Report of the Fourth Global Session of the UN
Science-Policy-Business Forum:
31 May – 3 June 2022

Since the UN Conference on the Human Environment was held in 1972, humanity has come a long way with respect to global environmental governance. More, however, needs to be done. We are faced with the triple crisis of climate change, biodiversity loss, and pollution. We are also not on track to meet many of the global environmental goals. Progress that was made was further set back by the COVID-19 pandemic and geopolitical turmoil, including the war in Ukraine.

Within the context, the fourth Global Session of the UN Science-Policy-Business Forum (UN-SPBF 2022) explored the many actions needed to achieve truly transformative change to put the world back on track to meet its goals.

In his vision setting speech, Johan Rockström, Director, Potsdam Institute for Climate Impact Research, reminded participants of the reality and urgency of the situation we find ourselves in, setting the stage for the next four days of discussions. During the discussions, participants addressed a range of issues dealing with multilateralism, including with respect to climate change, and future economic frameworks, before turning to issues that affect the daily fabric of our lives—technology, fashion, and supply chains. Leaders were also invited to share their vision for Stockholm+100.

Key messages emerging from these discussions included:
• Setting a carbon price to effectively account for emissions is needed;
• Stakeholders should collaborate and work cross-sectorally to find solutions;
• Data is crucial to effectively manage the situation we find ourselves in, as “you can’t manage what you don’t measure”;
• Technology has an important role to play, and can unlock opportunity and realize the potential of many to resolve the triple planetary crisis.
• Circular economy and planning for using recycled or recyclable materials is key; and
• Responsible mining will be crucial as an increase in critical minerals will be required for the energy transition.

The Stockholm+100 Leadership Dialogue provided a vision for the future, sharing inspiring insights, with Leaders highlighting many of the actions already being undertaken to move the needle on progress, while also calling for:
• redefining what is good enough for societies and individuals to thrive;
• policy and education to develop joint understanding;
• partnerships as key to resolving many challenges;
• the private sector to mobilize and take the lead; and
• engaging major groups and consumers to develop solutions for the crises we face.

UN-SPBF 2022 convened from 31 May – 1 June 2022. Two events were then held in parallel to the Stockholm+50 conference. On 2 June, “Transformers 1: The Stockholm+100 Journey Starts Now” showcased “trailblazing” actions for a positive transformation. On 3 June, “Transformers: Women in sustainability” presented three female leaders who offered insights into breaking barriers and overcoming obstacles to make a truly transformative change.

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A Brief History of the UN-SPBF

Launched at the third session of the UN Environment Assembly (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 aims to facilitate 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).

The Forum brings together more than 2,000 organizations around the world to:

• facilitate issue-based consultations and building communities of practice around key themes, bringing together top scientists, policymakers, citizen science groups, and the business sector;
• 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 fora to enhance decision making and inform future visions of the environment.


• science shaping green policies and market responses;
• big data: towards a digital platform for our planet;
• smarter, greener solutions for cities;
• green technology startup initiative;
• climate challenge: finance, markets, and non-state actors; and
• sustainable food for a healthy planet.

Priorities for action identified included: the need for more 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 biodiversity and ecosystem services loss.

UN Science-Policy-Business Forum on the Environment (2021): UN-SPBF 2021 convened virtually from 18-20 February 2021, under the theme, “Integrated Solutions #ForNature.” It aimed to identify how to address the triple planetary crisis—climate change, biodiversity loss, and pollution—through a shift to sustainable consumption and production patterns. The Forum was organized along three thematic tracks:

• Big Data and Frontier Tech: Powering the Transition to a Sustainable Future;
• Build Better: Integrated Solutions for Low-carbon, Resource-efficient, Inclusive Societies; and
• Managing Risk: Pollution Prevention and Management.

Key points emerging from the session included: cities are at the forefront of both environmental and health crises and their respective solutions; multi-stakeholder collaboration on food waste, nutrient efficiency, and digitizing farming communities is key to achieving nature-positive food systems; and partnerships can assist in promoting initiatives to address plastic pollution in oceans, seas, and rivers and to incentivize recycling.

First Regional Session of the UN-SPBF for Asia and the Pacific: The first UN-SPBF for Asia and the Pacific convened under the theme “Towards a Healthy Rebound for People, Nature and Economies.” Held virtually on 5 October 2021, the sessions focused on how the Asia-Pacific region can bounce back from the COVID-19 pandemic alongside the impacts of climate-related disasters. Key insights from the session included:

• For the most vulnerable nations across the region—and the world—the fight against climate change is an existential fight for survival;
• Improving environmental big data management and analytics, improving transparency across sectors, and producing ‘knowledge’ out of Big Data that is open to all are urgently needed;
• Artificial intelligence (AI) and exponential technology can transform organizations and industry to a more sustainable path, but policies and financial tools are required to power the transformation;
• Greater transparency, through tracking and traceability—including of investment and financial flows—is essential to managing and mitigating marine plastic pollution; and
• The use of gross domestic product (GDP) as a measure of economic activity needs to be complemented by other tools.
UN-SPBF 2022 Report

High-level Opening

The high-level opening, moderated by Axel Threlfall, Thomson Reuters, took place on Tuesday, 31 May.

Shereen Zorba, Head of the Global Secretariat, UN-SPBF, stressed the need to find ways to make international commitments translate into real transformation in a fair and equitable way. She highlighted participation not only of leaders from science, technology, and policy, but, importantly, of a youth delegation.

Sonja Leighton-Kone, Acting Deputy Executive Director, UN Environment Programme (UNEP), encouraged thinking about the policies, financial mechanisms, and incentives required to transform sectors, as well as drive the economic, social, and technological changes needed to tackle the triple planetary crisis.

In a video message, Abdulla Shahid, President of the 76th UN General Assembly (UNGA), prioritized equitable access to technology for developing countries, transition to cleaner production processes, and sustainable business practices.

Collen Vixen Kelapile, President, UN Economic and Social Council (ECOSOC), drew attention to the seventh meeting of the Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs held in May 2022, and the work of the UN Interagency Task Team on Science, Technology and Innovation, stressing the need for the wise use of science and technology and the equitable sharing of benefits.

Vision Setting: Johan Rockström called attention to the planetary emergency concerns not only with respect to environmental sustainability but also justice, and underscored the linkages between the environment, safety, security, prosperity, and equity. Science has provided the evidence for sustainability pathways, he said, and now it is time to deliver on the transitions needed, including towards justice and fair wealth distribution.

Responding to questions, Rockström stressed that:

- accountability needs to accompany climate commitments;
- the Ukraine war can be an accelerator towards longer-term independence from fossil fuels;
- the definition of justice includes an intergenerational component; and
- advancements have been taking place towards reconnecting Western and Indigenous knowledge systems.

He prioritized:

- an end date of fossil fuel sourcing, together with a redirection of subsidies towards a fund to compensate developing countries;
- a clause of zero loss of nature, together with ensuring stewardship by Indigenous Peoples; and
- full investment in education, to create engaged citizens.

Reimagining Multilateralism and Bridging the Implementation Gap

This session was co-convened on Tuesday, 31 May, in cooperation with the Institute for Sustainable Development and International Relations (IDDRI).

Vision Setting: Sébastien Treyer, Director, IDDRI, noted challenges to multilateral environmentalism, including:

- working on the economic transformation to achieve the net zero carbon goal;
- making plurilateral action work toward multilateral goals;
- fully involving multinational corporations and civil society in the dialogue; and
- moving beyond looking at everything with a security lens.

Panel: Maria Ivanova, Director, Center for Governance and Sustainability, University of Massachusetts, suggested there is no need for a World Environment Organization, but rather the focus should be on improving how UNEP fulfills its original mandate as a small, agile entity, catalyzing action and promoting collaboration.

Astrid Schomaker, Director for Global Sustainable Development, European Commission, identified three challenges to the current multilateral environmental governance system:

- fragmentation—how to break silos and bring together holistic views of our challenges;
- gaps—where no single multilateral institution is bringing together action on the issue; and
- inclusiveness—how to bring business, cities, and others into the process.

Noting the well-known impact of conflicts on the environment, Alain Le Roy, French Association for the UN, and former UN Under-Secretary-General for Peacekeeping Operations, said the key is to reduce the number and intensity of conflicts. He outlined efforts to minimize the use of the permanent member veto, which prevents the UN Security Council from fulfilling its
peacekeeping mandate, mentioning, in particular, UNGA debates where permanent Security Council members must defend their positions.

Harry Verhaar, Head of Global Public and Government Affairs, Signify, called for moving from a societal model of “survival of the fittest,” suggesting it should instead be a model that is the fittest for survival. He noted his company’s commitments to achieve the SDGs and its work with local governments—“where the action is”—to get things done.

Steven Kukoda, Executive Director, International Copper Association, noted some progress in ensuring industry has had a seat at the table over the last 10 years; however, he said governments do not yet have a balanced view of industries such as his. He agreed, though, that industry needs to do a better job of bringing its SDG credentials to the table.

Biao Yang, Secretary General, See Foundation, explained the origins, composition, and mission of the Foundation and its work on desertification, energy, climate change, biodiversity, and marine pollution. He highlighted the Foundation’s work on greening supply chains and promoting low-carbon trade in China.

Dominic Waughray, Senior Advisor to the CEO, World Business Council on Sustainable Development, suggested making sustainable development happen faster and at scale will require harmonizing standards and creating common definitions, making circularity work at scale across borders, and unlocking finance through the creation of a new asset class.

**Future Economy—Ending Harmful Subsidies, Beyond GDP, and Financing the SDGs**

**Vision Setting:** Opening the session on Tuesday 31 May, Christopher Hurst, Director General, European Investment Bank, said the accounting processes, procedures, and practices are not in place to properly account for our natural wealth. He called for pricing the resources we use at their proper economic value.

**Panel Discussion:** Romina Boarini, Director for Well-being, Inclusion, Sustainability and Equal Opportunity, Organisation for Economic Co-operation and Development (OECD), said the growing challenge in beyond GDP measurement is how governments are using it, noting “beyond GDP” takes issues such as wellbeing into account. She urged that national “beyond GDP” agendas materialize into action for a just transition.

Eric Usher, Head, UNEP Finance Initiative, underscored the need to regain purpose in the industry to move towards responsible banking. He said this requires understanding the impacts of financed projects, noting key milestones in providing impact-relevant data.

Lee White, Minister of Water, Forests, the Sea and Environment, Gabon, asked how carbon positivity and biodiversity are accounted for on balance sheets, outlining the political leadership Gabon has shown in becoming a carbon positive country.

Carlos Manuel Rodriguez, CEO, Global Environment Facility, said strengthening institutions alone will not achieve sufficient change, which also requires agencies that work at the landscape and seascape levels.

Paul Ekins, Professor, University College London, pointed to a systemic problem, saying finance will go where the available money is. He elaborated, saying, “If they can make a quick buck out of destroying the environment then they’ll do that.”

Nicola Villa, Executive Vice President, Government Center of Excellence, Mastercard, noted his company’s work around achieving the SDGs, particularly on financial inclusion, including through adapting its business model.

Lina Maria Montoya, Social Impact and Innovation Manager, Bancolombia Group, spoke on Bancolombia’s work to build sustainable cities and communities and promote financial inclusion and wellbeing. Noting the inequalities in Colombia, she questioned the use of impact investing in projects addressing wellbeing.

**Big Tech for the Planet**

**Vision Setting:** This session took place on Tuesday, 31 May. Tshepo Tsheko, CEO, Botswana Digital and Innovation Hub, presented on challenges and opportunities regarding sustainable development in Africa. He highlighted the continent’s rich biodiversity and human potential, calling for greater digital connectivity, capacity building, and empowerment through partnerships with big tech.

**Technology and Transformation:** Hendrik Hamann, Distinguished Researcher, IBM, and Christina Shim, Vice
President, Head of Strategy and Sustainability, IBM, presented on their company’s strategies and activities for sustainability. Hamann drew attention to data generation and storage, and digitalization of sectors including the environment, which provides opportunities to decouple growth from its environmental impact. On future trends, he underscored nanotechnology, AI, and quantum computing, which provides novel opportunities to tackle complex problems.

Shim focused on how IBM operationalizes sustainability. She called for data-centered action to achieve the SDGs, and for accelerating change through collaborations in applying and investing in technologies. The ensuing discussion addressed, among others, questions related to e-waste, the ethics of AI, and equitable access to quantum computing.

Big Data, Big DEAL: Shereen Zorba moderated the session. Paul Ekins noted that data is lacking for 68% of the environmental indicators of the SDGs, as well as for connecting policy-related indicators to those about the state of the environment. He explained that data gaps are due to the lack of finance and capacity at the national level.

Drawing attention to UNEP’s global environmental data strategy, Alexandre Caldas, UNEP, highlighted the need for: building capacities to use technology, particularly in the Global South; promoting partnerships; and using data to provide foresight and early warning in view of increased uncertainty.

Frederic Bretar, Head of Projects, Space Climate Observatory (SCO), explained SCO seeks to mobilize the various space agencies to collaborate with each other, and with end users such as decision makers, to use and validate the wealth of Earth observation data to provide a clearer overview of climate change at the global level.

Kaja Tael, Ambassador at Large for Climate and Energy Policy, Estonia, said the Data for the Environment Alliance (DEAL) seeks to address the need for accessible, quality basic data on the environment on which policymaking can be based. She highlighted business interest in DEAL and a pilot project soon to be launched in Kenya.

Martin Brocklehurst, Chair, Interim Board, Citizen Science Global Partnership, urged governments and UNEP to engage more with citizen science. “Stop asking if it works,” he said, pointing to examples of citizen science operating successfully at the national scale and stressing the need to take it to a global scale. Asked about safeguards, he said the keys are good application design by scientists and providing data verification systems.

Edan Dionne, Vice President, Corporate Environmental Affairs, IBM, stressed her company’s three core principles for AI: its purpose is to augment human intelligence; data and insights belong to their creator; and technology must be transparent and explainable. She also reviewed the six components of the Responsible Computing framework: data centers; more sustainable infrastructure; code; data usage; systems; and impact.

The Power of Digital Art for the Planet: Jonathan Lett, Director, Lett Holdings Ltd., Tommy Lexen, Managing Director, and artist John Munro discussed the digital audiovisual composition “50/50,” which was unveiled on 1 June 2022 before touring the world, saying it seeks to inspire interest in biodiversity and a feeling of connection to nature, and spur action to protect biodiversity. They also highlighted the auction of 50 non-fungible tokens based on the work, whose proceeds will be donated to UNEP.

Innovation: Powering Change for a More Sustainable Planet: Anna Williams, Solutions lead, Google Environment Insights Explorer (EIE), explained EIE uses Google data sources and modeling capabilities in a freely available platform to help cities and regions measure emission sources, run analyses,
and identify strategies to reduce emissions. She said Google is committed to helping 500 cities address their carbon emissions, and already provides over 40,000 cities and regions with data on transportation emissions.

**Gaming: Playing for the Planet:** Trista Patterson, Director of Gaming Sustainability, Microsoft, discussed the objectives of the Playing for the Planet Alliance, which brings together 36 major video game companies to integrate green activations in games, reduce their emissions, and support the global environmental agenda through changes in gaming device materials, green coding, and promoting environmental education with free modules for popular games. She displayed a video showcasing the Minecraft module for helping design a Net Zero Stockholm.

**From Corporate Responsibility to Creating Impact:** Margaret O’Toole, Worldwide Tech Leader Sustainability, Amazon Web Services (AWS), moderating the session, stated technology is one of the tools that will help drive a sustainable transformation. Sandra Karlsson, Head of Public Policy, Sweden AWS, spoke on the twin transition to a digital, sustainable future. She called on policymakers to promote sustainability as a business opportunity, and underscored collaboration and partnership between public and private institutions. She urged policymakers to see digitalization and sustainability as mutually supportive.

Ana Pinheiro Privette, Global Lead, Amazon Sustainability Data Initiative, spoke on how the Initiative, among others, engages with communities to assess what foundational datasets are needed. She said they develop partnerships with the data providers, to create win-win situations, as data is disseminated. She noted a partnership with Digital Earth Africa to bring earth observations to Africa.

**The Future of Energy**
This session, moderated by Tim Nixon, CEO, Signal Climate Analytics, explored technological, policy, and financing issues related to renewable energy and green hydrogen. It was co-convened with the International Renewable Energy Agency (IRENA) and the Norwegian University of Science and Technology and took place on Tuesday, 31 May.

**Part 1: Renewables:** Noting fossil fuels are still subsidized in 150 countries, Rana Adib, Executive Director, REN21, said a system change is needed to end such subsidies. She added that investing in renewable energy makes sense from an environmental and economic point of view, while promoting energy independence.

Howard Bevan, former Director of Energy, Al-Attiyah Foundation for Energy and Sustainable Development, focused on Qatar’s efforts, including on natural gas, methane monitoring, and building a knowledge economy.

Gulnara Abdullina, Vice President Europe, LONGi Solar, stressed solar applications in Europe need to co-exist with agricultural production. Regarding emerging economies in Africa, she called for transparent procurement programmes and streamlined permitting.

**Part 2: Green Hydrogen:** Espen Barth Eide, Minister of Climate and the Environment, Norway, noted there will be significant space for hydrogen in the energy transition, stressing the need for work not only on production, but also on usage and distribution, as well as for policy incentives. He further highlighted the massive electricity needs of hydrogen production.

Barbara Jinks, Programme Manager Green Gas and Delivery Use, IRENA, showed that hydrogen is a component of the energy transition strategy, noting that Sub-Saharan Africa has the greatest potential for green hydrogen but lacks infrastructure, policies, and investment.

Asgeir Tomasgard, Director, Norwegian University of Science and Technology Energy Transition Initiative, stressed the need to build the green hydrogen demand side at the same time as the supply side, and remove part of the political risk through international cooperation and long-term agreements.

Per Sandberg, Senior Advisor, Equinor, called for focusing on the entire hydrogen value chain, including distribution, storage, use, and safety, to make hydrogen a safe and efficient energy carrier.

James Mnyupe, Presidential Economic Advisor, Namibian Presidency, presented on Namibia’s green hydrogen production project as part of the economy’s industrialization and sustainable development, which involved an open bidding process, establishment of a public-private partnership, economic diplomacy efforts and agreements with European governments, and the launch of a blended financing platform at the World Economic Forum to help attract investment.
Bjorn Simonsen, CEO, Saga Pure, underscored the need to combine industry expertise with finance and to set realistic targets.

Zhang Cunman, Professor, Tongji University, China, presented on China’s approach to green hydrogen as a path towards the energy transition, including adoption of a new policy and involvement of local governments.

A youth representative from Argentina drew attention to Equinor’s offshore seismic exploration in Argentina, which has caused major opposition from the public.

**Opening of Day Two**

On Wednesday, 1 June, Axel Threlfall underscored key messages from the first day of the meeting, including on the urgent need to: deploy and finance the best technologies available to enable a transition; make the multilateral system more effective; enhance collaboration across sectors; and create demand for sustainable products. Sonja Leighton-Kone stressed the world has the knowledge and policy tools and needs to move into action.

**Nature-Positive Sector Transitions: Doubling the Speed of Progress**

**Vision Setting:** This session took place on Wednesday, 1 June, with Harry Verhaar sharing Signify’s experience regarding the transition of the lighting sector towards more energy-efficient solutions, starting from the EU Ecodesign Directive and the phasing out of incandescent bulbs. He stressed the need for companies to adapt quickly to remain competitive, address their entire supply chain, engage with regulation, and have a vision, suggesting the best way to serve any self-interest is to invest in a common interest.

**In Fashion: Turning the Needle on the Industry’s ‘Planetary Footprint’:** Axel Threlfall introduced this session, drawing attention to recent reports highlighting the huge environmental footprint of the fashion industry. Shereen Zorba moderated the panel, which addressed innovative business models towards the sector’s sustainability.

Sindiso Khumalo, South African designer, drew attention to her company’s environmental and social standards and value-based efforts to ensure sustainable materials and fair labor.

Alexandre Capelli, Moët Hennessy Louis Vuitton Group, presented on efforts towards a more circular business model based on: using material from regenerative agriculture or recycling; managing the product’s life cycle; managing plastic packaging; new circular services; traceability and transparency; certification of raw material; and customer education and awareness.

Cecilia Brännsten, H&M Group, drew attention to her company’s climate and biodiversity targets, focusing on energy efficiency, regenerative agriculture, and circularity, adding that harmonized legislation can facilitate and incentivize circular business models.

Kenneth Pucker, Tufts University, underscored that commitments must be accompanied by consequences if not met, noting the need for a regulatory shift to move the entire industry towards sustainability.

**Extractives, Mining, Tailing: The Full Cycle: Vision Setting:** Steven Kukoda said his industry is closely connected with the 2030 Agenda for Sustainable Development and is critical to achieving the energy transition and the goals under the Paris Agreement. He highlighted various partnerships, such as the Grid Efficiency and Resilience Partnership in Africa, the Copper Mark to certify sustainable copper production, efforts to increase copper recycling, and an upcoming initiative on decarbonizing the industry.

**Panel Discussion:** Sonja Leighton-Kone noted an International Energy Agency scenario showing the clean energy transition will substantially increase demand for critical minerals, such as copper, lithium, nickel, cobalt, manganese, and rare earth metals. Noting the fragility of governments and societies in many areas where these minerals are extracted, she said UNEP wants to ensure extraction does not create new challenges and is looking at ways to “raise the bar” in sector practices.

Bruno Oberle, Director General, International Union for Conservation of Nature (IUCN), cautioned greater mining of critical minerals must not increase greenhouse gas emissions or biodiversity loss, so all actors need to work together to ensure responsible mining. He hailed the Global Industry Standard on Tailings Management and how it was created cooperatively with industry and others to align with best practice. However, he identified its effective implementation as a challenge.

John Howchin, Global Ambassador, Global Tailings Management Institute, agreed the Standard was a good example of a voluntary initiative taking the lead that regulators will follow.
He warned the mining industry “still has many cowboys” who need to be reined in. He predicted the clean energy transition will bring heavy scrutiny from new investors demanding more responsible environmental and social behavior.

Asked for final thoughts, panelists mentioned: the role of the financial sector in prompting environmental, social, and governance changes in the sector; the need for regulatory policies to “level the playing field” to bring all mining in line with companies already acting responsibly; and how responsible mining policies likely will not result in significant product cost increases.

Accountability and Public Finance: Fast Tracking Sustainable Public Procurement

This session was co-convened on Wednesday, 1 June, with UNEP’s Sustainable Public Procurement Unit. Tim Nixon moderated this session. Caroline Nguyen, Director for Private Sector Engagement and Global Public Sector Partnerships, Council on Environmental Quality, US, reviewed efforts to introduce sustainable procurement in the US Government’s USD 650 billion of annual purchases. She announced the government will soon propose a regulation to require federal contractors to publicly disclose their climate emissions, climate risks, and plans to reduce both. She also highlighted the procurement aspects of the Greening Government Initiative, led by Canada and the US, involving 41 governments and a dozen observer nations.

Sébastien Postic, Project Manager – Industry, Energy and Climate, Institute for Climate Economics (I4CE), said while rules on sustainable procurement already exist in many countries, what is usually lacking is a strategy that covers matters such as what portion of procurement should be required to be green, which targets are to be set by sector, what training is needed for implementation, and how to measure progress. He also urged more engagement with finance ministries on the issue.

Farid Yaker, Programme Manager, Sustainable Public Procurement, UNEP, decried the lack of reliable data on procurement, saying that determining what portion is green when they only have process indicators is hard. He said UNEP is looking into how big data, AI, and other tools can improve measurement. Yaker urged a focus on effective implementation rather than on new rules and regulations.
products during the design phase, which, she said, can contribute to making the right business case.

**Closing Remarks:** ECOSOC President Collen Vixen Kelapile welcomed the Climate Pledge, a commitment by major companies to net zero carbon by 2040, which aims to stimulate investment in the development of low-carbon products and services. He noted, however, the need for: involving many more companies from different sectors; and linking climate action with impacts on the other SDGs, including on poverty, hunger, health, and decent work. He stressed that developing countries need access to knowledge and technologies; called for focusing on education; and challenged the signatories of the Climate Pledge to broaden its focus to include ecosystems and sustainable value chains.

**Stockholm +100: Future Vision**

**High Level Leadership Dialogue:** Maria Ivanova presented a “A letter to fellow citizens of the earth,” signed by a group of scientists, published in Nature and on the internet. She said it recalls the Menton Message presented by scientists to the 1972 Stockholm Conference, which warned of the “unprecedented common danger” from nature loss, environmental deterioration, war, and overcrowding and hunger. She highlighted the need for: redefining what is good and enough for societies and individuals to thrive; recognizing both privilege and responsibility; and empowerment and collective action.

Collen Vixen Kelapile stressed: data tools to measure progress on the SDGs; strengthened multilateralism to overcome the development losses related to the COVID-19 pandemic and geopolitical tensions; and honoring financial commitments.

Niklas Gustafsson, Head, Public Policy and Regulatory Affairs, Volvo Group, underscored the need for partnerships, and for a price on carbon accompanied by smart policies, drawing attention to developments regarding fossil fuel-free steel.

Hilde Røed, Senior Vice President Climate and Sustainability, Equinor, focused on her company’s development of offshore wind technologies as part of their commitment to low-carbon solutions, and a new policy to address nature loss. She said the dual challenge of climate and nature requires forceful policies, regulation, and carbon pricing, and called for honest discussions on the costs and trade-offs of developing alternatives to oil and gas.

**Bertrand Piccard, Chairman, Solar Impulse Foundation**

Bertrand Piccard, Chairman, Solar Impulse Foundation, suggested technological solutions to environmental problems are economically profitable and can, therefore, be successfully applied, further stressing the role of regulation and high standards.

Pernilla Halldin, Group Head of Public Affairs, H&M, underscored the impact of regulation and of collaborations. Jakob Kiefer, Group Head Public Affairs, ABB Group, also highlighted collaboration, as well as saving wasted energy, informing consumer behavior, addressing sustainable supply chains, and supporting a multilateral trade system.

Rana Adib called for spaces where stakeholders can develop joint understandings and narratives, highlighting the enabling role of policy and education.

John Streur, President and CEO, Calvert Research and Management, welcomed US and EU regulatory efforts to require more transparency on companies’ environmental impacts, but said more robust reporting is needed. He cautioned increased transparency is only a start and must be followed up by pricing externalities—not just carbon emissions, but also other emissions, water use, and biodiversity impacts.

Steven Kukoda urged companies to move beyond what they are obliged to do by regulations and standards, and focus instead on what needs to get done to advance the SDGs. He said this can be done through partnerships, and suggested it is often easier for companies to do this through trade associations.
Lee George Lam, Chairman, Hong Kong Cyberport, called for the Asia-Pacific region to adopt a green deal and seek green transformation in areas such as energy, infrastructure, transportation, finance, production, consumption, and waste. He urged the business sector to take the lead in mobilization toward this goal, but to also work with governments and communities toward a sustainable and inclusive future for all.

Noting solar photovoltaic power is key to the energy transition and achieving carbon neutrality, Li Zhenguo, Founder and President, LONGi, said he expected the market to grow steadily over the next 30 years. He called on developing countries to formulate and improve policies and roadmaps for the clean energy transition as soon as possible and leapfrog development toward a sustainable path.

Kaja Tael predicted that we will all live in a renewable energy world in 20 years. She noted the importance of clear signals from the EU for developing a renewables market. She urged “those just starting this journey” toward renewables to opt for digital technologies from the start, since it helps empower consumers to regulate their own consumption.

Civil society and youth representatives called for more engagement with major groups, underscoring the many contributions they can make during multilateral negotiations and other fora.

Transformers 1: The Stokholm+100 Journey Starts Now—Trailblazing Nature-Positive Sector Transitions to Save the World

On Thursday, 2 June, this event explored how trailblazing nature-positive actions have the potential to create a better future for all. It discussed the solutions and innovations needed to power these transitions and what enabling conditions are required to realize this journey. It also looked at issues of accountability, equity, inclusion, and justice as the backbone to this transformation.

Transformers 2: The Stokholm+100 Journey Starts Now—Breaking Barriers

This event, which took place on Friday 3 June, featured: Karin Svensson, Chief Sustainability Officer, Volvo Group; Cookie Phirinyane, Acting Director marketing and partnerships, Botswana Digital & Innovation Hub; Trista Patterson; and youth representative Selma Bichbich. It was moderated by Shereen Zorba.

Svensson presented on “Accelerating Value Chain Innovation and Doubling the Speed of Progress.” She addressed Volvo’s efforts towards sustainability, including on: electric vehicles and a partnership to develop a charging network; replacement of materials to move towards fossil-free steel; and participation in the First Movers Coalition, which uses purchasing commitments to accelerate the deployment of near zero and net zero technological solutions. She highlighted the need for incentives, carbon pricing, scaling up solutions, and partnerships, to reach entire value chains and share the risk of innovation.

Drawing attention to the Glasgow Women’s Leadership Statement on Gender Equality and Climate Change, Zorba opened discussions on “Women in Green Tech: Smashing Glass Ceilings for the Planet.” Phirinyane, Patterson, and Svensson shared their personal stories, and discussed barriers for women and their experience in male-dominated sectors, the privilege of growing up unaware of gender barriers that may exist, and the importance of mentors and role models. Patterson drew attention to systemic bias against women in many sectors and trainings towards change. To fight inequalities, Phirinyane prioritized: access to education; access to funding; and a policy shift, both to address inequality and to include more women in policymaking.

Bichbich urged empowering youth to lead and turn their recommendations into real action, and cautioned against excluding the Global South, adding that youth “will be creating the new UN.”
Upcoming Meetings

**Basel, Rotterdam and Stockholm Conventions COPs:** This meeting includes the fifteenth meeting of the Conference of the Parties (COP) to the Basel Convention, the tenth meeting of the COP to the Rotterdam Convention, and the tenth meeting of the COP to the Stockholm Convention, under the theme “Global Agreements for a Healthy Planet: Sound management of chemicals and waste.” **dates:** 6-17 June 2022  **location:** Geneva, Switzerland  **www:** brsmeas.org/20212022COPs/Overview/tabid/8395/language/en-US/Default.aspx

**Second UN Ocean Conference:** This meeting will bring together participants under the formal title “2022 UN Conference to Support the Implementation of SDG14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.” **dates:** 27 June - 1 July 2022  **location:** Lisbon, Portugal  **www:** oceanconference.un.org

**IPBES 9:** The ninth session of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services will consider, *inter alia*: the thematic assessment of the sustainable use of wild species; the methodological assessment regarding the diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services; and engagement with the Intergovernmental Panel on Climate Change. **dates:** 3-9 July 2022  **location:** Bonn, Germany  **www:** ipbes.net/events/ipbes-9

**High-level Political Forum on Sustainable Development (HLPF) 2022:** The 2022 meeting of the HLPF, under the auspices of ECOSOC, will convene under the theme, “Building back better from the coronavirus disease (COVID-19) while advancing full implementation of the 2030 Agenda for Sustainable Development.” **dates:** 5-7 and 11-15 July 2022  **location:** UN Headquarters, New York  **www:** sustainabledevelopment.un.org/hlpf

**UN Biodiversity Conference (CBD COP 15):** This meeting includes the 15th meeting of the COP to the Convention on Biological Diversity (CBD), the 10th meeting of the COP serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety, and the fourth meeting of the COP serving as the Meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing. The meeting is scheduled to review the achievement and delivery of the CBD’s Strategic Plan for Biodiversity 2011-2020. It is also expected to adopt the post-2020 global biodiversity framework, as well as decisions on related topics, including capacity building and resource mobilization. **dates:** 3rd quarter of 2022 (TBC)  **location:** TBC  **www:** cbd.int/meetings

**Sharm el Sheikh Climate Change Conference:** COP 27, the 17th meeting of the COP serving as the Meeting of the Parties to the Kyoto Protocol (CMP 17), and the fourth meeting of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA 4) will address implementation of commitments and other priority matters. **dates:** 7-18 November 2022  **location:** Sharm el-Sheikh, Egypt  **www:** unfccc.int

**UNEA-6:** UN Member States, civil society, business, and other stakeholders will come together to set priorities for global environmental policies. **dates:** 26 February - 1 March 2024  **location:** Nairobi, Kenya  **www:** unep.org/environmentassembly

For additional upcoming events, see [sdg.iisd.org](http://sdg.iisd.org)

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**Glossary**

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<td>AI</td>
<td>Artificial intelligence</td>
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<td>ECOSOC</td>
<td>Economic and Social Council of the UN</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>HLPF</td>
<td>High-level Political Forum on Sustainable Development of the UN</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>UNGA</td>
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<td>UN-SPBF</td>
<td>UN Science-Policy-Business Forum</td>
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This year’s World Environment Day Edition of the Stockholm Marathon took place in partnership with the UN SPBF.