SCIENCE POLICY BUSINESS FORUM

UN environment programme

United Nations Environment Programme
Science-Policy-Business Forum

Third Global Session

18 – 20 February 2021

Summary of Key Outcomes and Recommendations

Making peace with nature: the defining task of the 21st century

CONTENTS

I. Executive Summary

The United Nations Environment Programme Science-Policy-Business Forum (UNEP-SPBF) is the United Nation's fastest growing platform for innovation and integrated multi-sector solutions for the environment.

The Forum is a powerful multi-sectoral platform that works to build greater collaboration towards the achievement of the environmental dimensions of the Sustainable Development Goals, UNEA Decisions and UNEP's new Medium Term Strategy (MTS).

Close to 5,000 participants registered for the Forum's first virtual session. Key topics covered included:

- Opening of the Third Global Session of UNEP Science-Policy-Business Forum
- Big Data and Frontier Technology: Powering the Transition to a Sustainable Future
- Rethinking Cities: Bringing Nature to the Urban Environment
- Managing Risk: Pollution Prevention and Management:
    - Marine Litter and Microplastics Mitigation and Prevention
    - Addressing E-waste through Tracking, Traceability and Circular Approach
- Nature Positive Food Systems for a Healthy Planet and Healthy People
- Green Jobs and Green Entrepreneurship: The Future We Want and the Launch of the UNEP-SPBF Youth Working Group on Green Jobs and Entrepreneurship
- Environmental Multilateralism: Science for Policy, Innovation and Action

The Third Global Session of UNEP-SPBF underscored a need to develop policies that empower the deployment of new technologies and innovative policies for the environment, whilst adhering to principles of equity, inclusivity and fairness that leaves no one behind and makes peace with nature.

Forum sessions were co-convened with global partners, including; The Group on Earth Observations (GEO), Technology Partners, Global Partnership on Marine Litter (GPML), Sustainable Cities Impact Programme, Integrated Urban Solutions Partnership, Global Alliance for Building and Construction (Global ABC), UNEP Major Group for Children and Youth, UNEP's Partnership for Action on Green Economy (PAGE), International Labor Organization (ILO), Secretariat of the Basel, Rotterdam and Stockholm, Convention, and UNEP's Private Sector Unit.

II. Key Outcomes and Recommendations

Session Opening - Working Together to Address the Planetary Crises as Identified by UNEP's MTS

The session opening set the ambition towards developing a multi-sectoral approach for tackling the triple planetary threats posed by climate change, biodiversity loss and pollution and waste - as identified by UNEP's MTS. It also highlighted the importance of big data and knowledge enhanced by the use of digital technologies to ensure science is more accessible, understandable, and impactful. Participants emphasized the imperative for investing in ecosystem restoration and sustainable consumption and production for achieving a long-term and just post-COVID-19 recovery that accelerates and strengthens the achievement of the SDGs.

Participating in the high-level discussion were:

Inger Andersen, Executive Director, UNEP, **Hans Brattskar**, Special Envoy, Ministry of Climate and Environment, Norway, on behalf of the UNEA-5 Presidency**; Munir Akram**, President, UN Economic and Social Council (ECOSOC); and, **Petteri Taalas**, Secretary-General, World Meteorological Organization.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On big data and frontier technology, the Forum recommends:

1. The need to improve environmental big data management and analytics, noting that we have oceans of data but only drops of information. To produce knowledge out of big data that is open to all we must link UNEP's big data work on digital transformations;
2. Using big data and exponential technologies to deliver societal solutions that help consumers adopt sustainable lifestyles, help producers measure and disclose environmental impact, help investors assess environmental risk, and help regulators monitor real time progress;
3. AI and frontier technology can transform industry to a more sustainable path, but more enabling policies and financial tools are required to power the transformation;
4. Citizen Science, which can contribute to assessing up to 35% of SDG environmental indicators and to catalyze action towards the SDGs, needs to be empowered;
5. Raising the importance of earth observation technology for Indigenous Peoples - the guardians of biodiversity and among those most affected by climate change; and
6. Bridging the gender gap in earth observation science by involving women early in all earth observation data projects.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On bringing nature back to cities, the Forum recommends:

1. We need policies that encourage integrated infrastructure solutions drawing on nature-based solutions to optimize return on investment;
2. COVID-19 recovery must have green strings attached. The levers of the transformation are; compact urban planning and design; sector optimisation; cross sector symbiosis; and sustainable behaviours'; and
3. Cities need a seat at the table in national and international processes, calling for vertical integration and multi-level governance regarding urban planning considerations.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On pollution prevention and risk management, lessons from the Forum include:

1. Enhancing capacity for recycling and circularity down-stream, especially in developing and least developed countries is essential to overcoming the risk to human and planetary health;
2. For many communities, especially for Indigenous Peoples, keeping their waters and their land free from pollution is a fundamental right;
3. Policy action at the multilateral and national levels is required to contribute to the elimination of pollution to protect people's health and the planet; and
4. Tracking and traceability are essential to mitigating pollution through the environmentally sound management of e-waste and microplastics.

On marine litter and microplastics:

a) Greater coordination between multiple sectors is necessary to meet SDG target 14.1 on marine waste;
b) Welcoming the UNEP Global Assessment on Marine Litter and Microplastics as a comprehensive global framework for tackling marine litter and plastics in a holistic manner;
c) Digital and frontier technology solutions should be utilised to identify data gaps and emerging issues on marine litter and microplastics. The UNEP-IBM Marine Litter Digital Platform facilitated by UNEP-SPBF and the Global Partnership on Marine Litter provides one such example, find out more here.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On e-waste:

a) Effective implementation of the Basel Convention will assist Parties with minimizing the generation of e-waste and ensuring its environmentally sound management, including tracking and tracing of transboundary movements of e-waste;
b) Ensuring a clear distinction between e-waste and used equipment in national legislation, and developing institutional arrangements for inter-agency joint enforcement are among key elements for successfully managing e-waste at the national level; and
c) Developing circular approaches and incentives to extend electronic equipment's useful life are essential for preventing and minimizing the generation of e-waste.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On sustainable food systems, the Forum recommends:

1. Reconnecting farming with nature through everyone doing their part, individuals changing dietary habits, governments re-directing subsidies and incentives, and funding only nature-positive agricultural practices;
2. Industries involved in the sector must put sustainability at the core of their value chains; and
3. Digital and innovative farming offers massive opportunities that should be made possible in an inclusive and fair manner to all.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

On youth and green entrepreneurship, the Forum recommends:

1. Support for the newly created UNEP-SPBF Youth Working Group on Green Jobs and Entrepreneurship;
2. A focus on technology acceleration to help young people develop the knowledge and resources they need to become future environmental leaders and entrepreneurs;
3. A skills transition to align educational systems with the jobs of the future; and
4. Encourage greater participation among women and young girls in green entrepreneurship through policy intervention.

For full details on session speakers and structure, see Appendix I – Event Brochure.
Session recording available here

Empowering peer-reviewed Citizen Science to fill knowledge and data gaps

Citizen Science is built on the foundations of participatory design, co-creating projects driven by the needs of civil society. The current pandemic has illustrated that Citizen Science can provide data at scale, at pace, at a level of detail and at a cost that is not possible with conventional data sources. In just three countries over 4.6 million people provide daily data on the pandemic.

The Forum recognizes the importance of empowering Citizen Science globally in order to fill knowledge and data gaps on the environment. The Forum underscores the need to strengthen and empower Citizen Science built on sound scientific evidence and robustly peer-reviewed, to fill existing data gaps in areas related to measuring progress towards the achievement of the SDGs, as well as assessment of the state of the environment.

Since its inception in 2017, the Forum has played a critical role in bringing together Citizen Science luminaries and key groups under what is now known as the Global Partnership on Citizen Science.

The Partnership aims to create a platform to support and enhance the engagement between Citizen Science and environmental assessments and action for the planet.

The Forum is committed to continue to support this important dimension of scientific engagement and empowerment.

On environmental multilaterialism, the discussion concluded with the following suggestions:

1. Re-affirming the need for united multisectoral, multilateral action supported by science, reiterating the Secretary Generals' words: “we face a surplus of multilateral challenges and a deficit of multilateral solutions”;
2. Supporting and strengthening UNEP's role as a connector on environmental issues;
3. Targeting COVID-19 stimulus packages towards building back better and advancing the nature agenda;
4. Mobilizing green finance and promote technology transfer to least developed countries;
5. Enabling the conditions and incentives needed for more collaborative open-source data projects aimed at addressing key environmental conditions;
6. Considering accounting standards that address private sector impact on the environment; and
7. Encouraging greater youth engagement and involvement in multilateral decision-making.

Participating in the high-level discussion were:

Inger Andersen, Executive Director, UNEP, **H. E. Sveinung Rotevatn**, President of UNEA5 and Minister of Environment and Climate, Norway**, H. E. Jeanne D Arc Mujawamariya**, Minister of Environment at Ministry of Environment of Rwanda, **H. E. Dr. Yasmine Fouad**, Minister of Environment at Ministry of Environment of Egypt, **H. E. Mohamed Mubarak Bin Daina**, Chief Executive, Supreme Council for Environment of the Kingdom of Bahrain, **H. E. Fernando Coimbra**, Minister of Environment, Chair of UNEP CPR at Ministry of Environment of Brazil, **Tina Birimpili**, Deputy Executive Director, UNCCD, **Jim Whitehurst**, President, IBM, **Sir Bob Watson**, Environmental Scientist at Former Chair of IPBES, **Prof.Maria Ivanova**, Director, Center for Governance and Sustainability at University of Massachusetts Boston,**Harry Verhaar**, Head, Global Public and Government Affairs, Signify, **Yugratna Srivastava**, Global Coordinator, Major Group of Children & Youth to UNEP.

For full details on session speakers and structure, see Appendix I – Event Brochure
Session recording available here

III. Event Analytics

SUMMARY

PARTICIPANTS

Registered: 4816

SESSIONS

Total sessions : 7

Total views: 6013

Replays: 3760

VIRTUAL BOOTHS

Virtual booths: 9

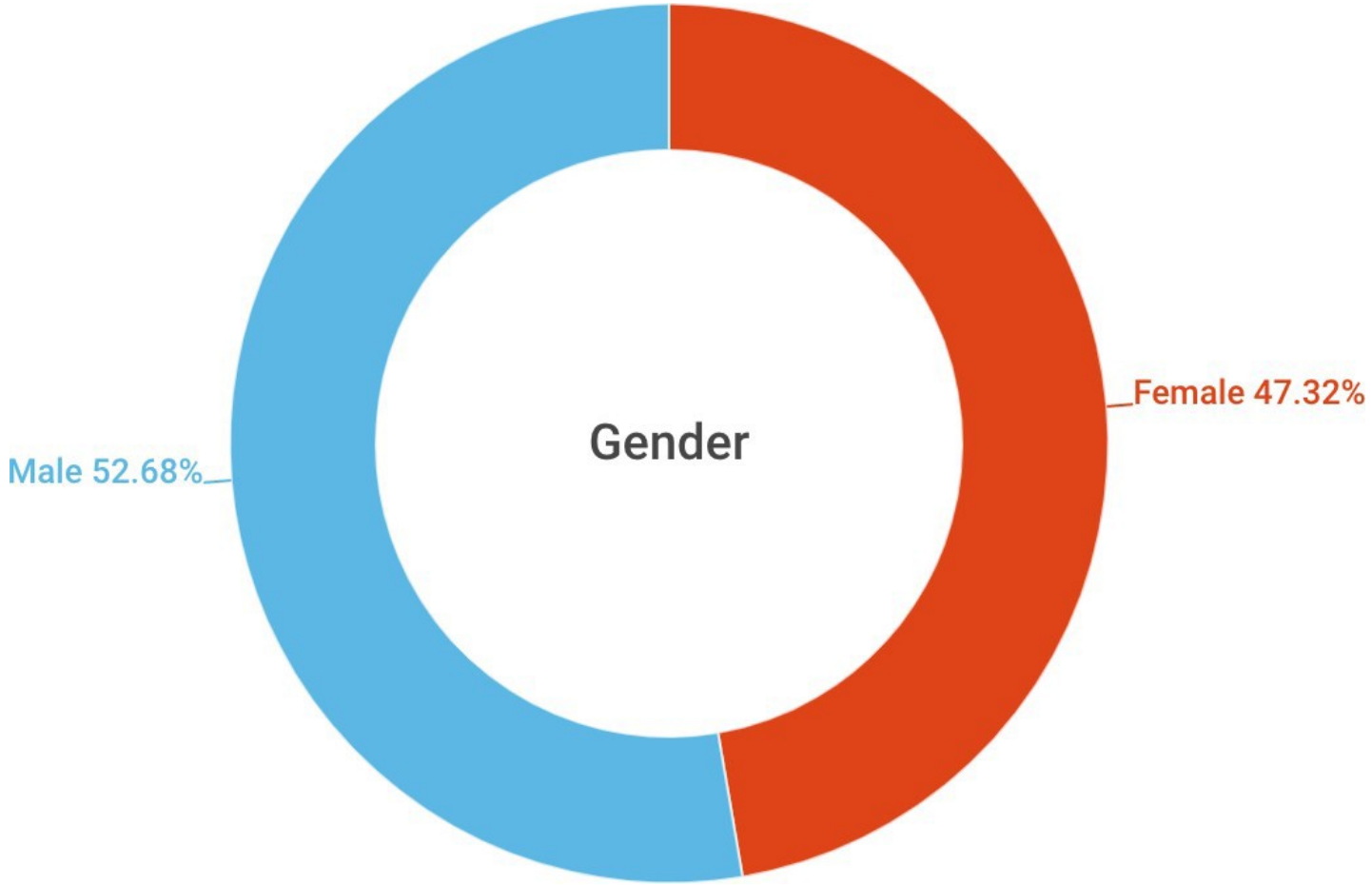
Total visits: 931

SPEAKERS

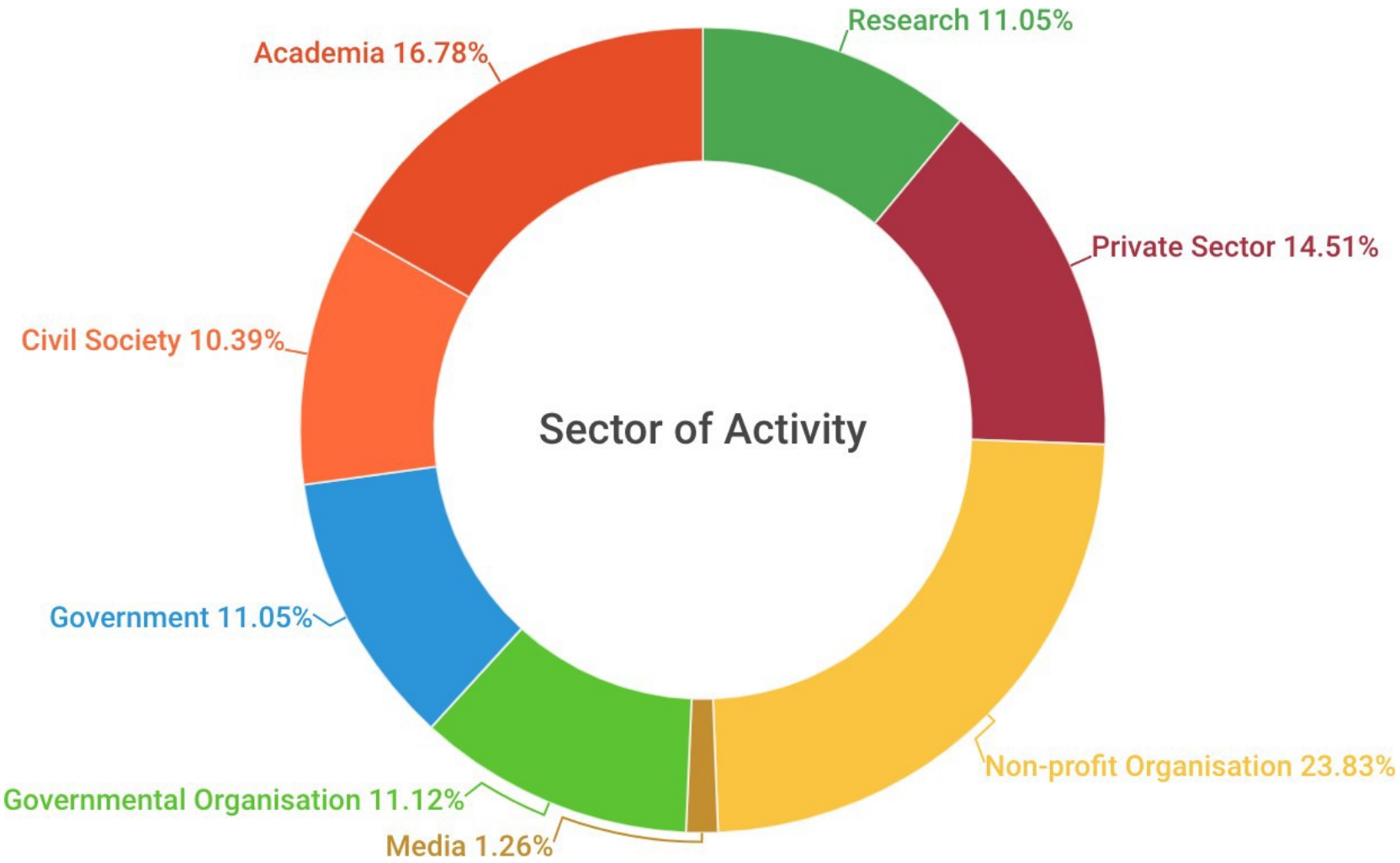
Speakers: 126

Profile views: 2305

GENDER



REPRESENTATION BY SECTOR

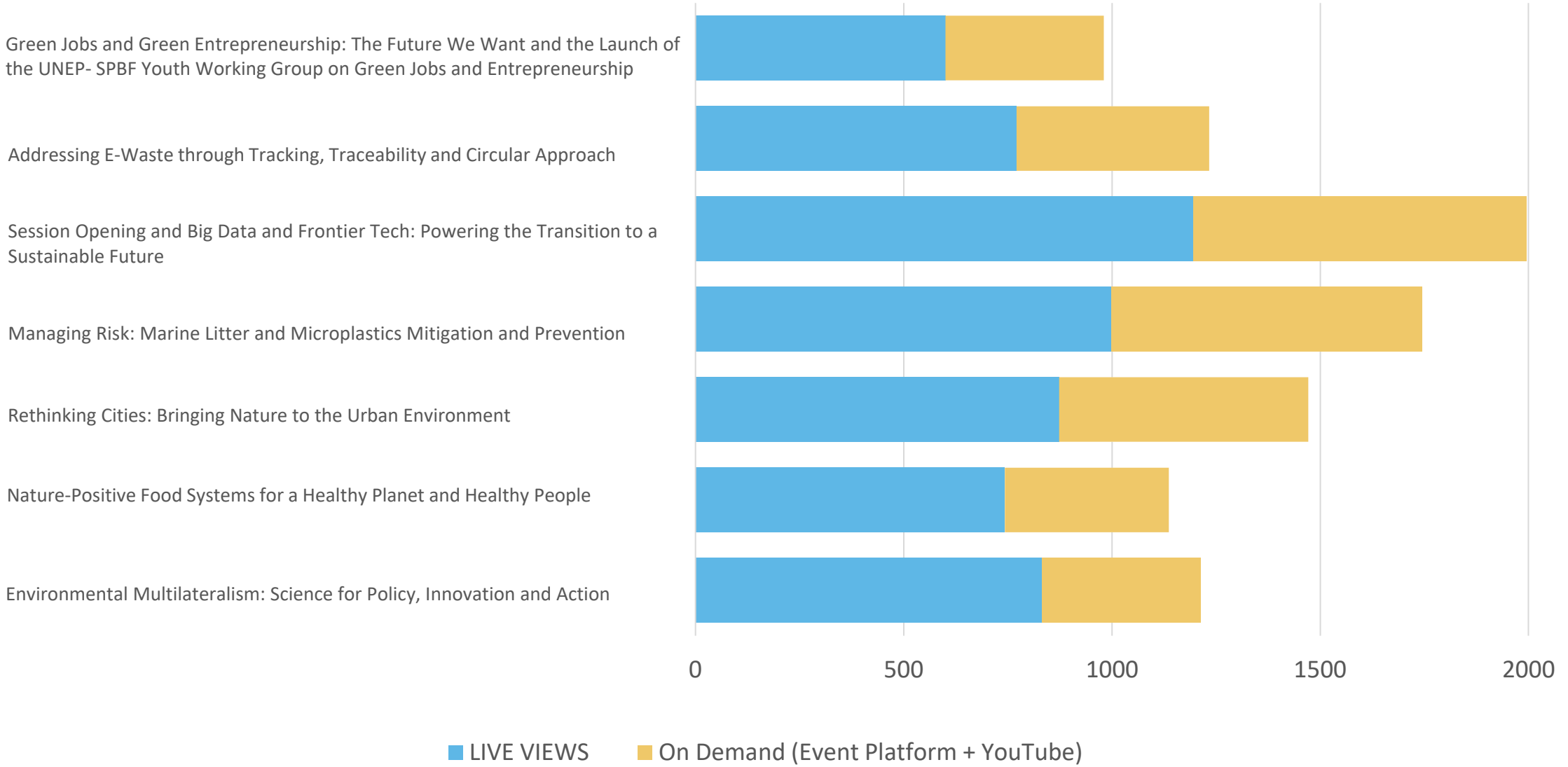


SESSIONS

Total sessions : 7

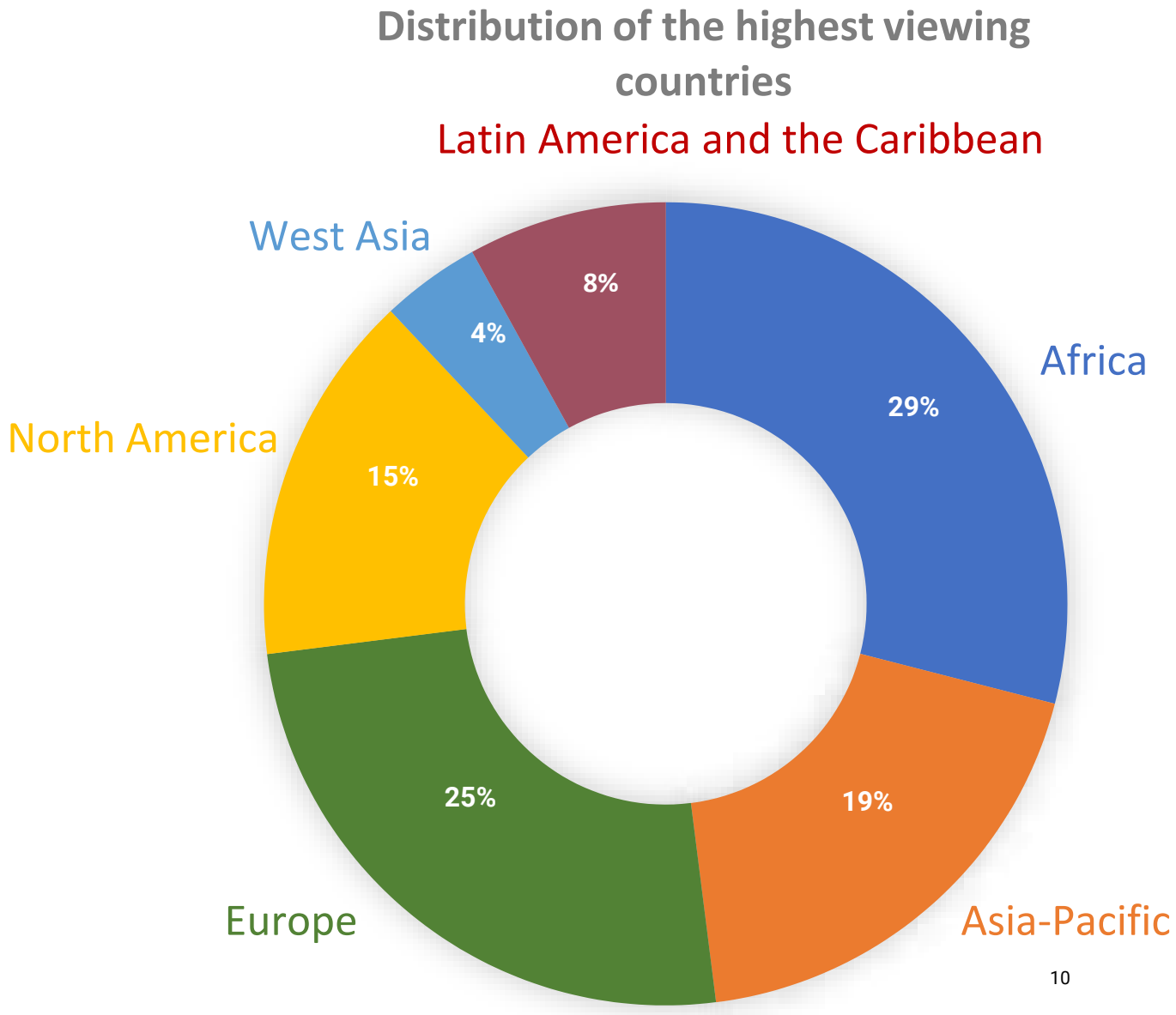
Total Live views: 6013

On Demand: 3760 (As of 7 March- Ongoing)



REGIONAL REPRESENTATION

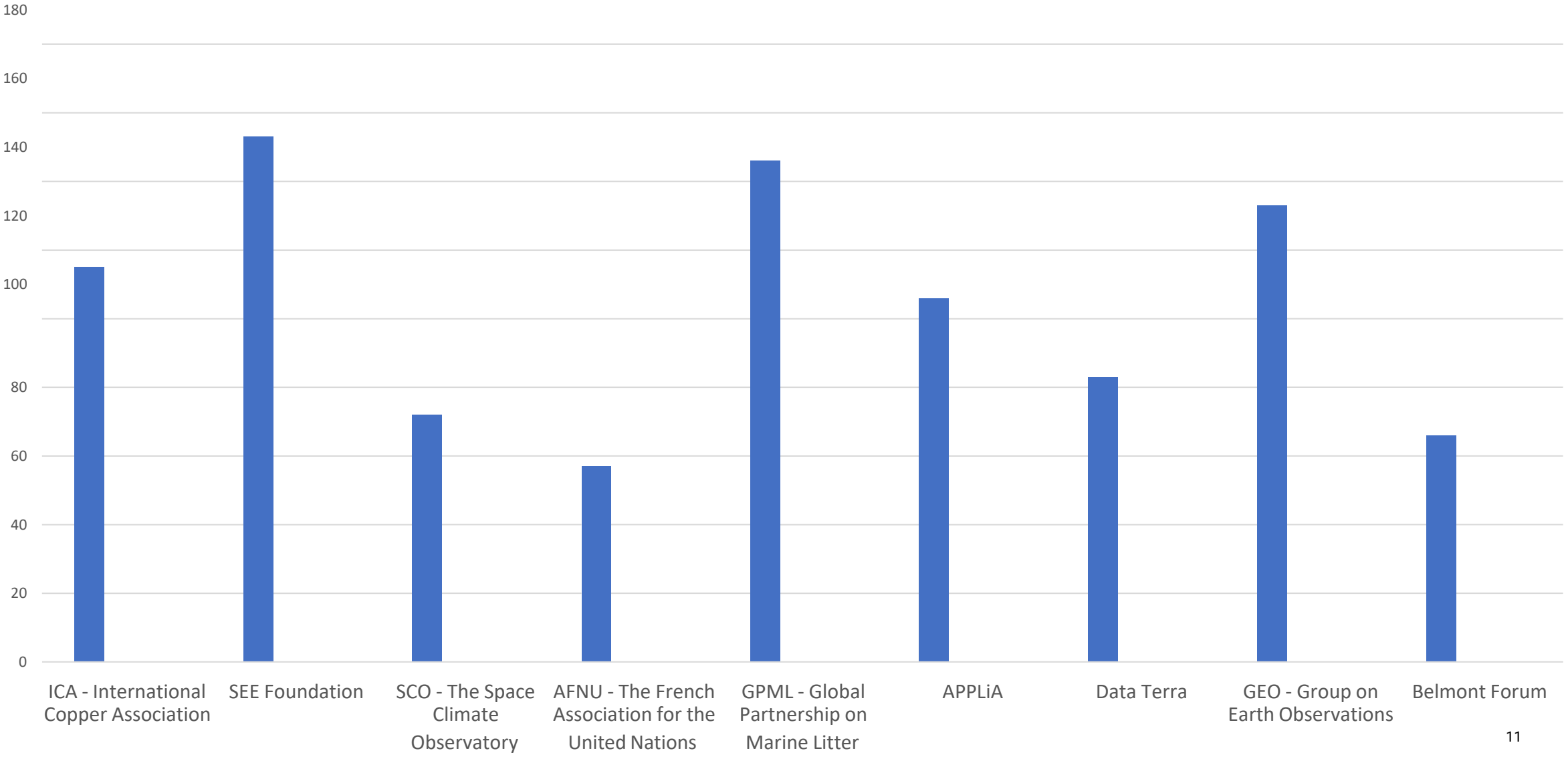
137 COUNTRIES REPRESENTED



VIRTUAL BOOTHS

Virtual booths: 9

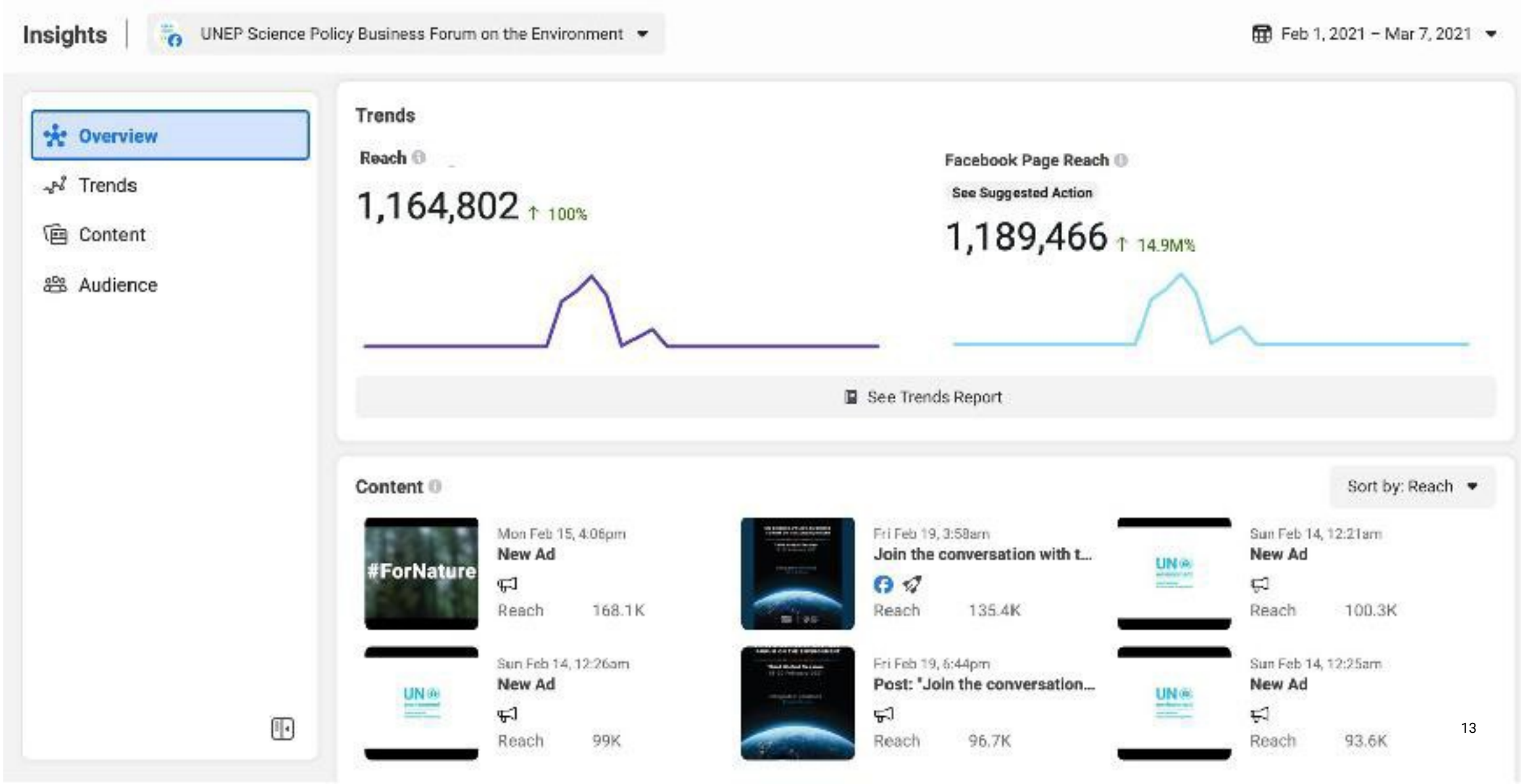
Total visits: 931




facebook

OVERVIEW

UNEP Science Policy Business Forum on the Environment




LinkedIn

Analytics

Last 30 day activity

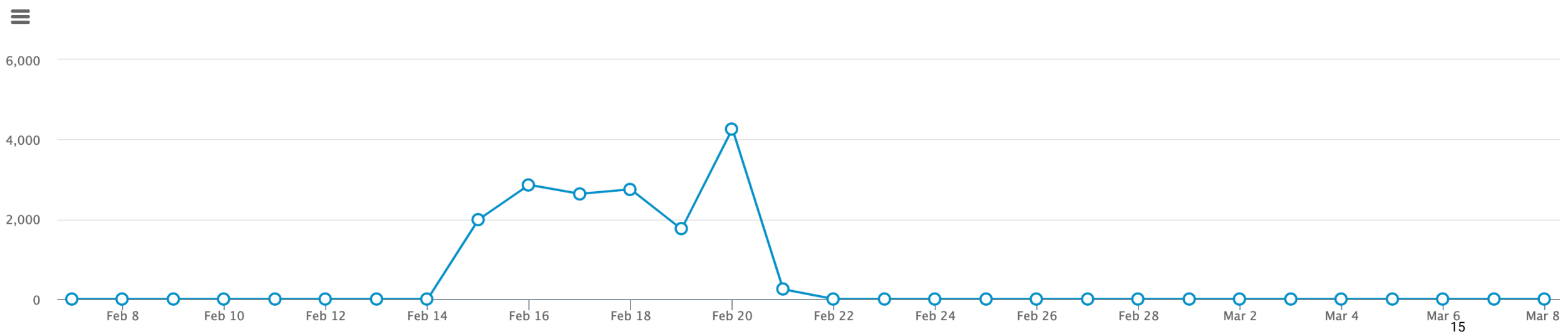
17.8K 0%

Post impressions

Start a post

Performance for 7 Campaign Groups

Aggregate On | View: **Performance** | Display: **Impressions** | Time range: **2/7/2021 - 3/8/2021** | Total impressions: **16,511**



Demographics for 7 Campaign Groups

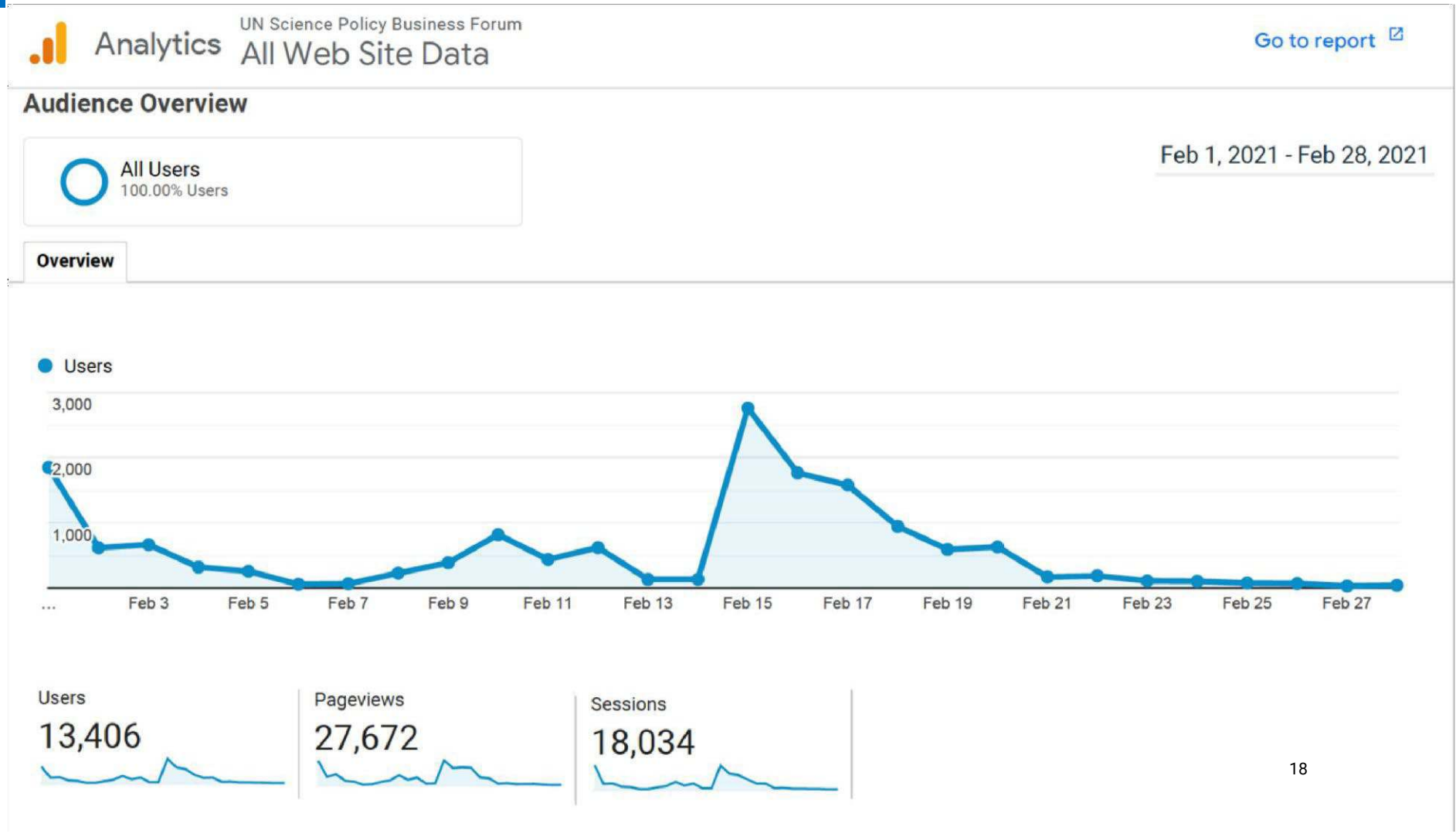
View: **Demographics** Display: **Job function** Time range: **2/7/2021 - 3/8/2021**

Name	Impressions
Business Development	2,739 (16.59%)
Operations	2,698 (16.34%)
Engineering	1,756 (10.64%)
Community and Social Services	1,224 (7.41%)
Education	1,060 (6.42%)
Sales	1,051 (6.37%)
Program and Project Management	1,045 (6.33%)

UNEP-SPBF WEBSITE

FEBRUARY 2021

UNEP-SPBF Third Global Session, ONLINE



IV. Supporting Documents and Resources

Full event summary viewable at UN-SPBF.org:
https://un-spbf.org/event/un-spbf-integrated-solution-fornature/

IISD Event Bulletin:
https://enb.iisd.org/sites/default/files/2021-03/2021_un_science_policy_business_forum_environment.pdf

Video of session outcomes delivered by UNEP-SPBF's digital spokespeople to UNEA-5:
https://youtu.be/_3oL9HwfDio

Launch of UNEP-SPBF Youth Working Group on Green Jobs and Entrepreneurship:
https://un-spbf.org/event/unep-spbf-launches-working-group-on-youth-for-green-jobs-and-entrepreneurship/

Previous UNEP-SPBF event documents available at UN-SPBF.org:
https://un-spbf.org/documents/

Third Global Session of UNEP-SPBF held in partnership with:

Appendix I

EVENT BROCHURE

UN SCIENCE-POLICY-BUSINESS FORUM ON THE ENVIRONMENT

Third Global Session

18-20 February 2021

Integrated Solutions

#ForNature

UN environment programme

SCIENCE POLICY BUSINESS FORUM

Opening of the Third Global Session of UNEP-SPBF

&

Big Data and Frontier Tech: Powering the Transition to a Sustainable Future

FEB 18th

15.00 - 19.00 EAT
ONLINE

Co-convened by with The Group on Earth Observations (GEO) and Technology Partners

For 68% of the environment-related SDG indicators there is not enough data to assess progress, according to UNEP studies which also found that towards all 12 of the SDGs targets related to the state of the environment, there is either no data or no progress made.

To achieve the environmental dimension of the SDGs, it is essential to scale up environmental action that is backed by adequate knowledge. A task that is only achievable through the deployment of the latest technologies, including earth observations, Artificial Intelligence, Machine Learning and the Internet of Things.

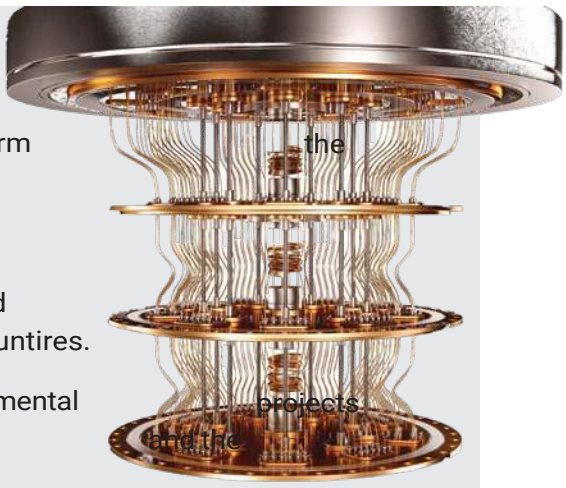
The Group on Earth Observations will report back on outcomes of the Earth Observations Indigenous Summit, with a focus on how satellite imagery can improve disaster risk management for indigenous communities. GEO will also provide an overview of its current work and future ambitions.

In cooperation with the European Parliament's special committee on AI and the Green Deal, the session will explore elements related to legislation, equity, democracy and transparency transparency related to the technology use and the equitable sharing of Big Data products and services.

To date, over 20 Member States have voiced their support to establish a Data for the Environment Alliance (DEAL). The session, for the first time, will present how this work is shaping up and the opportunities it presents.

Key technology partners (including IBM, Microsoft, Amazon, Huawei, Google Earth Engine, Dassault Systèmes) will provide an overview of how their technologies are transforming our understanding of and actions for the planet. New initiatives and collaborations will be launched that directly contribute to UNEP's work and the vision presented in its Medium-Term Strategy.
.

The session will examine the following key questions:



The opportunities exponential technologies offer to transform industry towards a sustainable path.

How to manage AI's environmental footprint.

How Technology can better support access to big data and knowledge for decision making, especially in developing countires.

The power of partnership: a review of UNEP and GEO environmental in partnership with top technology partners and innovators opportunities these partnerships offer to achieve the SDGs.

Equity, ethics, transparency, diversity and inclusion as enablers for a fair digital future.

Inger Andersen
Executive Director
UNEP

H.E. Hans Brattskar
Special Envoy, UNEA Presidency
Ministry of Climate and Environment, Norway

Petteri Taalas
Secretary-General
WMO

Munir Akram
President
Economic and Social Council

Juliet Kabera
Director General
Rwanda Environment Management Authority

Laurent Durieux
Head of Mission AI, Big Earth Data and SDGs
The French Public Research Institute

Kathryn Guarini
Chief Operating Office & Vice President Impact Science
IBM Research

David Jensen
Digital Transformation Taskforce Coordinator
UNEP

Florence Verzelen
Executive Vice President, Industry, Marketing and Sustainability
Dassault Systèmes SE

Yousef Al-Ghamdi
Head of Energy Sector
Saudi Authority for Data and Artificial Intelligence (SDAIA)

Adam Smith
Co-Founder and Head of Strategy
Descartes Labs

Alessandro Curioni
Vice President Europe and Africa
IBM Research

Ray Amani
Assistant Vice President of Investment
Nasdaq

Tamar Eilam
IBM Fellow
IBM Research

Jesarela López
Director of Technical Coordination of Vice Presidency
National Institute of Statistics and Geography of Mexico

Dilek Fraisl
Citizen Science Researcher
International Institute for Applied Systems Analysis

Meelis Munt
Secretary General of the Ministry of Environment
Estonia

Alexandre Caldas
Chief, Big Data Branch
UNEP

Pascal Peduzzi
Director
UNEP Grid-Geneva

Thuraya al Hashimi
Executive Director Digital Data Enabling Sector
AE Federal Competitiveness & Statistics Centre (FCSC)

Prof. Guo Huadong
Director, Institute of Remote Sensing and Digital Earth
Chinese Academy of Science

Laurence Monnoyer Smith
Director of Sustainable Development
Centre National d'Études Spatiales

Charlotte Bishop
Senior Project Manager
Norway International Climate and Forest Initiative (NICFI)

Bonnie Lei
Head of Global Strategic Partnerships AI
Microsoft

Maria Cecilia Londoño Murcia
Researcher
Alexander von Humboldt Biological Resources Research Institute

Ana Pinheiro Privette
Lead
Amazon Sustainability Data Initiative (ASDI)

Heidi Savelli
Programme Management Officer, Global Partnership for Marine Litter
UNEP

Willem Clappaert
Government Industry Solutions Leader
IBM

Kate Fickas
Founder
NASA Ladies of Landsat

Ado Lohmus
Permanent Representative to UNEP and Initiative coordinator
Estonia

Jian Liu
Director Science Division
UNEP

Dr. Jonathan R. Everhart
Chairman & CEO
Global ReEnergy Holdings

Rebecca Moore
Director
Google Earth Engine

Rafael Monge Vargas
Director
National Geoenvironmental Information Center, Costa-Rica

Nicholas Holmes
Chief Technology Officer for Global Government,
IBM Cloud and Cognitive Software

Diana Mastracci Sánchez
Founder
GEO Indigenous Alliance

Dragoş Tudorache
Chair, Special Committee on Artificial Intelligence in a Digital Age
European Parliament

Prof. Dr. Gilberto Camara
Director of the GEO Secretariat
UNEP

Rethinking Cities: Bringing Nature to the Urban Environment

FEB 19th

15.00 - 18:00 EAT

ONLINE

Co-convened with the Sustainable Cities Impact Programme, the Integrated Urban Solutions Partnership and the Global Alliance for Building and Construction (Global ABC)

Close to 66% of global populations are expected to live in cities by 2050. The resource requirements of urban areas could grow to nearly 90 billion tonnes per year by 2050 with high demand for land, food supplies and raw materials that will far exceed the planet's threshold. Cities are already responsible for some 75% of greenhouse gas emissions. In and around cities, biodiversity and green areas provide ecosystem benefits and services increasing the resilience of cities and improving human health.

According to the report The Weight of Cities by the International Resources Panel (IRP), cities that become more resource-efficient in transport, commercial buildings, and building heating/ cooling could achieve reductions of between 36 to 54 percent in energy use, GHG emissions, metals, land and water use.

The argument has been made that urban planning, sector optimization, cross-sector optimization towards circularity and behavioural changes will together provide cumulative benefits far greater than the those provided by each of the four levers individually.

Building Better in response to the COVID-19 pandemic is helping reimagine city concepts such as the "15-minute city", shifts to active mobility, shorter value chains, and an emphasis on bringing nature back into cities - not least by taking a hybrid approach to infrastructure, connecting the grey infrastructure with nature-based solutions.

An annual average of USD6.9 trillion in infrastructure investment up until 2030 is considered indispensable for the achievement of global development and climate agendas.

The bulk of this investment, according to the OECD, involves developing countries – including fragile low-income economies and emerging economies driven by population growth, increased income levels and rapid urbanization. However, developed countries will also require action to bridge infrastructure and capacity gaps, given the need to invest in retrofitting ageing infrastructure – particularly in light of renewed climate change mitigation and adaptation efforts.

The session will examine the following key questions:

What strategies to redesign, rethink and transform cities, and the infrastructure that support them, will lead to the greatest efficiency, resilience and inclusion?

What policies, investments and multi-sector initiatives are required to implement these strategies at scale to achieve the SDGs?

With a view to supporting changes in present consumption and production patterns, what cross-cutting interlinkages in different infrastructure systems, including cross-sectoral infrastructure integration are essential?

Martina Otto
Head of Cities
UNEP

Julie Greenwalt
Co-Chair GEO for Cities
UNEP

Kobie Brand
Vice President for Africa and Director
ICLEI Cities Biodiversity Center (CBC)

Santiago Saura
City Councillor for International Affairs and Cooperation
Madrid, Spain

Carlos Cadena Gaitán
Secretary of Mobility
City of Medellin, Colombia

Yvonne Aki-Sawyerr OBE
Mayor of Freetown
Sierra Leone

Dr. Li Zhang
Secretary General
Society of Entrepreneurs for Ecology Foundation, China

Anu Ramaswami
Co-author
IRP report "The Weight of Cities"

Aniruddha Dasgupta
Global Director
WRI Ross Center for Sustainable Cities

Carlos Manuel Rodriguez
CEO
Global Environment Facility

Emmanuelle Nasse Bridier
Head of Urban Resilience Initiative
Meridiam

Martin Powell
Head of Urban Development
Siemens AG

Anton Koller
President, District Energy
Danfoss

Harry Verhaar
Head of Global Public & Government Affairs
Signify

Ursula Hartenberger
Researcher
Global Alliance for Buildings and Construction

Paolo Falcioni
Director General
APPLiA

Robert Pinter
Green & Healthy Buildings Manager Europe
International Copper Association

Dr. Wang Lan
Deputy Dean, College of Architecture and Urban Planning
Tongji University

Sarah O'Carroll
Cities Lead
The Ellen MacArthur Foundation

Maimunah Modh Sharif
Executive Director
UN Habitat

Abdalah Mokssit
Secretary
IPCC

H. E. Rodrigo Rodriguez Tornquist
Secretary of Climate Change, Sustainable Development and Innovation
Argentina

Oliver Hillel
Programme Officer
Secretariat of the Convention on Biodiversity

Marine Litter and Microplastics Mitigation and Prevention

FEB 19th

13.00 - 14.30 EAT

ONLINE

Co-convened in partnership with the Global Partnership on Marine Litter (GPML)

As a pollutant without borders, marine litter and microplastics continue to choke the world's oceans, with a recent study revealing higher concentrations of plastic hidden beneath the surface of the Atlantic Ocean than anyone previously thought - 7,000 microplastic particles per cubic meter of seawater.

Plastics has even been found in human placentas, demonstrating the reach of this pollutant.

Found along the world's coastlines and estuaries to the remotest polar regions and down into the deepest ocean trenches, we are only just beginning to understand the true impact of marine litter and microplastics on the environment and society.

To tackle plastics, the largest, most harmful and persistent fraction of marine litter, immediate action is needed.

Significantly reducing marine pollution by 2025, as envisaged by the Sustainable Development Goals, requires focused, accelerated action by multiple actors and sectors.

UNEA Resolution 3.7 on Marine Litter and Microplastics, stresses "the importance of long-term elimination of discharge of litter and microplastics to the oceans and of avoiding detriment to marine ecosystems and the human activities dependent on them from marine litter and microplastics".

The session will examine the following key questions:

What does the latest science tell us about the risks posed by marine litter and microplastics for ecosystems, human health and society ?

In order to manage and mitigate the risk of marine litter in our environment, what urgent policy action is required at the multi-lateral and national levels?

What part does innovation, technology and finance have to play?

What does multi-stakeholder cooperation offer in the management and mitigation of marine litter and microplastics related risk?

Leticia Carvalho
Head of Marine and Freshwater Branch
UNEP

Prof. Jacqueline McGlade
Lead Author
UNEP Global Assessment on Marine Litter and Microplastics

Melissa Wang
Senior Scientist
Greenpeace

Tina Ngata
Environmental & Indigenous Rights Advocate
Women Major Groups Representative

Gabriel Thoumi
Director of the Plastics Programme and Financial Markets
Planet Tracker

Juan Bofill
Senior Engineer in the Water Management Division
European Investment Bank

Patrick Labat
Senior Executive Vice President, Northern Europe
Veolia

Heidi Savelli
Programme Management Officer, Global Partnership for Marine Litter
UNEP

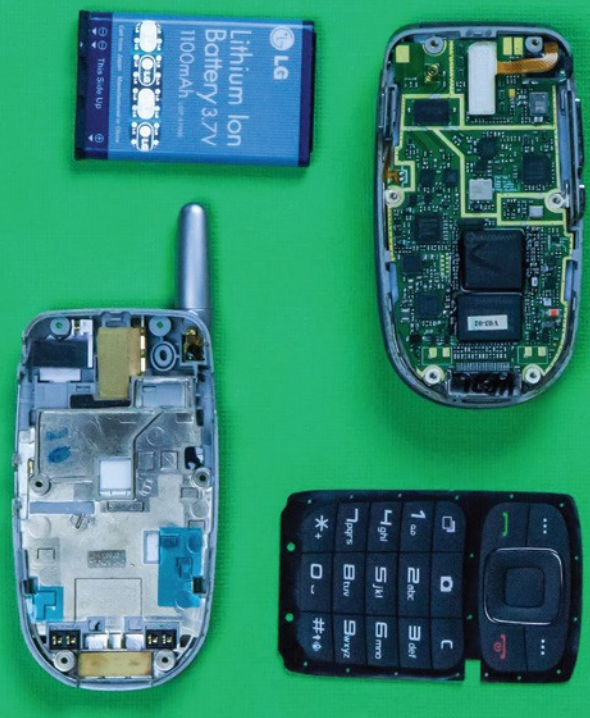
Saiful Ridwan
Chief Enterprise Solutions
UNEP

Nicholas Holmes
Chief Technology Officer for Global Government,
IBM Cloud and Cognitive Software

Audrey Hasson
Head
GEO Blue Planet European Office

H.E. Satoru Lino
Deputy Director, Office of the Marine Environment
Ministry of the Environment of Japan

Addressing E-waste through Tracking, Traceability and Circular Approach



Co-convened by the Secretariat of the Basel, Rotterdam and Stockholm Convention & UNEP's Private Sector Unit

FEB 18th

13.00 - 15.00 EAT

ONLINE

In the past few decades, the consumption of electronics has penetrated nearly every aspect of our daily lives, so it is no surprise that the production and use of electronic products has sky-rocketed, leading to the generation of massive quantities of end-of-life electronics – e-waste. According to the UN's Global e-waste Monitor of 2020, only an estimated 17.4 per cent are currently collected and recycled of the 53.6 million metric tonnes (Mt) of e-waste generated worldwide in 2019 which increased up by 21% in just five years. Efforts to reverse this trend need our attention more than ever before.

Electronics contain valuable materials, including those of strategic value such as indium and palladium; and precious metals such as gold, copper and silver. These materials can be recovered and recycled, thereby serving as a valuable source of secondary raw materials, reducing pressure on scarce natural resources, as well as minimizing the overall environmental footprint.

The negative effects of e-waste on human health and the environment continues to be scientifically documented in many regions of the world. E-waste exported to developing countries can be subject to poor recycling techniques such as open burning leading to inhalation of toxic fumes loaded with persistent. organic chemicals (POPs) and other substances. This results in long-term contamination of nearby land and rivers, and consequently the food chain, and POPs may eventually end up as contaminants in foods destined for human consumption.

The environmentally sound management of e-waste and the transboundary movements of e-waste or used equipment may serve as a big lever in the direction of circularity by reducing the need for mining of materials of strategic value and increasing recycling and resource recovery as well as creating new market opportunities, jobs and sources of income.

The tracking and traceability of e-waste requires better implementation of policies, innovating systemic and technological solutions involving governments, private sector, academia and the civil society whereby the environmental sound management of e-waste is ensured, and a circular approach is encouraged without jeopardizing human health and the environment.

The session will demonstrate ongoing efforts by different stakeholder groups and explore innovative approaches to sustainable e-waste solutions.

The session will examine the following key questions:

E-waste has been an issue of concern for a number of years. Why is it still a problem despite numerous efforts by governments, industry, civil society and international organizations?

What are the main drivers of e-waste for becoming a global environmental challenge?

What policies and regulatory mechanisms are best suited to tackle e-waste? How to deal with the informal sector and informal practices to manage e-waste?

How does the sustainable management of e-waste contribute to the circular economy? How to avoid the loss of valuable resources?

Can regional cooperation provide solutions to support developing countries?

What role industry can play in dealing with e-waste in a sustainable way? Are there innovative solutions from the manufacturing /design perspective?

Rolph Payet
Executive Secretary
Secretariat of the Basel, Rotterdam and Stockholm Conventions

Michel Tschirren
Senior Policy Advisor International Chemicals & Wastes Management
Federal Office for the Environment, Switzerland

Olga Speranskaya
Senior Advisor
IPEN

Trisha Beejai
Technical Officer
Environmental Management Authority, Trinidad and Tobago

Larke Williams
Foreign Affairs Officer
US Department of State

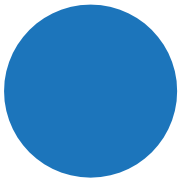
Vanessa Gray
Head of Environment and Emergency Telecommunication
Int. Telecommunication Union

Shalini Sharma
Co-Founder & CEO
E-Waste Exchange

Pascal Leroy
Director General
WEEE Forum

Carlos Silva Filho
President
International Solid Waste Association

Cynthia Asare Bediako
Chief Director
Ministry of Environment, Science, Technology &



Seika Sanno
Deputy Director, Industrial & Hazardous Waste Management
Ministry of Environment, Japan

Brendan Edgerton
Director, Circular Economy
World Business Council for Sustainable Development

Bruce Anderson
Managing Director for Global Electronics Industry
IBM

Nature-positive Food Systems for a Healthy Planet and Healthy People

FEB 20th

13:00 - 16:00 EAT

ONLINE

Convened in support of the 2021 Food Systems Summit and the UN Decade on Ecosystem Restoration

Today, the world's food systems need to be transformed towards nature-positive patterns. The rebuilding of economies after the COVID-19 crisis offers a unique opportunity to transform the global food system and make it resilient to future shocks, while ensuring environmentally sustainable and healthy nutrition for all.

As agricultural systems form the foundation of our food systems, it is imperative that they are redesigned to restore and regenerate, rather than degrade, ecosystems — all while providing affordable and healthy diets for a global population estimated to reach 10 billion by 2050.

The question is less what we need to achieve, but "how" – how to induce behavioral change at scale to restore ecosystems and reverse the damage to planetary health? What policies, incentives and investments are needed to motivate responsible individual and collective action and capitalize on the synergistic opportunities that lie in food systems?

Unless we redesign food systems and consumption patterns, greenhouse gas (GHG) emissions from global food production will continue to push the planet beyond the internationally agreed goal of limiting global warming to 1.5°C, even if we immediately halted all other emissions.

Food systems contribute up to 29 per cent of all GHG emissions, including 44 per cent of methane. **Agriculture alone is responsible for up to 80 per cent of biodiversity loss** and continues to overuse increasingly limited natural resources – including water, forests and land. Indeed, agriculture accounts for up to 70 per cent of all freshwater use and 80 per cent of all deforestation, and more than one-quarter of the energy used globally is expended on food production and supply.

The UN Decade on Ecosystem Restoration 2021 – 2030, led by UNEP and FAO, includes a focus on farmlands and other ecosystems vital for sustainable food systems.

The session will examine the following key questions:

Why a transformation of our food systems is integral for nature and economies?

How does Regenerative Agriculture connect us back to nature?

How can we promote Nutrient Use Efficiency with as much as 80% being lost to the environment?

How do we tackle food waste?

What targeted actions by public and private actors can support the required transformation?

James Lomax
Advisor, Sustainable Food Systems and Agriculture
UNEP

Philip Lymbery
CEO
Compassion in World Farming Organization

Emma Naluyima
Private Veterinarian
2019 Africa Food Prize Recipient

Alzbeta Klein
Director General
IFA

H. E. Mahindananda Aluthgamage
State Minister of Agriculture
Sri Lanka

Mark Sutton
Professor
UK Centre for Ecology & Hydrology

Maliha Malik
Chief Operating Officer
FFC Food Security and Agriculture Center of Excellence (FACE)

Anna Engleryd
Chair, Executive Body, UNECE Convention
Swedish Environmental Protection Agency

Martina Otto
Head of Cities
UNEP

H.E. Renato Alvarado
Minister of Agriculture and Livestock
Costa-Rica

Shirley Lu
GEO Author Managing Director Asi
ProVeg International

Marcus Gover
CEO
WRAP

Shirley Lu
GEO Author Managing Director Asi
ProVeg International

Marcus Gover
CEO
WRAP

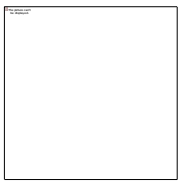
Maria Carolina Duran
Secretary of Economic Development
City of Bogota, Colombia

Wilson Merino
Director, Economic Promotion Agency Conquito
City of Quito, Ecuador

Ullas Samrat
Co-Founder
Triton Foodworks

Dr. Esau Galukande
Director, Gender and Community Service
City of Kampala, Uganda

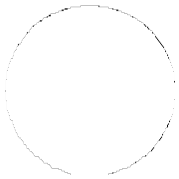
Jean-Marie Dembele
Associate Professor of Computer Science
Gaston Berger University.
St-Louis, Senegal



Peter Rylander
Partner
IBM Global Business Services

Pal Oystein Stormorken
VP Farm Ecosystems
Yara International

Dr. Tarifa Alzaabi
Acting Director General, Deputy Director General
Bio Saline



Green Jobs and Green Entrepreneurship: The Future We Want

YOUTH SESSION

FEB 18th

11.00 - 12.30 EAT

ONLINE

Co-convened in partnership with the UNEP Major Group for Children and Youth, UNEP's Partnership for Action on Green Economy (PAGE) and the International Labor Organization (ILO)

On Green Jobs and the Green Economy

According to ILO, 'green jobs are decent jobs in any economic sector (e.g., agriculture, industry, services, administration) which contribute to preserving, restoring and enhancing environmental quality'.

Since the start of the pandemic, hundreds of millions of people have lost their jobs as a result of global economic downturn. Building back better means creating jobs that take our economies one step further towards the 2030 Agenda and Paris Agreement, by accelerating and scaling up sustainable consumption and production while creating green and decent jobs for a just transition.

Youth have been particularly affected by the ongoing pandemic with over 200 million students currently enrolled in the higher education system and 71 million unemployed. According to ILO, the transition to a green economy will add an estimated 60 million new jobs to the market by 2030, but these are conditional on the availability of relevant skills and training. To create green growth, the businesses, governments, local communities, NGOs must work with each other and higher education can act as a convener to encourage cross-sector collaboration. These partnerships hold the potential to produce the necessary financing, policies, market demand, training and education of the new and existing workforce as described in the UNEP Global Guidance for Education on Green Jobs.

On Green Entrepreneurship

Youth unemployment, underemployment, and decent jobs remain global challenges while we are witnessing rapid environmental degradation and climate change which pose serious threats to the future of our economies. According to ILO many of the jobs necessary to transition to a green economy do not exist and green entrepreneurs can contribute to create them.

Green entrepreneurship is instrumental in responding to those challenges as key drivers for starting and sustaining a green economy by providing green products and services, introducing greener production techniques, boosting demand for green products and services, and creating green jobs.

The session will examine the following key questions:

What is required in terms of changing macro-economic policies to encourage green jobs?

Why is the environment a driver for job creation?

What policies and actions are needed to address skills shortages?

What are the conditions required for creating and sustaining green jobs in a post covid world?

What are the key challenges and opportunities of green entrepreneurship? How does green entrepreneurship address environmental and social challenges?

Youth for Environment

UNEP MAJOR GROUP FOR CHILDREN AND YOUTH

Asad Naqvi
Head of Secretariat
UNEP Partnership for Action on Green Economy

Moustapha Kemal Gueye
Coordinator Green Jobs Programme,
ILO

Jaee Nikam
GEO for Youth Author
Research Associate at Stockholm Environment Institute Asia

Cassandra Delage
Founder & CEO
Plast'if

Ullas Samrat
Co-Founder
Triton Foodworks

Steven Shutong Jiang
Founder & CEO
Soarability

Making peace with nature: The defining task of the 21st century

Multilateralism: Science, Policy, Innovation, Action!

FEB 20th

17:00 - 19:00 EAT

ONLINE

Multilateralism: Science, Policy, Innovation, Action!

"We face a surplus of multilateral challenges and a deficit of multilateral solutions. Advancing the nature agenda will be a critical test for multilateralism."

António Guterres, UN Secretary General

In January, this year, the UN Secretary-General launched the UN@75 initiative, kick starting the world's largest conversation on global challenges, and the gap between 'the future we want' and where we are headed, if current trends continue. One million respondents reaffirmed the essential role of the United Nations in responding to global challenges, calling for more international cooperation, not less.

The survey also pointed to overwhelming concerns on the climate crisis and the destruction of our natural environment. Responding to these findings, Member States recommitted to a reinvigorated multilateralism, noting that the urgency for all countries to come together, to fulfil the promise of the nations united, has rarely been greater.

As we continue to address the global pandemic, as it rises and ebbs across the world – the three planetary crisis identified by UNEP's Medium Term Strategy: The climate crisis; the nature crisis and the pollution crisis – show no signs of dissipating. And this is because our patterns of unsustainable production and consumption are eroding at a relentless speed, the natural foundations on which life and prosperity depend.

We face three imperatives in addressing the climate crisis: first, we need to achieve global carbon neutrality within the next three decades. Second, we have to align global finance behind the Paris Agreement, the world's blueprint for climate action. Third, we must deliver a breakthrough on adaptation to protect the world – according to UNSG.

The closing session will look at the following thematics:

Making peace with nature is the defining task of the 21st century. Do we have the systems in place to 'make the peace' with the systems that sustain our very lives?

How can the world arrive at a networked, inclusive and effective environmental multilateralism – one that advances the nature agenda? How do we ensure that no one is left behind?

What transformative shifts are required to address the COVID19 and climate crises? How can technology and innovation play a part in this transformation?

Is the private sector on track in its decarbonization efforts? How do we measure success across economies and sectors?

Inger Andersen
Executive Director
UNEP

H. E. Sveinung Rotevatn
Minister of Environment & Climate
Norway

H. E. Jeanne d'Arc Mujawamariya
Minister of Environment
Rwanda

H. E. Dr. Yasmine Fouad
Minister of Environment
Egypt

Carlos Manuel Rodriguez
CEO
Global Environment Facility

H. E. Fernando Coimbra
Chair
UNEP Comittee of Permanent Rpresentatives

Maria Ivanova
Professor and Director
Center for governance and sustainability, University of Massachusetts Boston

Jim Whitehurst
President
IBM

Tina Birmpili
Deputy Executive Director
UNCCD

Sir Bob Watson
Environmental Scientist
Former Chair
IPBES

Eric Rondolat
Chief Executive Officer
Signify

H. E. Mohamed Mubarak Bin Daina
Chief Executive
Supreme Council for Environment, Bahrain

Yugratna Srivastava
Facilitator
UNEP Major Group of Children and Youth