

UNIVERSITY OF AMSTERDAM Faculty of Social and Behavioural Sciences



A SAFE PLANET ON A JUST WORLD: INPUTS ON STI TO PREPARATORY PROCESS FOR THE 4TH UN CONFERENCE ON FINANCING FOR DEVELOPMENT (FFD4)RECOMMENDATIONS OF THE 10 MEMBER GROUP

Joyeeta Gupta, Professor, Univ. of Amsterdam, IHE Delft Institute for Water Education Co-chair, Ten-member group advising UN on Science, technology and Innovation (STI) on SDGs Outgoing co-chair, Earth Commission Commissioner – Global Commission on the Economics of Water Co-Chair UNEP-GEO-6, Spinoza prize (1.5 million Euros) winner 2023.



UNIVERSITY OF AMSTERDAM Faculty of Social and Behavioural Science

Outline

I. STI for the SDGs

II. Impacts of rapid technological change on the SDGs
– Al and other frontier technologies, emerging science issues, pandemics and other disruptors

III.

Recommendations for the TFM and STI Forum

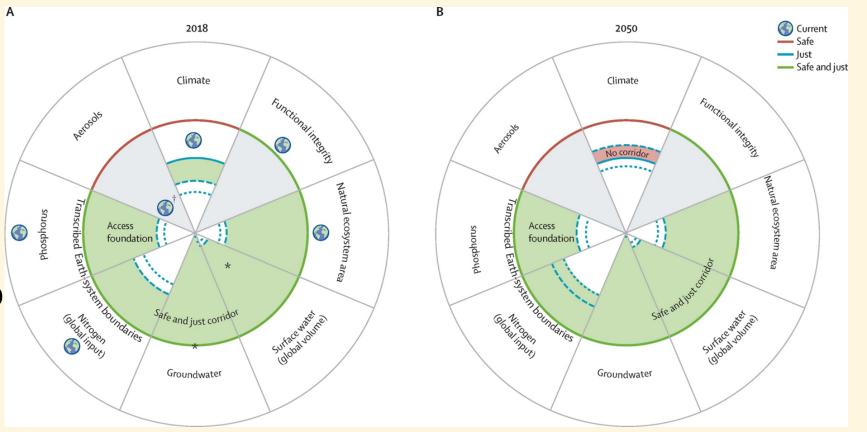




Specific recommendations by the 10-Member-Group

a) Science-policy
advice on safe and
just targets,
boundaries and
transformations

b) Documenting best
practices and develop
reliable and finegrained data on
advancing gender
equality in STI.



Gupta, J., et al. (2024). A just world on a safe planet: Earth system boundaries, transformations and translation, *Lancet Planetary Health*.





Specific recommendations by the 10-Member-Group

a) Building a **UN collaborating hub/network for a sustainable and safe Built Environment** to support decent living standards. The hub could focus on decarbonizing building materials, provide strategic foresight/roadmaps on infrastructure transformations and materials, provide information on tech options, social and institutional innovations, and help understand synergies and trade-offs, and monitor progress.

b) Collaborative, **global sustainability science centre and training network across geopolitical divides** (with demonstration projects at scale in energy, food, climate, biodiversity, health, and sanitation)

c) Share **technologies and skills to solve the basic health issues of water, sanitation, and food security. Prioritize investing in the first 1,000 days of a child's life** particularly in the poorest settings within and between countries (providing modern medical and nutritional support for all children before 2030).

d) Create a **One-UN programme on digitalisation** and sustainability in support of developing countries.

e) Develop and implement **national STI4SDG roadmaps**, as strategic guideposts for all stakeholders. Providing expert support and training on strategic STI governance, regulation, and institutions for STI policy, especially in SIDS, LDCs, and Africa.

f) Build capacity on **national strategic plans for the equitable and affordable phase down of fossil fuels**.





Specific recommendations by the 10-Member-Group:

a) Developing innovative ideas and practical partnerships for **cooperation on funding R&D** for the SDGs. Global governmental research funders to boost spending on SDGs by 20% over the next five years

b) Collaborative, **global sustainability science centre and training network across geopolitical divides** (with demonstration projects at scale in energy, food, climate, biodiversity, health, and sanitation). Allocate funds that are commensurate with the challenges, and as significant as other major international science initiatives (e.g., CERN).

c) Global network of banks of ideas, funds for innovation, and ethical councils for innovation

d) Create a **global fossil fuel and carbon dioxide removal (CDR) fund** and market to facilitate the sustainable deployment of CDR technology options and address fossil fuel stranded assets.

e) Boost **global public investment in global public goods to reach (0.2% of GNI)** and consider implementing the recommendations of the Expert Working Group on Global Public Investment.





Specific recommendations by the 10-Member-Group:

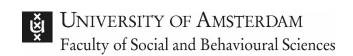
a) Governments to commit to put in place policies, regulations, initiatives, and funding to build the **next generation Web 3.0 distributed system** and make it work for all by 2027.

b) Build worldwide **capacity** for using, developing, and understanding the impacts of generative AI.

c) Create a **One-UN programme on digitalisation and sustainability** in support of developing countries.

d) Track and assess emerging applications and their benefits brought about by the **convergence of AI and biotech**, especially for agriculture and food security.

e) Synthetic (technology-enabled) data production to **monitor SDG progress** in agriculture, built environment, oceans, and on poverty and socio-economic development, leveraging AI, satellite and remote sensing data, among others.





Conclusion

The ten member group is very happy to help with the preparations and content of the Conference. You can count on us.