

D. Science for Policy and Action

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A. Background: Envisaged Impact and Strategic Coherence

Objective

Policy-Making and stakeholder actions are guided by environmental data and information



Envisaged Impact

National, regional and international policies are aligned with, and management practice is acting on "What the (Environmental) Science Says"



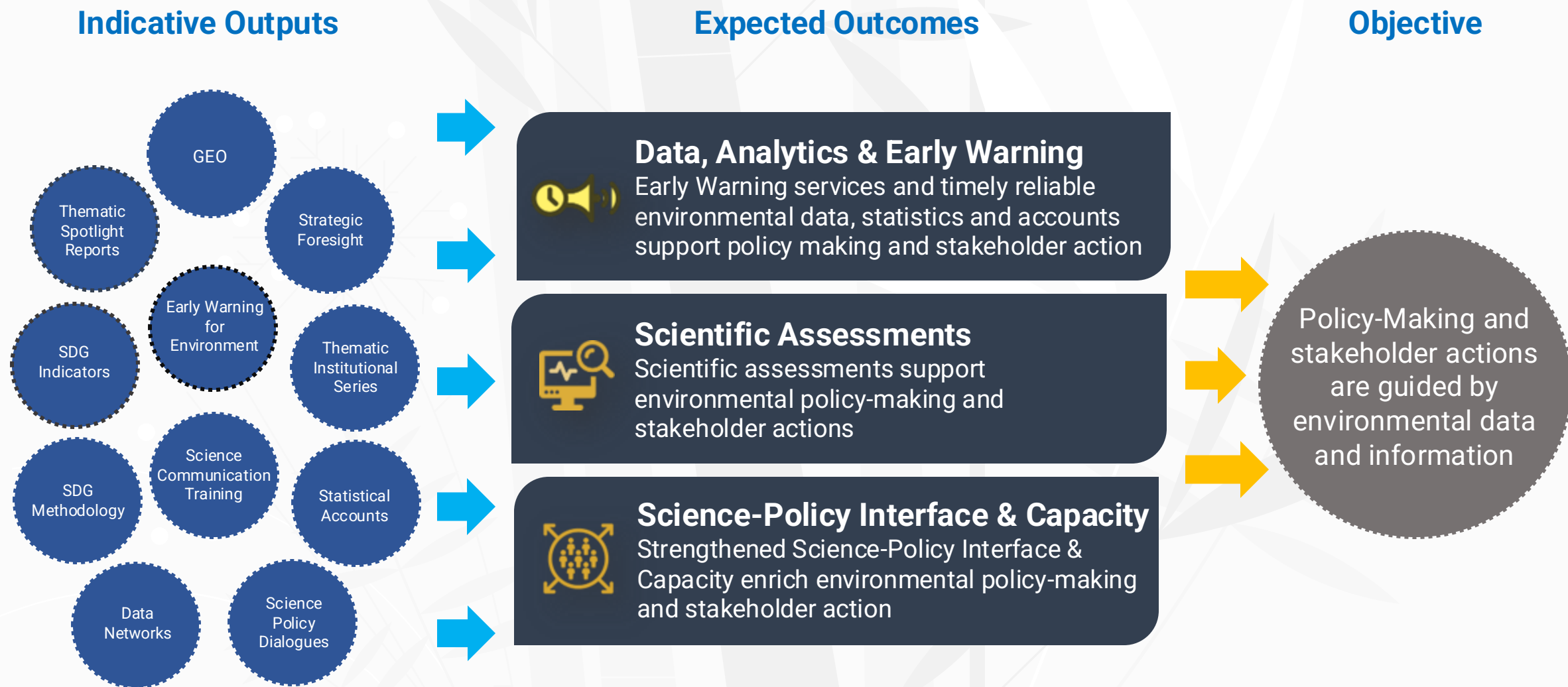
Synergies with other sub-programmes

Environmental Governance

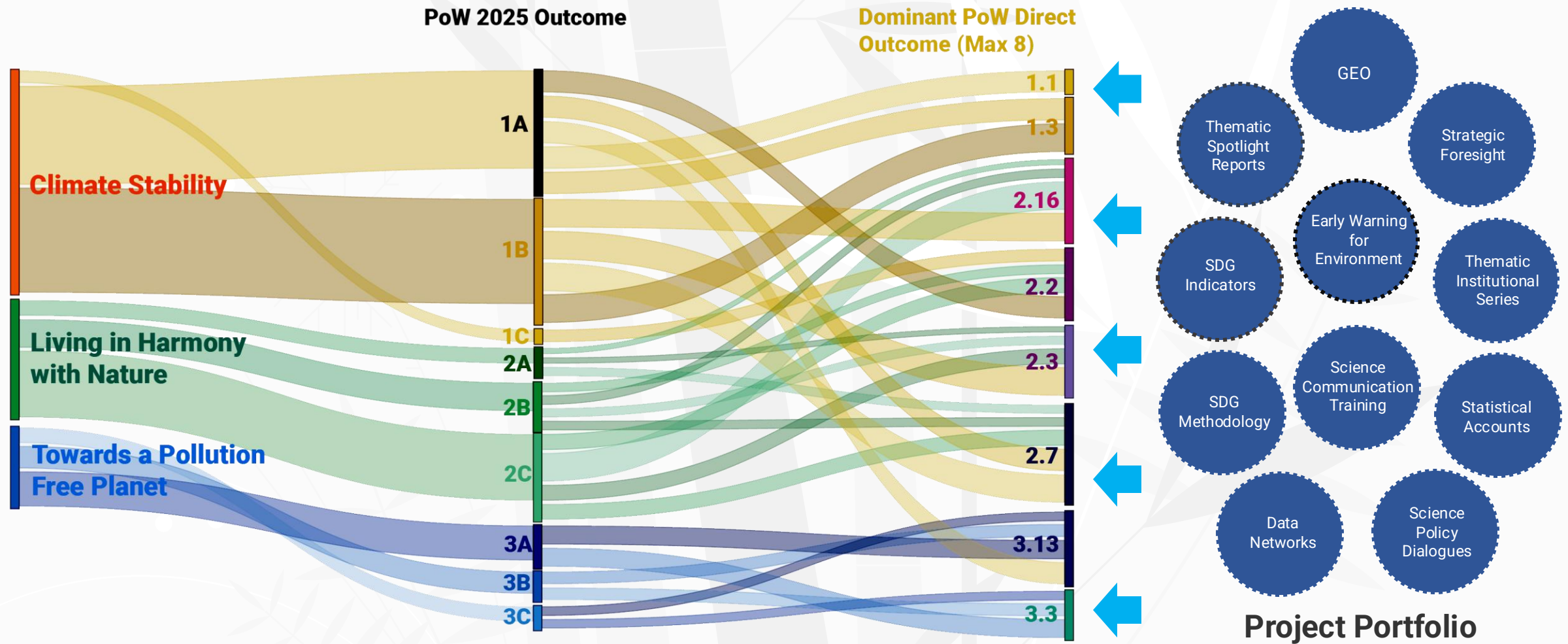
Digital Transformation



A. Background: Science for Policy and Action



A. Background: Foundational Contributions to MTS and PoW



B. Results: Science for Policy and Action

Support to Climate Stability

Emission Gap Reports



Adaptation Gap Reports



B. Results: Science for Policy and Action

Support to Living in Harmony with Nature

GBF Indicators

- GBF Indicators on: Coastal eutrophication potential, Plastic debris density, Food waste index, Material footprint per capita.
- Launch of the Global Footprint Tool supporting countries to calculate energy, carbon, water and land use footprints using national data.
- Development of a module on Trade Flows for the E-Learning course on Economy Wide Material Flow Accounts.
- Capacity-building to Belarus, Bhutan, Burundi, Ecuador, Namibia on the Systems of Environmental-Economic Accounts.
- National, regional, and global data reported to the Global SDG Database for the 25 SDG Indicators under its custodianship.

Assessments

- What's Cooking? An assessment of the potential impacts of selected novel alternatives to conventional animal products.
- Frontiers 2024/2025: Emerging Issues of Environmental Concern to be released in the first quarter of 2025.



Coming soon:
Frontiers 2024/25
Emerging Issues of
Environmental
Concern

B. Results: Science for Policy and Action

Support Towards a Pollution Free Planet

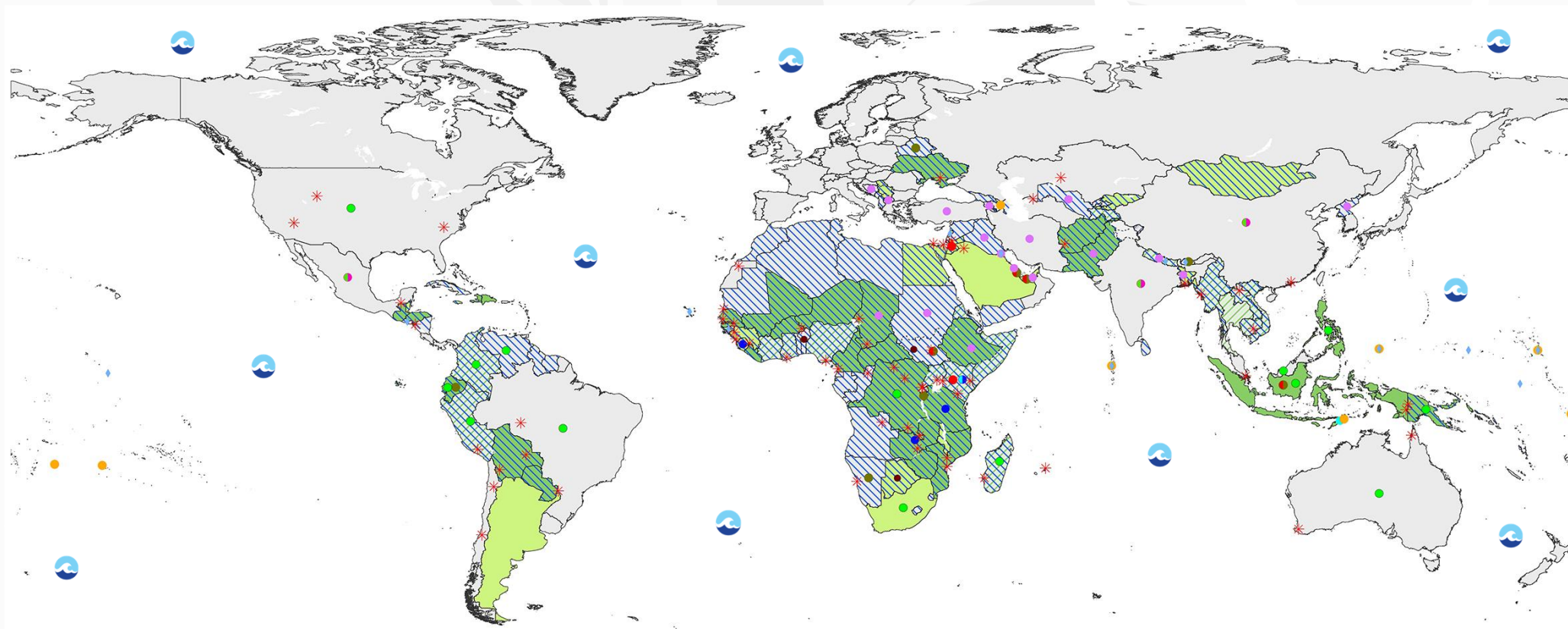
- Final stages of development and consultation on a joint UNEP-UNITAR statistical guideline on measuring flows of plastic along the life cycle.
- Contributions to the third edition of the Global E-Waste Statistics Guidelines.
- Final stages of development of a methodology and report for assessing Plastic Patches > than 10m in Open Ocean using Remote Sensing.
- Launch of the *Circular Economy: from indicators and data to policy-making* report.



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B. Results: Science for Policy and Action

Cross-Cutting Support - Early Warning for the Environment: World Impact Map



Highlighting country impact of early warning to the three different pillars of Climate Change, Biodiversity and Nature Loss & Pollution and Waste

EC Country Fiches and CCA Countries

- EC Country Fiches Project countries (46)
- CCA countries (39)
- Overlap: EC Country Fiches and CCA countries (18)

EW4All Countries

- Megadiverse countries (14)
- Highly Polluted countries (17)
- Overlap: Most Polluted and Megadiverse countries (3)
- EW4ALL initiative high-priority countries (30)

Global Environment Monitoring (GEMS)

- Water Quality monitoring (Global)
- Case studies (3 countries)
- Air Quality monitoring (Global)
- Case study (1 country)
- Overlap: Air and Water Quality monitoring (Global)
- Case study (1 country)
- MyOcean Tool enhancing ocean and coastal health data availability (Global)

SDGs and Environment

- Climate Change and Disaster-related Statistics (2 countries)
- Nature: supports Environmental-Economic Accounts (5 countries)
- Cross-cutting: Capacity Building on Environment Statistics (4 countries)

GCF, SOFF and GEF Portfolio

- Global Environment Facility Portfolio (14 countries)
- System Observation Finance Facility Portfolio (8 countries)
- Green Climate Fund Portfolio (3 countries)

Research4Life Access to Scientific Information

- Developing countries (121)

Early Warning Data Analytics

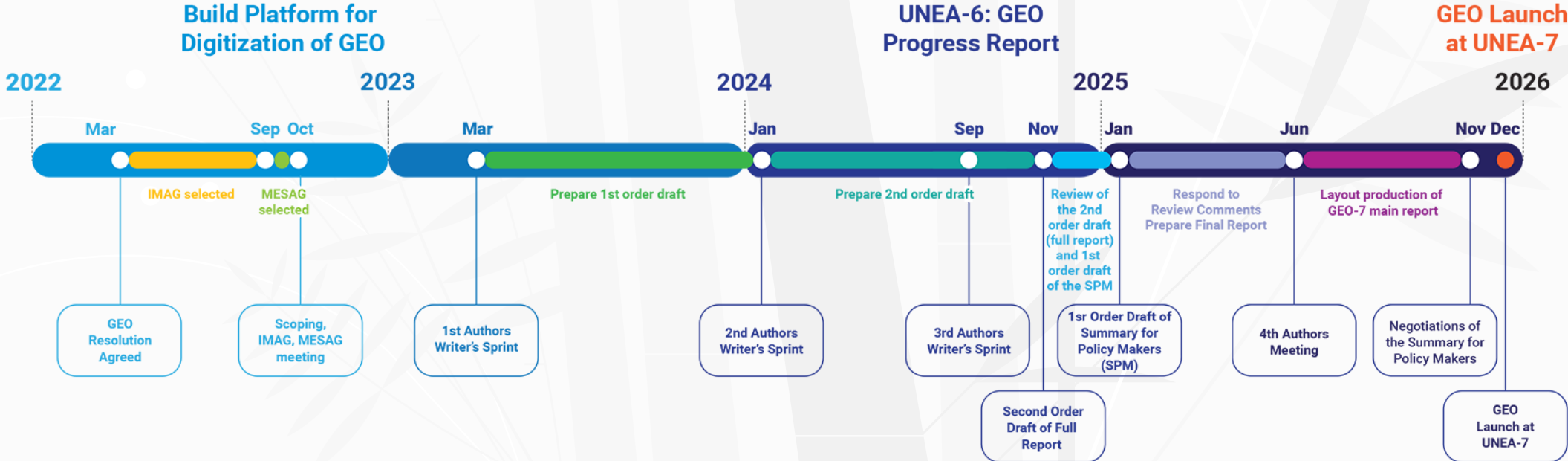
- Disaster Risk Platform (193 countries)
- Hotspot Platform (63 Hotspots in 50 Countries)

B. Expected Results: Science for Policy and Action

Cross-Cutting Support: Solutions Pathways for Climate, Nature, Pollution: GEO-7



GEO-7 will map out solution pathways



B. Results: Science for Policy and Action

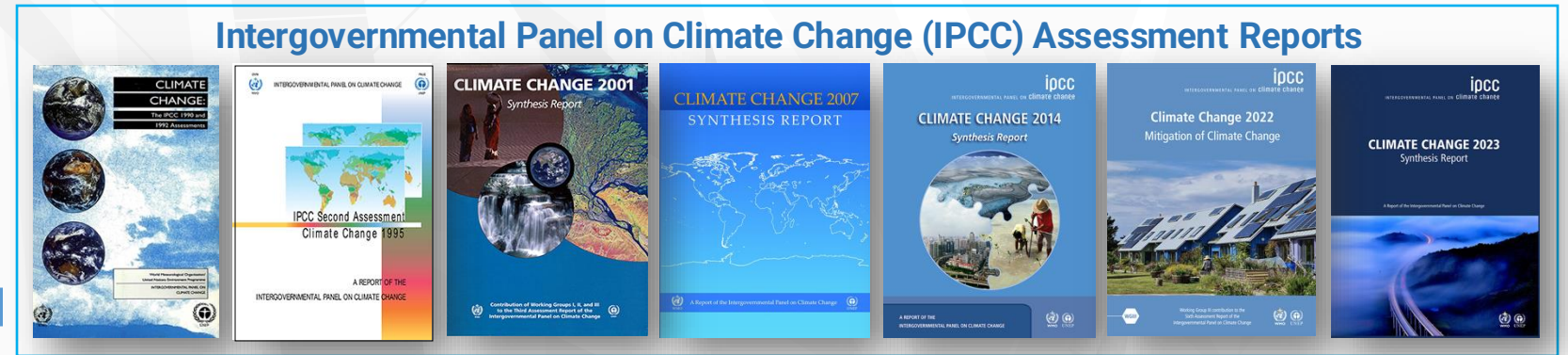
Cross-Cutting Support to the Science-Policy Interface and Environmental Governance



UN
environment

Strengthening the
Science-Policy Interface:
A gap analysis

Intergovernmental Panel on Climate Change (IPCC) Assessment Reports



- CLIMATE CHANGE: The IPCC 1995 and 1995 Assessment
- IPCC Second Assessment: Climate Change 1995
- CLIMATE CHANGE 2001: Synthesis Report
- CLIMATE CHANGE 2007: SYNTHESIS REPORT
- CLIMATE CHANGE 2014: Synthesis Report
- Climate Change 2022: Mitigation of Climate Change
- CLIMATE CHANGE 2023: Synthesis Report

Coming Soon: Science Policy Panel on Chemicals, Waste and Pollution Prevention

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

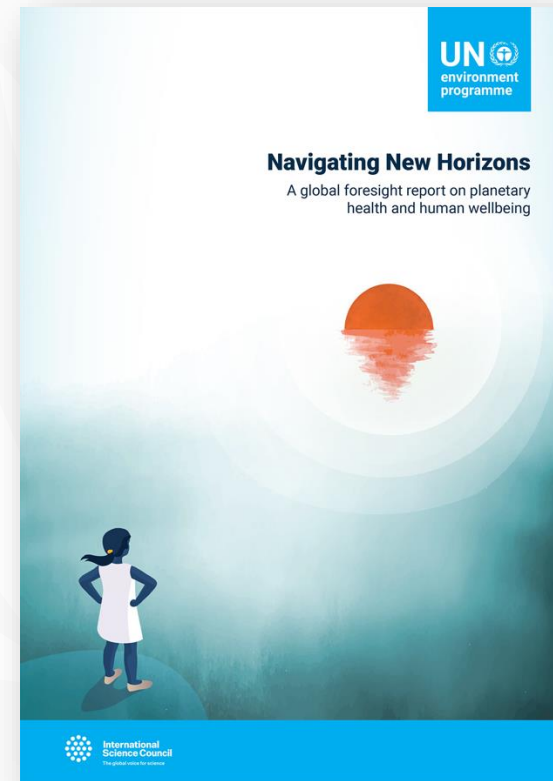
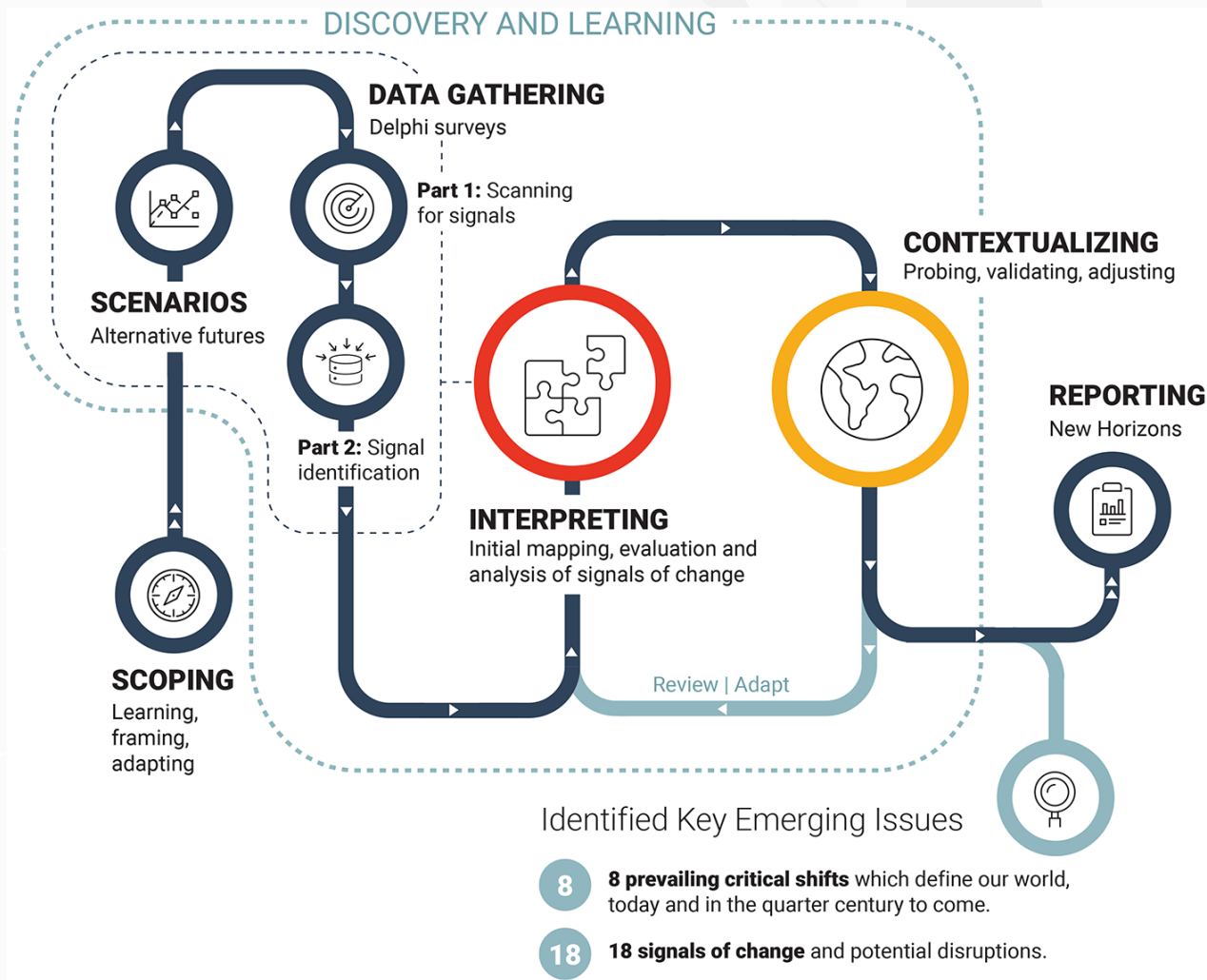


- The assessment report on LAND DEGRADATION AND RESTORATION
- The assessment report on POLLINATORS, POLLINATION AND FOOD PRODUCTION
- The thematic assessment report on INVASIVE ALIEN SPECIES AND THEIR CONTROL
- The assessment report on THE DIVERSE VALUES AND VALUATION OF NATURE

B. Results: Science for Policy and Action

Cross-cutting Support: New Foresight Methodology

A conceptual summary of the foresight process and methodological steps



Development and roll-out of an environmental foresight methodology capturing 18 signals of environmental change and 8 critical global shifts that are accelerating the triple planetary crisis.

Photo credit: Shutterstock/Miha Creative

B. Results: Science for Policy and Action

Cross-Cutting Support to Digital Transformation



Photo Credit: Envato Elements / stocasso

- Contributing curated data and analytics to the WESR Platform.
- Collaborating with private sectors and institutions to use Artificial Intelligence and satellite imagery to monitor air pollution, climate change and biodiversity loss.

D. Lessons Learned

Lessons:

- Early Warning Systems for climate related risks are becoming mature and widespread. And they are impactful. There are few comparable Early Warning Systems for Biodiversity or Pollution related risks.
- Numerous assessments which continue to document that *'things are bad and getting worse'*...do not seem to result in sufficient change to address the threats and concerns.

Adaptations:

- In this PCP we are developing 'Early Warning for the Environment' systems which provide alerts for both slow and rapid-onset threats linked to biodiversity loss and pollution.
- With its solutions-focus, the 7th Global Environment Outlook will attempt to shift the conversation from *'things are bad and getting worse'* to conversations around specific actions that can be taken at the national level to meet our climate, nature and pollution reduction targets.



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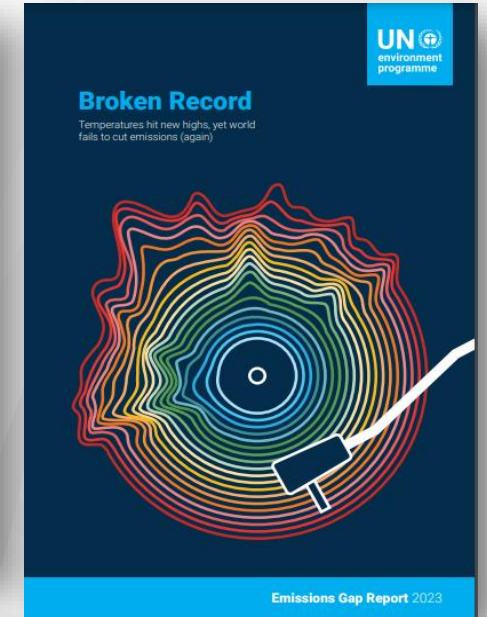
C. Strategic Risks and Opportunities: Science for Policy and Action

Opportunities

- New commitments, e.g., *Global Biodiversity Framework*, the Science Policy Panel on Chemicals, Waste and Pollution Prevention, the International legally binding instrument on plastic pollution (in prep.)

Strategic Risks

- Financial resources
- Limited outreach, advocacy, and/or political will to act on “what the science says”



D. Looking Ahead: Science for Policy and Action

United Nations General Assembly Resolution: UNEP/EA.4/RES.23 Keeping the world environment under review:



United Nations Environment Assembly of the United Nations Environment Programme

United Nations Environment Assembly of the
United Nations Environment Programme
Fourth session
Nairobi, 11–15 March 2019

Resolution adopted by the United Nations Environment Assembly on 15 March 2019

4/23. **Keeping the world environment under review: enhancing the United Nations Environment Programme science-policy interface and endorsement of the Global Environment Outlook**

The United Nations Environment Assembly,

Mindful of the mandate of the United Nations Environment Programme, as outlined in General Assembly resolution 2997 (XXVII) of 15 December 1972, and other relevant resolutions that reinforced its mandate, including to keep the world environmental situation under review, and recalling Governing Council decision 27/11 of 22 February 2013 on the state of the environment and the contribution of the Environment Programme to meeting substantive environmental challenges,

Recalling the outcome document of the United Nations Conference on Sustainable Development, entitled “The future we want”,¹ in particular paragraph 88 (d), which called for the Environment Programme to “[p]romote a strong science-policy interface, building on existing international instruments, assessments, panels and information networks, including the Global Environment Outlook, as one of the processes aimed at bringing together information and assessment to support informed decision-making”,



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Thank you

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