

Navigating New Horizons Key Messages

REPORT SUMMARY

Navigating New Horizons – A Global Foresight Report on Planetary Health and Human Wellbeing, from the United Nations Environment Programme and the International Science Council, calls for the world to pay heed and respond to a range of emerging challenges that could disrupt planetary health and wellbeing. The report presents insights on eight critical global shifts that are accelerating the triple planetary crisis of climate change, biodiversity and nature loss and pollution and waste.

Eighteen signals of change – identified by hundreds of global experts and distilled through regional and stakeholder consultations that included youth – offer a glimpse into potential disruptions, both positive and negative, that the world needs to keep a watching brief on. The report outlines how to create an enabling environment for better decision-making by creating a new social contract, embracing agile and adaptive governance, and increasing integrated accessible data and knowledge.

The report offers a stark reminder of the interconnectedness and fragility of our systems in the 21st Century and warns that prioritizing short-term gains over anticipatory action and preparedness jeopardizes long-term prosperity and planetary health. However, it also points to the tremendous potential and human ingenuity that can be leveraged in the spirit of discovery and cooperation to deliver solutions across the triple crisis.

KEY MESSAGES

1. [The world may have entered the era of Polycrisis.](#)

The eight critical shifts identified through the foresight process include the rapid development of new technologies such as AI combined with governance challenges. This is overlapping with competition for natural resources, new forms of conflict, mass forced displacement and migration, persistent widening inequalities, declining trust and weakened institutions, the prevalence of mis/disinformation, and an increasing global multipolarity, creating a polycrisis, in which global crises are not just amplifying and accelerating but seem to be synchronizing. This is now a feature of the times and has environmental implications.

2. [The environment continues to degrade despite efforts to address the triple planetary crisis.](#)

The report identifies humanity's relationship with the environment as a key critical shift. The Great Acceleration continues to exacerbate the drivers of environmental degradation. Material extraction, fossil fuel use and production, plastics, water use and GDP are all increasing. Temperature records are being exceeded. Extreme weather events such as floods and fires are occurring more frequently with greater intensity. Biodiversity continues to decline. Pollution and waste is found from the pristine Antarctic to Pacific Ocean. Despite the Paris climate pledges, the world is on track for a catastrophic temperature increase of between 2.1 °C and 3.9 °C by 2100.

One key signal of change linked to this heating, and highlighted in the report, is: Ancient microbes hidden in thawing Arctic permafrost. Researchers have estimated that ancient microorganisms, some of which

may be pathogenic, could be released from the thawing cryosphere each year as result of climate change – with consequences for environmental, animal and human health. This phenomenon has already led to an outbreak of anthrax in Siberia, killing thousands of reindeer and affecting dozens of people.

3. Demand for critical minerals and materials to meet net zero targets, combined with digital transformation, is creating new tensions for planetary health and human wellbeing.

This critical shift – **Critical resources: scarcity and competition reshaping dynamics of global security** – is a core issue across all regions where best practice management and just transitions is needed to prevent further degradation of the environment and to support the wellbeing of communities. The demand for critical rare earth elements and critical minerals and metals is expected to increase fourfold by 2040, exacerbating pressures on terrestrial biodiversity. The pressure to speed up supply is increasing calls for deep sea mining and even space mining. This presents major challenges for biodiversity and nature, the potential for more pollution and waste, and conflict over land – with vulnerable local and indigenous communities most affected. Mining of the deep sea could impact pristine environments and decrease attention on the circularity and efficiencies that should be adopted for sustainable development.

4. AI offers opportunities for economic growth and social progress, but the implications for the environment are multifaceted.

As the world seeks to govern AI, it needs to factor in environmental impacts. While AI and digital transformation can bring many benefits, potential environmental implications need to be considered: increased demand for critical minerals and rare earth elements and water resources to meet new data centre demands among them. Practices such as e-waste recycling, energy-efficient data centres, renewable energy and responsible resource management are essential to mitigate environmental harms. The use of AI in weapons systems and the development of synthetic biology need careful review through an environmental lens.

5. Armed Conflicts are increasing and have many environmental impacts that could result in legacy issues for decades.

Armed conflict and violence are rising and evolving, driven by regional tensions, a breakdown in the rule of law, absent or co-opted state institutions, illicit economic gains, the scarcity of resources and climate change. These conflicts result in ecosystem degradation and pollution, leading to repercussions for vulnerable populations. There are major implications for recovery post-conflict, with the legacy of contamination from destroyed infrastructure and residues from munitions. The report identified this critical shift as requiring attention.

6. Forced Displacement is increasing human health and environmental impacts in many countries.

Forced displacement leaves another environmental footprint, affecting recovery and the health of populations. One in every 69 people, or 1.5 per cent of the entire world's population, is now forcibly displaced – nearly a doubling of the people that were displaced a decade ago. The combination of conflict and climate change is affecting both internal and external displacement, with a wide range of

environmental impacts from the lack of services such as water, sanitation and hygiene, solid waste management and energy provision.

7. [To effectively address these critical shifts and signals of change outlined through Foresight, the world needs a new social contract.](#)

Three areas stand out as important opportunities to renew the social contract and increase society's resilience: engaging and embracing a broader and diverse range of stakeholders, including indigenous people as well as local communities; giving young people a stronger voice; and rethinking measures of progress to go beyond GDP.

8. [Agile and adaptive governance is a game changer for implementing the SDGs and making faster progress on key climate and biodiversity targets.](#)

As change accelerates, governments and societies can introduce shorter term targets and indicators that allow them to see the success of interventions and be more agile in changing if actions are not having the desired effect. Adaptive governance also should empower communities and foster innovation across society, which involves facilitating communities to engage, experiment and learn. Ushering in a new era of tools and actions to reconfigure financial systems and reroute capital flows – a positive of signal of change in this report – could help to reduce inequalities, eradicate extreme poverty and address environmental crises.

9. [Guiding governance through integrating data and knowledge and making it accessible for those who need it when they need it.](#)

Supporting agile and adaptive governance depends on monitoring and assessing the impacts of innovation, experimentation and systems that enable information to guide investments and actions. This includes integrating and improving monitoring on environmental change to support better decision making and combining data, information and knowledge, while making it more accessible

10. [Adopting Foresight is essential to take decisions that shape a better future, rather than reacting to the negative consequences of poorly considered choices.](#)

People today are living with the ill-considered decisions of past generations. For example, fossil fuels have brought climate change, single-use plastics have polluted nature, and products containing harmful chemicals have impacted the health of millions of people.

By monitoring and analyzing signals of change and disruptions – including those outside the traditional environmental space – UNEP, the UN and others can help to avoid further such mistakes by shaping strategic interventions that amplify the positive signals and mitigate the negative. Adopting such a forward-looking agile approach that identifies emerging risks, big and small, is essential in shaping more effective prevention and preparedness strategies and decisions for a better future.

Just as the impacts of multiple crises are compounded when they are linked, so are the solutions. There are already many actions underway that would address the global shifts and signals of change identified in the report. Foresight can help to accelerate these actions and spark many more.