Developing and implementing a foresight trajectory for UNEP

Office of the Chief Scientist, UNEP

Strategic Foresight CPR Subcommittee Meeting
23 May 2023

Some definitions

- **Foresight is** a structured, multi-disciplinary approach to think systematically and explore trends, emerging changes and to inform decision-making and priority-setting today. Foresight is not about forecasting or predicting the future, nor is it intended to entirely replace traditional forms of analysis and policy-making.

- **Horizon Scanning** is the foundation of a Strategic Foresight process and is the systematic outlook to detect early signs of potentially important developments. It involved a set of methods and assumes ongoing monitoring of changes as they mature into trends.

- **Futures** is the broad academic and professional field developing globally as well as research, methods and tools that are available to be used to develop a foresight capacity.

- **Strategic Foresight** is an organisational capacity that informs the development of strategy. It allows decision-makers and stakeholders to look outside, above and beyond, and have structured strategic conversations about change, uncertainty and complexity, and take its impacts into account.

A new foresight trajectory for UNEP

Assumptions

- Developing deeper strategic foresight and future-oriented culture can enable a wide set of tools to **support strategic planning, prioritisation and advance effective preparedness**.

- UNEP needs a common understanding and vision of its foresight function and a process to **unite efforts, maximize efficiency and extend impact.**

Three mutually supportive workstreams:

1. Building internal capacity and capabilities for applying foresight.

2. Applying foresight and horizon scanning as an organization (short-term & long-term future perspectives) to inform strategic planning.

3. Codifying UNEP's approach, methodology and mutually agreed Strategic Foresight function.

Foresight related activities at UNEP

- Currently UNEP broadly undertakes three levels of **environmental** foresight work based on short, medium and long-term time horizons:

  - *Short-Term* Foresight focused on permanent and dynamic early warning GEAs, Foresight Briefs (monthly)

  - *Medium-Term* Foresight that includes Frontiers and Emerging issues (annual)

  - *Long-Term* Foresight focused on long term futures e.g., GEO/IPCC Long term projections and scenarios released every 5-10 years, and the 21 Issues for the 21st Century report –outcome of a 12-month horizon scanning foresight
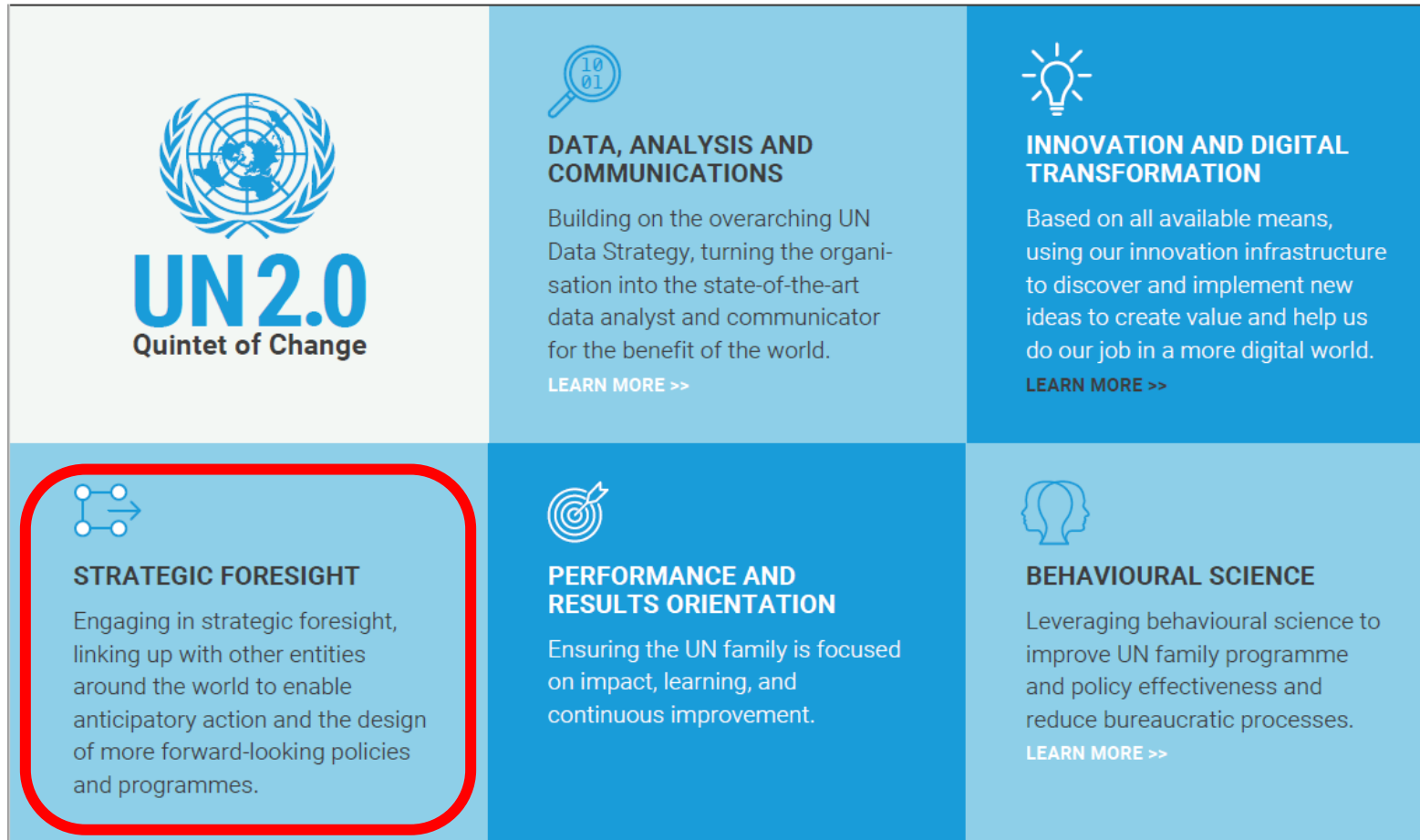
We can enhance what we have been doing in Foresight to navigate disruption or change, and apply systematic and robust approaches across the organisation
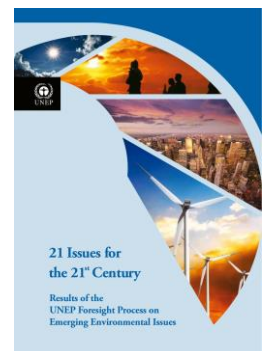
UN 2.0 – Quintet of Change

Strategic Foresight is one of the five major step changes in the ongoing UN reform process

UN 2.0 Quintet of Change

DATA, ANALYSIS AND COMMUNICATIONS

Building on the overarching UN Data Strategy, turning the organisation into the state-of-the-art data analyst and communicator for the benefit of the world.

LEARN MORE >>

INNOVATION AND DIGITAL TRANSFORMATION

Based on all available means, using our innovation infrastructure to discover and implement new ideas to create value and help us do our job in a more digital world.

LEARN MORE >>

STRATEGIC FORESIGHT

Engaging in strategic foresight, linking up with other entities around the world to enable anticipatory action and the design of more forward-looking policies and programmes.

PERFORMANCE AND RESULTS ORIENTATION

Ensuring the UN family is focused on impact, learning, and continuous improvement.

BEHAVIOURAL SCIENCE

Leveraging behavioural science to improve UN family programme and policy effectiveness and reduce bureaucratic processes.

LEARN MORE >>

- UN Futures Lab
- Strategic Foresight and Global Risk Reports (5-year)
- Trusteeship Council repurposed as a Multi-stakeholder Foresight Body
- Special Envoy for Future Generations
- Action Agenda for 2040-2050
- UN Summit on the Future (September 2024)
- Inputs from specialized agencies on critical future issues; insights from HSFs to assist countries think through a range of possible futures, threats and opportunities.

How Do Organizations use Foresight

- **Foresight informs strategic planning**
- Identify issues on the horizon and keep a watching brief on changes that may affect business
- Deepen understanding on factors influencing an organisations mandate, workstreams and **priorities**
- Understanding **gaps and changes eg. in workforce**, skillsets, technology and preparedness
- Prioritisation of issues, where trends and issues are reviewed for where benefits can be attained
- Strengthening organisational alignment
- Develop an informed **future-oriented strategy** and
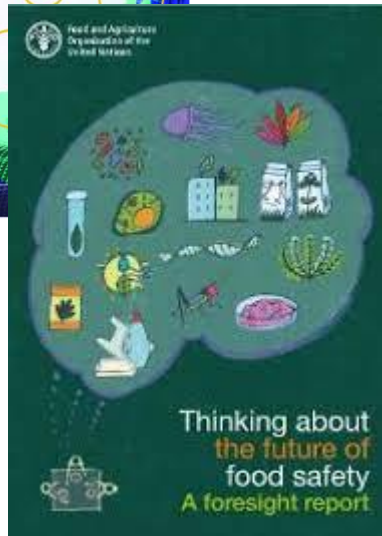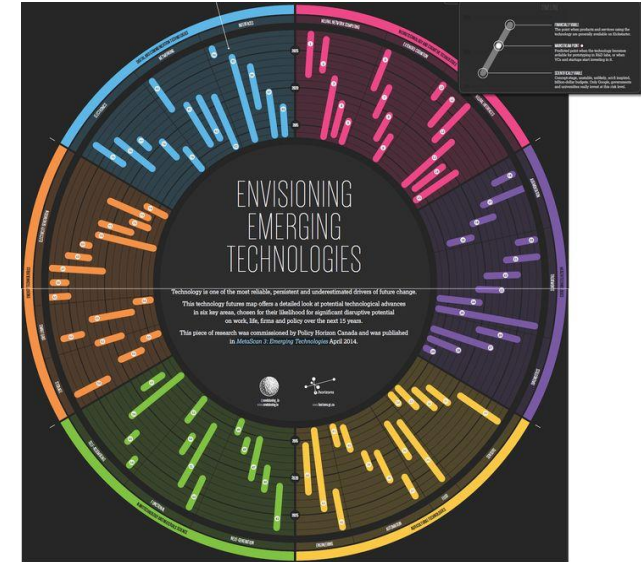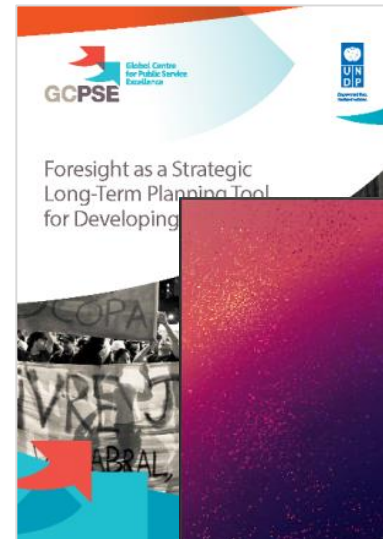- Plan interventions that **improving long-term performance** and **impact**!
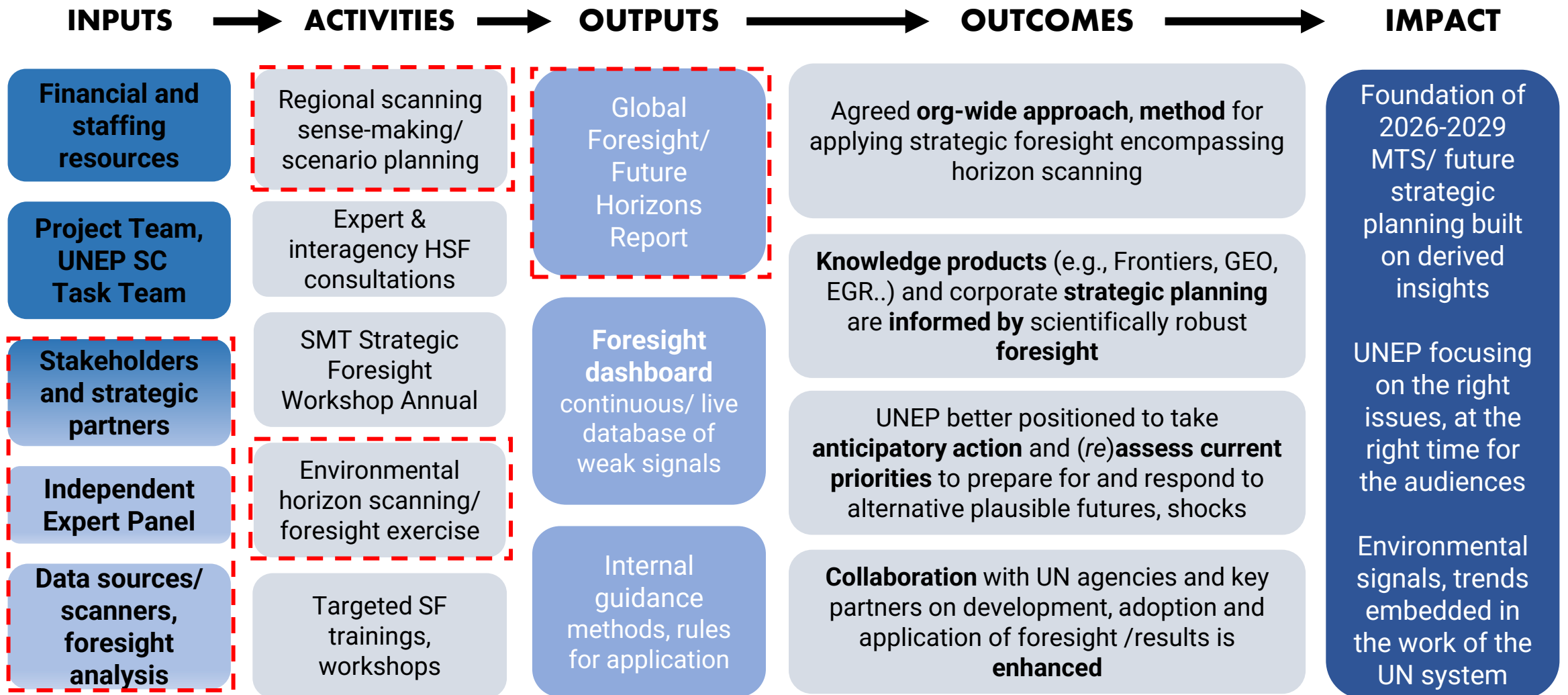

The World Economic Forum
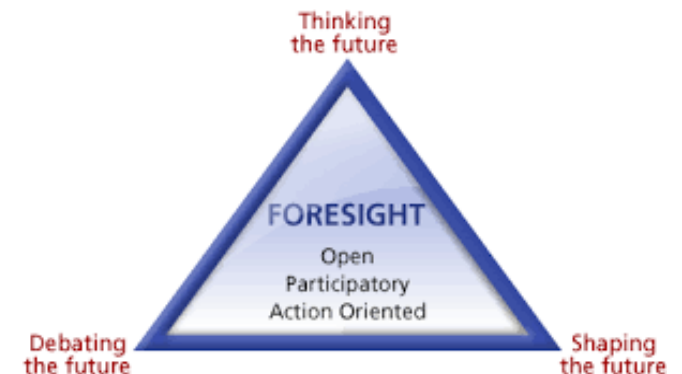
European Foresight Platform

How Do Organizations use Foresight

Approaching a foresight trajectory

INPUTS → ACTIVITIES → OUTPUTS → OUTCOMES → IMPACT

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACT
Financial and staffing resources	Regional scanning sense-making/ scenario planning	Global Foresight/ Future Horizons Report	Agreed **org-wide approach**, **method** for applying strategic foresight encompassing horizon scanning	Foundation of 2026-2029 MTS/ future strategic planning built on derived insights
Project Team, UNEP SC Task Team	Expert & interagency HSF consultations		**Knowledge products** (e.g., Frontiers, GEO, EGR..) and corporate **strategic planning** are **informed by** scientifically robust **foresight**	UNEP focusing on the right issues, at the right time for the audiences
Stakeholders and strategic partners	SMT Strategic Foresight Workshop Annual	**Foresight dashboard** continuous/ live database of weak signals	UNEP better positioned to take **anticipatory action** and (*re*)**assess current priorities** to prepare for and respond to alternative plausible futures, shocks	Environmental signals, trends embedded in the work of the UN system
Independent Expert Panel	Environmental horizon scanning/ foresight exercise			
Data sources/ scanners, foresight analysis	Targeted SF trainings, workshops	Internal guidance methods, rules for application	**Collaboration** with UN agencies and key partners on development, adoption and application of foresight /results is **enhanced**	

Key Participants

Project Team: UNEP; Prospex/DRS; International Science Council
UNEP Task Team: Staff from across UNEP including regions

Foresight Expert Panel

Member Name	Region
1. Debra Davidson	WEOG
2. Diana Mangalagiu	CEE
3. Diana Ürge-Vorsatz	CEE
4. Edgar E. Gutierrez-Espeleta	LAC
5. Elham Ali Mohamed	Africa
6. Fang Lee Cooke	WEOG
7. Felix Moronta Barrios	LAC
8. Henrik Carlsen	WEOG
9. Jia Gensuo	Asia Pacific
10. Michelle Mycoo	LAC

11. Nadejda Komendantova	WEOG
12. Nicholas King	Africa
13. Nyovani Madise	Africa
14. Peter Gluckman	WEOG
15. Ranjan Datta	Asia Pacific
16. Simone Lucatello	LAC
17. Soumya Swaminathan	Asia Pacific
18. Wibool Piyawattanametha	Asia Pacific
19. Wilfred Lunga	Africa
20. *Salvatore Arico (ex officio), ISC*	
21. *Andrea Hinwood (ex officio), UNEP*	

Carefully selected through an ISC nomination process

Horizon scanning foresight process

Adapted from Bengston 2013; 2019
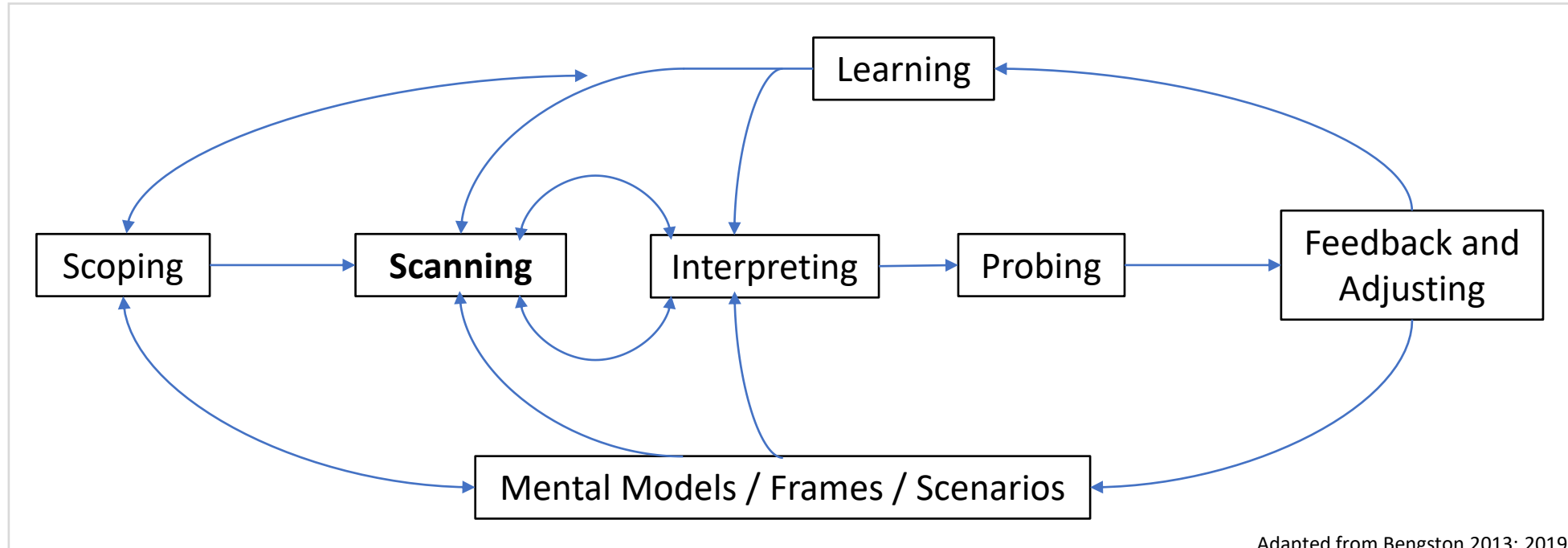
- Horizon scanning – systematic detection, collection and interpretation of issues and signals of change within a specific field

- To be effective, a horizon scan is carried out in the context of a process that facilitates the downstream use of outputs

Horizon scanning foresight process (for UNEP)

1. Scoping

Part 1: set-up/ design framing, Delphi survey & mental models (*Feb-May*)

<<<<<< **Learning, framing, adapting** >>>>>>

2. Exploratory **Sourcing & data gathering** (*May- June*)

Scanning for evidence
- Delphi digital survey ~+1000
  - Internal/UNEP intelligence gathering ~100
    - Other UN Agencies ~200
    - Member States ~193
  - UNEP Major Groups and Stakeholder ~400

3. Developing Scenarios / Alternative Futures (*June 20-21*)

Developing a set of contextual narratives of "alternative futures" — or storylines of how the future might unfold. The scenarios will be used as a platform and foresight tool to engage in systemic reflections and the exploration of potential challenges, opportunities and options for action.

4. Interpreting/sensemaking level #1 (*Expert Panel*) (*June - Sept*)
systematic detection & structured debate

Initial mapping, evaluation and analysis of weak signals of change (Global)

5. Filtering: contextualizing, probing, validating, adjusting (sensemaking level #2) (*Oct-Nov*)

Africa foresight workshop	**Europe** foresight workshop	**West Asia** foresight workshop	**Asia Pacific** foresight workshop	**LAC** foresight workshop	**N.A.** foresight workshop

Adapting

Region-specific issues, risks, opportunities & <u>areas for action</u> to support transitions

6. Reporting: identification of key issues and significant disruptors on the horizon, priority actions and possible implications (**Future Horizons**) (*Jan-April 2024*)
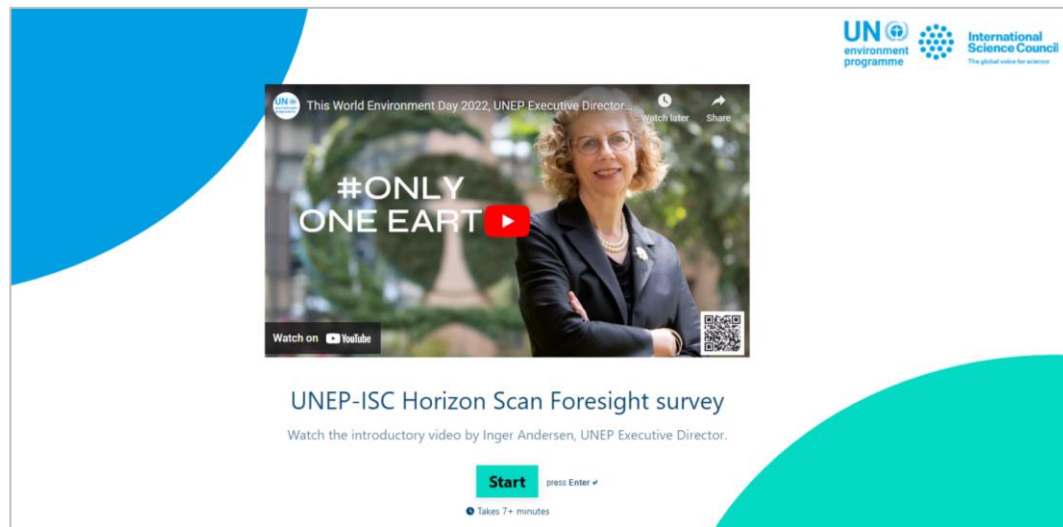
Horizon Scanning & Foresight

- We hope to receive at least 1000 'issues' or 'signs of change' with attached evidence which will be analyzed and from which signals will be determined (outputs)

- These will then be 'sense checked' by our global expert panel and regional foresight teams and be discussed in the context of scenarios.

- Issues and themes identified will then have a deeper review

- Most processes, including megatrends analysis, involve the engagement of experts to sense check and give perspectives on issues

- We will have global and regional experts and inputs

The Delphi Survey 'signals' identification

Data sources / semi-curated list of participants

1. **Scientists and technical experts (*n=~1000*)** *International Science Council & UNEP networks*

2. **Government, major groups other stakeholders (n=~400)** 193 Member States – nominations *through Governance Affairs; private enterprise, practitioners, youth, ci*vil society/ MGS (*including non-traditional knowledge experts*

3. **UN participants (n=~200);** Network of internal/ "UNEP-scanners" (~100 nominated); Representatives from other UN agencies (including conventions, Secretariats etc.)

UNEP-ISC Horizon Scan Foresight survey
Watch the introductory video by Inger Andersen, UNEP Executive Director.

What we need from CPR

Nomination of one representative per MS to pre-register and complete the Delphi Survey

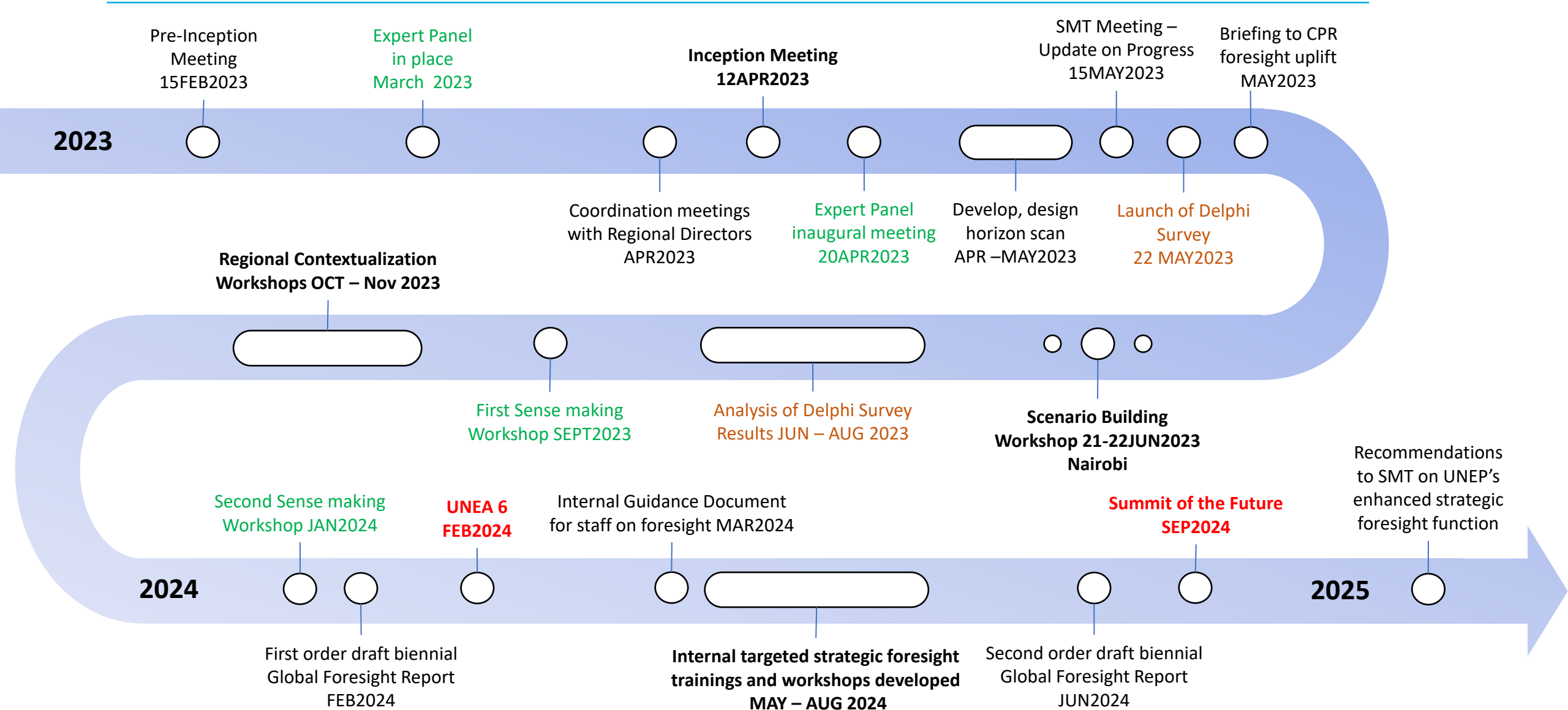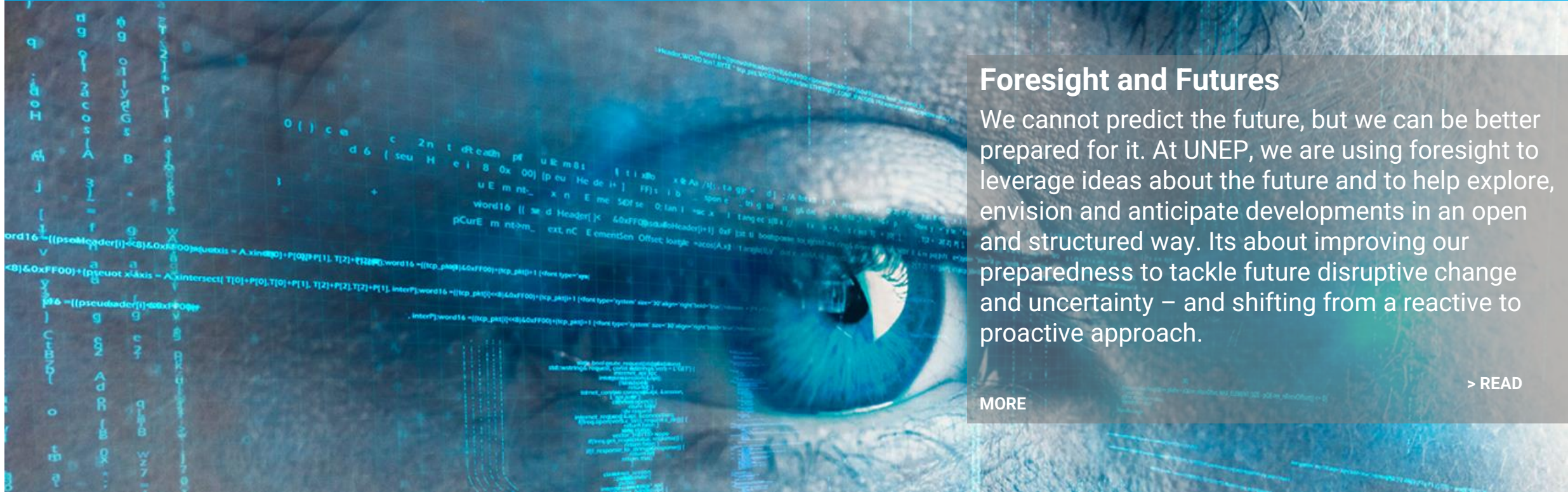Delphi Survey will be open from May 29 – June 28

UNEP Foresight and GEO processes

The plan is to **link the two processes** as follows:

1. **UNEP provides GEO-7 with the set of contextual future scenarios**. This enables GEO-7 to

    - capture deep uncertainties in the future context, and to
    - test and adjust its solution pathways in view of divergent future contexts
    - (Note: the modelling approach in development for GEO-7 captures to a certain extent "*action*"-uncertainty; it does however not capture *contextual* uncertainty – hence the value of this process to the GEO-7)

2. **GEO-7 provides UNEP with the set of solution pathways,** which can be applied in its strategy-making for UNEP as an organisation.

Mutually reinforcing

Key Milestones

UN environment programme

2023

Pre-Inception Meeting 15FEB2023

Expert Panel in place March 2023

Coordination meetings with Regional Directors APR2023

Inception Meeting 12APR2023

Expert Panel inaugural meeting 20APR2023

Develop, design horizon scan APR –MAY2023

SMT Meeting – Update on Progress 15MAY2023

Launch of Delphi Survey 22 MAY2023

Briefing to CPR foresight uplift MAY2023

Regional Contextualization Workshops OCT – Nov 2023

First Sense making Workshop SEPT2023

Analysis of Delphi Survey Results JUN – AUG 2023

Scenario Building Workshop 21-22JUN2023 Nairobi

Second Sense making Workshop JAN2024

UNEA 6 FEB2024

Internal Guidance Document for staff on foresight MAR2024

Recommendations to SMT on UNEP's enhanced strategic foresight function

2024

First order draft biennial Global Foresight Report FEB2024

Internal targeted strategic foresight trainings and workshops developed MAY – AUG 2024

Second order draft biennial Global Foresight Report JUN2024

Summit of the Future SEP2024

2025

Strategic Foresight
at UNEP

Horizon
Scanning

Signs of
new

Publications

Get Involved

Foresight and Futures

We cannot predict the future, but we can be better prepared for it. At UNEP, we are using foresight to leverage ideas about the future and to help explore, envision and anticipate developments in an open and structured way. Its about improving our preparedness to tackle future disruptive change and uncertainty – and shifting from a reactive to proactive approach.

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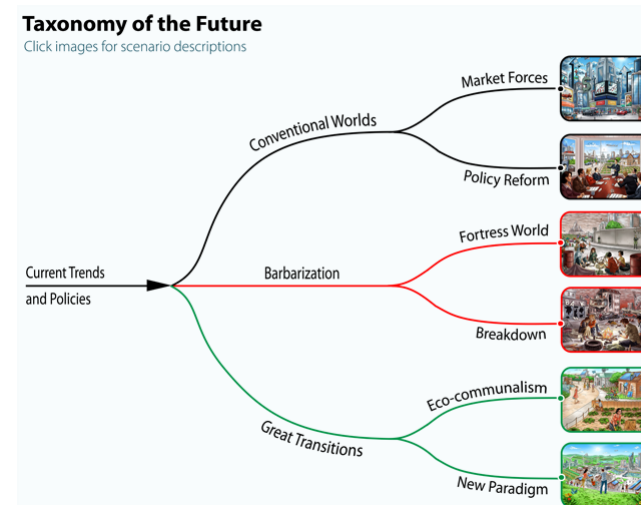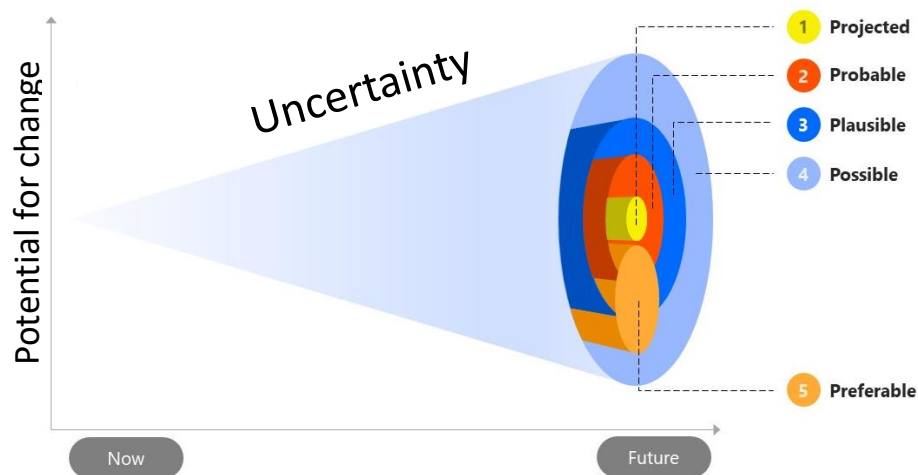
Latest updates

Thank you

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Jason Jabbour, Senior Program Coordinator, Strategic Foresight Task Team
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Exploratory Scenarios (for foresight)

1. Scoping Part 1: set-up/ design framing, Delphi survey & mental models
(*Feb-May*)

Part 2: **Developing Scenarios (Futures)**
(*June 20-21*)

Uncertainty

Potential for change

1 Projected
2 Probable
3 Plausible
4 Possible
5 Preferable

Now

Future

Taxonomy of the Future
Click images for scenario descriptions

Conventional Worlds — Market Forces
Conventional Worlds — Policy Reform
Current Trends and Policies
Barbarization — Fortress World
Barbarization — Breakdown
Great Transitions — Eco-communalism
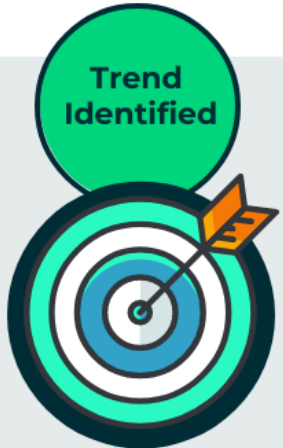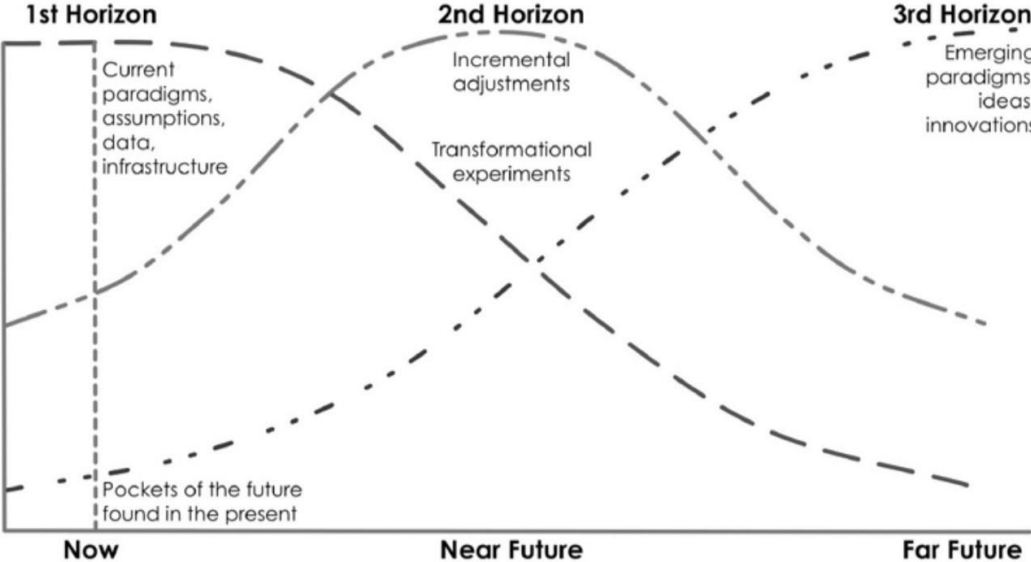Great Transitions — New Paradigm

Developing ongoing **process for UNEP's foresight function** applying different foresight techniques, OCS will **develop a set of contextual future <u>scenarios</u> =** qualitative storylines describing divergent & plausible ways the world might develop)

UNEP's GEO-7 is a separate **process** that also contains a foresight element focused on developing **target-seeking <u>solution pathways</u>** – or, in other words, a set of actions (incl. policies) that seek to move the world towards reaching defined environmental targets

The Horizon Scanning Cycle

Identifying trends involves many steps and revisions but it will be worth it in the end!

Left diagram

1st Horizon
Current paradigms, assumptions, data, infrastructure

2nd Horizon
Incremental adjustments

Transformational experiments

3rd Horizon
Emerging paradigms, ideas, innovations

Pockets of the future found in the present

Now   Near Future   Far Future

Right diagram

Trend Identified

1. CREATE YOUR TEAM - Identify interested and influential people who are determined to make a difference

2. DEFINE YOUR OBJECTIVES - Discuss and investigate what you want to achieve. They will align with, and inform, the firm's strategy

3. COLLATE YOUR KEYWORDS - Experiment, explore, refine, and assess them constantly based on feedback from your team

4. ASSESS YOUR RESULTS - What can you learn from your research? Are there any trends, insights, or weak signals?

5. MAP YOUR TRENDS - Once you have spotted threats, opportunities and potential issues, you can generate relevant reports