

# UN CLIMATE CHANGE GLOBAL INNOVATION HUB COP27 EVENT REPORT

November 2022





# TABLE OF CONTENTS

| EVECUTIVE CUMMA DV   | 4                    |
|--|----------------------|
| EXECUTIVE SUMMARY  |                      |
| DAY 1: OPENING DAY   |                      |
| Session 1: UGIH Core-Partner Introductory Remarks  | 8                    |
| Session 4: Showcasing an Expanded Climate Innovation PlatformSession 5: Innovation in the UNFCCC Process   | . 9<br>. 10          |
| Session 6: Global South-Global North Cooperation on the Digital and Green Twin Transition<br>Session 7: UGIH City-Focused Innovation and Implementation Sessions – Focusing on Goyang City<br>Demonstration Pilot and extension of Methodology Towards Global Cities                                   |                      |
| DAY 2: CITIES  | 12                   |
| Session 1: Transforming Cities – Money! The Role of Finance and Capital<br>Session 2: Transforming Cities – Capabilities and Mindsets<br>Session 3: Barriers Faced by Women Climate-tech Entrepreneurs in Africa<br>Session 4: Launch of Every Action Counts Green Digital Customer Journeys Guidebook | . 12<br>. 13         |
| Session 5: Accelerating Climate Solutions for a Net-Zero Continent   | . 14<br>. 14<br>. 15 |
| Session 8: Cities in the MENA Region as Opportunity Hubs for Innovation  |                      |
| DAY 3: FINANCE DAY   |                      |
| Session 1: Innovative Green Bonds and Sustainability Development Budgets   |                      |
| Session 3: Financing SDG Stimulus and the Paris Agreement  | 17                   |
| Session 5: Innovative Financial Instruments for Climate and Sustainability Solutions   | . 18                 |
| Session 6: Net Zero Urban ProgrammeSession 7: The Role of Stock Exchanges in a Net-Zero World  | . 18<br>. 19         |
| DAY 4: GREEN AND DIGITAL TRANSITION DAY  |                      |
| Session 1: European Green Digital Coalition  |                      |
| Session 2: Building the Open Climate Network   | . 20                 |
| Session 3: ICT4Green Roundtable DialogueSession 4: Mind the Gap: Accelerating Sustainable Transformation with Enabling Technologies and Innovative Policymaking  |                      |
| Session 5: Enhancing Multi-Stakeholder Engagement to Advance Development and Deployment of Emerging Technologies for Climate Action  |                      |
| Session 6: Filling in the Gaps: Open Data and Artificial Intelligence for Equitable climate Action in Monitoring, Reporting, and Verification  | . 23                 |
| Session 7: Bringing the Balance Sheet of the Planet to the Public Ledger   | 23                   |
| DAY 5: TRANSFORMATIVE CLIMATE ACTION   | 24                   |
| Session 1: High-level Session on Human Well-Being, Climate Change, Migration, Biodiversity,  Land Regeneration, and Resource Preservation  | . 24                 |
| Session 2: Advancing Paris Agreement Implementation and Climate Action through Innovation and Technology.  | . 24                 |
| Session 3: Ther Council of Engineers for the Energy Transition (CEET) Statement ReleaseSession 4: High-level Event on Green Hydrogen   |                      |
| Session 5: Changing Systems - Resource Solutions for Planetary Stability   | . 26                 |
| Session 6: Mobilizing Anticipatory Science for Disruptive Climate Action   |                      |
| Session 8: Open Data for Climate - Breakthrough to Accelerate and Scale Resilient Climate-aligned Finance and Investment   |                      |
| DAY 6: REGENERATIVE SYSTEMS WITH A FOCUS ON NUTRITION AND HEALTH DAY   | . 28                 |
| Session 1: Official launch of "Beans is How"   | . 28                 |
| Session 2: Regenerative Innovation to Help Solve the Climate CrisisSession 3: Regenerative Foods of the Future: Support the Healing of Human Health and the Environment  | . 28                 |
| Session 4: Launch of a Challenge   |                      |
| Session 5: Innovation to Satisfy the Core Human Needs of 10 Billion People by 2050: The Case of Nutrition and Health   | . 30                 |
| Session 6: Achieving NDC targets through Clean Cooking Action (Clean Cooking Alliance)<br>Session 7: Using Web3 to Build the Global Carbon Ledger  | . 30                 |
| Session 8: Assessing Avoided Emissions and 1.5C Global Sustainability Compatibility from Nutrition/  | 71                   |

| DAY 7: SHELTER AND YOUTH DAY  | 32       |
|---|----------|
| Session 1: Appropriate Framework for Multi-Stakeholder Engagement to Support Youth and Women Innovators and Entrepreneurs in Implementing Climate Solutions in Africa |          |
| Session 2: Bamboo Shelter: The Potential of Bamboo as a Sustainable Building Material   | 32       |
| Solutions (The role of nature and bits in replacing bricks)   | 33       |
| Session 4: Sheltering and Empowering Informal Communities: A Conversation Among Leaders in Local Government, Informal Settlements, and Shelter Solution Providers     | 33       |
| Achieve Systemic Change   |          |
| Session 6: Prize Ceremony Hack for Earth Youth Hackathon  |          |
| DAY 8: GREEN HYDROGEN DAY   | 36       |
| Session 1: Opening ceremony: The Global Demand and Supply for Green Hydrogen  |          |
| Session 2: A Realistic Assessment of the Current State of Green Hydrogen  |          |
| Session 3: The Heavy Industry Perspective   | 3/       |
| Solutions Integrating Energy Efficiency   | 37       |
| Session 5: Enabling the Development and Upscaled Deployment of GH2 through Systemic Innovation  |          |
| Session 6: The Innovators' Laboratory   |          |
| Session 7. Power to A. Example of Deployment  | 33       |
| DAY 9: CULTURE AND CREATIVE INDUSTRY/FASHION DAY  | 40       |
| Session 1: Fashion! & Gaming Industry   | 40       |
| Session 2: Cities & Regions and how to Build Bridges with new European Bauhaus and Beyond   |          |
| Session 3: Digital Arts and Sustainable Web   | 41       |
| from Cultural Enabler   |          |
| Session 5: Sustainable Tourism and Cultural Heritage  |          |
| Session 6: Bridging City-level Innovation: Agendas and Approaches to Accelerate City Climate Action Session 7: Accelerating Urban Climate Action                      | 42<br>43 |
| Session 8: Nature-based Digital Currencies: Incorporating Living Capital and Climate Actions as Pillars   | 43       |
| for an Advanced Monetary System   | 43       |
| DAY 10: SOLUTIONS DAY   | 44       |
| Session 1: Enabling Transformative Innovation through Standards   | 44       |
| Session 2: Accelerating Climate Change Adaptation through Innovation  | 44       |
| Session 3: Assessing Avoided Emissions and 1.5C Global Sustainability Compatibility from  Transformative System Solutions   | 45       |
| Session 4: Introducing ACCTION  |          |
| Session 5: Digital MRV for Inclusive Climate Action   | 46       |
| Session 6: Digital MRV for Enhanced Fairness in Climate Action  | 46       |
| Session 7: Genesis 2.0 demo   |          |
| Session 6. The Ethereum Climate Platform – Amplifying Climate Action  | 47       |
| DAY 11: CLOSING DAY   | 48       |
| Session 1: Reformed green bonds in LA (Forestry-based mitigation projects)  |          |
| Session 2: Role of Youth and Digital Innovation in Promoting Transformative Climate Action  |          |
| Session 4: Closing ceremony   |          |
|   |          |
| PHOTO GALLERY   | 50       |



# **EXECUTIVE** SUMMARY.

For the second consecutive year, the UN Climate Change Global Innovation Hub (UGIH) successfully concluded its dialogues on transformative innovation at COP27 held in Sharm El-Sheikh, Egypt between 7 November and 18 November 2022. During the two weeks, the UGIH hosted a total of 85 sessions.

A Pavilion served as a convening and networking area to promote, discuss, share, and enable transformative and collaborative strategies to develop climate and sustainability solutions.

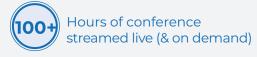
The objectives of the second UGIH physical hub dialogues were threefold:

- To promote the concept of system, change in climate, and sustainability innovation.
- To identify and access potential future members of the different working groups and build a movement that will enable effective implementation of the UGIH.
- To boost UGIH's visibility.

The Pavilion represented a space to introduce new products, business models, innovations, and services. Discussing innovation can help advance markets and create transformative supply chains that are in line with climate and sustainability goals. Innovation can be used to manage change and discover new opportunities.

Climate innovation is focused on fostering competitive advantage, sustaining current growth paths, and increasingly complying with economic and social regulations that seek to enhance emission reductions. With a cluster of climate actors using the Pavilion at COP27 as a collaborative platform, the UGIH can help develop, transfer, and deploy solutions that align with the SDGs and climate goals.

- COP27 Platform, YouTube, dedicated website
- Launching of digital



- (50,000+ views on YouTube)
- Speakers, 305 in-person; 103 remote (40% female)



- Organizations
- COP27 Side-Events outside the UGIH Pavilion



Distinguished speakers included but were not limited to:

- Mahmoud Mohieldin Egypt's Climate Champion, COP27
- Irina Gorbounova, General Manager M&A and Head of XCarb Innovation Fund, ArcelorMittal
- Lord Browne, former BP chief executive, co-head of the world's largest renewable energy private equity fund
- Ibrahim Thiaw, Executive Secretary, United Nations Convention to Combat Desertification (UNCCD)
- Olga Algayerova, Executive Secretary, UNECE
- Gerd Müller, Director General UNIDO
- Adessalam Ould Mohammed, Minister of Petroleum, the Islamic Republic of Mauritania
- Waleed Bin Salman, Vice Chairman, World Green Economy Organization (WGEO)
- Carla Montesi, Director-General for International Partnerships, European Commission
- Milagros De Camps, Vice Minister for Climate Change and Sustainability, Dominica Republic
- Mayor Lee Dong-hwan, Goyang City
- Mayor Mohammed Safieni, Chefchauen, Morocco
- Rachel Kyte, Member of the CPI Board and Dean of the Fletcher School at Tufts University
- Andrew Steer, President & CEO, Bezos Earth Fund
- Sandrine Dixson-Decléve, Co-President, Club of Rome
- Fanglu Wang, Managing Director, CITIC Capital
- Jeffrey Sachs, President and Co-Chair, UN Sustainable Development Solutions Networks
- Essam Sharaf, Egyptian Academic, Former Prime Minister of Egypt.
- Ovais Sarmad, Deputy Executive Secretary
- James Zhan, Director, Investment and Enterprise, United Nations Conference on Trade and Development
- Nathaniel Amann-Blake, Assistant Deputy Minister, Ministry of Energy, Mines and Low Carbon Innovation, Government of British Columbia, Canada
- Nancy Norris, Senior Director, ESG & Digital Trust, Ministry of Energy, Mines and Low Carbon Innovation, Government of British Columbia, Canada
- Izabella Teixeira, Co-chair, International Resource Panel
- Manish Bapna, President, Natural Resources Defense Council
- Alfonso Blanco Bonilla, Executive Secretary, OLADE
- Benedicte Nolens, Head Hong Kong Centre, Bank of International Settlement
- Silvio Dulinsky, Deputy Executive Secretariat at ISO
- Andy Deacon, Co-managing Director, Global Covenant of Mayor
- Dennis Pamlin, Executive Director, Mission Innovation NCI/ Senior Advisor, RISE
- Margaret Chu, CEO, Gold Standard
- Kirsten Dundlop, Chief Executive Officer at EIT Climate-KIC
- Phoebe Koundouri, Professor, Athens University of Economics and Business & Technical University of Denmark; President EAERE; Chair UN SDSN Global Climate Hub; Co-Chair SDSN Europe
- Peter Bakker, CEO, WBSCD
- Amit Prothi, Director General, Coalition for Disaster Resilient Infrastructure
- Valérie Hayer, European Parliament
- Philippe Wang, Executive Vice-President, Huawei
- Steven Haft, Head of Global Partnerships, ConsenSys
- Martin Wainstein, Executive Director, Open Earth Foundation
- Alan Ransil, Green Team Lead, FILECOIN
- Wes Geisenberger VP, Sustainability & ESG, HBAR Foundation





The Pavilion featured 85 back-to-back sessions, each running 50 minutes with a 10-minute break between sessions. The sessions focused on specific climate innovation themes including cities, digital finance, digital for climate, tools, partners for tomorrow (incubators and accelerators), innovation for climate and the SDGs at the UN, youth, gender, and core needs/solutions space.

The Pavilion hosted plenary sessions, knowledge-sharing panels, conversations, lightning talks, creative content, workshops, roundtables, and ceremonies. The sessions were in hybrid format enabling both in-person and virtual participation. Partners, session organizers, and audience members are invited to follow the Innovation Hub on social media with #GlobalInnovation4Climate on Twitter and LinkedIn.

In the Pavilion @ COP27, we saw several milestone moments, including:

- □ Launch of the UGIH Virtual Hub co-designed by Amazon, OEF, and the UGIH
- Showcase "Bamboo Shelters: The Potential of Bamboo as a Sustainable Building Material"
- Launch of the "Beans is How" food security initiative by the SDG2 Advocacy Hub
- Showcase of "Global Demand and Supply for Green Hydrogen" with a possible declaration by governments and stakeholder groups
- Innovation and Implementation Sessions Focusing on Goyang City Demonstration Pilot and Extension of Methodology toward Global Cities
- Launch of Every Action Counts coalition of Consumer Engagement Best Practices
- Guidebook including new Ant Group Oceans Initiative and the 10x1000 Tech for Inclusion Program collaboration with GDFA
- Launch of a CEO's Roundtable: The Role of Exchanges in Creating a Net Zero World
- Showcase "Mobilizing Anticipatory Science for Disruptive Climate Action" by GESDA
- Showcase "Cities & Regions & New European Bauhaus" by Climate KIC
- Showcase "Accelerating urban climate innovation in 2023: the Innovate4Cities Conference and 1st Annual Innovation Summit (GCOM)
- Showcase "Accelerating Solution Oriented Innovation Our 2050 World"
- Showcase "Genesis 2.0: Prototyping use of Smart Contracts for Carbon Credits attached to Green Bonds"
- Call for action on "Global South-North Cooperation on the Digital and Green Twin Transition Leveraging the Power of Digital Innovations" by the GIZ and UGIH
- Call for action on "Innovation and Youth" by the GIZ and UGIH
- Call for action on "Resilient infrastructure in the face of climate change, the global challenges of climate change 2022", by the UNGSF
- The Council of Engineers for the Energy Transition (CEET) statement released, by the UNSDSN
- Launch of ICLEI-Mission Innovation/RISE partnership in support of an expanded innovation agenda in Regions and Cities, including the development of a scanning tool for the solution and human need leadership
- Launch of OECD Mission Innovation/RISE partnership to explore synergies between an expanded climate innovation agenda and a full iceberg approach, including a tool to support policymakers
- Launch of Clean Energy International Incubation Centre by Mission Innovation/RISE
- International Gigaton Challenge for Incubators from all Countries to support an expanded innovation agenda
- Launch of the purpose-driven assessment tool to support exponential uptake of globally sustainable
   1.5C compatible solutions
- Launch of Web-guide for assessment and support of solution providers by Mission Innovation/RISE

**COP27 EVENT REPORT** 

□ Launch of UN SSE's new Advisory Group on Carbon Markets and a new FAQ on voluntary carbon markets

Partners and session organizers are invited to promote their sessions using materials from the **UGIH Trello board**.

#### UGIH

#### IN THE COP27 NEGOTIATION TEXT

Decision -\*/CMA.4 Enhancing climate technology development and transfer to support implementation of the Paris Agreement

...."14. Requests the secretariat to ensure that the relevant activities of the UNFCCC Global Innovation Hub contribute to supporting the implementation of the joint work programme as guided by the technology framework to avoid duplication and fragmentation of efforts in the area of innovation;"

#### **UGIH**

#### REFERRED ON TECHNICAL PAPERS

The UN Climate Change Global Innovation Hub was listed in the **Technical paper** on specifications for the UNFCCC web-based platform on non-market approaches (Article 6.8), Annex I as one of other UNFCCC web platforms.

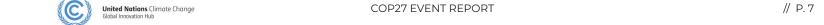
The technical paper addressed a request from the Chair of the Subsidiary Body for Scientific and Technological Advice (SBSTA) to the UN Climate Change secretariat.

#### **UGIH**

#### TEAM PARTICIPATION AT COP27 OUTSIDE THE PAVILION

- 1. SDG Pavilion: An Expanded Innovation Space for Transformative Climate Solutions, 9 November (recording is available here).
- 2. ICLEI: Activating an Expanded Climate Innovation Agenda in Response to the Climate Emergency: Cities and Regions in Focus." 9 November (recording is available here).
- 3. China Pavilion: Bamboo as a Substitute for Plastic Initiative. 16 November (information is available <a href="here">here</a>).
- 4. UNFCCC Side Event: The road to sustainable mobility in cities, 17 November (recording is available here).
- CMCC/JPI Climate-EAERE-SISC side event "Launching a European Climate Science Assessment Mechanism for Policy Support", 17 November (recording is available here).
- Innovation Zone "Okeanos made from stone: Leading technology transfer,"
   November (recording is available here).

COP27 Dialogues detailed report Full Programme is available here.



# DAY ONE

## OPENING DAY

On November 7, 2022, the UN Climate Change Global Innovation Hub (UGIH) kickstarted the opening day of COP27 Dialogues in the Egyptian city of Sharm El-Sheikh with multiple high-level sessions. A total of seven sessions were held on day one and it comprised introductory remarks, fireside chats, presentations, and panel discussions.

#### **SESSION 1**

#### **UGIH CORE-PARTNER INTRODUCTORY**

**REMARKS** was led by Carlos Ruiz-Garvia (Project Manager, UN Climate Change Global Innovation Hub [UGIH]) and brought together key partners to share their reflections on UGIH and its contribution to existing climate action initiatives including its work with cities.

#### **KEY TAKEAWAYS:**

- The value of the UGIH, and its contribution to existing climate action initiatives including its work with cities.
- The importance of innovation and the need for radical collaboration.
- The importance of cities as demand and solution provider.
- The expanded innovation agenda promoted by the UGIH.

#### **SPEAKERS**

- Carlos Ruiz-Garvia (Project Manager, UGIH)
- Massamba Thioye, (Project Executive, UGIH)
- Jorn Verbeeck (Sustainability, and ESG, KPMG Belgium)
- Kirsten Dunlop (Climate-KIC)
- Dennis Pamlin (Mission Innovation)
- Martin Wainstein (Open Earth Foundation)
- Andy Deacon (Global Covenant of Mayors)
- Mayor Lee Dong-hwan (Goyang City, South Korea)
- Nathaniel Amann-Blake (Assistant Deputy Minister, British Columbia, Canada)
- Phoebe Koundouri (Athens University of Economics and Technical University)

#### **SESSION 2**

AND CLIMATE AND SUSTAINABILITY
INNOVATIONS (PART 1) included opening
remarks, led by Massmba Thioye, and a panel
discussion on the need for systemic and
transformative climate action from a broad
range of stakeholders, including cities.

#### **KEY TAKEAWAYS:**

- The need for innovative financial instruments that can enhance the global flows of climate finance.
- The need for widescale collaboration between policymakers, industries, and scientists to promote transformative innovation, especially in the hard-to-abate sectors.

#### **SPEAKERS**

- Massamba Thioye, (Project Executive, UGIH)
- Phoebe Koundouri (Athens University of Economics and Technical University)
- Rachel Kyte (Dean of the Fletcher School at Tufts University)
- Eesa Bastaki (University of Dubai)
- Roland Schatz (Chief Executive Officer and Founder, UNGSII)
- Irina Gorbounova (General Manager M&A and Head of XCarb Innovation Fund, ArcelorMittal)





#### **SESSION 3**

AND CLIMATE AND SUSTAINABILITY
INNOVATIONS (PART 2) furthered the
conversation that began in Session Two.
Panelists shared ideas, experiences, and plans
for future actions that can contribute to the
development and up-scaled deployment of
transformative and ambitious climate and
sustainability solutions.

#### **KEY TAKEAWAYS:**

- It is necessary to rethink the system to refocus human, financial, and natural capital to serve human needs and planet prosperity rather than power and wealth creation.
- Disruptive and transformative solutions that the private sector can finance must be developed.
- We must reapproach the current economic and financial systems to encourage the global flow of finance to enhance the local-level implementation of climate projects.

#### **SPEAKERS**

- Kirsten Dunlop (Climate-KIC)
- Ibrahim Thiaw (Executive Secretary, UNCCD)
- Sandrine Dixson-Decléve (President, Club of Rome)
- Jeffrey Sachs (President and Co-Founder, UN Sustainable Development Solutions Networks)
- Janez Potočnik (Co-chair of the International Resource Panel)
- Andrew Steer (CEO, Jeff Bezos Foundation)
- Fanglu Wang (Managing Director, CITIC Capital)

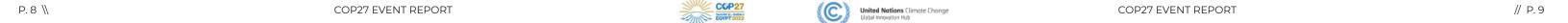
#### **SESSION 4**

SHOWCASING AN EXPANDED CLIMATE INNOVATION PLATFORM featured the launch of the Mission Innovation-ICLEI partnership and support for an expanded innovation agenda in regions and cities. Representatives spoke on multiple aspects of the innovation ecosystem, including city and region-focused implementors of innovations, incubators, and innovation-supporting organizations.

#### **KEY TAKEAWAYS:**

- There was overwhelming support from the attending stakeholders to focus on human needs and an expanded solution agenda on a global level.
- Speakers highlighted the need to heavily focus on an implementation agenda that outlines many small actions that have the potential to deliver the outcome of a decarbonized world.

- Dennis Pamlin (Mission Innovation NCI)
- Robert Andrén (Director General, Swedish Energy Agency)
- Gino Van Begin (Secretary General, ICLEI)
- Pourya Salehi (Acting head of Urban Research Team, ICLEI)
- Andreas Johansson (Head of Research and Business Development, RISE Research Institutes of Sweden)



# DAY ONE

### OPENING DAY

#### **SESSION 5**

#### INNOVATION IN THE UNFCCC PROCESS

co-organized with the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN), explored how UNFCCC process with a focus on national systems of innovation and digitalization. The first segment featured the presentation of the recently launched TEC/CTCN Joint Work Programme by Matt Kennedy, Senior Advisor to the CTCN Secretariat. This was followed by two panel discussions: one focusing on national systems of innovation and the second on digitalization.

#### **PANELISTS**

- Matt Kennedy (Senior Advisor to the CTCN Secretariat)
- Kirsten Dunlop (CEO, Climate KIC)
- Dietram Oppelt (TEC member and NDE of Germany)
- Surachai Sathitkunarat (Thailand NDE Focal Point National Designated Entity Thailand)
- Cathy Li (YOUNGO/WGC representative)
- Stephen Minas (Member of TEC and CTCN Advisory Board and Gender focal point)
- Rajiv Garg, (Regional Manager, CTCN)
- Kaoru Inoue (Director, GESI)
- Tambe Honourine Enow (YOUNGO Representative, YOUNGO CTCN Board)

#### **SESSION 6**

GLOBAL SOUTH-GLOBAL NORTH
COOPERATION ON THE DIGITAL AND
GREEN TWIN TRANSITION sought to present
policies, programmes and priorities in addressing
the twin transition by Europe and the Global
South. Speakers discussed a shared vision for
future cooperation.

#### **SPEAKERS**

- Kirsten Dunlop (CEO, Climate-KIC)
- Milagros De Camps (Vice Minister for Climate Change and Sustainability, Dominican Republic)
- Emma Theofelus, (Deputy Minister, Information and Communication Technology, Namibia)
- Alice Higiro (Project Director, Ministry of ICT and Innovation, Rwanda)
- Carlos Kan (National Director of Innovation from the National Authority for Government Innovation, Panama)
- Martin Wimmer (BMZ, Chief Digital Officer and Head of Department Global Health, Transformation of the Economy; Digitalization; Food Security)
- Waleed Bin Salman (Vice Chairman, World Green Economy Organization)
- Jan Wahlberg (Ambassador for Climate Change, Finland)
- True Schedvin (Head of Unit Global Sustainable Economic Development, Sida, Sweden)
- Carla Montesi (Director-General for International Partnerships, European Commission)

#### **SESSION 7**

IMPLEMENTATION SESSIONS – FOCUSING ON GOYANG CITY DEMONSTRATION PILOT AND EXTENSION OF METHODOLOGY TOWARDS GLOBAL CITIES focused on showcasing the interim results of the Goyang City demonstration pilot that focuses on innovations in city-level carbon accounting and climate action. This session included keynote speeches, a presentation, and a panel discussion.

#### **KEY TAKEAWAYS:**

- Consumption-based carbon accounting is an important and valuable tool.
- Data and technology play a critical role in developing GHG accounting systems for cities and can be used to inform the development of evidence-based policies.
- Sharing best practices enhances the innovation and collaboration between cities.

- Mayor Lee Dong-hwan (Goyang City, South Korea)
- Dr. Kwigon Kim (Seoul National University)
- Nathaniel Amann-Blake (Assistant Deputy Minister, British Columbia, Canada)
- Catherine Atkin (CodeX Climate Data Policy Initiative)
- Katherine Foster (Executive Director, Green Digital Finance Alliance)
- John Verbeeck (Senior Manager Sustainability and ESG, KPMG Belgium)
- Benjamin Jance (Head of Research and Innovation, Global Covenant of Mayors for Climate and Energy)









// P. 13

# CIT

# CITIES





Cities Day promoted conversations on how to develop and deploy transformative climate and sustainability solutions in cities. Throughout the first part of the day, the sessions focused on systems change, climate, and sustainability innovations in cities. Subsequent sessions looked at changing paradigms through systems thinking and making innovation a core component in climate tech with a focus on gender parity and equity. The afternoon sessions focused on human needs and highlighted stakeholders' roles as solution providers. The final sessions focused on Global South-Global North collaboration on digital and green transitions. The day also featured the introduction of the UGIH digital platform prototype.

#### **SESSION 1**

DAY TWO\_

TRANSFORMING CITIES – MONEY! THE ROLE OF FINANCE AND CAPITAL brought together a wide range of experts to explore the role of finance and capital in transforming cities. The panelists showcased success stories of cities in raising and deploying capital and explored the obstacles that are holding back funding from the private sector and donors and opportunities for increasing financial flows in cities.

#### **SPEAKERS**

- Ikenna Azuike (Journalist, Climate KIC)
- Rodrigo Massi (International Relations Coordinator, Sao Paulo City Hall)
- Divyata Ashiya (Special Advisor, Long-Term Investment Coalition)
- Thomas Osdoba (Programme Director, NetZeroCities)
- Jonas Kamleh (Lead Climate Strategist, City of Malmö, Sweden)
- Julio Lumbreras (Founder and Director, Cities2030)

#### **SESSION 2**

TRANSFORMING CITIES – CAPABILITIES

AND MINDSETS explored the capabilities and mindset needed to amplify and achieve ambitious climate goals in cities. Panelists encouraged the participation and collaboration of a wide array of stakeholders across different contexts to establish accelerator labs.

#### **SPEAKERS**

- Solla Zophoniasdottir (Director of Learning, EIT Climate-KIC)
- Emma Presutti (Strategic Innovation Designer, Chora)
- Axel Grael (Mayor, Niterói, Brazil)
- Reham Youssef (Head of Policy and Partnerships, UNDP)
- Raj Kalia (Co-Lead of Capital Investments, Dark Matter Labs)
- Eduardo Noboa (Strategic Sustainability Advisor, BMW Foundation)

#### **SESSION 3**

# BARRIERS FACED BY WOMEN CLIMATE-TECH ENTREPRENEURS IN

AFRICA focused on women entrepreneurs in Africa and illustrated how they are disproportionately represented in climate accelerators and incubators. This session announced the launch of WeClim Equally, a gender-smart handbook for climate programmes. Panelists discussed ways to build capacities of ESOs, investors, and start-ups and how accelerators, funds, and impact investors can become gender strategic.

#### **SPEAKERS**

- Cassia Moraes (Partnerships and Outreach Manager, Strategic Programmes, EIT Climate-KIC)
- Audrey Marigold S-Drako (CEO, Sabon Sake)
- Caroline Kirabo (CEO, M-Kyala Ventures)
- Nicola Mustetea (Director Climate Change, British International Investment)
- Collins Kimaro (General Manager, Westerwelle Foundation/Anza)

#### **SESSION 4**

# LAUNCH OF EVERY ACTION COUNTS GREEN DIGITAL CUSTOMER JOURNEYS

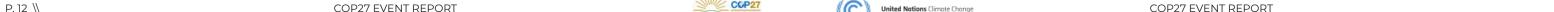
**GUIDEBOOK** served as the first major convening of Every Action Counts Coalition Partners. It highlighted the work done by Every Action Counts Coalition comprising large platforms, digital, finance, and e-commerce with a pledge to empower one billion people by 2025 through green transparency and actions.

Panelists illustrated ways in which the organizations have worked on creating solutions for the green fintech space and discussed how the financial system can respond to climate risks – greening finance, financial products, and services, and finding what to finance.

- Jason Pau (Ant Group)
- Emma van de Ven (Rabobank)
- Daryl Teo (Group)
- Toni Ballabriga (BBVA)
- Katherine Foster (Executive Director, Green Digital Finance Alliance)
- Jeffrey Oatham (Delivery Hero)







// P.15

### CITIES

#### **SESSION 5**

ACCELERATING CLIMATE SOLUTIONS FOR A NET-ZERO CONTINENT mapped impediments to innovation in Africa, opportunities for scaling innovation, and specific support to ensure African solution providers can join international innovation hubs.

Panelists highlighted funding portfolios and the lack of diversification for venture capitalists and recommended alternate investment options in electric vehicles (EV) and other innovation areas. Private sector finance plays a key role in the climate space to invest in adaptation efforts.

#### **SPEAKERS**

- Audrey Marigold S-Drako (CEO, Sabon Sake)
- Sinead Walsh (Climate Director & Deputy Director General for Irish AID and Africa, Department of Foreign Affairs and Trade, Ireland)
- Jade Bouhmouch (Managing Partner, Ambo Ventures)
- Prabhakar Vanam (CEO, Kenya Climate Innovation Center)
- Joshua Murima (Head of Engagement and Investor Relations, Briter Bridges)

#### **SESSION 6**

VIRTUAL HUB introduced the UGIH Virtual Hub, highlighting its key features and how it can be used by cities and other stakeholders. The Virtual Hub will play a central role in furthering UGIH's key goals, ensuring innovation is fostered and utilized to help everyone achieve sustainability and climate goals.

#### **PANELISTS**

- Martin Wainstein (Executive Director, Open Earth Foundation)
- Alex Dalessio (Lead, AWS Innovation Studio, AWS)
- Carlos Ruiz Garvia (Project Manager, UGIH)
- Eva Gladek (Metabolic)



#### **SESSION 7**

INCUBATORS AND ACCELERATORS: WHERE MANY OF THE NEW GLOBALLY SUSTAINABLE SOLUTIONS ARE BORN featured the launch of 'Gigaton Challenge' for incubators and accelerators by Mission Innovation's NetZero Compatibility Initiative in collaboration with the Social Alpha's Clean Energy International Innovation Centre.

#### **KEY TAKEAWAYS:**

- Incubators, accelerators, and related activities are an essential part of transforming society towards sustainability.
- It is critical to plan so that the most impactful and transformational innovations are invested in and supported in a way that enables them to succeed.
- The economy needs to be transformed to focus on behavioral change and on human needs.
- Net-zero is not just about reducing emissions from the big sectors but also about behavioral change and changing the way the economy works, for example reducing the need for energy in the first place or transitioning to renewables.

#### **SPEAKERS**

- Dennis Pamlin (Executive Director, Mission Innovations Net-Zero Compatibility Initiative)
- Smita Rakesh (Vice President & Partner, Social Alpha)
- Simon Bennett (Energy Analyst, IEA)
- Frédéric Wils (Senior Business Development Manager, GIZ CATALI.5°T Initiative)
- Niclas Carlsson (Director of International Market Development, Swedish Energy Agency)

#### **SESSION 8**

## CITIES IN THE MENA REGION AS OPPORTUNITY HUBS FOR INNOVATION

discussed the challenges and opportunities for climate and sustainability innovations in the MENA (Middle East and North Africa) region that can potentially boost the region's economic growth and long-term stability. The MENA region works to scale up mid-to-later-stage enterprises that have an environmental and social impact.

- Mary Awad Menassa (Senior Climate Action Specialist and Coordinator, UNFCCC-WGEO RCC MENA and SA)
- Avi Hasson (CEO, Start-up Nation Central)
- Richard Bush (Chief Environment Officer, NEOM)
- Abeer Manneh (Director Sustainability, NEOM)





# 5 DAY THREE

# FINANCE DAY





Finance Day focused on the development of transformative tools that enhance the global flow of finance to promote climate action. A wide array of high-level speakers from stock exchanges, banks, and the private sector spoke on topics including digital finance, innovative green bonds model, and the role of exchanges in creating a net zero world.

#### **SESSION 1**

# INNOVATIVE GREEN BONDS AND SUSTAINABILITY DEVELOPMENT

BUDGETS explored how green bonds can be used to promote climate action. Four innovative green bond models were introduced that have been developed to help direct financing to the development and deployment of climate and sustainability solutions. The second segment featured a panel discussion on how to better develop and deploy innovative financial instruments that can enhance global flows of climate finance.

#### **SPEAKERS**

- Lord Browne of Madingley (Former Chief Executive Officer, BP)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Rosie Hampson (Executive Director, Goldman Sachs (Asia) L.L.C)
- Yehuda Kahane (Chairman and Cofounder, YKCenter)
- Moshe Bareket (Director General of the Israeli Capital Market Insurance & Savings Authority)
- Stefan Brunnhuber (World Academy of Art and Science Trustee, Member of the Club of Rome Model)
- Mike Hayes (Global Head of Renewable Energy, KPMG)
- Jeffrey Sachs (President and Co-Chair, UN Sustainable Development Solutions Networks)

#### **SESSION 2**

## ROLE OF STOCK EXCHANGES IN INNOVATING CLIMATE SOLUTIONS

showcased how stock exchanges help markets meet the growing demand for climate-related information and in mobilizing the finance needed to transition to a net-zero world.

#### **KEY TAKEAWAYS:**

- A program launched by the UN SSE initiative, IFC, and CDP proved that training and education play a key role in progress.
- It is essential to advance climate-related financial disclosures. Regulation will play a key role in progressing the voluntary carbon markets to help finance a transition to a net-zero economy.
- Panelists representing stock exchanges
  highlighted the progress they have made in
  guiding markets on disclosures, including
  climate-related disclosures in alignment with
  the financial stability.

#### **SPEAKERS**

Representatives from:

- The CME Group
- The Egyptian Exchange
- Intercontinental Exchange (ICE)
- International Sustainability Standards Board
- Johannesburg Stock Exchange
- Singapore Stock Exchange
- Deutsche Börse Group & Financial Conduct Authority

#### **SESSION 3**

#### **FINANCING SDG STIMULUS AND THE PARIS**

AGREEMENT focused on making the case for an official SDG Stimulus Plan. Panelists explored the current obstacles and opportunities for mobilizing the capital needed for long-term investments in value chains aligned with climate and sustainability goals that contribute to the satisfaction of core-human needs (nutrition and health, shelter, access, leisure, and clothing as well as education).

#### **KEY TAKEAWAYS:**

- We must determine the global investment needs based on the SDGs and develop an investment for each country based on their specific contexts.
- There is a need for open data to support evidence-based decision making.

#### **SPEAKERS**

- Jeffrey Sachs (President and Co-Chair, UN Sustainable Development Solutions Networks)
- Mahmoud Mohieldin (UN Special Envoy/ High-level champion)
- Andy Kerr (Chief Strategy Officer, Climate KIC)
- Peter Bakker (CEO, WBCSD)
- Phoebe Koundouri (Chair UN SDSN Global Climate Hub; co-chair SDSN Europe)
- Yannis Ioannidis (Athena RC και National and Kapodistrian, University of Athens)
- Irina Gorbounova (General Manager M&A and Head of XCarb Innovation Fund, ArcelorMittal)

#### **SESSION 4**

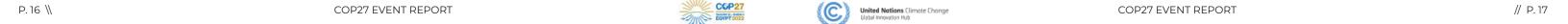
PROGRAMMABLE MONEY AND THE
FUTURE OF CLIMATE FINANCE focused on
how the tokenization of environmental assets
can help address frictions in mobilizing and

distributing climate finance globally.

#### **KEY TAKEAWAYS:**

- By combining asset tokenization together with the programmability of central bank digital currency, we will see the era of fintech innovations which will help to blend both the public and private sector finance and enhance accountability to scale up climate finance and meet global climate challenges.
- Open data, tools, and methodologies can play a critical role in enhancing value chains carbon accounting, transparency and stimulating finance.
- There is a need for investment data and the standardization of how data is used to make meaningful comparisons and articulate the optimal mixture of investments and transformations of value chains to attain sustainable growth.

- Yannis Ioannidis (Athena RC και National and Kapodistrian, University of Athens)
- Eva Gladek (Metabolic)
- Phoebe Koundouri (Professor, Athens University of Economics and Business & Technical University)
- Michael Sheren (President MVGX Green Exchange)



# DAY THREE

**SESSION 5** 

# INNOVATIVE FINANCIAL INSTRUMENTS FOR CLIMATE AND SUSTAINABILITY SOLUTIONS explored pathways to better develop and upscale the deployment of innovative financial instruments that can support and incentivize the development of transformative climate and sustainability innovations. To make progress, it is necessary to have:

- Increased public-private investments to reduce the risks involved in some projects.
- A better definition of new concepts and what they mean in practice.
- The development of projects with a broad applicability scale across countries.
- Transformative low-cost technologies that can be financed sustainably.

#### **SPEAKERS**

- Andrew Musungu Asira (Head of Operations, The East African Development Bank)
- Nick Barigye (CEO, Rwanda Finance Limited)
- Alain Tchibozo (Chief Economist, West Africa Development Bank)
- Fanglu Wang (Managing Director, CITIC Capital)
- Helen Brume (Director, Project & Asset Based Finance, African Export-Import Bank)

#### **SESSION 6**

#### **NET ZERO URBAN PROGRAMME** was

developed in collaboration with cities to accelerate the scale and speed at which we can achieve net zero in urban environments. This session included a demonstration of the Digital Twins in the following cities: Sharm El Sheikh, Egypt; Aberdeen, UK; Stavanger, Norway; and Dubai, UAE.

Cities are evolving from pledges to action and technology can play a key role in developing and deploying solutions and the need to operationalize equitable urban climate action.

#### **SPEAKERS**

- Kari Aina Eik (Executive Director, United Cities)
- Olga Algayerova (Under-Secretary-General, Executive Secretary, UNEC)
- Stine Lise Hattestad Bratsberg (Head of Strategy & Transformation in ESG EMA Hub, KPMG)
- Dr. Essam Sharaf (Egyptian Academic, Former Prime Minister of Egypt)
- Joel Alexander Mills (CEO, Augment City)

### THE ROLE OF STOCK EXCHANGES IN A

FINANCE DAY

**NET-ZERO WORLD** discussed the role of exchanges in tackling the climate crisis, highlighting specific initiatives from markets around the world. Speakers discussed new developments in sustainable finance from the perspectives of securities market regulation, market infrastructure operations, and standard setting.

**SESSION 7** 

#### **KEY TAKEAWAYS:**

- The International Organization of Securities Commissions (IOSCO) developed guidance in the areas of sustainability reporting standards, combatting greenwashing in products, and the development of voluntary carbon markets.
- Stock exchange leaders showcased the practical implementation of sustainable finance through product innovation, market education, and standards adoption.
- Key tipping points have been reached in the industry leading to the increased mainstreaming of sustainable finance, especially the integration of climate.
- The UN Sustainable Stock Exchanges (SSE) launched its new Advisory Group on Carbon Markets, inclusive of a new FAQ on voluntary carbon markets.

- Rami El. Dokany (CEO, Egyptian Exchange)
- Jean Paul Servais (Chair of Board, Chair, FSMA, International Organization of Securities Commission)
- Rodrigo Buenventura (IOSCO member, Chair, CNMV, International Organization of Securities Commissions)
- Ndidi Nnoli-Edozien (Board Member, International Sustainability Standards Board)
- Loh Boon Chye (CEO, Singapore Exchange)
- Nandini Sukumar (CEO, World Federation of Exchanges)









### GREEN & DIGITAL TRANSITION DAY

Green and Digital Transition Day focused on how digital technologies can help accelerate climate action. Various experts showcased initiatives established to promote green and digital transition including the European Green Digital Coalition, Climate Chain Coalition, Global Enabling Sustainability Initiative, and the Green Digital Finance Alliance. Various themes including building an OpenClimate network, digital accounting, the role of ICTs, and the use of artificial intelligence to promote equitable and transformative climate action were promoted. Roland Schatz (Chief Executive Officer and Founder, UNGSII) also showcased two innovative SDG performance tracking tools.

#### **SESSION 1**

#### **EUROPEAN GREEN DIGITAL COALITION**

focused on the European Green Digital
Coalition and the ICT companies role in
contributing to the success of the green
digital transformation. The session presented
examples of successful projects that are being
implemented to promote the green digital
transition including standardization of
methodologies and policies. Panelists explored
the existing barriers to a green digital transition
and opportunities for rapid deployment. Digital
technologies can play a critical role in promoting
climate actions, including the reduction of
companies' carbon footprint through various
measures including energy saving.

#### **SPEAKERS**

- Valérie Hayer (Member of the European Parliament, Renew Europe)
- Kaoru Inoue (Director, Global Enabling Sustainability Initiative)
- Ilias Iakovidis (Adviser at DG Connect European Commission)
- Mats Pelläck Scharp (Head of Sustainability, Ericsson)
- Pauline Op de Beeck (Associate Director -Europe, The Carbon Trust)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Steven Moore (Head of Climate Action, GSM)

#### **SESSION 2**

#### **BUILDING THE OPEN CLIMATE NETWORK**

discussed how the Open Climate Network is being built with open-source digital technology to support nested climate accounting and integrate key digital platforms. The Open Earth Foundation showcased how decentralized identifiers and verifiable credentials play a role in the Government of British Columbia, Canada's Energy & Mines Digital Trust project, verified by the Open Climate Network, and incorporated into jurisdictional registries.

#### **SPEAKERS**

- Catherine Atkin (Chair, CodeX Climate Data Policy Initiative/Principal, BlueVista)
- Angel Hsu (Founder and Director, DataDriven Lab/Associate Professor, Public and Policy Department and Environment and Ecology Program, University of North Carolina)
- Vincent Caldeira (Chief Technologist, OS-Climate)
- Nancy Norris (Senior Director, ESG & Digital Trust, Ministry of Energy, Mines and Low Carbon Innovation, Government of British Columbia, Canada)
- Nathaniel Amann-Blake (Assistant Deputy Minister, Government of British Columbia, Canada)
- Martin Wainstein (Executive Director, Open Earth Foundation)

#### **SESSION 3**

#### **ICT4GREEN ROUNDTABLE DIALOGUE**

focused on how transformative ICT approaches can be utilized to enable and empower green development of a wide range of industries including agriculture, logistics, mining, transportation, and manufacturing. Through discussion and debate, this roundtable sought to bring multiple stakeholders, ranging from industry insiders and academics to policymakers and regulators to exchange knowledge, lessons learned and good practices on the empowering effect, referred to as "carbon handprint" and potentially transformative frameworks to measure the climate contribution of enabling entities.

- Philippe Dong Wang (Executive Vice-President, Huawei Northern Africa)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Tareq Emtairah (Director at Department of Energy at UNIDO)
- Paolo Gemma (WP2/5 Chairman, ITU)
- Dennis Pamlin (Mission Innovation)
- Willem Jonker (CEO, EIT Digital)
- Ibrahim Adam al-Dukheiri (Director General of Arab Organization for Agricultural Development)
- Nompilo Morafo (MTN Group Chief Sustainability and Corporate Affairs Officer)
- Kaoru Inoue (Director, GeSI)
- Ilias Iakovidis (Advisor DG-Connect, European Commission)









# FOUR.

### **GREEN & DIGITAL TRANSITION DAY**

#### SESSION 4

MIND THE GAP: ACCELERATING SUSTAINABLE TRANSFORMATION WITH ENABLING TECHNOLOGIES AND INNOVATIVE POLICYMAKING presented the critical role that the digital sector can play in supporting transformative changes in a global scenario. Some specific examples of the technologies were presented, and how they are helping companies in different sectors to produce the most sustainable and ecologically friendly options that have the lowest impact on our planet.

#### **KEY TAKEAWAYS:**

- Programs such as the Digital with Purpose Movement and the European Green Digital Coalition underline how Information and Communication Technology companies are driving sustainable development through enabling tools
- The digital sector can make an increased contribution to accelerate climate action across different areas.
- Current practical digital solutions and frameworks can be scaled for greater impact.

#### **SPEAKERS**

- Dennis Pamlin (Head of Strategy, Digital with Purpose)
- Yu Ping Chan (Senior Programme Officer, United Nations)
- Florence Verzelen (Executive VP, Industry Solutions, Field Marketing and Sustainability, Dassault Systèmes)
- Luis Neves (CEO, Global Enabling Sustainability Initiative)
- John Pflueger (Principal Environmental Strategist, Dell)
- Massamba Thioye (Project Executive, UNFCCC Global Innovation Hub)

#### SESSION 5

ENHANCING MULTI-STAKEHOLDER
ENGAGEMENT TO ADVANCE DEVELOPMENT
AND DEPLOYMENT OF EMERGING
TECHNOLOGIES FOR CLIMATE ACTION
presented the official launch of the new Climate
Chain Coalition Strategy and how actors can
promote awareness and participation in the
new sustainability strategy to mobilize resources
and support platforms that can accelerate
innovations for ambitious climate actions.

#### **KEY TAKEAWAYS:**

- Infrastructures such as crypto certificates and blockchain are key to tackling the climate crisis and fundamental for continued economic prosperity and social coherence.
- Emerging and disruptive technologies have the potential to enhance the climate resilience of critical infrastructure by providing a rapid and accurate assessment of asset conditions before, during, and after hazard occurrences, supporting decision-making and adaptation.
- The potential of these technologies remains largely unexploited. Speakers called for multidisciplinary roadmaps and the rapid deployment of computational coalition communication.

#### **SPEAKERS**

- Miroslav Polzer (Executive Director, IAAI GloCha)
- Tom Baumann (Co-Founder and CEO, NovaSphere)
- Ira Feldman (Co-founder, Adaptation Ledger)
- Katherine (Foster Executive Director of the Green Digital Finance Alliance)
- Jose Lindo (Co-Founder & Integrity Board Member, Climate Coin)
- Kristina Lucrezia Cornèr (Managing Editor, Cointelegraph)

#### **SESSION 6**

ARTIFICIAL INTELLIGENCE FOR EQUITABLE CLIMATE ACTION IN MONITORING, REPORTING, AND VERIFICATION focused on a community-centered approach to understanding the opportunities of leveraging advanced technologies and open data for climate action, with an emphasis on underrepresented regions and communities. It discussed best practices and lessons learned to provide policymakers with an understanding of best practices to mobilize finance, protect communities and democratize actionable information with open technology.

#### **KEY TAKEAWAYS:**

- Artificial intelligence (AI) and data-sharing with governments and academia can be extremely powerful tools in the fight against global warming.
- Al can help improve and expand our current understanding of climate change by making it possible to process immense volumes of data to understand existing climate trends and to forecast future developments and the impact of policies.
- All and open data can help deliver greener and more effective solutions, such as improving and optimizing energy generation and utilization.

#### **SPEAKERS**

- Priya Donti (Climate Change AI)
- Lissa Matyas (the Vice-President, Global Government Affairs CIFAR Canada)
- Matthew Gray (CEO, TransitionZero)
- Pooja Patwari (Senior Manager, Avaada)
- David Dao (Co-Founder and Executive Director, Gain Forest)
- El Khalil Cherif (Tecno Lisboa)

#### **SESSION 7**

**BRINGING THE BALANCE SHEET OF THE** PLANET TO THE PUBLIC LEDGER focused on a system thinking approach to promote open data from climate projects in an auditable, data, discoverable way. This allows us to understand attribute level impacts derived from this data and how it allows us to build assets and markets with verifiable trust that extends beyond climate data into social impact, equity assurance, and financial asset creation. This session debated new open-supply digital instruments for investment and financing such as Green Digital Finance Alliance, Evercity, and Green Bonds, that are used to scale the certification methodology and guarantee green stamp projects.

#### **KEY TAKEAWAYS:**

- Low accuracy and transparency of impact measurement due to lack of on-site resources, high costs, and low liquidity and profitability of impact finance hinder the green market growth.
- Digital technologies have great potential to tackle these challenges, and the panelists recommended an application of open-source blockchain and new behavior nudges to train better-performing solutions in these camps.
- Certification using blockchain and IoT can be a good option to reduce costs and facilitate auditing.

- Wes Geisenberger (VP, Sustainability & ESG, HBAR Foundation)
- Alexey Shadrin (CEO & Founder, Evercity.io)
- Katherine Foster (Executive Director, Green Digital Finance Alliance)
- Benoît Clément (Director Financial Innovation, Verra)



### TRANSFORMATIVE CLIMATE ACTION

Transformative Climate Action Day featured discussions that focused developing and deploying transformative solutions/innovations to address climate and sustainability goals. Themes included biodiversity and human well-being, resource preservation and regeneration, deployment of green hydrogen value chains, decarbonization approaches, the role of science and research, and resource solutions for planetary stability. High-level panelists from government ministers to heads/senior representatives of organizations included the Executive Secretary of UNCCCD, Director of UNIDO, Vice-President of the AIIB, Co-chair of the International Resource Panel and IPCC Vice-Chair and Execute Secretary, Inter-American Institute for Cooperation on Agriculture.



HIGH-LEVEL SESSION ON HUMAN WELL-BEING, CLIMATE CHANGE, MIGRATION, BIODIVERSITY, LAND REGENERATION, AND RESOURCE PRESERVATION explored how the satisfaction of core human needs is in line with climate and sustainability (including the biodiversity, land regeneration, and resource preservation) goals. Transformative innovation is essential in policy, technological, social, business models, and financial areas. Solutions must be accessible to everyone, especially the most vulnerable populations.

#### **SPEAKERS**

- Cecilia Kinuthia-Njenga (Director, Intergovernmental Support and Collective Progress, United Nations Framework Convention on Climate Change)
- Andrea Meza (Deputy Executive Secretary, United Nations Convention for Combat Desertification)
- Manuel Marques Pereira, (Head of Migration, Environment, Climate Change and Risk Reduction Division, IOM)
- Izabella Teixeira (Co-chair, International Resource Panel)
- Maria Virginia Vilariño (Lead Author of the IPCC Sixth Assessment Report (AR6) on Climate Change Mitigation (Working Group III) Member of Expert Peer Review Group)
- Manuel Otero (Execute Secretary, Inter-American Institute for Cooperation on Agriculture)
- Dipa Bagai (Country Head, India Program, Natural Resources Defence Council)

#### **SESSION 2**

ADVANCING PARIS AGREEMENT
IMPLEMENTATION AND CLIMATE ACTION
THROUGH INNOVATION AND TECHNOLOGY

was co-organized with the Climate Technology Centre and Network of UNFCCC and the World Intellectual Property Organization (WIPO). Panelists presented concrete examples of activities and solutions having tangible impacts on the path towards net zero emissions by 2050, including CTCN's work on climate innovation and technology, WIPO Green's work on climate change and technology, and WIPO Green's emission reduction initiative in Indonesia.

#### **SPEAKERS**

- Rose Mwebaza (Director, Climate Technology Centre and Network)
- Peter Oksen (Senior Program Officer, WIPO Green)
- Bikash Pandey (Director, Clean Energy, Winrock International)
- Dietram Oppelt (TEC Member)
- Erwin Rose (Vice-chair, CTCN)





#### **SESSION 3**

# THE COUNCIL OF ENGINEERS FOR THE ENERGY TRANSITION (CEET) STATEMENT

**RELEASE** focused on a system thinking approach to promoting transformative climate action. Three key approaches of the council were discussed. Key tools that communities around the world can use to support pathways toward affordable and reliable low-carbon energy systems were highlighted.

#### **SPEAKERS**

Council of Engineers' leadership, steering committee, and members including:

- Prof. Jeffrey Sachs
- Gerd Müller (Director General UNIDO)
- Carlo Papa (Steering Committee Member)
- Semida Silveire (Council member)

#### **SESSION 4**

#### HIGH-LEVEL EVENT ON GREEN HYDROGEN

sought to initiate a process that will support the development and upscaled deployment of the green hydrogen value chain, leveraging the important potential of (i) African countries and (ii) key enabling entities.

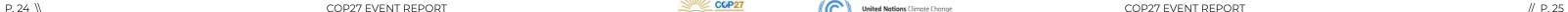
#### **KEY TAKEAWAYS**

- Low-cost green hydrogen at scale will enable industrialization, especially in the African context.
- The Global South is underutilizing the potential of green hydrogen.
- Smart mechanisms including capacity-building initiatives encourage increased investments to realize the upscale development and deployment of green hydrogen value chains.

- Ibrahim Thiaw (Executive Secretary, United Nations Convention to Combat Desertification)
- H.E. Abdessalam Ould Mohamed Saleh (Ministry of Petroleum, Mines and Energy, Islamic Republic of Mauritania)
- Sir Danny Alexander (Vice President, Policy and Strategy, AIIB)
- Bernhard Lorentz (Global Consulting Sustainability & Climate Strategy Leader, Deloitte)
- Maggy Shiino (Petroleum Commissioner, Namibia)







### TRANSFORMATIVE CLIMATE ACTION





#### **SESSION 5**

# CHANGING SYSTEMS - RESOURCE SOLUTIONS FOR PLANETARY STABILITY

showcased how decoupling resource use from environmental impact and human wellbeing is achievable in different ways across different global contexts. This discussion kick-started collaborative visioning of future provisioning systems, inspiring business and policy actors to work towards tomorrow's economy – focused on delivering human wellbeing and planetary health. Bottlenecks need to be addressed for the shift to system solutions that contribute to the imagination challenge – envisaging the high-performing systems of the future.

#### **SPEAKERS**

- Izabella Teixeira (International Resource Panel Co-chair)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Dr. Medrilzam (Director of Environmental Affairs, Ministry of National Development Planning, BAPPENAS, Government of Indonesia)
- Ramona Liberoff (Director, Programme for Accelerating the Circular Economy)
- Aline Mosnier (Scientific Director, Food, Agriculture, Biodiversity, Land-Use, and Energy (FABLE) Consortium)
- Dennis Pamlin, (Head/Senior Advisor, Mission Innovation's Net Zero Innovation Initiative)
- Maria Tsavachidis (CEO, EIT Urban Mobility)

#### **SESSION 6**

# MOBILIZING ANTICIPATORY SCIENCE FOR DISRUPTIVE CLIMATE ACTION presented GESDA's mapping of ongoing and future

research in the eco-regeneration and geo-engineering domain. Using the examples of decarbonization technologies and One Health, it discussed avenues for scaling the impact of future scientific breakthroughs, as well as areas of collaboration with partners for multilateral action, including with the Global Innovation Hub.

#### **SPEAKERS**

- Martin Müller (Executive Director of Science Anticipation, Geneva Science and Diplomacy Anticipator)
- Wendy Queen (Professor and Director of the Laboratory for Functional Inorganic Materials, EPFL, Co-Chair of the GESDA Task Force on Decarbonization)
- Thelma Krug (IPCC Vice-Chair)
- Alexandre Fasel (Swiss Special Representative for Science Diplomacy)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)

#### **SESSION 7**

#### **INNOVATION TO SERVE ENHANCED**

circular economy. The panelists presented examples of innovation that can foster circular business models and sustainable products together with guidelines on scalability and if possible, ways to assess/measure the benefits of such innovations.

#### **SPEAKERS**

- Benjamin Jance (Head of Research and Innovation, Global Covenant of Mayors for Climate & Energy)
- Elisa Tonda (Chief of Branch, Resources and Markets Branch, Economy Division, United Nations Environment Programme)
- Mathew Fraser (Head of Research and Development, Lead of Circularity Reporting Initiative)
- Gayle Schueller (Chief Sales Officer, 3M)
- Gwneaelle Avice Huet (Chief Strategy and Sustainability Officer)
- Bernier Carolyn (CIRPASS consortium coordinator, CEA).

#### **SESSION 8**

#### OPEN DATA FOR CLIMATE - BREAK-THROUGH TO ACCELERATE AND SCALE RESILIENT CLIMATE-ALIGNED FINANCE

**AND INVESTMENT** explored how data can go from being open and widely available to actionable and impactful. Data and analytics tools can underpin breakthrough innovations in climate-aligned finance and accelerate the transition to net zero.

- Alex Dalessio (Lead, AWS Innovation Studio)
- Matthew Sandoe (Climate Risk Lead, BNP Paribas and lead of OS-Climate Risk and Resilience Tool Project)
- Truman Semans (CEO, OS-Climate)
- Vincent Caldeira (CTO of OS-Climate's Data Commons, and Field CTO for APAC at Red Hat)
- Brendan Reilly (CEO, Climate Risk Research).



# SX REGENERATIVE SYSTEMS WITH A FOCUS ON NUTRITION & HEALTH DAY

Regenerative Systems Day focused on how to develop and deploy innovative solutions to address the core human need for nutrition and health. The day featured the launch of two challenges "Beans is How" and "Resilient infrastructure in the face of climate change, the global challenges of climate change 2022". It also featured high-level panelists and celebrities including Alex Garvin who is currently working to raise awareness around climate action.

#### **SESSION 1**

#### OFFICIAL LAUNCH OF "BEANS IS HOW"

signified the official launch of the "Beans is How" campaign, an ambitious campaign that aims to increase the global production and consumption of beans (beans, peas, pulses, and legumes) by 2028. It brought together high-level advocates across climate, agriculture, nutrition, and food security to join a dynamic conversation on the power of beans to drive transformative change for people and the planet.

#### **SPEAKERS**

- Agnes Kalibata (Bean Champion & President of AGRA)
- Sam Kass (Bean Champion, Chef, and Policy Advisor)
- HE Dr. Yaya Olaniran (Nigeria Permanent Representative, FAO/IFAD/WFP)
- Christina Kenz (Chief Growth and Sustainability Officer, The Kraft Heinz Company)
- Jennifer Baarn (Head, Partnerships, AGRA, Acting Managing Director ACRF)
- Stefania Avanzini (Director, One Planet Business for Biodiversity, World Business Council for Sustainable Development)
- Elizabeth Nsmidala (President of the Pan Africa farmers Organization & President of Eastern Africa Farmers Federation).

#### **SESSION 2**

REGENERATIVE INNOVATION TO HELP SOLVE THE CLIMATE CRISIS connected a systemic perspective on the potentials of regenerative principles with examples and presentations of practices from research, industry, and entrepreneurship that have been employed in the field (e.g., regenerative agriculture). It further showcased some of the changes implemented by stakeholders across economic ecosystems to reverse climate acceleration.

#### **SPEAKERS**

- Dr. Johan Rockström (Director of the Potsdam Institute for Climate Impact Research)
- Sandrine Dixson-Declève (Co-President of the Club of Rome)
- Ineza Umuhoza Grace (Co-Founder Loss and Damage Youth Coalition)
- Phillippe Birker (Co-Founder, Climate Farmers)
- Lubomila Jordanova, (Founder, Plan A)
- Lena Thiede (Co-Founding Partner, Planet A Ventures)
- Tia Kansara (Chief Executive Officer, Replenish Earth)

#### **SESSION 3**

REGENERATIVE FOODS OF THE FUTURE:
SUPPORT THE HEALING OF HUMAN
HEALTH AND THE ENVIRONMENT sought
to raise awareness on the impact agriculture
and protein sectors have on our global food
systems, human suffering, and environmental
destruction. Panelists discussed the immense
opportunity for innovative solutions that
sustainable alternative proteins have to reduce
some of these issues and create local resilience

#### **SPEAKERS**

and regeneration.

- Yoav Reisler (Marketing Manager Aleph Farms)
- Lee Recht (VP of Sustainability Aleph Farms)
- Danielle Nierenberg (CEO of Food Tank & 2020 Julia Childs Award Recipient)
- Aimee Christensen (CEO Christensen Global & Sun Valley Foundation)
- Marc Buckley (Founder ALOHAS Regenerative Foundation & Member, UGIH High-Level Working Group on Nutrition & Health)

#### **SESSION 4**

LAUNCH OF A CHALLENGE featured the launch of the Resilient Infrastructure in the Face of Climate Change, the global challenges of climate change in 2022.

- Chris Martin (Musician, Coldplay)
- Louise Zetterstrom (Industry Relations, The Global Sustainability Fund Inc.)
- Alexander Garfin (Actor)
- Jonas Svensson (Founder, and CFO, The Global Sustainability Fund Inc.)
- David Hanegraaf (Director and CFO, The Global Sustainability Fund Inc)











# SX REGENERATIVE SYSTEMS WITH A FOCUS ON NUTRITION & HEALTH DAY

#### **SESSION 5**

INNOVATION TO SATISFY THE CORE
HUMAN NEEDS OF 10 BILLION PEOPLE
BY 2050: THE CASE OF NUTRITION AND
HEALTH was co-organized with UGIH's Nutrition
and High High-Level Working Group, and it
explored how to determine and formulate the
demand for climate and sustainability
solutions that can enable the sustainable
satisfaction of the global need for nutrients.

#### **SPEAKERS**

- Carlos Ruiz Garvia (Project Manager, United Nations Framework Convention on Climate Change)
- Mark Post (Professor of Sustainable Industrial Tissue Engineering, Maastricht University)
- Paul Newnham (Director, SDG2 Advocacy Hub)
- Patrick Brown (CEO, Impossible Foods)
- Marc Buckley (Founder, and CEO, ALOHAS Regenerative Foundation & ALOHAS Eco-center)
- Stephanie von Stein (Senior Associate Director of International Engagement, The Good Food Institute)

#### **SESSION 6**

ACHIEVING NDC TARGETS THROUGH
CLEAN COOKING ACTION (CLEAN COOKING
ALLIANCE) focused on country-level efforts to
achieve climate goals through clean cooking,
the work of state and non-state actors to
support these efforts, and what action is
needed to ensure success going forward. It
showcased innovative ways countries are using
country-level clean cooking action to achieve
their climate goals, and how other stakeholders
can learn from and support the realization of
the climate and other co-benefits accrued.

#### **SPEAKERS**

- Donee Alexander (Chief Science and Learning Officer, Clean Cooking Alliance)
- Prince Essel (Co-Founder, Econexus Ventures Limited)
- Hans Olav Ibrekk (Special Envoy, Norwegian Ministry of Foreign Affairs)
- Ruth Nankabirwa Ssentamu (Minister of Energy and Mineral Development, Uganda)
- Kandeh Yumkella (Founder and CEO, The Energy Nexus Network)

#### **SESSION 7**

#### **USING WEB3 TO BUILD THE GLOBAL**

carbon LEDGER sought to demonstrate how innovative web3 technologies can be leveraged to deliver integrated, 1.5 °C compatible, climate solutions. It conceptualized the global carbon accounting system as a distributed network and focused on promising new web3 technologies to allow emissions data to move through that network rapidly, reliably, and verifiably in service of decarbonization

#### **KEY TAKEAWAYS**

- Blockchain networks and other web3 crypto initiatives can enable a unique opportunity to drive collective action toward reducing emissions and creating a new demand for clean technologies.
- Data to verify the carbon footprint should be open, decentralized, and verifiable.

#### **SPEAKERS**

- Marc Johnson (Environmental Solutions Architect, Protocol Labs)
- Alan Ransil (Ph.D., Project Lead, Protocol Labs)
- David Dao (Founder, GainForest)
- Orinayo Ayodele (Program Manager, Protocol Labs)
- Caitlin Moore (Environment Data Partnership, Protocol Labs)
- Hayley Moller (Head of Marketing, and Founding Team, Thallo)

#### **SESSION 8**

ASSESSING AVOIDED EMISSIONS AND 1.5C GLOBAL SUSTAINABILITY COMPATIBILITY FROM NUTRITION/HEALTH SOLUTIONS:
BEST AND NEXT PRACTICE featured a discussion on investing and scaling for health and nutrition on all levels of society to promote both sustainability and profitability.

#### **KEY TAKEAWAYS**

- There are already start-ups, innovators, and investors ready to scale up sustainable health and nutrition solutions, such as alternative protein on a global market with sufficient support and investment.
- Existing examples of nutrition and health transformative solutions, including Mycorena, are in line with climate and sustainability goals.
- Startups and incubators can scale innovative solutions within a given jurisdiction and ultimately provide solutions for cities and local regions that face similar challenges and can collectively help local economies to move up in the value chain.

- H.E Luis Alberto Villegas Prado (Vice Minister of Agriculture, Colombia)
- Dennis Pamlin (Executive Director, Mission Innovations Net-Zero Compatibility Initiative)
- Ramkumar Nair (CEO and Founder, Mycorena)
- Leslie Kapin (Director of Impact and Sustainability, Astanor Ventures)
- Mattis Bergquist (Chief Sustainability, Coop)
- Pourya Salehi (Head of Urban Research Team, ICLEI - Local Governments for Sustainability)







# DAY SEVEN

# SHELTER AND YOUTH DAY





Shelter and Youth Day focused on transformative shelter solutions, featuring experts who explored existing barriers to environmentally sustainable shelter solutions and innovations and future opportunities. Speakers explored how to bring together stakeholders and better include the youth and women to collaboratively contribute to these solutions.

#### **SESSION 1**

APPROPRIATE FRAMEWORK FOR
MULTI-STAKEHOLDER ENGAGEMENT TO SUPPORT YOUTH AND WOMEN INNOVATORS
AND ENTREPRENEURS IN IMPLEMENTING
CLIMATE SOLUTIONS IN AFRICA presented
an integrated framework that brings together
key stakeholders from the innovation and
entrepreneurship ecosystem in Africa.

#### **KEY TAKEAWAYS:**

- A multi-stakeholder approach can promote green technology, innovation, and entrepreneurship through the engagement of youth and women in implementing local climate action, transforming their local economy for a climate-resilient future.
- The potential of the international carbon market can be harnessed to finance youth and women innovations for climate actions in Africa.

#### **SPEAKERS**

- Erick Tambo (Head of Pan African Cooperation and Educational Technologies (PACET) United Nations University – Vice Rectorate in Europe)
- Ambe Emmanuel Cheo (Associate Academic Officer, UNU-VIE)
- Walter Ubal (Senior Program Specialist, International Development Research Centre)
- Nanko Madu (Director of Programmes, African Technology Innovation Hubs Initiative)
- William Otieno (Regional Lead, Regional Collaboration Centre Kampala, UNFCCC)
- Phillipa Hamakasu (Youth Innovator IMPULSOUTH)
- Mao Amis (Founder and impact investment lead, Africa Centre for a Green Economy

#### **SESSION 2**

BAMBOO SHELTER: THE POTENTIAL OF BAMBOO AS A SUSTAINABLE BUILDING MATERIAL sought to promote affordable housing as a resilient alternative to reduce carbon emissions, especially in the global south. Using case studies, various experts including representatives from INBAR, Technology Base Bahy Foundation Inc, FOB Consult Limited and Ecuador Government, and the Ugandan Government highlighted the benefits of bamboo as an alternative building material while exploring existing barriers, innovative solutions, and opportunities for upscale development and deployment of the bamboo value chain.

#### **SPEAKERS**

- Lu Wenming (Deputy Director General, INBAR)
- H.E. Maria Gabriela Aguilera (Minister of Urban Development and Housing of Ecuador)

#### **SESSION 3**

ASSESSING AVOIDED EMISSIONS AND 1.5C GLOBAL SUSTAINABILITY COMPATIBILITY FROM SHELTER SOLUTIONS (THE ROLE OF NATURE AND BITS IN REPLACING BRICKS) centered on how climate solutions are essential in providing shelter as a human need, with examples of technology, digitalization, green spaces, and durable apparel based on sustainable materials, all of which fundamentally address shelter for human needs.

#### **KEY TAKEAWAYS:**

- Consumption-based accounting and the need for completely new data which allows stakeholders to move beyond compliance and look at the opportunities.
- Shelter can be provided in a sustainable and profitable way showing that enabling all humans to have access to core human needs is not only possible, but also logical from a long-term investment perspective, as these innovations are likely to become more and more relevant and competitive over time.

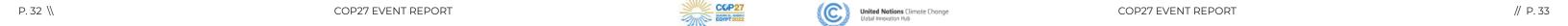
#### **SPEAKERS**

- Dennis Pamlin (Executive Director, Mission Innovation's Net-Zero Compatibility Initiative)
- Catherine Atkin (Chair, CodeX Climate Data Policy Initiative, The Stanford Center for Legal Informatics)
- Erik Schultes (Lead FAIR Implementation, GO FAIR Foundation)
- Erik Swan (Director, Digital Business Exploration, Husqvarn)
- Gustav Hedström (Houdini Sportswear, Business Developer)

#### **SESSION 4**

SHELTERING AND EMPOWERING INFORMAL COMMUNITIES: A CONVERSATION AMONG LEADERS IN LOCAL GOVERNMENT, INFORMAL SETTLEMENTS, AND SHELTER SOLUTION PROVIDERS brought together a panel of mayors, informal settlements leaders, and shelter solutions providers to have a frank discussion to outline these priority needs and identify the partnerships and solutions that can deliver in the coming years. Introduction of "Roofs Over our Heads" that seeks to deliver resilient, low carbon, and affordable homes and improve public infrastructure to urban residents, particularly those living and working in informality.

- Sheela Patel (Founder and Director, Society for Promotion of Area Resource Centres; Founder of Slum Dwellers International)
- Georges Youssef (Mayor of Menjez, Lebanon)
- Nicholas Kunga (Climate Change Advisor, Embu County, Kenya)
- Jayaraman Durai (Director of Global Programs, International Bamboo and Rattan Organization)
- Theresa Carampatana (Member of the Slum Dwellers International Board and President of the Homeless People's Federation of the Philippines)



## SHELTER AND YOUTH DAY

#### **SESSION 5**

TO NET-ZERO: MULTI-LEVEL PARTNERSHIPS
AND INNOVATION TO ACHIEVE SYSTEMIC
CHANGE featured the announcement of the first 50 cities selected to join the Urban
Transitions Mission first cohort. It provided the first platform for these cities to share their challenges to reach a net-zero, resilient future and will allow them to elaborate on their vision of how by working with the Urban Transitions Mission, they aim to leapfrog from their current climate action planning to their future-proofed climate action implementation.

#### **SPEAKERS**

- Giorgia Rambelli (Mission Innovation, Urban Transitions Mission Director)
- Mohamed Sefiani (Mayor of Chefchauen, Morocco)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Alison Gilliland (Dublin City Councillor and Committee of the Regions Rapporteur on COP 27)
- Anna Krzyzanowska (Mission Innovation Directorate General for R&I, European Commission)
- Marilia Carvalho De Melo (Secretary of Environment for Minas Greais State, Brazil)

#### **SESSION 6**

PRIZE CEREMONY HACK FOR EARTH YOUTH **HACKATHON** showcased the winners of the previously launched Hack for Earth Youth Hackathon. Hack for Earth Youth hackathon at COP27 gathered young people from 124 countries for 48 hours, to create real solutions to climate change. 1864 teams competed for a chance to pitch their solutions to world leaders. The seven challenges include transport, agriculture, biodiversity, smart cities, energy, natural resources management, and sustainable digital solutions. The submissions were evaluated using the following criteria: Diversity, Comprehensibility, Realizability, Innovativeness, Scalability, and Solving the United Nations Sustainable Development Goals.

#### **JURY MEMBERS**

- David Jensen (UN Environment Programme)
- O'Neall Massamba (ESQ. The World Bank)
- Ahmed Fathy (Youth Loves Egypt Foundation)
- Tremeur Denigot (European Commission)
- Laura Veronica Munoz (Ecofeminist Climate Activist)
- Hira Hafeez-UR-Rehman (UNICEF)
- Vladislav Kaim (United Nations)
- Bernhard Kowatsch (UN World Food Programme)

#### **SESSION 7**

ADVANCING ACTION ON HEAT RESILIENCE AND CLIMATE-FRIENDLY COOLING brought

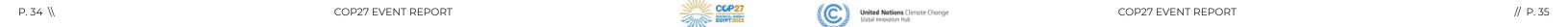
together government and national actors to brainstorm what is needed to implement transformative solutions at scale on heat and cooling in developing countries. This high-level event provided an opportunity to discuss innovative solutions to fast-track and scale up the implementation of strategies to build resilience to extreme heat and efficient and climate-friendly cooling solutions in cities globally. This session featured the release of the NRDC-GERMI factsheet 'Addressing Skyrocketing Demand for Cooling in India with Cool Roofs.

- Manish Bapna (President, Natural Resources Defense Council), Ovais Sarmad (Deputy Executive Secretary, UNFCCC)
- Ovais Sarmad (Deputy Executive Secretary, UNFCCC)
- Ayman Refaie (Head of Carbon Credit Department, Ministry of Environment, Egypt)
- Prima Madan (Senior Advocate, Cooling and Efficiency-India, NRDC)
- Dipa Bagai (India Country Director, NRDC)
- Amit Prothi (Director General, Coalition for Disaster Resilient Infrastructure)
- Diarmid Campbell-Lendrum (Head, Climate Change and Health Unit at World Health Organization)
- Seema Paul (Program Director, Sequoia Climate Foundation)
- Brian Dean (Head, Energy Efficiency and Cooling, Sustainable Energy For All)









Green Hydrogen Day, was co-organized by the UN Climate Change Global Innovation Hub and the Future Clean Architects (FCA). The day brought together stakeholders in the development and scaling process of green hydrogen technologies including representatives from the public and private sectors from both the global south and global north. The day focused on innovation gaps and systemic bottlenecks in the value chains of sustainable hydrogen production pathways. It also orchestrated multi-stakeholder sessions to identify specific, actionable steps to drive innovation in green hydrogen technologies, processes, and modes of cooperation.

#### **SESSION 1**

#### **OPENING CEREMONY: THE GLOBAL DEMAND** AND SUPPLY FOR GREEN HYDROGEN

featured opening high-level statements from Alfonso Blanco Bonilla, Executive Secretary, OLADE, and Tareg Emtairah, Director of Energy, UNIDO. The statements highlighted the global demands for green hydrogen and the prospects of green hydrogen. The panelists further reflected on the current advancements to scale up the development and deployment of green hydrogen value chains. This session set the stage for the expected outcomes of the day.

#### **SESSION 2**

#### A REALISTIC ASSESSMENT OF THE **CURRENT STATE OF GREEN HYDROGEN**

focused on the status of green hydrogen production from a techno-economical standpoint.

#### **KEY TAKEAWAYS**

- There is a need to establish standards and certifications to enable a green hydrogen market.
- Green hydrogen will be a scarce resource for years to come, it is not a silver bullet for every industry.
- The scale-up of supply and demand must happen together, to avoid a "chicken and egg" problem.
- All forms of low carbon energy are needed to meet energy demand.
- We need to de-risk hydrogen projects and make them bankable.

#### **SPEAKERS**

- Noam Boussidan (Project Lead, Climate Change Initiatives, World Economic Forum)
- Magnolia Tovar (Global Director Zero-Carbon Fuels, Clean Air Task Force)
- Bernhard Lorentz (Global Consulting Sustainability & Climate Strategy Leader at Deloitte)
- Martin Mueller (Executive Director, Science Anticipator)





#### **SESSION 4**

THE HEAVY INDUSTRY PERSPECTIVE aimed to join innovators and analysts to discuss challenges in transforming industrial sectors and how these issues can be resolved.

**SESSION 3** 

#### **KEY TAKEAWAYS**

- Heavy industry requires larger quantities of green hydrogen and transport infrastructure for its operation.
- Significant cost reductions are needed before having a business case to adopt green hydrogen.
- We need carbon capture, utilisation and storage (CCUS) infrastructure and legislation to tackle the unavoidable emissions from the cement industry.
- The EU will not be self-sufficient in green hydrogen, imports will be required.

#### **SPEAKERS**

- Marlene Arens (Senior Manager Associations, Heidelberg Materials)
- Roman Diederichs (Managing Director, Dirostahl Karl Diederichs GmbH & Co. KG)
- Michael Theben (Director-General, Climate Protection, and State Planning, Ministry of Economic Affairs, Climate Action and Energy, NRW, Germany)

**ASSESSING AVOIDED EMISSIONS AND 1.5C GLOBAL SUSTAINABILITY COMPATIBILITY** FROM ENERGY SOLUTIONS INTEGRATING **ENERGY EFFICIENCY** featured the Launch of OECD-Mission Innovation/RISE partnership for an expanded climate solution agenda, including a world premier for the first iceberg illustration linked to the expanded climate innovation agenda. This is based on OECD's 'iceberg approach' to innovation, which will support a shift from "means" (e.g. GDP/transport) to "ends" (human welfare and flourishing lives). Issues need to be addressed from a human-needs perspective, in line with an expanded climate solution agenda, where the focus is on fulfilling access to transport, energy and data rather than trying to 'fix' current emissions sources.

- Aimée Aguilar Jaber (Team Leader, Climate Change Mitigation Team, OECD)
- Mariana Mirabile (Economist, Policy Analyst, OECD)
- Gemma O'Reilly (Economist, Member of the Climate Change Advisory Council Secretariat, EPA, Ireland)
- Felix Creutzig (Climate Change Center Berlin Brandenburg, Scientific coordinator & CCC Coordinating Lead Author of the IPCC's 6th Assessment Report)
- Pourya Salehi (Head of Urban Research Team, ICLEI - Local Governments for Sustainability)



# GREEN HYDROGEN DAY

#### **SESSION 5**

# ENABLING THE DEVELOPMENT AND UPSCALED DEPLOYMENT OF GH2 THROUGH SYSTEMIC INNOVATION looped in policymakers from a wide array of areas that affect innovation to explore what is needed to support systemic innovation.

#### **KEY TAKEAWAYS**

- The technology to produce green hydrogen is relatively mature, what is needed is new business models to turn those technologies into viable products.
- We need to look beyond efficiency and focus on levelized cost of energy.
- The demand aggregation can enable economies of scale and deliver greater certainty for investors.
- Regions with high demand for green hydrogen tend to not have the renewable capacity to supply themselves, they will import from regions with low demand and abundant renewables.

#### **SPEAKERS**

- Anja Siegesmund (Minister for Environment, Energy and Nature, Thuringia, Germany)
- Minister Anja Siegesmund; Khroumbaly LEHBIB (Conseiller chargé des Hydrocarbures amont, Ministère du pétrole, des Mines et de l'Energie République Islamique de Mauritania)
- Bjorn Noack, Director (Product Management Market Segment, PC Bosch)

#### **SESSION 6**

THE INNOVATORS' LABORATORY incorporated entrepreneurs and consortia working on green hydrogen. It focused on the present and alternative technologies and how to scale innovation along the value chain.

#### **KEY TAKEAWAYS**

- We need stronger efforts on identifying the most effective use cases for hydrogen consumption.
- There is huge potential for green hydrogen production in the Global South.
- The social case must be considered before large-scale investment in a new industry.
- The creation of a value chain cannot be pushed, only pulled Identifying the off-takers is the first step.
- Connecting academia and industry can help low TRL technologies transition to real-world impact.

#### **SPEAKERS**

- Juan Pablo Davila (Industrial Development Officer, UNIDO)
- Thomas Birr (Chief Strategy and Innovation Officer, E.ON)
- Michelle dos Santos Cordeiro Perna

#### **SESSION 7**

#### POWER TO X: EXAMPLE OF DEPLOYMENT

showcased examples of green hydrogen deployment initiatives. While reflecting on available technologies, the panelists also reflected on opportunities for the development and up-scaled deployment of green hydrogen value chains.

- Frank Obrist (President and CEO, Obrist technologies)
- Thomas Wu (Member of Executive Board, DSE Green Technology)
- Carlo Giardinetti (Sustainability Lead, Consulting, Deloitte Consulting AG)
- Rosilena Lindo (Undersecretary of Energy, National Secretariat of Energy of Panama)









# CULTURE AND CREATIVE INDUSTRY/FASHION DAY

Culture and Creative Industry/Fashion Day focused on how the Culture & Creative Sector Industry (CCSI) can enhance climate action. Experts explored innovative solutions to help promote more sustainable work in CCSI and beyond and discussed the urban innovation agenda as a means to promote climate action in cities. This day marked a start to a continuous engagement with the CCSI.

#### **SESSION 1**

**FASHION! & GAMING INDUSTRY** brought together fashion brands and technology and innovation partners to openly discuss what must be done – making a commitment and launching them into actionable initiatives.

#### **KEY TAKEAWAYS:**

- Unlike other industries, fashion is largely unregulated. With no fundamental infrastructure and laws regarding problematic issues like fashion waste, governments need to start reinforcing standards with policy changes that will support responsible business conduct in global value chains.
- Addressing fashion overproduction starts with slowing down and taking advantage of already existing digital and policy solutions that have proven to be game changers in other industries.
- One way to do this is by committing to cross-sector collaborations and partnerships that focus on pooling resources and sharing of progress and struggles to better understand the challenges and opportunities that come with exploring uncharted territory.

#### **SPEAKERS**

- Muchaneta ten Napel (Founder and CEO of Shape Innovate)
- Laura Roja Uribe (Head of Merchandise and E-Commerce for Ninjas in Pyjamas)
- Fredrik Timour (founder and CEO of the Fashion Innovation Centre)
- Luca Bertolino (Head of Global Strategic Marketing FILA)

#### **SESSION 2**

BRIDGES WITH NEW EUROPEAN BAUHAUS
AND BEYOND featured the introduction of the New European Bauhaus Initiative. It explored how the culture and creative industry and projects like the New European Bauhaus can create more inclusive and sustainable communities. The new European Bauhaus is an initiative launched in the European Union to capture a threat from the past and turn it into a framing for the future that unites our sustainability efforts. Communicating through creative arts across disciples can facilitate individual citizens and communities to connect.

#### **SPEAKERS**

- Lisa Lang (Director Policy & EU Affairs, EIT Climate-KIC)
- Kirsten Dunlop (CEO of EIT Climate KIC)
- Sheela Patel (High-Level Roundtable Member of JRC NEB)
- Farhana Yamin (Main Coordinator of Cultural COP)
- Alison Gilliland (Member of CoR, Dublin City Council)
- Jefferson Gomes (Director of Technology SENAI Brazil)
- Ebtissam Farid (Architect & Founder Encode Studio, Associate professor of Architecture and design).

#### **SESSION 3**

#### **DIGITAL ARTS AND SUSTAINABLE WEB**

symbolized the start of an ongoing inclusive conversation between civil society, government at all levels, Indigenous Peoples' organizations, cultural organizations and institutions, businesses, universities, research organizations, and other stakeholders. All parties have a shared ambition to create just, thriving, and resilient communities today and into the future, and this session highlighted how the Culture & Creative Sector Industry (CCSI) and existing technical solutions enable this future.

#### **KEY TAKEAWAYS:**

- Culture and creative sectors have a real role in presenting desirable visions of the future.
- It is essential to involve youth and local individuals as experts, including them in the process of generating tools, frameworks, and practical approaches with a focus on system innovation.

#### **SPEAKERS**

- Muchaneta ten Napel (Founder and CEO of Shape Innovate)
- Adams (Director of Green Web Foundation, Co-Founder of Greening Digital)
- •Katherine Foster (Executive Director of Green Digital Finance Alliance)
- Miroslav Polzer (Founder & CEO of IAAI Glocha, Chairperson Global Challenges Foundation)
- Adriaan Eeckels (Project Leader, European Commission Joint Research Centre Science & Art)

#### **SESSION 4**

#### ASSESSING AVOIDED EMISSIONS: SUPPORT-ING AND ASSESSING GLOBAL SUSTAINABILITY COMPATIBILITY FROM CULTURAL ENABLER

featured the launch of Purpose Driven Assessment Tool. The tool assesses the full impact of solutions from companies in four steps. It can be used by any company, investor, or incubator, but especially purpose-driven companies that want to show the full scope of their positive contributions and how they can increase it further to help reach a goal of 1.5 °C global equity.

- Dennis Pamlin (Executive Director, Mission Innovation's Net-Zero Compatibility Initiative)
- Clara Wickham (Sustainability Analyst, Mission Innovation's Net-Zero Compatibility Initiative/RISE)
- Ruth Reichstein (Advisory Board to the President, New European Bauhaus, European Commission)
- Eva Karlsson (CEO, Houdini)
- Louise Berg (Visionary and founder, Sibship)
- Nick Henry (CEO & Founder, Climate Action)









# CULTURE AND CREATIVE INDUSTRY/FASHION DAY

#### **SESSION 5**

SUSTAINABLE TOURISM AND CULTURAL HERITAGE focused on innovative models for addressing the impact of climate change on cultural and natural heritage, that are aligned to sustainability and climate goals. The first portion of the session presented models for vulnerability analysis and the valuation of cultural and natural heritage sites, followed by a panel discussion that focused on the introduced mechanism and solutions.

#### **SPEAKERS**

- Jeffrey Sachs (President and Co-Chair, UN Sustainable Development Solutions Networks)
- Phoebe Koundouri (Professor, Athens University of Economics and Business & Technical University; President EAERE; Chair UN SDSN Global Climate Hub co-chair SDSN Europe)
- Christos Zerefos (Secretary General of the Academy of Athens; Head of the Research Center for Atmospheric Physics & Climatology of the Academy of Athens; Professor Emeritus)

#### **SESSION 6**

BRIDGING CITY-LEVEL INNOVATION: AGENDAS AND APPROACHES TO ACCELERATE CITY CLIMATE ACTION featured the launch of the City Research and Innovation Agenda Bridge: a comprehensive linking of the CRIA, GRAA, and NCF that aligns the critical climate-driven priorities of cities and local governments today with the broader set of core human needs that can – and must – be addressed sustainably. Panelists discussed the value of research and innovation and how cross-sector partnerships can accelerate progress with GCOM Board Mayor and explored the potential for action through an interlinked and expanded innovation agenda.

#### **SPEAKERS**

**COP27 EVENT REPORT** 

- Anna Reynolds (Lord Mayor of Hobart, Australia)
- Georges Youssef (Mayor of Menjez, Lebanon)
- Dennis Pamlin (Executive Director, Mission Innovation Net-Zero Compatible Solutions Initiative)
- Massamba Thioye (Project Manager, UNFCCC Global Innovation Hub)
- Giorgia Rambelli (Director, Urban Transitions Mission)
- Pourya Salehi (Acting Head of Urban Research, ICLEI World Secretariat and Co-Chair, GCoM Research and Innovation Technical Working Group)

#### **SESSION 7**

#### **ACCELERATING URBAN CLIMATE ACTION**

focused on how to accelerate global urban research and innovation for city climate action through knowledge sharing and cross-sector partnerships cultivated through the Innovate-4Cities Conference and Annual Innovation Summit. The first segment of the session explored the urban opportunity for research and innovation at speed and scale. The second panel's discussion explored research and action-driven priorities for the Innovate4Cities Conference and the Annual Innovation Summit.

#### **SPEAKERS**

- Anna Reynolds (Lord Mayor of Hobart, Australia)
- Cinthia Ribeiro (Mayor of Palmas, Brazil) (live interpretation provided in person by Braulio Diaz, Institutional Relations and Advocacy Regional Manager at ICLEI South America)
- Benjamin Jance IV (Head of Research and Innovation, Global Covenant of Mayors for Climate & Energy)
- Sheela Patel (Founder and Director of the Society for Promotion of Area Resource Centres (SPARC) and Innovate4Cities Advisory Group Co-Chair)
- Debra Roberts (IPCC AR6 Working Group II Co-Chair and Innovate4Cities Advisory Group Co-Chair)
- Bernhard Barth (Climate Change and Urban Environment Coordinator (a.i.), UN-Habitat)
- Giorgia Rambelli (Director, Urban Transitions Mission)
- Andy Deacon (Co-Managing Director, Global Covenant of Mayors for Climate & Energy)

#### **SESSION 8**

NATURE-BASED DIGITAL CURRENCIES: INCORPORATING LIVING CAPITAL AND CLIMATE ACTIONS AS PILLARS FOR AN

ADVANCED MONETARY SYSTEM introduced the novel topic of nature-based Central Bank Digital Currency and debate of what is money and how social agreements can be mobilized to ensure there is financial capacity to avoid planetary-scale ecological collapse. The session kickstarted with the vision of nature-based digital currencies and showcased ongoing activities from central banks incorporating environmental accounts in their records, to digital infrastructure for CBDC, advanced eco credit mechanisms that dynamically represent ecosystem health, and a research initiative to marry these efforts in concrete integrated pilots.

#### **KEY TAKEAWAYS**

 We must shift from a system that serves wealth accumulation to one that centers on human and planet prosperity.

- Martin Wainstein (Open Earth Foundation)
- Zoe Knight (HSBC)
- Kate Dooley (University of Melbourne)
- Atossa Soltani (Amazon Sacred Headwaters)









# DAY TEN

# SOLUTIONS DAY

Solutions Day showcased examples of transformative innovative solutions that have been designed to enhance climate action. The showcased solutions ranged from innovative business models to innovative financial instruments, policies, and technologies. The panelists also explored opportunities for scaling up the presented solutions.

#### **SESSION 1**

ENABLING TRANSFORMATIVE INNOVATION THROUGH STANDARDS focused on how standards are being reimagined to help the world tackle climate change through transformative innovation. Raising awareness of the role of standards in expanding the innovation agenda and avoiding locking in incremental innovation versus driving transformative innovation.

#### **KEY TAKEAWAYS:**

- There are links between standards and innovation, highlighting the existing knowledge gap in the role of transformative versus incremental innovation, risks, and opportunities in setting impossible standards.
- There is a need for transformation and ambition and the role of standards now and in the future.

#### **SPEAKERS**

- Virginia Newton-Lewis (International Policy Manager, our 2050 World),
- Silvio Dulinsky (Deputy Secretary General, ISO)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Dennis Pamlin (Executive Director, Mission Innovation's Net-Zero Compatibility Initiative)
- Emily Faint (Policy and Engagement Lead, Our 2050 World)

#### **SESSION 2**

ACCELERATING CLIMATE CHANGE
ADAPTATION THROUGH INNOVATION was

co-organized with the Climate Technology
Centre and Network (CTCN) of UNFCCC and
focused on sharing models, approaches, solutions,
and partnerships to promote innovation in
adaptation. The session presented lessons
and best practices from the Adaptation Fund
Climate Innovation Accelerator and discussed
thought leadership for accelerating, encouraging,
and enabling climate change adaptation
innovation, and funding opportunities to
support innovation in adaptation.

#### **SPEAKERS**

- Omar Saleh (Zephyr Consulting, Grantee from UNEP-CTCN)
- Lievin Ndayizeye (Designated Authority for the Adaptation Fund)
- Dipayan Dey (South Asian Forum for Environment)
- Saliha Dobardzic (Senior Climate Change Specialist Adaptation Fund).
- The panelists included representatives from CTCN, UNDP, Adaptation Fund, ICLEI, and the fund's grantees.





#### SESSION 3

ASSESSING AVOIDED EMISSIONS AND 1.5C GLOBAL SUSTAINABILITY COMPATIBILITY FROM TRANSFORMATIVE SYSTEM SOLUTIONS featured the launch of the Guide to Assess and Support Solution Providers which highlights strengths, weaknesses, and differences between various types of assessment and reporting tools designed to improve the understanding of a specific solution or other activities. The Guide includes relevant existing approaches such as Impact Forecast's methodology and Carbon4's Net-Zero approach.

#### **SPEAKERS**

- Dennis Pamlin (Executive Director, Missions Innovations Net-Zero Compatibility Initiative)
- Jakob Dahlqvist (Sustainability Assessor, Mission Innovation's Net-Zero Compatibility Initiative / RISE)
- Sarah Kearney (Executive Director, Prime Coalition)
- Bram van der Grinten (Founder, Impact Forecast)
- Antoine Crépe (Consultant, Carbone4)
- Tomoki Ooka (Deputy Director, Global Environmental Affairs Office, Industrial Science and Technology Policy and Environment Bureau, METI, Japan)
- Luis Neves (CEO, GeSI/Digital with Purpose)
- Gabriela Herculano (Co-Founder and Chief Executive Officer, iClima Earth)
- Marco Duso, Partner (BCG/Green Venture)
- Alexander Nick (Climate Action Director, WBCSD)

#### **SESSION 4**

INTRODUCING ACCTION showcased the recently launched disaster risk management software tool at the speed and scale that the climate crisis requires. The software developers Evandro Holz, CEO, Clurb and Mariano Rossi, CFO, Clurb were one of the winners of the Innovate 2030 Challenge.







# DAY TEN

## SOLUTIONS DAY

#### **SESSION 5**

#### **DIGITAL MRV FOR INCLUSIVE CLIMATE**

ACTION focused on how digitalization of carbon market methodologies can help enhance inclusive climate action. This session included overviews of existing approaches, including a highlight on Climate Action Data Trust by the World Bank Climate Change Group, an overview of Digital Public Good National MRV System/Registry and UNDP-WB pilot, and more.

#### **KEY TAKEAWAYS:**

- Innovations in MRV are key to unlocking climate finance and showing progress on climate goals.
- Digital technologies help streamline data collection, processing, and quality control in MRV processes, thus reducing the cost and time to ERC issuance.

#### **SPEAKERS**

- Chandra Shekhar Sinha (Adviser, Climate Change Group, World Bank)
- Gemma Torres Vives (World Bank Warehouse)
- Massamba Thioye (Project Executive, UN Climate Change Global Innovation Hub)
- Jan-Willem van De Ven (Head of International Climate Policy and Engagement, EBRD)
- Alexandra Soezer (Global Carbon Technical Adviser, United Nations Development Program)
- Thomas Forth (German Ministry of Climate Change and Foreign Affairs/ZDK, Foundation Future of the Carbon Market)

#### **SESSION 6**

CLIMATE ACTION sought to explore how the digitalization of carbon market methodologies and MRV systems can help enhance fairness in climate action. The panelists explored how digitalization can help communities with low capabilities to benefit from carbon markets and collaborations that need to be put in place to enhance the digitalization of carbon markets.

#### **KEY TAKEAWAYS**

- There is a need to create a true link between digitization and micro-scale technologies allowing programs to have their activity cycle expand over time and save transaction costs.
- We must decentralize MRV systems as it will enable communities to start benefiting from direct interaction with the international carbon markets.

#### **SPEAKERS**

- Thomas Forth (German Ministry of Climate Change and Foreign Affairs/ZDK, Foundation Future of the Carbon Market)
- Sandra Greiner (Lead Consultant, Climate Focus)
- H.E Patricio Lombardi (Foundation for Carbon Market Fairness)
- Ousmane Fall Sarr (Coordinator, West African Alliance for Carbon Market)
- Margaret Kim (CEO, Gold Standard)

#### **SESSION 7**

developed PoC of a smart contract-based integrated green bond and carbon market. It sought to raise awareness of a new structure of green bonds with MOI appended and how blockchain technology can help digitally track real-time mitigation outcome data linked to a bond lifecycle, thereby providing transparency and reducing the risk of greenwashing.

#### **SPEAKERS**

- Benedicte Nolens (Head Hong Kong Centre, Bank of International Settlement)
- Michael Chin (CEO, InterOpera Pte. Ltd)
- Rosie Hampson (Executive Director, Goldman Sachs (Asia) L.L.C.)
- Bill Kentrup (Co-Founder & Head of Origination, Allinfra)

#### **SESSION 8**

THE ETHEREUM CLIMATE PLATFORM – AMPLIFYING CLIMATE ACTION focused on promoting innovative solutions that contribute to scalable climate impact through ecosystem-wide collaboration, and using Web3 tools to drive capital into climate-aligned assets at scale and deliver a structural template for private and public-sector participation in carbon finance. The session described the problems that Ethereum seeks to address while at the same time elaborating on how these Web3-driven solutions can help address the problems identified.

#### **KEY TAKEAWAYS**

- The announcement of the Ethereum Climate Platform (ECP) by the ECP Partners including representatives from ConsenSys, Allinfra, Celo, FILECOIN, Gold Standard, Code Green, Enterprise Ethereum Alliance, AAVE, Web3 Cloud, Nomura Bank, Huobi, Gitcoin, Polygon, Art blocks, Microsoft, and Global Blockchain Business Council.
- Ethereum and blockchain have the potential to put more money directly in the hands of people, therefore this technology can be a tool to empower people to do it in transparent and accountable manner and address some of the existing problems with climate solutions in our world.



# CLOSING DAY

The standard Care William Ca. As the content of the

Closing Day marked the conclusion of UN Climate Change Global Innovation Hub COP27 Pavilion Dialogues. Panelists discussed the recently developed Urban Implementation Cookbook, reformed green bonds, and youth participation in climate action. Massamba Thioye, the Project Executive for the UN Climate Change Global Innovation Hub closed the dialogues with thanks to the panelists, UGIH's core partners, and to the United Nations Framework Convention on Climate Change.

#### **SESSION 1**

# REFORMED GREEN BONDS IN LA (FORESTRY-BASED MITIGATION PROJECTS)

ocused on Nature-Based Solutions and how blockchain can be used to finance them. It presented three use cases of how carbon and biodiversity tokenization can help to provide collateral and impact metrics to traditional green bonds.

#### **SHOWCASES**

- Partnerships for Forest by Palladium
- Terrasos Habitat Bank
- Banco Mestizo Maya Earth Lab

#### **SESSION 2**

## ROLE OF YOUTH AND DIGITAL INNOVATION IN PROMOTING TRANSFORMATIVE CLIMATE

ACTION focused on how youth can be effectively engaged in the COP27 discourse on transformative and systemic innovation. During the session, youth climate action leaders presented their stories of empowerment and leadership and further reflected on how digital tools such as the recently developed DigitalaRT4Climate support youth climate action including resource mobilization. The session presented GloCha programs and solutions and explored the potential of strategic partnerships between the youth organization and the UN Climate Change Global Innovation Hub.

#### **SPEAKERS**

- Miroslav Polzer (Executive Director, IAAI GloCha)
- Michael Bäcklund (ClimateScience)
- Alex Wang (YouthinkCenter China)
- Busingye Nurudin (Smart Youth Network Uganda
- Moran Sol Broza (Founder and CEO, BE)
- Timothy Damon, (2016 YOUNGO Focal Point, UNFCCC). You can watch the recorded sessions here.

#### **SESSION 3**

## TASTE-TEST: A FIRST LOOK-BACK ON THE URBAN IMPLEMENTATION COOKBOOK was

led by the UGIH's Cities Working Group and sought to amplify the soft launch of the Urban Implementation Cookbook and review initial lessons and opportunities. It highlighted the implementation of the Need-Based Climate Innovation Framework, the City Research and Innovation Agenda, and the Global Research and Action Agenda.

#### **KEY TAKEAWAYS**

- The Urban Implementation Cookbook empowers cities to design and implement local need-driven and dynamic solutions.
- UGIH creates value by facilitating cities' development agendas, particularly regarding greening their value chains.

#### **SPEAKERS**

- Jorn Verbeeck (Senior Manager, Sustainability & ESG, KPMG)
- Katherine Foster (Executive Director, Green Digital Finance Alliance)
- Pietro Visetti (Project Manager, Green Digital Finance Alliance)
- Catherine Atkin (Chair, Stanford CodeX Climate Data Policy Initiative)
- Andy Deacon (Co-Managing Director, Global Covenant of Mayors for Climate & Energy)
- Carlos Ruiz Garvia (Project Manager, UN Climate Change Global Innovation Hub)

#### **SESSION 4**

**CLOSING CEREMONY** (recording of the closing ceremony is available **here**)





# CALLERY \_\_\_\_\_









































# PHOTO GALLERY \_\_\_\_\_













































unfccc.int









