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Summary of the Special Session of the UN Science-Policy-Business Forum on the Environment (UN-SPBF): 27 February 2024

“All governments should nominate a minister for future generations with the first task of eliminating excess, in line with the saying, the world has enough for everyone’s needs, but not everyone’s greed.”

Science, policy, and business working in tandem to deliver environmental impacts while fostering social equity and intergenerational justice was a core theme at the Special Session of the UN Science-Policy-Business Forum for the Environment (UN-SPBF), which convened in parallel to the sixth session of the UN Environment Assembly (UNEA-6).

Kicking off with inspirational, TED-talk like presentations by 19 speakers, the Forum was transformed into a collective moment of hope as speakers imagined a world in which: net-negative financial flows amounting to trillions of dollars each year are invested in nature-based solutions (NbS) and “doing good”; generative artificial intelligence (AI) bridges global knowledge gaps by supporting contextualized solutions at the local level; technology mimics natural processes to develop genuinely biodegradable materials; and governments in the Global North generate enough trust with their citizens to channel more resources for ecosystem restoration in the Global South without encountering a political backlash.

These aspirations were summarized in UN-SPBF Executive Secretary Shereen Zorba’s presentation of her expectations for the Forum, in which she emphasized that those in attendance hold the knowledge, power, and influence “to create the impact we desire and the world we want – one where the planet thrives, the people prosper, and no one is left behind.”

The rest of the day was dedicated to debating how to make this happen by engaging in interactive discussions around the latest scientific research, examples of enabling policies, innovative financial instruments, and numerous illustrative cases of solutions and practices to spur more meaningful multistakeholder collaboration and drive integrated solutions at the scale needed to tackle current and future challenges.

The discussions were structured around three main sessions exploring: sector-wide transformations; economic and financial tools; and integrated early warning systems. For each segment, speakers from government, industry, finance, and society engaged in interactive plenary panels and thematic roundtables to present

innovative ideas and practical lessons to shape the discussions at UNEA-6 and beyond. The first set of discussions focused on actionable strategies across various sectors, including housing, mobility, energy, and food systems, with an emphasis on justice, equity, and sustainability. Participants highlighted the potential of sustainable consumption, circular economy, and resource efficiency to significantly reduce carbon emissions and promote environmental resilience.

Financial tools and market integrity to mobilize finance for NbS was the other key theme, with calls for quadrupling funding by 2050 for NbS and other global environmental targets. Discussions also centered on enhancing the integrity of carbon markets and promoting high-integrity mechanisms to support sustainable development and biodiversity conservation.

Participants further underscored the importance of engaging civil society on an equal basis as other stakeholders, noting they are on the frontlines of tackling environmental challenges as well as feeling the social impacts of unequal financial flows. Participants highlighted the need for inclusive decision-making processes and empowering future generations to become agents of change.

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Closing as it started, with a vision for the future, the final session emphasized the importance of personal commitment, leadership, and systemic changes to achieve environmental goals. Speakers called for transformative actions, mindset shifts, and cooperation-based models to ensure a sustainable and equitable future for all.

More than 550 participants attended the one-day event on 27 February 2024 in Nairobi, Kenya.

A Brief History of the UN-SPBF

Launched at UNEA-3 in December 2017, the UN-SPBF is a framework designed to catalyze a more dynamic interface between science, policy, business, and society. The Forum facilitates multi-stakeholder platforms to identify and promote opportunities for green investment that are driven by advances in science and technology, empowering policies, and innovative financing. It also seeks to function as an accelerator and incubator of innovation and positive change to achieve the Sustainable Development Goals (SDGs).

Since its launch, the Forum has become the UN's fastest-growing inter-agency, multi-sector convening platform on the environment, bringing together more than 3,500 contributors and partner institutions from around the world to:

- enable issue-based consultations between top scientists, policymakers, citizen science groups, and the business sector, and build communities of practice around key themes;
- showcase positive impacts of transformative green solutions and technologies, and take stock of the policies and investments required to scale up successful models; and
- contribute to UNEA, the UN High-level Political Forum on Sustainable Development (HLPF), and other global forums to enhance decision making and inform future visions on the environment.

UN-SPBF 2017: The inaugural UN-SPBF took place in December 2017 in Nairobi, Kenya. It launched the report, [Frontiers 2017: Emerging Issues of Environmental Concern](#), which addressed six key emerging themes: the environmental dimension of antimicrobial resistance; nanomaterials; marine protected areas and sustainable development; sand and dust storms; off-grid solar solutions; and environmental displacement.

UN-SPBF 2019: The second global session of the UN-SPBF convened in March 2019 in Nairobi, Kenya. In support of the UNEA-4 theme, "Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production," this meeting identified a number of action priorities including the need for ambition on energy efficiency and climate change mitigation, establishing new business models to drive the circular economy, and focusing on resource efficiency to decouple economic growth from the loss of biodiversity and ecosystem services.

UN-SPBF 2021: This meeting convened virtually from 18-20 February 2021, under the theme "Integrated Solutions #ForNature," with a focus on: big data and frontier technologies;

integrated solutions for low-carbon, resource-efficient, inclusive societies; and managing risk through pollution prevention and management.

UN-SPBF 2022: The fourth global session of the UN-SPBF convened from 31 May to 1 June 2022 in Stockholm, Sweden, alongside the Stockholm+50 Conference. Under the theme, "Next 50 Years: Reimagining Multilateralism and Pathways for a Nature Positive World," the meeting explored the transformative actions required to put the world on track to meet multilateral environmental goals.

Regional Sessions of the UN-SPBF: The inaugural session of the Asia-Pacific Science-Policy-Business Forum (AP-SPBF) took place virtually on 5 October 2021. Hosted by the Republic of Korea, the theme was "Towards a Healthy Rebound for People, Nature and Economies."

The inaugural African SPBF took place on 17 August 2023, in parallel to the 19th African Ministerial Conference on the Environment (AMCEN) in Addis Ababa, Ethiopia. Conceived as a partnership arm for the implementation of AMCEN decisions, it represented an important milestone toward the African Climate Summit hosted by Kenya the following month.

The second AP-SPBF convened in Colombo, Sri Lanka, on 3 October 2023, and explored the theme "Putting Sustainability into Gear in the Asia-Pacific Region: Future-proofing Economies, People and the Planet." Discussions highlighted that to successfully leverage the huge potential for green investment in the region, higher legal and regulatory cohesion, public-private partnerships to de-risk climate investments, and access to high-quality data on the current share of green investment are needed.

Report of the Meeting

High-Level Opening Session: Inspirational Talks for Shaping Our Common Future

Axel Threlfall, Editor-at-Large, Reuters, welcomed participants to the Forum, noting it is a critical component of UNEA-6, uniting leaders from business, policy, science, and



UN-SPBF Moderator **Axel Threlfall**, Editor-At-Large, Reuters, and First Lady of Kenya, **Rachel Ruto**



Elizabeth Mrema, Deputy Executive Director, UNEP

society to support and contribute to the global environmental agenda. He underlined that for the past seven years, UN-SPBF has been shaping ideas, forming key processes, leading impactful alliances, and working towards policies that empower technology, innovation, and integrated solutions for nature.

Presenting her visions and expectations for the Forum, Shereen Zorba, Executive Secretary, UN-SPBF, underlined that in attendance are those holding a lot of knowledge, power, and influence to create the impact we desire and the world we want – one where the planet thrives, people prosper, and no one is left behind. She stressed that the journey today starts with greater ambition for sector-wide targets, diverse sectors, understanding the challenges, and how to overcome them, and will conclude with a vision for the future and commitment to do much, much more.

Elizabeth Mrema, Deputy Executive Director, UNEP, recalled recent scientific reports, including the [Global Assessment Report on Biodiversity and Ecosystem Services](#), which highlight worsening environmental degradation such as the loss of over a million species. She remarked that the business sector is increasingly recognizing that without nature, businesses risk collapse, and that to ensure continuing profitability, there is a need for innovation and alternative approaches aimed at enhancing the wellbeing of the planet. Acknowledging that businesses are beginning to step up, Mrema called for more financial flows moving from nature-negative to nature-positive activities.



Shereen Zorba, Executive Secretary, UN-SPBF

Moderator Threlfall then opened a mini-TED talk style round of reflections, inviting 19 speakers from policy, science, business, and civil society to provide short personal reflections on the question: “What is the one thing we can change or embrace to keep the world on track to achieve environmental goals?”

Sanda Ojiambo, Executive Director, UN Global Compact, observed that history has shown that leaders who succeed are those who put short-term profits behind long-term goals. Drawing from the UN Global Compact’s work with more than 20,000 businesses around the world, she stressed the potential for change when individuals take bold and collective action.

Tomáš Taraba, Deputy Prime Minister and Minister of Environment, Slovakia, underlined the importance of effective communication with citizens to gain their trust on policy choices for economic and social transformation. He stressed that this principle can be extended to international multistakeholder partnerships to support sustainable development projects that provide global benefits.

Emphasizing that as a highly polluting sector, infrastructure is central to effective climate action, Sonja Leighton-Kone, Deputy Executive Director, UN Office for Project Services (UNOPS), called for radical changes in how we plan, design, build and manage infrastructure. She highlighted some examples of UNOPS projects that support partners to integrate inclusive NbS into mainstream infrastructure planning.

Juergen Weichenberger, Vice-President, AI New Value Stream, Schneider Electric, observed that while digitalization is increasingly ubiquitous in society, promoting AI without addressing energy demand is counterproductive. Underscoring the need for an ecosystem approach to technology choices, he said this requires transdisciplinary collaboration to move beyond single solutions such as pure carbon offsetting that could generate unintended consequences.

Chris Reid, Macquarie University, identified the one thing as nature itself. He stressed that studying nature will give us the solutions we need, discussing examples of ongoing research such as isolating proteins from corals to color garments rather than using toxic dyes, and pioneering bioleather and other textiles designed for eco-friendly decomposition in landfills. Highlighting that the opportunities offered by nature-inspired technologies are clear, he lamented the lack of funding for “blue sky research” that could help in the development of such technologies.



Chris Reid, Macquarie University



Tony Goldner, Taskforce on Nature-related Financial Disclosures

Taolesulusulu Cedric Shuster, Minister for Natural Resources and Environment, Samoa, underlined the need for multilateralism to evolve, urging governments, the private sector, and science to work together. He stressed that problems such as plastic pollution cannot be resolved only by governments but require action by both producers and consumers as well.

Astrid Schomaker, Director for Global Sustainable Development, European Commission, stressed that information agency is achieved by bringing together science, business, and policy, with the ingredients of multilateralism, political will, adequate funding, knowledge sharing, and technology transfer. She called for: science-based measurable targets that will place the world on the pathway of equity so that all countries, not just the rich, can make progress; governments to turn agreements into action, while carrying citizens along; and business to show a true entrepreneurship spirit of regarding challenges as new business opportunities and ways of doing things.

Philip Lopokoiyit, CEO, ICEA LION Insurance Company, Kenya, recalled data showing that 95% of climate finance is directed at emission reductions, with only 5% for adaptation and resilience-building. Calling for increased adaptation and resilience-building in an inclusive and efficient manner and remarking that private capital is only about 3% of adaptation finance, he suggested that: banks can finance adaptation by lending to resilience projects and businesses; private investment can be directed towards infrastructure; and insurance companies can support resilience building efforts through parametric insurance.

Tony Goldner, Executive Director, Taskforce on Nature-related Financial Disclosures (TNFD), emphasized that today's "big question" is how to shift the flow of capital. He said this requires a fundamental change in mindsets, which can only happen through communicating business risks and opportunities in a language that business understands. While noting the concept of planetary boundaries as one promising example, he stressed that achieving change at the needed scale will require "a mix of carrots and sticks." This, he said, would include policy clarity and alignment, viable business models, and using public funding as a lever for investments in "nature resilience outcomes,"

such as long-term and green infrastructure. He highlighted the forthcoming launch of the Global Nature-based Finance Facility at the 16th session of the Conference of the Parties (COP 16) to the UN Convention on Biological Diversity (CBD) as a practical response to the need for such investment models for the future.

Discussing data challenges, Holger Harreis, Senior Partner, McKinsey, invited participants to imagine a virtual database that would generate all the data one needs to make informed decisions. Stressing that data is the most valuable asset for any business, he challenged stakeholders present to consider collaborating on the equivalent of a "UN Appstore for the environment," to channel and prioritize investments and spur behavior change to protect "the last defensible barrier for our future." He said this would require a small, but critical ecosystem of system providers and a few initial commercial use cases to attract investors and users.

Olga Skaredina, Children and Youth Major Group, urged participants to envision a world where the rights of future generations "are not an afterthought," and where young people are not forced to fight to be heard but are fully included in multistakeholder partnerships. Outlining recommendations from the recently concluded [Global Youth Environment Assembly](#), she stressed that adopting intergenerational equity as a guiding principle across all multilateral processes would empower young people to become true agents of change.

Philippe Zaouati, CEO, Mirova, described his company as one of the first movers in adopting NbS as a business model. Drawing insight from projects over the past decade, he expressed optimism that while the investment gap for nature is huge, bold, and creative, public leadership could help unlock more capital for blended finance instruments beyond carbon markets. He mentioned the recently launched [International Advisory Panel on Biodiversity Credits](#), which aims to do this.

Johan Rockström, Director, Potsdam Institute for Climate, lamenting the lack of policy alignment with science, stressed that we have all the policy agreements we need to solve the climate and ecological crises, and that what is required now is to deliver on these agreements. While acknowledging that these agreements are not perfect, he said they are "good enough" and called for investment, innovation, and equity to deliver on them. Rockström highlighted his institute's first Planetary Boundary Health



Tora Leifland, Head of Public Affairs, Volvo Group

Check, to be published in 2024, which will provide an annual, comprehensive assessment of the planet's health.

Pavan Sukhdev, CEO, GIST Impact, called for considering companies' environmental impacts by measuring their corporate sustainability. Emphasizing that a sustainable company is one that contributes to a better world, he highlighted the importance of measuring and valuing this impact. He suggested using peer-reviewed science to assess the social benefits and costs of companies and framing this information in a robust economic framework that policymakers, companies, and investors can comprehend.

Tora Leifland, Head of Public Affairs, Volvo Group, recalled a 2024 Nature study on [Globally representative evidence on the actual and perceived support for climate action](#), which found that 89% of the global population demands increased climate action, with 69% expressing a willingness to contribute 1% of their personal income towards this. She urged embracing collective will and turning the 89% to a global movement to reshape our common future, combined with bold leadership, especially from the private sector. Leifland called for, among other things, increased collaboration, as well as a price on carbon that motivates investment in sustainable technologies and prioritizing sustainable materials such as fossil-free steel.

Zhu Xiaoyu, Board Member, Society of Entrepreneurs and Ecology (SEE) Foundation, displayed a scarf made from recycled plastic bottles recovered from the Ocean. He discussed the role of social responsibility in addressing environmental challenges, highlighting, for instance, that his organization has developed operational guidelines for NbS, in collaboration with IUCN China, to restore ecosystems and improve human wellbeing. Zhu remarked that the environmental protection projects implemented by the SEE Foundation are always nature oriented.

Janez Potočnik, Co-Chair, International Resource Panel, called for addressing the drivers of environmental degradation, recalling that research shows that extraction and processing of materials are responsible for the triple planetary crisis. He urged decoupling economic growth from resource extraction, underlining that we can meet human needs with much less energy and materials. Potočnik suggested that all governments should nominate a minister for future generations with the first task of eliminating excess, repeating the well-known saying that "the world has enough for everyone's needs, but not everyone's greed."

Part I: Sector-Wide Transformations

The Imperative for Resource Efficiency and Sustainable Value Chains: In 2022, over 55% of the world's greenhouse gas emissions stemmed from biomass cultivation, mineral and fossil resource extraction, and their conversion into materials, fuels, and food. This figure rises to over 60% when emissions from land-use changes are included. The International Resource Panel's 2024 [Global Resources Outlook](#) (GRO) reveals that strategies like sustainable consumption, circular economy, and resource efficiency could slash carbon dioxide emissions by over 80% by 2060.

In a smooth segue from the inspirational opening to the first substantive session, Hans Bruyninckx, GRO 2024 Lead Author, asked participants to imagine a future SDG+40 meeting "when GRO 2055 has just been published and against considerable challenges, the world has effectively utilized all available science and knowledge to create the world we want." Expanding on this idea, he envisioned a future where the world has followed the recommendations of science and the business community, including those in the GRO 2024, driven by vision and leadership, and combined with governments' creation of the



A view of the panel during the roundtable on Responsible Mining in a Resource-Hungry World



Collins Nzovu, Minister of Green Economy and Environment, Zambia; **Tommi Kauppila**, Geological Survey of Finland; and **Tora Leifland**, Head of Public Affairs, Volvo Group

right conditions such as eliminating environmentally harmful subsidies. Bruyninckx underlined the role of bold action and systemic change at a pace and scale the world had never seen before, to move from the “rocking horse decades” of a lot of movement but little progress, to the decades of action, to achieve this future. He concluded by saying what changed the whole game was the world realizing that “it is all about ethics.”

Four interactive thematic sessions convened in the morning and afternoon to explore some actionable strategies across housing, mobility, energy, and food systems, emphasizing justice and equity, based on the report’s insights.

Responsible Mining in a Resource-Hungry World: The International Resource Panel estimated in 2019 that mineral and metal extraction tripled between 1970 and 2017 and projected it would double again by 2060. Speakers during this panel explored enabling conditions for responsible mining and the sustainable use of mineral resources to facilitate the low-carbon energy transition, infrastructure growth, and digitalization that are driving growth in global demand. The session was co-organized by the Consumption and Production Unit of UNEP’s Industry and Economy Division, the International Resource Panel, and the UN-SPBF community. Axel Threlfall, Editor-at-Large, Reuters, moderated the session.

Collins Nzovu, Minister of Green Economy and Environment, Zambia, said his country is seeking to manage the growth in global demand for transition minerals by prioritizing environmental protection and ensuring the local population benefits from mining. He noted the country has adopted environmental management acts to ensure all actors are held to the same standard.

Boat Modukanele, Deputy Permanent Secretary, Ministry of Foreign Affairs, Botswana, said his country seeks to ensure all mining operations are certified and that his ministry is responsible for ensuring mining is sustainable. He noted the role of banks, such as through the development of lending instruments for the mining sector to help them invest in solar systems.

Inga Wagner, Head of Unit, European and international Circular Economy and Raw Materials Policy, Germany, said her country has a national circular economy strategy and seeks

to reduce consumption of raw materials and close raw material cycles.

Steven Stone, Deputy-Director, Industry and Economy Division, UNEP, stressed the importance of this sector in moving the world away from fossil fuel consumption.

Steve Kukoda, Executive Director, International Copper Association, highlighted his association’s pathway to net zero and their copper flow model, which helps track copper that is being lost along the lifecycle. He also noted the need for social acceptance of mining.

Tommi Kauppila, Research Professor Circular Economy Solutions, Geological Survey of Finland, said if we triple mining, we will have more mining waste. He highlighted the need to find uses for the minerals in this waste and to start building systems now for these uses.

Vergütz Leonardus, Chief Innovation Officer, OCP Group, emphasized the need to foster innovation, including by de-risking products. He said OCP’s green investment strategy 2023-2027 will help the company achieve full carbon neutrality by 2040.

Cathryn MacCallum, Head of ESG Strategy, Akobo Minerals – Gold, said her company seeks to enable human-centered approaches and is exploring NbS, including to reduce tailings.

Rohit Dhawan, CEO, International Council on Mining and Metals, said responsible companies should always follow the highest standards and not drift to the lowest option required within a jurisdiction.

Tora Leifland, Head of Public Affairs, Volvo Group, said her company applies the highest level of standards, and a conflict minerals department keeps track of the minerals and metals needed for their products.

Jan Morrill, Tailings Campaign Manager, Earthworks, stressed the importance of safety, recalling that poorly designed mines cost lives. She highlighted her organization’s 17 guidelines to help ensure tailing safety, stating they are focused on technologies, access to information, and corporate accountability.

Adam Matthews, Chair, Global Investor Commission on Mining 2030, said investors recognize the need to work with stakeholders and industry to ensure they have identified best practice standards.



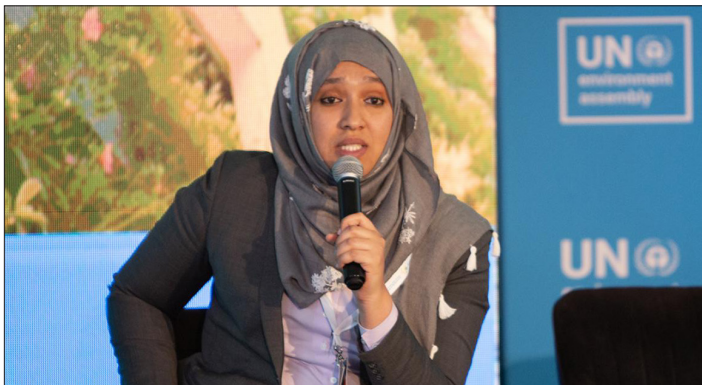
L-R: Moderator **Joe Ageyo**, Editor-in-Chief, Nation Media Group; **Hassaan Mohamed**, Deputy Minister of Climate Change, Maldives; **John Thompson**, Bureau of Oceans and International Environmental and Scientific Affairs, US Department of State; **Juergen Weichenberger**, Schneider Electric; and **Nasra Nanda**, CEO, Kenya Green Building Society

The Urban Environment: The Near-Zero Buildings of the Future: This thematic session focused on the intersection of sustainable architecture, urban planning, and environmental health, and explored how near-zero emission and resilient buildings can play a pivotal role in reducing urban pollution and addressing climate change. Co-organized with the UNEP Cities Unit in cooperation with the UNEP-led Cool Coalition, Global Alliance for Buildings and Construction (Global ABC), and Generation Restoration, the session was moderated by Joe Ageyo, Editor-in-Chief, Nation Media Group.

Hassaan Mohamed, Deputy Minister of Climate Change, Maldives, discussed his country's approach to net-zero resilient buildings and climate adaptation, identifying a focus on reducing energy consumption and increasing reliance on renewable energy. He highlighted the My Solar initiative, a collaboration between the government, utility companies, and foreign donors, which aims to empower households to generate electricity through solar energy. On adaptation, he explained the current Maldivian practice for reclaiming land to a higher elevation above mean sea-level.

John Thompson, Deputy Assistant Secretary, Environment, Bureau of Oceans and International Environmental and Scientific Affairs, US Department of State, emphasized the dual role of cities and urban areas as both solution generators and significant contributors to climate change and pollution. Noting that building codes in the US are typically adopted at the subnational or local levels, which presents challenges in setting national standards, Thompson highlighted options for promoting sustainability at the federal level through "environmental diplomacy." Among such initiatives, he highlighted the Global Cooling Pledge to reduce emissions from cooling systems and the US-ASEAN Green Building Innovation Program, which promotes circular economy principles in the construction industry.

Juergen Weichenberger, Vice President, AI New Value Stream, Schneider Electric, emphasized that despite significant advances in AI and the Internet of Things (IoT) to improve energy management – such as devices that adjust energy output based on hotel room occupancy – reducing unsustainable demand for energy requires changing the behavior of building occupants. He gave examples of demand-side management measures, such as educating people to use air conditioners only when necessary and to close curtains to reduce cooling needs.



Nasra Nanda, CEO, Kenya Green Building Society

Nasra Nanda, CEO, Kenya Green Building Society, noted that 60% of Nairobi's population resides in informal settlements, which requires considering the broader built environment in urban planning. She advocated an ecosystem approach that works better in the African setting, emphasizing this should include affordable and sustainable housing, micro forests, and green public spaces. Nanda highlighted the need for community engagement and collaboration to ensure buy-in of the local population.

Annika Lindblom, Director for International and EU Affairs, Finnish Ministry for Environment and Climate Change, said her country's approach to addressing the triple planetary crisis is by transforming to a circular economy. She discussed ongoing revisions of building legislation, as well as Finland's Roadmap to a Circular Economy 2016-2025, in which the construction sector is pivotal as a major consumer of resources. Lindblom further outlined her government's efforts to work with the private sector through low-carbon circular economy agreements.

Kweku Lisk, Deputy Mayor, City of Freetown, Sierra Leone, described some of his city's urban resilience initiatives, such as the "Freetown the Treetown" community tree planting programme, installation of shade covers in outdoor markets to protect those most affected by extreme heat, and climate education programmes to raise awareness. He mentioned the city's Heat Action Plan, to be launched by the end of the month, which contains specific measures and interventions to reduce heat-related risks and increase climate change resilience.

Zhai Yubo, Chief Sustainability Officer at NaaS Carbon Neutrality, emphasized the importance of aligning urban planning with green building initiatives. He mentioned that in China, a major concern is electric vehicle charging, and therefore the location and capacity of electric vehicle charging stations must be carefully considered. Zhai also described the launch of a demonstration project to develop eco-building and electric vehicle charging stations.

Dennis Papa Odenyi Quansah, Kenya, Ghana and Nigeria Lead, Climate Business Department, International Finance



L-R: Moderator **Erika Kay**, CEO, Future Earth US Global Hub; **Veluppillai Kananathan**, Sri Lanka High Commissioner and Permanent Representative to Kenya; **Branson Skinner**, Founder, The Or Foundation; **Ria Ana Sejpal**, Founder, Lilabare; Ambassador **Johanna Lissingner Peitz**, Ministry of Climate and Enterprise, Sweden; and **Abdullah Muhammed**, Business Development Manager, Wama International Group

Corporation, discussed his organization's EDGE software, a web-based application that shows users the cost-benefits of sustainable building design strategies, to enable them to make informed choices. He explained this software helps build a business case for financial institutions to participate in the green transition, noting that most clients are concerned about the "bottom line" cost of carbon neutrality to them.

Dechen Tsering, Director, Climate Change Division, UNEP, underlined the importance of multi-level governance, highlighting target-setting for cities, such as under the CBD. She called for increased financing, capacity building, planning, accountability, and targets, particularly for cities.

Christophe Béchu, Minister of Ecological Transition and Territorial Cohesion, France, via video message, underlined the role of local authorities and invited participants to the Buildings and Climate Global Forum scheduled for March 2024 in Paris, France.

Thread Lightly: Unravelling the Fabric of Sustainable Fashion: The fashion industry is a significant contributor to ecological degradation. Each year, the textile value chain is estimated to be responsible for: 2-8% of global emissions; 215 trillion liters of water use (the equivalent of 86 million Olympic-sized swimming pools; and 9% of microfiber pollution to the Ocean. Drawing on UNEP's 2023 report, [Sustainability and Circularity in the Textile Value Chain: A Global Roadmap](#), this session aimed to gain insights into the multifaceted challenges facing the sector and explore how to link diverse stakeholders in transitioning away from the harmful "take-make-waste" model of much of the global textile and fashion industry. The session was co-organized by UNEP's Economy and Industry Division and the UN-SPBF community and moderated by Erika Kay, CEO, Future Earth US Global Hub.

Velupillai Kananathan, High Commissioner and UNEP Permanent Representative of Sri Lanka to Kenya, discussed the challenge of waste reduction and pollution control. He noted that while the country is cognizant of the need to adopt more sustainable practices, the sector needs technology transfer, and financial and capacity-building support to meet stringent new sustainability and ethical standards, especially from the European Union.



Velupillai Kananathan, High Commissioner and UNEP Permanent Representative of Sri Lanka to Kenya

Johanna Lissinger Peitz, Ambassador, Ministry of Climate and Enterprise, Sweden, offered perspectives from ongoing EU-level discussions on extended producer responsibility (EPR) guidelines for the textile sector, noting their link to multilateral negotiations to ban a broader set of microplastics and other forever chemicals.

Branson Skinner, The Or Foundation, discussed his organization's work with vendors and other diverse groups at the Kantamanto Market in Ghana, one of the world's largest secondhand clothing markets, which recirculates an estimated 25 million garments a month. Highlighting efforts to progressively upfit the market's infrastructure to become "a global flagship for circularity," he underscored the role of globally accountable EPRs, to redirect fashion design from volume to value, stating "if it costs more to recirculate than the value of the garment, it becomes waste."

Ria Ana Sejjal, Founder, Lilabare, described the label as "part agriculture, part craft, innovation and invention – not just fashion." She said this leads to pursuing a vision of sustainable fashion that spans sourcing from smallholders at a fair living wage, by: adopting eco-friendly production processes; creating new revenue streams for farmers by purchasing agricultural waste such as tea residue to develop fabric dyes; ensuring consistent demand to suppliers to grow their business; and promoting artisanal innovation by adapting or reinventing traditional techniques.

Abdullah Muhammed, Wama International Group, discussed a range of marketing and communication strategies by brands to make sustainable fashion more appealing, noting only 15% of global consumers are currently interested in sustainability.

Joining online, Omoyemi Akerele, Founder, Lagos Fashion Week, described overproduction and overconsumption by the large brands as the elephant in the room. She described the role of her organization as a catalyst, by supporting fashion entrepreneurs "who consciously design to honor the environment and respect artisans and producers."

Alexandre Capelli, LVMH, discussed efforts by the fashion brand to promote ethical and sustainable practices along the



L-R: **A.G Kawamura**, Co-Facilitator, Farmers Major Group, UNEP; **Leigh Ann Winowiecki**, Global Research Lead, World Agroforestry Centre (CIFOR-ICRAF); **Arne Cartridge**, Special Advisor, Yara; **Selemani Saidi Jafo**, Minister of State, Tanzania; **Mark Sutton**, UK Centre for Ecology and Hydrology; and **Karimi Thurania**, Kenya Country Manager, OCP Group

entire value chain, including sourcing from certified supply chains, supporting regenerative farming practices, and focusing on quality to lengthen the lifespan of its products. On specific strategies to boost circularity, he highlighted the introduction of repurposing booths at stores, remarketing deadstock fabrics to support young designers, and developing new fabrics from waste products such as grape pulp and other recycled raw materials.

In a final round, Moderator Kay invited panelists to offer one idea on how to improve collaboration in the fashion sector, with speakers proposing:

- increased investments by brands to support their suppliers to transition to more sustainable practices;
- more concerted efforts to tackle waste management and other entrenched problems;
- focusing on the demand side to shift from an overconsumption mindset towards lifelong value, supported by policies that require brands to factor in their environmental social costs;
- recognizing that we are part of the natural system and respecting it in our practices;
- linking innovation, design, and a market sector approach; and
- combining lessons and best practices from around the world.

Building the Business Case for Soil Health: An estimated 24 billion tons of topsoil is lost annually, necessitating increased use of pesticides and nitrogenous fertilizers, which in turn exacerbates soil acidity, pesticide residues, and nutrient overload. Among other objectives, this roundtable aimed to construct a compelling investment case and explore comprehensive public-private partnership models for revitalizing soil health as the basis for sustainable food system transformation while contributing to poverty reduction and biodiversity conservation goals.

Selemani Saidi Jafo, Minister of State for Environment, Tanzania, outlined some challenges and opportunities in attracting investment for sustainable land management and soil health initiatives. He underscored the importance of an enabling policy framework with a strong call for action, underpinned by the best agronomic practices.

Karimi Thurania, Kenya Country Manager, OCP Group, discussed her organization's contribution to sustainable soil management in three key areas: providing mobile soil testing services with recommendations for customized fertilizers and

other inputs; initiating a large-scale soil mapping project covering 50 million hectares and developing 44 customized solutions for 10 value chains; and promoting judicious use of fertilizers and regenerative farming practices on more than 5,000 demonstration farms. Thurania highlighted Ethiopia's transition from "no food" to a 40% increase in yield of key grains such as tef and wheat as the direct result of applying such customized soil solutions.

Arthur Kamamura, Co-Facilitator, Farmers Major Group, UNEP, offered personal insights from adapting to continuous change as an urban small-scale vegetable farmer in Orange County, California, US. Charting how urbanization as well as decades of unsustainable practices and climate change have impacted what was one of the most productive agricultural regions, he stressed that even under such conditions it is possible to remediate the soil and make it productive again as "we have much more in our toolbox than ever before."

Leigh Ann Winowiecki, Soil and Land Health Global Research Lead, CIFOR-ICRAF, discussed some solutions for sustainable land management in Africa, where an estimated 60% of soils are degraded. She urged greater collaboration to scale good soil management practices, highlighting the UN Decade of Ecosystem Restoration as a good example.

Arne Cartridge, Special Advisor, Yara, said soil regeneration efforts need to first embrace farmers as stewards. Noting the multiple demands on farmers, he stressed that external support must provide them not only with tools but opportunities to generate diverse income streams.

Discussing key gaps and opportunities to scale up partnerships for soil health, the panelists highlighted, among others:

- the importance of investing in the evidence base on returns from investments in land restoration;
- undertaking soil research at an ecosystem scale to better understand good agricultural practices;
- moving beyond binary discussions towards viable and actionable solutions;
- abandoning demonstration plot approaches that "have been proven not to work" and exploring how to engage farmers as innovators and citizen scientists; and



H.E. Rachel Ruto, First Lady of Kenya



Inger Andersen, Executive Director, UNEP



Leila Benali, President of UNEA-6

- recognizing that social and political “tools” are just as important as technology.

In general discussion, one speaker raised the issue of how to apply mechanization and precision farming on smallholdings, with Thurairaja suggesting that one option is to encourage farmers to form cooperatives to facilitate leasing of equipment at affordable prices. Kamamura further noted that farmers with insecure land tenure face challenges with the long-term investment needed to improve soil health and, hence, need support with alternative tools that can generate yields in a short period of time.

Responding to a question on how to unleash the right nutrients in poor soils, Winowiecki cautioned that “the starting point matters” with African soils generally having lower fertility due to geology. She said this requires first focusing on stopping soil degradation before starting to rebuild organic matter. Citing World Food Prize winner Rattan Lal, she stressed the importance of elevating the position of farmers as soil stewards, by recognizing that healthy soils are our collective bank account.

Part II: Economic and Financial Tools

High-Level Opening Plenary: Introducing the second special session in the afternoon, Moderator Threlfall noted that NbS are crucial for addressing climate change in a cost-effective manner but said funding must be quadrupled by 2050 to meet Rio Convention targets.

Inger Andersen, Executive Director, UNEP, called for multilateral solutions to the triple planetary crisis, noting that humans cannot exist without a stable climate, lush nature, and pollutant-free planet. She lamented that NbS are underfunded globally at only USD 200 billion per year, less than one-third of what is needed. She highlighted debt-for-climate-and-nature swaps, such as Ecuador’s USD 1.1 billion swap, and Gabon’s USD 500 million marine conservation deal, as a promising approach to fill this gap.

Leila Benali, UNEA-6 President, underlined the importance of bringing together science, policy and business, noting that



L-R: **Pavan Sukhdev**, CEO, GIST Impact (on screen); **Claudine Uwera**, Minister of State for the Environment, Rwanda; **Iziah Adekunle Salako**, Minister of State for Environment, Nigeria; **Laksmi Dhewanthi**, Deputy Minister, Ministry of Environment and Forestry, Indonesia; **Maria Susana Muhamad**, Minister of Environment and Sustainable Development, Colombia; **Eva Mayerhofer**, Head of Environmental Policy and Biodiversity, European Investment Bank; **Tony Goldner**, Executive Director, Taskforce on Nature-related Financial Disclosures; **Reshma Shah**, Group Director for Sustainability for Equity Group Holdings; and **Florent Kaiser**, Global Forest Generation



Laksmi Dhewanthi, Deputy Minister, Ministry of Environment and Forestry, Indonesia

only by combining the strength of the private sector, the vision of scientists and the rigor of scientific enquiry, and the wisdom of politicians and policymaking, can the world pave the way for a sustainable and peaceful coexistence between humans and nature. Calling for urgent action, she stressed that policymakers cannot afford to wait until everyone to be convinced.

Rachel Ruto, First Lady, Kenya, discussed her newly launched initiative to plant 500 million trees by 2032. She invited all present to share knowledge, best practices, and innovative solutions for financing NbS, lauding UN-SPBF's role as a multistakeholder platform that can help steer finance towards meaningful change.

High-Level Panel: Tracking Financial Flows to Nature-based Solutions: Building on UNEP's [State of Finance for Nature 2023](#) report, this session explored the scale of nature-negative finance flows from both public and private sector sources, comparing them to the finance needed to maximize the potential of NbS to help tackle climate, biodiversity, and degradation challenges.

Claudine Uwera, Minister of State for the Environment, Rwanda, explained that her country has adopted integrated financial instruments as called for by the Addis Ababa Action Agenda for Aid Effectiveness, to achieve its ambitious goal for to achieve carbon neutrality by 2050. Stating that the country has pioneered natural capital accounting models to build a green GDP, she highlighted a joint initiative with the World Bank exploring innovative instruments such as green bonds.

Iziah Adekunle Salako, Minister of State for Environment, Nigeria, noted his country's participation in the [High Ambition Coalition for Nature and People](#), as well as ongoing initiatives to reduce climate risks such as protecting mangrove ecosystems and other green infrastructure, supporting local communities to establish tree nurseries and promoting clean cookstoves. Describing the countries' Indigenous and local communities as "a canary in a coal mine," he said protecting them and rewarding their contribution to biodiversity protection is "the right thing to do."

Laksmi Dhewanthi, Deputy Minister, Ministry of Environment and Forestry, Indonesia, discussed how her country redirects financial flows towards NbS, outlining a number of proactive

policy instruments such as the launch of a public-private expenditure report, budget tracking at the subnational and national levels, exploring green and blue government bonds, and strengthening governance for nature-positive financing.

Eva Mayerhofer, Head of Environmental Policy and Biodiversity, European Investment Bank (EIB), discussed a new EIB tool that measures the potential exposure to such biodiversity risks as part of the bank's credit analysis process, with higher risks being directly reflected in a higher loan price. She noted that due to their long-term perspective, NbS projects tend to be small in scale and integrated in larger infrastructure, citing the Ruhr River restoration project in northeast Germany as a success story. She explained that while it took 20 years at a total project cost of five billion euro, the project has yielded tangible environmental, social, and economic benefits that include flood protection, improved water quality, and recreation value.

Reshma Shah, Group Director, Sustainability, Equity Group Holdings, discussed how her group has applied TNFD recommendations on social and environmental safeguards. Stating it has voluntarily taken on additional TNFD components despite experiencing considerable pushback, she said their motivation comes from the need to better understand and quantify emerging risks for their clients, and that they have therefore become a first mover in providing additional value for investors.

Florent Kaiser, CEO, Global Forest Generation, discussed the role of philanthropy in restoring critical ecosystems, highlighting a flagship project in the Andean region that aims to address a continental scale problem through a mosaic of local-level actions that draw on ancestral knowledge and socio-economic principles. He said that philanthropy played an important role in the initial phases to demonstrate and scale the model that now involves more than 30,000 people across five Andean countries and is attracting global attention and funding. He cautioned against viewing market-based mechanisms as the only viable option, stressing that restoring such public goods requires going beyond business as usual to inspire people's passion and commitment.



Augustine Kenduiwo, Deputy Director, Climate Change, Ministry of Environment, Kenya

The Argument for High-Integrity Carbon Markets: While the private sector plays a role in driving demand for carbon credits, it increasingly faces accusations of greenwashing and the need for clearer guidelines on credit quality and claims. Financial institutions are pivotal not only in providing the necessary capital and investment products to support these markets but supporting clearer global standards and consistent guidelines to bolster market confidence and integrity. This plenary session moderated by Axel Threlfall discussed strategies to enhance equity in carbon markets to support sustainable development in nature-rich regions, which often face the dilemma of balancing fossil fuel exploration for economic development with environmental sustainability.

Augustine Kenduiwo, Deputy Director of Climate Change, Ministry of Environment, Kenya, highlighted recent amendments to the national climate act to facilitate access to carbon markets. He noted, however, that this requires high transparency and a level playing field on both the supply and demand sides to ensure predictable pricing and avoid double counting of carbon credits.

Zhang Li, Director, Green Inclusive Carbon Neutrality Center, discussed China's fast growing emissions trading sector since 2021, noting it reached a total of USD 3.5 billion in trading during the first two years, and is a vital part of achieving carbon neutrality by 2060. He said the national carbon market operates under a cap-and-trade principle, where the government sets a cap on emissions, and companies can trade emission allowances to stay within their allocated limits.

Jenni Pitko, Member of Parliament, Finland, highlighted some regulatory initiatives at the national and regional levels, such as

guidelines on forest and soil-based carbon sequestration from the agricultural sector, while noting persistent challenges with double counting and greenwashing in carbon offsetting schemes.

Philippe Zaouati, CEO, Mirova, stressed that market instruments do not mean a "free for all" and explained that as an impact investor, Mirova works with credible project managers to develop high quality products.

Tracy Lane, Associate Director, KPMG East Africa, said the African carbon markets initiative aims to produce 300 million credits annually to unlock USD 6 billion in financing. Noting that the East African carbon market is developing fast, and covers such sectors as agriculture, forest, land use, and waste management, she said that under the right conditions, the African continent could become one of the largest suppliers and therefore one of the highest recipients of carbon financing.

Gabriel Labbate, Co-Chair of the Expert Panel, Integrity Council for the Voluntary Carbon Market, highlighted some pressing issues in ensuring the credibility of carbon credits, noting that the Council's theory of change is that if we can ensure integrity in this market, scale will follow. While noting an increased uptake of its guidance by governments and other stakeholders, he stressed that the challenge is in the fine print, notably the timeline for achieving impact, or understanding what additionality means for renewable energy markets in middle-income countries.

Sunny Trinh, Co-Founder and CEO, DevvStream, discussed the role of digital solutions in enhancing the transparency and traceability of carbon credits, but cautioned that this comes at a cost. He said one of the ways forward is to increase the value of



L-R: Moderator **Joe Ageyo**, Editor in Chief, Nation Media Group; **Sylvia Mwangi**, Climate Risk Expert, Zep-Re Insurance Company; **Marine Collignon**, Ministry for Europe and Foreign Affairs, France; **Pedro Ivo Ferraz da Silva**, Secretary for Climate, Ministry of Foreign Affairs, Brazil; **Louise Kessler**, I4CE; **Kyung Ah Koo**, Korea Environment Institute; **Mrinalini Rai**, Director, Women4Biodiversity; and Davinah Milenge-Uwella, African Development Bank

carbon credits since “if you make it profitable to do good then people will be good.”

Thematic Roundtable on the Cost of Climate and Nature Positive Transitions: From Strategy to Action: This session, moderated by Joe Ageyo, Editor in Chief, Nation Media Group, focused on how to move from planning to effective implementation of climate and sustainability strategies.

Pedro Ivo Ferraz da Silva, Secretary for Climate, Ministry of Foreign Affairs, Brazil, underlined the imperative to not only conserve and protect the Amazon but to also ensure that the communities that depend on it can maintain their livelihoods from it. He further remarked that the Amazon should not solely be regarded from above, in terms of carbon sequestration, but also from below, considering its biodiversity and the wellbeing of the Amazonian people.

Marine Collignon, Deputy Assistant Director for Environment and Climate, Ministry for Europe and Foreign Affairs, France, highlighted the importance of the need for country-ownership, recognizing that countries may pursue different transition paths, as they have different needs and priorities. She described her country’s efforts including the green budget first published in 2020 and annually since then, the establishment of the General Secretariat for Ecological Planning in 2022, and a whole-of-society financing focus, noting that public funding will not be sufficient.

Kyung Ah Koo, Senior Researcher, Korea Environment Institute, emphasized the need for strong legal and policy frameworks. She mentioned her country’s carbon neutrality and green growth plan, under which the government plans to invest

about USD 67.5 billion over five years, primarily to develop new carbon sequestration technologies. She said the country is now focusing on developing new financing sources, especially from the private sector.

Louise Kessler, Economy Programme Director, I4CE, identified integrated financing plans for the transition as a missing piece at the country level. She stressed these plans can act as a roadmap to bridge the financing gap, provide a positive signal to the private sector and financial institutions, and limit the chances of a disorderly transition, such as maladaptation. Kessler called for national climate strategies that: assess investment needs, establish policies to trigger investment, identify funding sources such as new fiscal instruments or redirecting fossil fuel spending, and review the micro-economic implications of the transition.

Davinah Milenge, Principal Programme Coordinator, African Development Bank, underscored that where there are targets, investors listen. She gave the example of the Nairobi Declaration on Sustainable Insurance. She explained that although the Bank is not a signatory to the Declaration, it saw the Declaration as an opportunity, and therefore launched, together with partners, the Africa Climate Risk Insurance Facility for Adaptation which aims to mobilize USD 1 billion of concessionary financing, high-risk capital, and grants to support the African insurance industry.

Sylvia Mwangi, Climate Risk Expert, Zep-Re Insurance Company, stressed that insurance companies are “in the action space” beyond declarations and beyond panels like this one, “giving feet to the climate discussions.” She cited the example of the Horn of Africa De-risking, Inclusion and Value Enhancement



A view of the room during the panel session.

(DRIVE) project, which was established to enhance pastoralists' access to financial services for drought mitigation.

Mrinalini Rai, Director, Women4Biodiversity, stressed a focus not just on climate financing, but also on biodiversity and nature financing, urging a change in the narrative around the valuation of nature. She called for accountability and due diligence, as well as the application of social indicators to finance projects. Rai said biodiversity should not be considered only as a carbon sink, but as valuable in itself.

In the subsequent discussion, one participant highlighted that the carbon taxes being imposed by governments have the potential to kill the carbon market. Another participant stressed the role of grassroots organizations as providers of solutions, but noted many of them are not aware of available funding.

Part III: Towards Integrated Early Warning Systems

Forecasting the Future: Towards Integrated Early Warning Systems for the Planet: While some “swim in too much data,” others need more data to generate actionable information for the local level. Speakers at this event considered the role of early warning systems and Early Warning for Environment as fundamental accelerators for achieving the 2030 Agenda for Sustainable Development. It was co-organized in cooperation with the Early Warning and Data Analytics Branch of UNEP's Early Warning and Assessment Division. Axel Threlfall, Editor-at-Large, Reuters, moderated the event.

Alexandre Caldas, Chief Early Warning and Data Analytics, UNEP, highlighted that while early warning systems have focused on climate and natural disasters, they focus primarily on emergency responses leaving a gap on preparedness and prevention. He emphasized the need to integrate early warning systems through partnerships.

Boat Modukanele, Deputy Permanent Secretary, Ministry of Foreign Affairs, Botswana, discussed the role of regional networks in early warning systems.

Jeronimo Rosa Joao Chivavi, High Commissioner of Mozambique to Kenya, emphasized the importance of

communicating with neighboring countries on early warning systems.

Katrin Saarsalu-Layachi, Ambassador for Climate and Energy, Ministry of Foreign Affairs, Estonia, recognized the importance and power of data for decision making.

Stefania Ministrini, Head of Unit of International Affairs and Institutional Relations, Italian Institute for Environmental Protection and Research, stressed the need to make better use of existing data, boost trust in knowledge, and increase collaboration and overcome reluctance to data sharing.

Tomaž Rodič, Director, Slovenian Center of Excellence for Space, Science and Technology, discussed his organization's use of satellite data to understand flows of rain to river basins, among other insights. He also stressed the need to ensure early warning messaging is effective.

Christian Feichtinger, Executive Director, International Astronautical Federation, said while space was once seen as a realm for only a few countries, several emerging countries are increasingly venturing into space technologies. He underscored the need for cooperation to bring stakeholders together.

Charles Mwangi, Director, Kenya Space Agency, discussed the challenges of ensuring messages and analysis are able to reach those who need it, particularly actors on the ground.

Lorant Czarán, Head, UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), stressed the need to facilitate access to data for experts at the country and local levels.

Giuseppe Ottavianelli, Head of Applications, European Space Agency, called for actionable information and attention to efforts to facilitate the “last mile,” which should ensure the final user has customized solutions, including through a co-development and co-design approaches.

Charity Wayua, Director, IBM Research Africa, noted the role of innovation for managing big data sets and shifting the way we manage AI to use data.



Janez Potočnik, Co-Chair, International Resource Panel



Lemogang Kwape, Minister of Foreign Affairs, Botswana



Jane Burston, CEO, Clean Air Fund

High-Level Closing Session

UN-SPBF concluded in the same way as it began, with a set of innovative ideas and final reflections to inspire and inform the high-level deliberations of UNEA-6 in the days ahead. Identifying some building blocks to “doing better,” nine closing speakers offered their perspectives on “the one thing that we need to either change or embrace to put the world on track to meet environmental goals.”

Zainab Hawa Bangura, UN Under-Secretary General and Director-General, United Nations Office at Nairobi (UNON), stressed that change must start with personal commitment and leadership, pointing to the newly launched Kenyan First Lady’s tree planting initiative at the adjacent Karura Forest. Observing that the UN campus occupies a previous part of the forest, she stressed that UNON has planted 2000 trees in the past year in a bid to restore the compound to its original purpose.

Lemogang Kwape, Minister of Foreign Affairs, Botswana, observed that what humanity has done to our planet in the quest to live a comfortable life has become the path to destruction. He urged increased collaboration to think globally, coordinate regionally, and act locally.



Martin Brocklehurst, Chair, Citizen Science Global Partnership

Jane Burston, CEO and Founder, Clean Air Fund, said her one thing would be to pursue win-win solutions by integrating actions on air pollution, health, and climate, focusing on super pollutants, such as black carbon, which are currently not being addressed under the global climate regime.

Posing the question “What does the business community get for participating at multilateral forums such as UNEA?” Steven Kukoda, Executive Director, International Copper Association, noted the opportunity it offers to bring their perspectives to these discussions and learn from others.

Maria Ivanova, Director, School of Public Policy and Urban Affairs, Northeastern University, suggested the creation of an art and academia alliance to bring to the table the inspiration and mobilization the world needs. Noting the existence of art that illustrates the problem, she emphasized the need for art that shows a vision of a different world, to serve as a bridge between data and dreams, and connect heart and mind, as well as humans and nature. She concluded by saying “let us be good ancestors and better neighbors.”

Mina Guli, Founder and CEO, Thirst Foundation, stressed we have a water crisis that is urgent and threatening everything that has been discussed today. Underlining that “if we don’t get water right, everything falls apart,” she urged protecting, restoring, and rebuilding resilience of the world’s rivers.

Mohamed Abdelraouf, Co-Chair, Major Groups Facilitating Committee, UNEP, noted that current environmental problems give business an opportunity, as “the future belongs to everything that is environmentally friendly.” He pinpointed major groups and civil society as the missing component, highlighting their roles in advocacy, research, on-the-ground monitoring, and acting as watchdogs. He stressed the importance of integrating them into the process.

Martin Brocklehurst, Chair, Citizen Science Global Partnership, said citizens and citizen science are an integral part of all the solutions suggested in today’s discussions. He emphasized the ability of citizen science to access the remotest



Maria Ivanova, Director, School of Public Policy and Urban Affairs, Northeastern University



UN-SPBF Moderator **Axel Threlfall**, Editor-At-Large, Reuters

regions and into the hearts of cities, providing real time on-the-ground data. Observing that access to real-time data prompts behavioral change, he advocated for the establishment of a charter for citizen science.

Janez Potočnik, Co-Chair, International Resource Panel, called for four major changes to make the future we want a reality:

- optimizing human needs, maximizing human wellbeing, and ensuring economies function to deliver fundamental needs;
- changing mindsets to understand that humans are not separate and superior to nature, but are embedded in it, and that destroying nature equals destroying humanity;
- moving from extraction-based to creation-based production and rewarding creative ways of meeting human needs; and
- building cooperation-based social and political models, recognizing that a safe and more equal world is a precondition for environmental resilience.

Thanking “this amazing community that keeps growing,” Moderator Threlfall concluded that the day’s discussions and participant’s dedication will help inform the UNEA discussions, and declared the meeting closed at 7:50 pm.

Upcoming Meetings

Buildings and Climate Global Forum: This Forum will bring together ministers and high-level representatives of key organizations to initiate a new impetus in international collaboration for building decarbonization and resilience. It is co-organized by France and UNEP, with the support of the Global Alliance for Buildings and Construction. **dates:** 7-8 March 2024 **location:** Paris, France **website:** unep.org/events/conference/buildings-and-climate-global-forum

Informal Dialogue on Building Global Resilience and Promoting Sustainable Development Through Infrastructure Connectivity: This event, announced by the President of the UN General Assembly, will contribute to ongoing efforts to achieve peace, prosperity, progress, and sustainability for all, in line with the 2030 Agenda for Sustainable Development. **date:** 17 April 2024 (tentative) **location:** New York City, US **website:** un.org/

[pga/78/2023/11/29/letter-from-the-president-of-the-general-assembly-sustainability-week/](https://un.org/pga/78/2023/11/29/letter-from-the-president-of-the-general-assembly-sustainability-week/)

High-level Thematic Debate on Debt Sustainability and Socioeconomic Equality for All: This event, announced by the President of the UN General Assembly, will contribute to ongoing efforts to achieve peace, prosperity, progress, and sustainability for all, in line with the 2030 Agenda for Sustainable Development. **dates:** 19 April 2024 (tentative) **location:** New York City, US **website:** un.org/pga/78/2023/11/29/letter-from-the-president-of-the-general-assembly-sustainability-week/

SDG Investment Fair: The ninth edition of the SDG Investment Fair will bring together over 5,000 participants from governments and the private sector to hear pitches on 100 SDG-aligned projects, with a total investment scope of USD 50 billion. The Fair will also facilitate networking sessions and discussions on how to develop additional bankable SDG investment pipelines and innovations in financing approaches.areas of expertise. The Forum will result in a co-chairs’ summary of discussions. **dates:** 9-10 May 2024 **location:** New York City, US **website:** sdgs.un.org/tfm/STIForum2024

2024 AI For Good Global Summit: This event aims to identify practical applications of AI to accelerate progress towards the SDGs and scale solutions for global impact. The Summit is an action-oriented platform promoting AI to advance climate, gender, health, inclusive prosperity, and sustainable infrastructure. It is organized by the International Telecommunication Union, in partnership with 40 UN sister agencies, and co-convened with the Government of Switzerland. **dates:** 30-31 May 2024 **location:** Geneva, Switzerland **website:** aiforgood.itu.int/summit24/

For additional upcoming events, see: sdg.iisd.org

Glossary

AI	Artificial Intelligence
CBD	Convention on Biological Diversity
COP	Conference of the Parties
EPR	Extended Producer Responsibility
GEF	Global Environment Facility
GRO	Global Resources Outlook
MEAs	Multilateral environmental agreements
NbS	Nature-based solutions
SDGs	Sustainable Development Goals
TNFD	Taskforce on Nature-related Financial Disclosures
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UN-SPBF	United Nations Science-Policy-Business Forum on the Environment