UN SCIENCE-POLICY-BUSINESS FORUM ON THE ENVIRONMENT

Third Global Session 18-20 February 2021

Integrated Solutions #ForNature



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





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



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



David JensenDigital Transformation
Taskforce Coordinator
UNEP

Research Institute



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 Nasdag



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 Al Microsoft





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



Dr. Jonathan R. Everhart Chairman & CEOGlobal ReEnergy Holdings



Ana Pinheiro Privette Lead Amazon Sustainability Data Initiative (ASDI)



Rebecca Moore Director Google Earth Engine



Heidi Savelli
Programme Management
Officer, Global Partnership
for Marine Litter



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



Willem Clappaert
Government Industry
Solutions Leader
IBM



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



Kate Fickas FounderNASA Ladies of Landsat



Diana Mastracci Sánchez FounderGEO Indigenous Alliance



Ado Lohmus
Permanent
Representative to UNEP
and Initiative coordinator
Estonia



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



Jian Liu Director Science Division UNFP



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