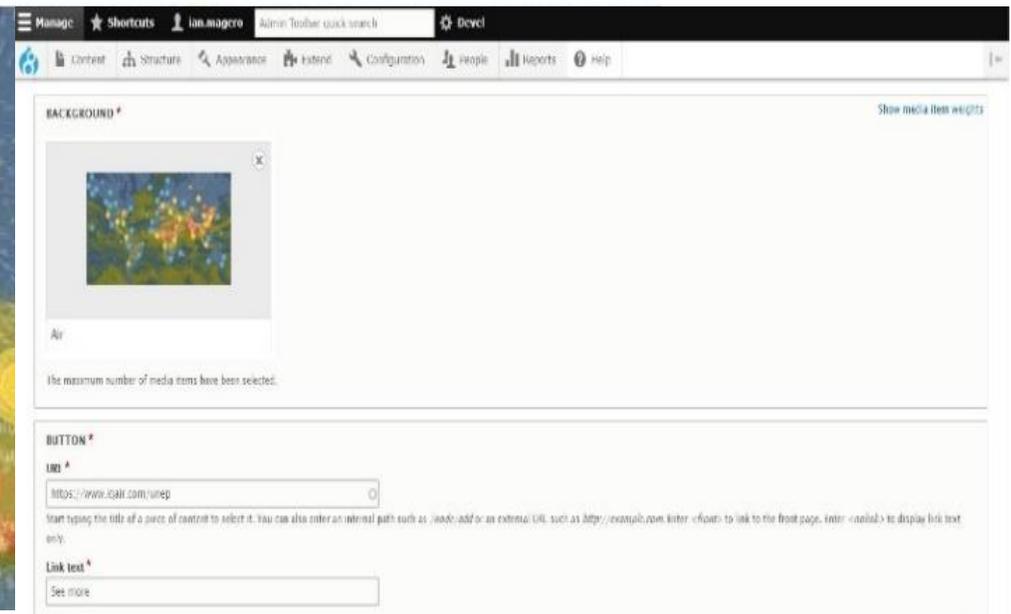




# Integration: New Design and Content Management System (CMS) (fully aligned with MTS 2022-2025 Priorities) – Awaiting OICT security clearance



## World Environment Situation Room



A custom WESR CMS Page Edit: Will allow data managers access to their pages in WESR

**Integration:** More than 15 Demonstration projects  
(Across Divisions, Regional Offices and MEAs)

Impact and Demonstration Projects

Project	Key Leadership
WESR CCA	Across UNEP, all Regional Offices and Policy Division, GRIDs, Yale University
InforMEA	MEAs and Law and Governance Division
SCP-HAT	Economy Division, TRP and 10YFP Network
Biodiversity	Ecosystems, WCMC, GRD, IUCN, CBD, JRC
Ozone	MEA Secretariat Ozone
Climate Change	Ecosystems Division, GRID-Geneva
3 Cities in Africa	Regional Office for Africa, GRID-Geneva, Yale University
Hotspots Atlas	GRID=Sioux Falls, GRID-Geneva
Illegal Killing Elephants	CITES and MIKE Team and EAD AGEDI Abu Dhabi
Oceans	GRID-Arendal, Science Division, UNESCO
Water	GEMs and World Water Quality Alliance, Ecosystems Division
Pollution	Economy Division
33 Countries Fiches	GRID Geneva
SDGs and Statistics	Science Division
Knowledge Repository	Science Division
Air Quality Monitoring	Science Division
Foresight	Science Division, IPCC, IRP, IPBES, and UN CEB-HLCP Foresight Network
UNEP and Copernicus	GRID-Geneva, EC, ESA, Copernicus
Blueprint Geospatial Hub	UN Geospatial Network UN-GCIM



## Integration: Content Managers make Available Contents and Services (CMS) (ACTING AS ONE Across UNEP)

Conceptual Framework for the Development of a Global Environmental Data Strategy

### VII. Our Roadmap for Implementation - Intelligent Dashboard of Services

Intelligent Dashboard of Services



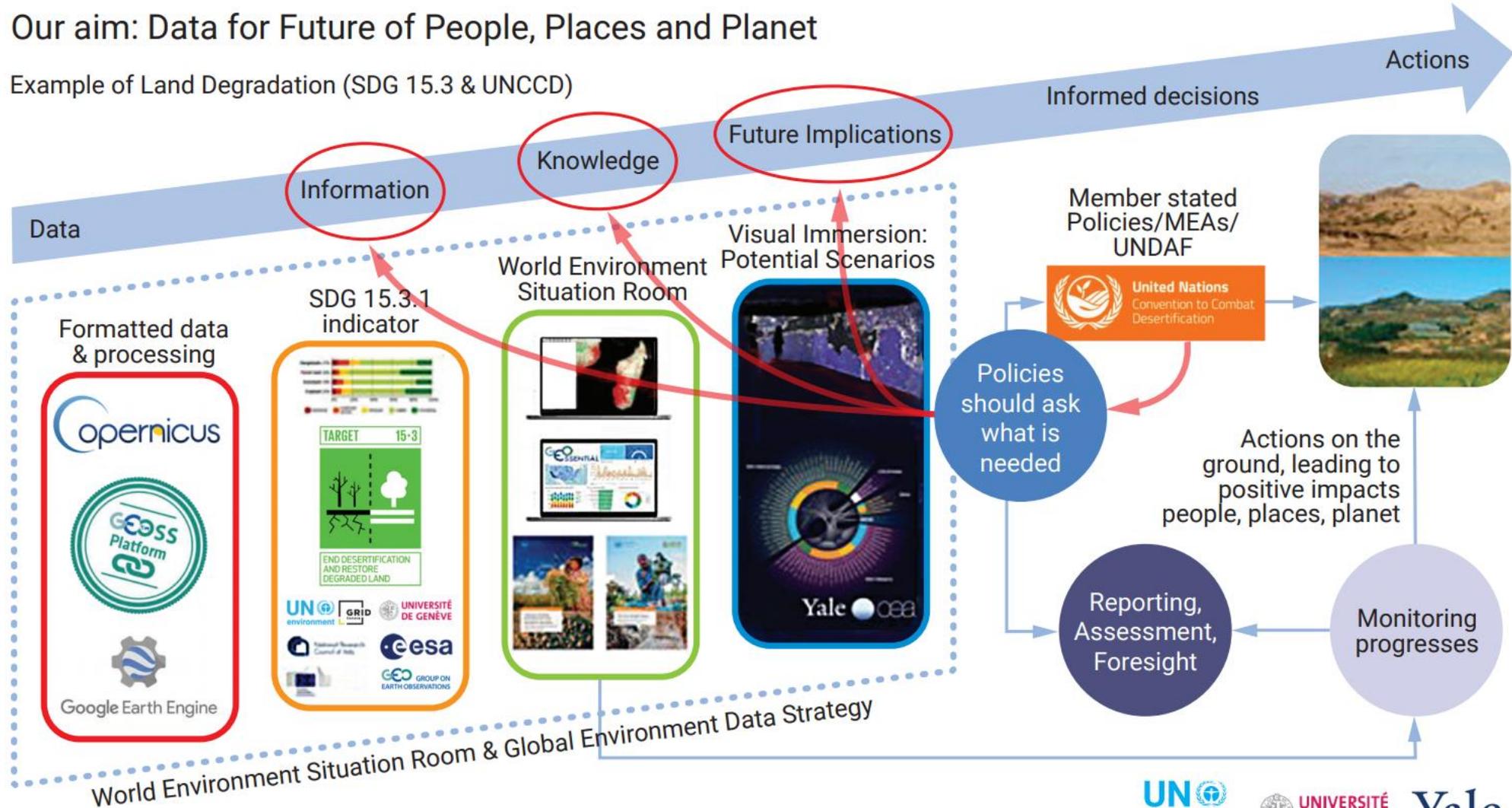
### Roles and Responsibilities of Content and Service Managers, across UNEP, Divisions, Regional Offices and MEAs)

Commitment and themes	Responsible staff	Entity	e-mail
1. General structure, overall coordination	Pascal Peduzzi	Science Division, Big Data Branch	pascal.peduzzi@unep.org
2. Technical implementation	Magda Binsada	Science Division, Big Data Branch	binsada@unep.org
3. Homepage (www.unep.org)	Josephine Mule (Science Division)	Science Division, Big Data Branch	josephine.mule@unep.org
4. Integration in unep.org	Pooja Mandil	Communication Division	pooja.mandil@unep.org
5. Integration of UNEP.org in WESR	Josephine Mule (Science Division)	Science Division, Big Data Branch	josephine.mule@unep.org
6. General promotion (web stories, social media, press releases, etc.)	Nancy Groves	Communication Division	ngroves@unep.org
<b>Base of content</b>			
10. Statistics	Ludgerde Coppens	Science Division, Capacity Development and Innovation Branch	ludgerde.coppens@unep.org
11. Global Monitoring	Hartwig Kremer (Science Division)	Science Division, Big Data Branch	hartwig.kremer@unep.org
12. Foresight and Early Warning	Sandor Friglit (Science Division)	Science Division, Big Data Branch	sandor.friglit@unep.org
13. Assessments	Edoardo Zandi	Chief, Scientific Assessments Branch - Science Division	edoardo.zandi@unep.org
14. Multilateral Environmental Agreements	Eva Duer	Law Division, Info/MEA	eva.duer@unep.org
15. Digital Library	Angeline Djampou	Science Division, Big Data Branch	angeline.djampou@unep.org
16.			
17. <b>Themer</b>			
18.			hartwig.kremer@unep.org
19.			sonya.smaoun@unep.org
20. Air quality	Helena Molin-Valdes + Hartwig Kremer + Sonya Smaoun	Economy Division / Science Division	helenamolinvaldes@unep.org
21. Biodiversity & Ecosystems	Coré Pretorius	WCMC, Ecosystems Division	Core.Pretorius@unep-verm.org
22. Resilience	Alex Oleson-Birny	Ecosystems Division, Biodiversity unit	alex.oleson@unep.org
23. Chemical and waste	Tessa Goverse	Economy Division, Resilience to Disasters & Conflict Implementation	goverse@unep.org
24. Climate Change	Niklas Hageberg	Ecosystems Division	Niklas.Hageberg@unep.org
25. Conflicts	David Jensen	Crisis Management Branch	david.jensen@unep.org

## ➔ **Impact:** Intelligent Environmental Data to Support Decision-Making and Action

Our aim: Data for Future of People, Places and Planet

Example of Land Degradation (SDG 15.3 & UNCCD)

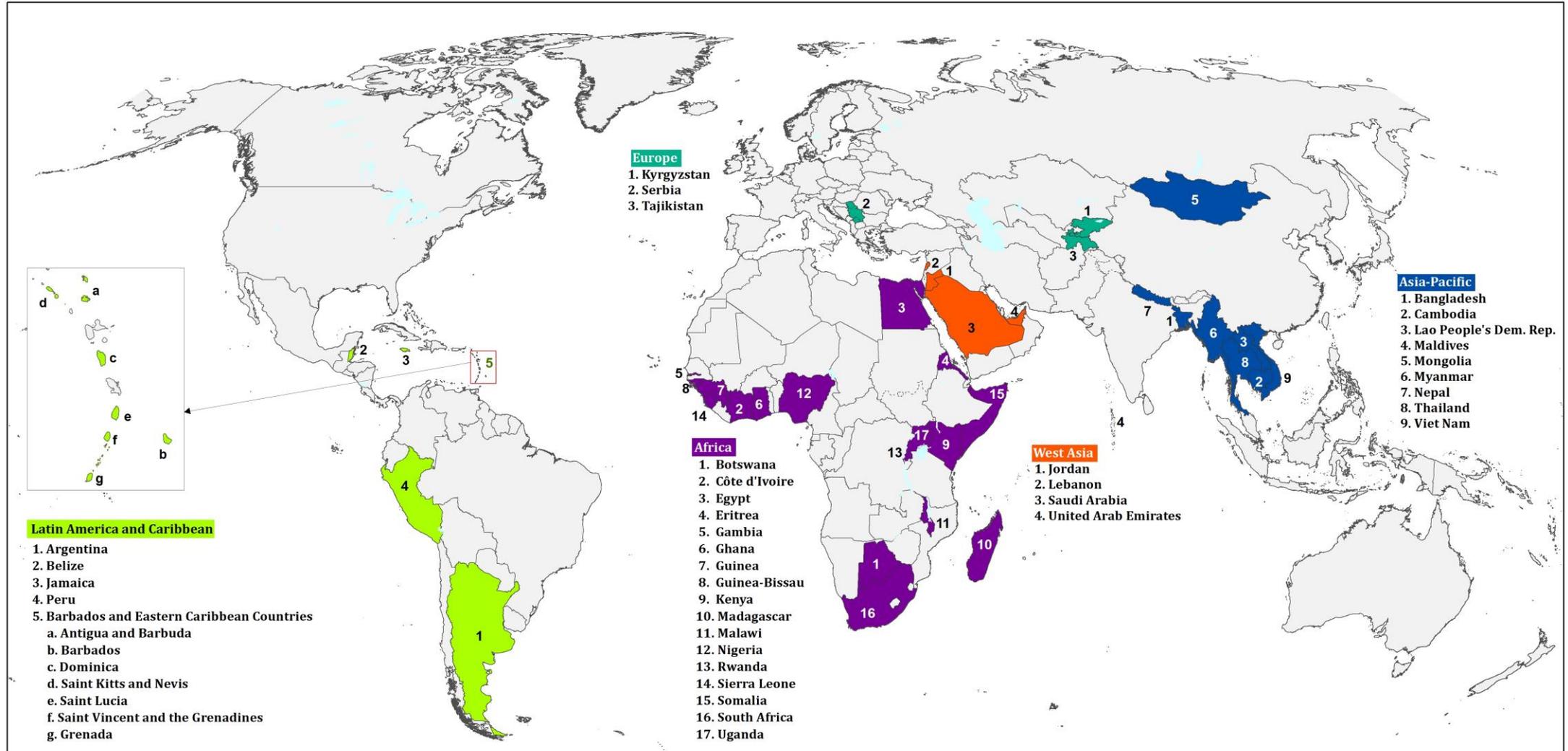


World Environment Situation Room & Global Environment Data Strategy

# ENVIRONMENTAL DATA FOR OUR FUTURE

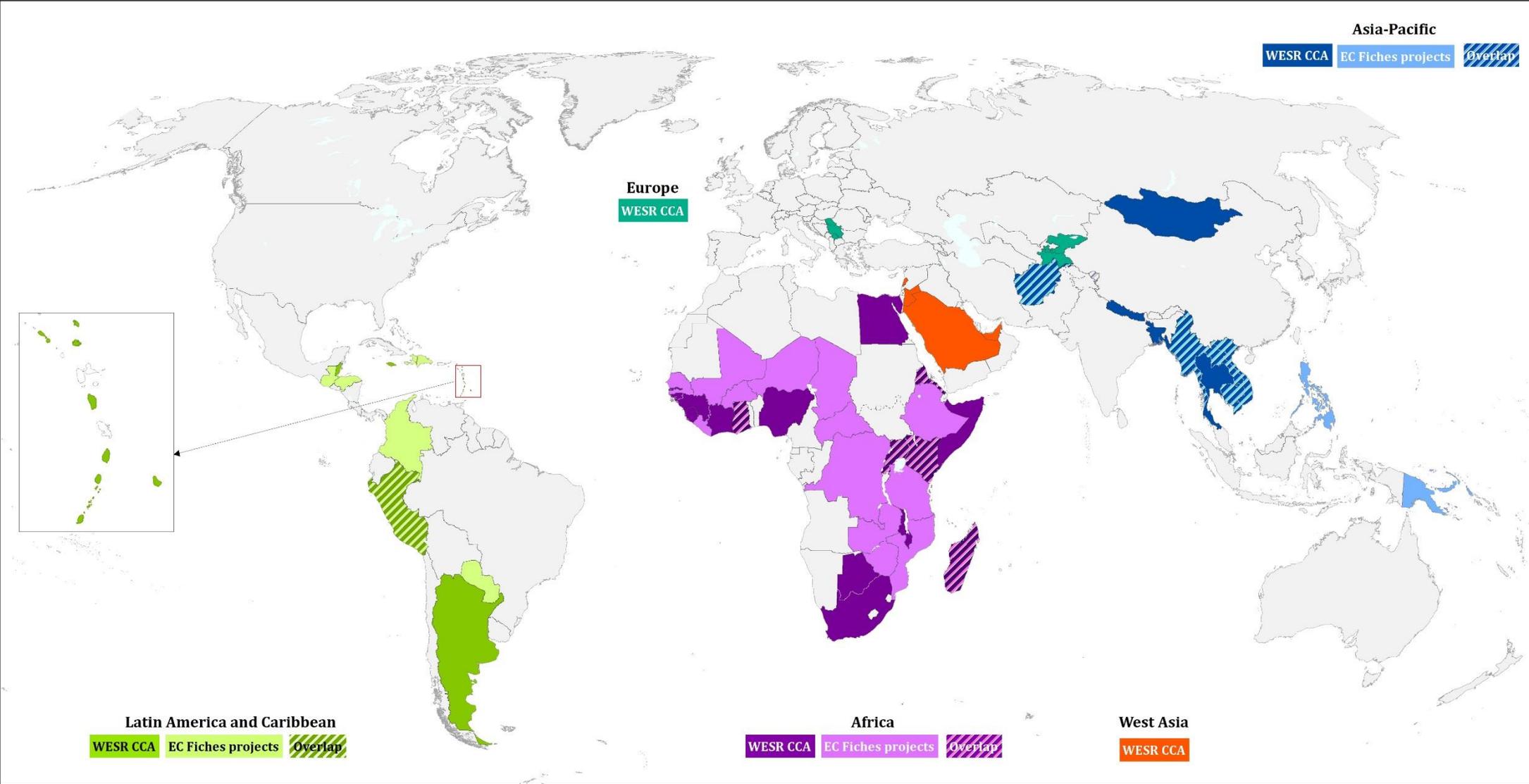
## Impact: 30 countries CCA – UN Reform - Interoperability with 5 UN Regional Economic Commissions

WESR CCA Countries – Implementation in 2021



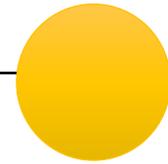
# Impact: CCA and UN Reform and 33 Country Fiches Joint Impact

WESR CCA and EC Country Fiches projects' Countries

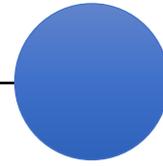


# Where we want to Go

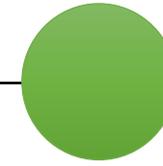
# Deliverables for 2021, 2023, 2025 and 2030



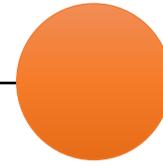
2021



2023



2025



2030

## Contents and Services

Global Environmental Data Strategy	<ul style="list-style-type: none"> <li>• Progress Report: UNEA-5</li> <li>• Pathway I: Integration Completed</li> <li>• Pathway II: Partnerships in Progress</li> </ul>	<ul style="list-style-type: none"> <li>• Progress Report: UNEA-6</li> <li>• Pathway I and II: Integration and Partnership Complete</li> </ul>	<ul style="list-style-type: none"> <li>• Final Report: UNEA-7</li> <li>• Global Environmental Data Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation Environmental Data Strategy</li> <li>• Towards achieving Agenda 2030 and SDGs</li> </ul>
WESR and WESR CCA/IRIS	<ul style="list-style-type: none"> <li>• WESR CCA Interoperability with Economic Commissions implemented and functional</li> <li>• Security and infrastructure set-up of WESR assured</li> </ul>	<ul style="list-style-type: none"> <li>• Design and Content Management System of WESR implemented across all UNEP themes</li> <li>• WESR CCA implemented across 5 Regions in selected countries</li> </ul>	<ul style="list-style-type: none"> <li>• WESR fully integrated with UNEP MTS 2022- 2025.</li> <li>• WESR CCA implemented globally and visible in all Regional Collaborative Platforms and Issue-Based Coalitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Seamless data streaming and analytics in WESR.</li> <li>• WESR an integral part of global UN data infrastructure.</li> </ul>
Foresight Services	<ul style="list-style-type: none"> <li>• Emerging issues highlighted in Foresight Briefs</li> <li>• Foresight demonstration projects commence</li> </ul>	<ul style="list-style-type: none"> <li>• Foresight processes developed in UNEP</li> <li>• Established Foresight Briefs</li> <li>• Portfolio of foresight demonstration projects</li> </ul>	<ul style="list-style-type: none"> <li>• Foresight processes mainstreamed in UNEP</li> <li>• WESR includes a future looking process</li> </ul>	<ul style="list-style-type: none"> <li>• Realtime foresight systems analysis of emerging issues &amp; highlighting responsive policy actions</li> <li>• Foresight process is fully integrated into the strategic planning &amp; prioritization of UNEP</li> </ul>

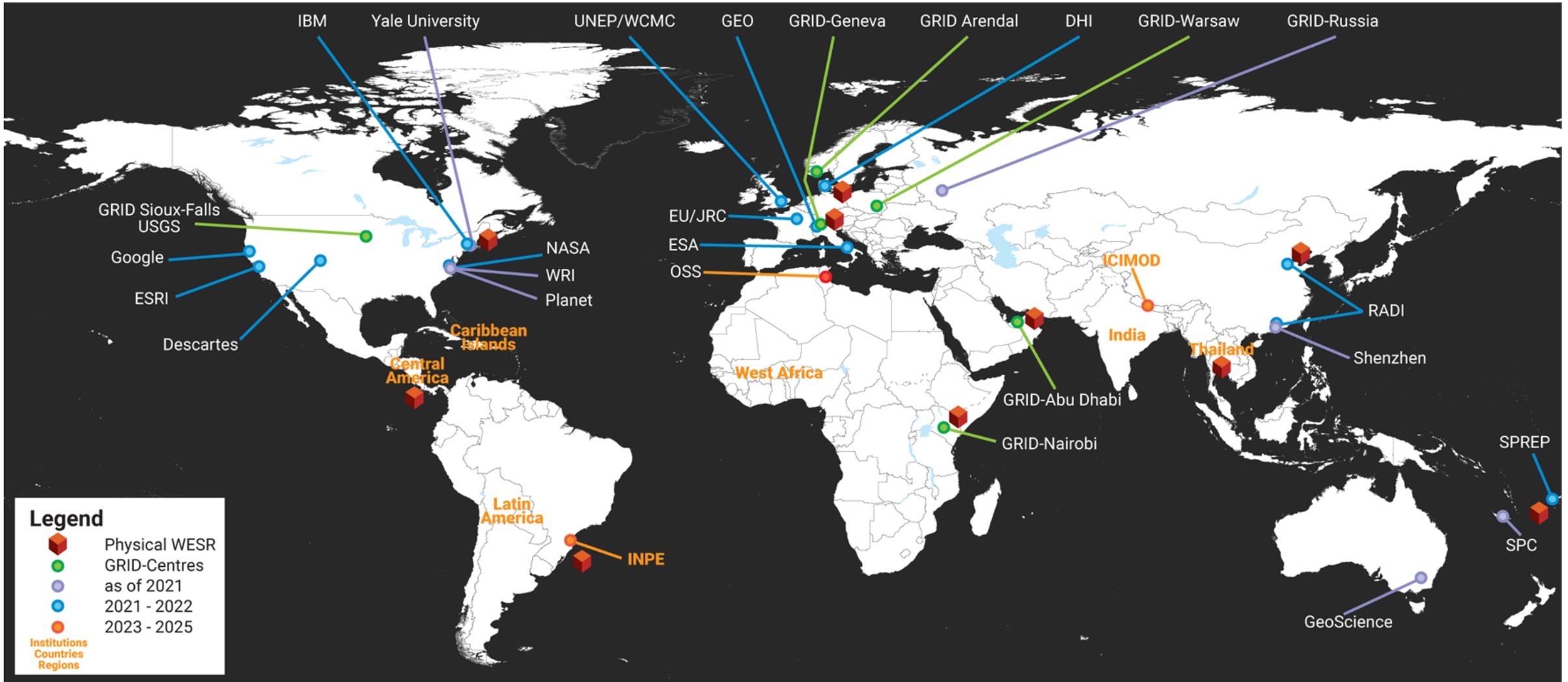
# Where we want to Go

# Deliverables for 2021, 2023, 2025 and 2030



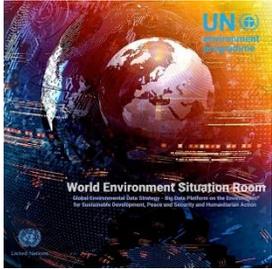
GEMs and WWQA	<ul style="list-style-type: none"> <li>GEMS/Water delivers data in WESR and SDG 632</li> <li>GEMS/Oceans and Air partner on data for MTS</li> <li>WWQA updates WWQ-Assessment and runs 13 funded and non-funded workstreams</li> </ul>	<ul style="list-style-type: none"> <li>GEMS/WWQA capacity development consortium;</li> <li>WWQ-Assessment incl. scenarios in UNEA 6</li> <li>WWQA informs Water Decade conference</li> <li>Water/Air/Oceans in MTS</li> </ul>	<ul style="list-style-type: none"> <li>GEMS build on country, earth observation and modelling data in digital transformation</li> <li>WWQA process will be in 2<sup>nd</sup> phase - accelerates SDG 6 and periodic WQ update</li> </ul>	<ul style="list-style-type: none"> <li>GEMS to achieve global regional national data coverage and time series</li> <li>Capacity building consortium standards taken up nationally</li> <li>WWQA informs solutions and products for long term operational application</li> </ul>
Digital Library Services	<ul style="list-style-type: none"> <li>Fully integrated into WESR with easy search and visualization</li> </ul>	<ul style="list-style-type: none"> <li>OARE is a key value asset for 100 developing countries</li> </ul>	<ul style="list-style-type: none"> <li>ResearchforLife is a key value asset for 100 developing countries</li> </ul>	<ul style="list-style-type: none"> <li>UNEP digital library as a key resource for UN Data Strategy</li> </ul>
GRIDs Network Services (Advanced Geospatial and Data Analysis)	<ul style="list-style-type: none"> <li>Catalog of Services of 7 GRID centers fully available</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of GRID centers to include 3 more from the South (1 in Brazil, 2 in Asia and Pacific)</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of GRID centers to include 3 more from the South (1 in LAC, 1 in India and 1 in the Pacific)</li> </ul>	<ul style="list-style-type: none"> <li>UNEP GRiD network services as a key resource for UN Data Strategy</li> </ul>

**Partnership:** 24 *One Global Partnership* partners in place for WESR

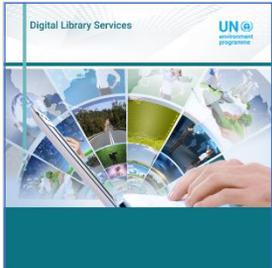


# Where we want to Go

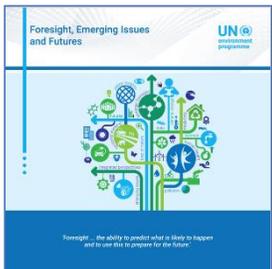
# Communication and Outreach



Big Data and the World Environment Situation Room: Harnessing Big Data on the Environment for Sustainable Development and Humanitarian Action - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35894/BDWESR.pdf>



Digital Library Services - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35859/UNEPLib.pdf>



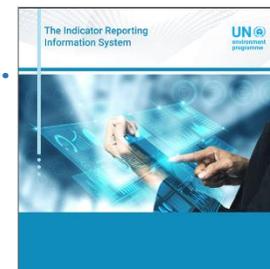
Foresight, Emerging Issues and Futures – <https://wedocs.unep.org/bitstream/handle/20.500.11822/35878/FSB.pdf>



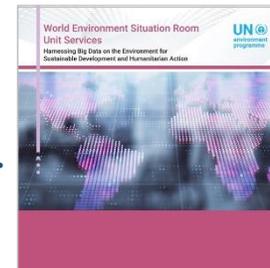
Global Environment Monitoring System Services & World Water Quality Alliance: Freshwater, Air and Ocean - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35879/GEMS.pdf>



World Environment Situation Room: Global Environmental Data Strategy - Big Data Platform on the Environment for Sustainable Development, Peace and Security and Humanitarian Action - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35186/WESRBDB.pdf>



The Indicator Reporting Information System - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35880/IRIS.pdf>



GRIDs Network Services: UNEP Environmental Data Centres in support to Environmental Governance and Policies - <https://wedocs.unep.org/bitstream/handle/20.500.11822/35898/GRID.pdf>

# Where we want to Go

# Delivery to the MTS 2022-2025

Science-Policy

**Science-Policy**  
as a foundation

Knowledge

Contribute to climate stability by providing meaningful scientific information

Environmental Governance

Leverage digital transformations

Nature

**Digital Transformation**  
as an enabler

Digital transformations

Make living in harmony with nature a reality

Environment Data Gap

Information

*Digitizing scientific knowledge*

Data

*Closing the environmental data gap*

Take us towards a pollution-free planet

Science

Put science at the Centre of sound environmental governance.

Information

Ensure that sound science supports finance and economic transformations

Pollution-free

Finance and economic transformations

# Where we want to go

## Readiness Implementation 2021

Activities to be accomplished (GEDS/WESR)	Timeline
1. Approval by the DGG of the Concept Data Strategy to be submitted for approval of SMT for follow-up consultation with member States and other external entities and stakeholders.	December 2021
2. Impacts on the Ground in Countries and Support to UN Reform (WESR CCA) - 30 Countries  (Including an updated global map of combined impact of WESR CCA/33 Country Fiches, in all regions and countries)	December 2021
3. The Interoperability of WESR with UN Regional Economic Commissions (UN Reform Knowledge Hubs) and UNDCO	October 2021
4. Implementation of EC Interactive Country Fiches – Data for Action through evidenced based decision-making: 33 Countries	November 2021
5. Integration into the WESR of Digital Library Services, Strategic Foresight activities and GEMs	September 2021
6. Integration into the WESR of 15 Demonstration Projects across MEAs, Divisions and Regional Offices	December 2021
7. New Designs for WESR Thematic Landing Pages and Implementation of new WESR - Content Management System	September 2021
8. Completion of 3 Workshops for Co-Design of WESR and alignment with MTS 2022-2025	September 2021
9. To conduct to 2 Workshop Meetings with existing Donors and Members States funding GEDS/WESR for strategic reflection on strengthening the financial basis.	December 2021

## Delivery to the MTS 2022-2025

**Actions/Activities to be completed by end of 2021.**

**The Table on the left provides a list of Readiness Activities for the GEDS and WESR to be completed before end of 2021.**

In the last quarter of every year, the Secretariat of the DGG will provide for discussion and approval of the DGG, an **Annual Work Plan for GEDS/WESR** and the report of activities of the current year.



**Thank You!**

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