Concept Note

COP28 side event

"Innovation and technology in climate change mitigation and land restoration: Identifying solutions for accelerated uptake"

Co-organized by WIPO, UNCCD & CTCN

6 December, 3:00 – 4:30 pm, Dubai, Blue Zone SE Room 6

Short description:

Emerging technologies offer promising solutions to tackle climate change and land degradation. UN organizations are working with key partners to make available mitigation solutions by harnessing the power of innovation. This includes supporting the transfer from workshop to market to field, within or between countries, as well as supporting National Systems of Innovation.

Long description:

This side event will highlight how innovation and technology supports mitigation in agriculture and in the hard-to-abate industry sectors of steel and cement, as well as land restoration and terrestrial habitat conservation.

It will provide an opportunity to showcase the forthcoming second edition of the Green Technology Book (GTB), mitigation solutions edition, published by WIPO and CTCN together with the Academy of Scientific Research & Technology of Egypt. First launched at COP27 on adaptation, this accessible, digital-first publication promotes tangible solutions. The first edition had in six months >½ million visitors and 14,000 downloads, predominantly from developing countries. The GTB mitigation edition will have three main sections focusing on agriculture, cities, and industry.

The event will also highlight how advanced technology can aid in comprehensive land restoration. While these technologies offer immense potential, there is a need for increased understanding, knowledge sharing, and effective policy-making to harness their full power. The G20 Global Land Initiative, hosted by UNCCD, aims to reduce degraded land by 50 percent by 2040 by supporting existing efforts through building capacity, sharing good practices, strengthening the evidence base, promoting effective investments, and engaging all relevant stakeholders. Other speakers will also highlight the role of innovation and technology for climate change adaption and mitigation.

Lead organizations:

WIPO GREEN is part of the World Intellectual Property Organization (WIPO), a UN specialized agency promoting innovation and a balanced and effective intellectual property rights system. WIPO GREEN works to promote the deployment of innovation and technology for the global challenges of climate change, food security and the environment. This is done through matchmaking of solution seekers and technology owners. One of the major tools is a large database of needs and green technologies which is an open, public and free resource for discovering and linking up to tangible solutions. The database contains 130.000 technology of which 4000 are uploaded by users such as technology owners. There is no requirement for technologies to have acquired intellectual property rights such as patents etc. The database is used for on-the-ground matchmaking activities such as acceleration projects, as well as for making the Green Technology Book. This new annual WIPO

flagship publication, first launched at COP27 on climate change adaptation technologies, provides an overview of solutions available in various sectors of high relevance for climate change adaptation. It is a text-light, digital publication which since launch has had close to 1 million visitors and been downloaded in full >23.000 times, mostly from people in developing countries. At COP28, the 2nd edition on climate change mitigation technologies will be launched, focusing on agriculture, industry, and cities.

The Group of 20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats (G20 Global Land Initiative) was established from the G20 Environmental Ministers Meeting in Riyadh in 2020, with the objectives to prevent, halt and reverse land degradation with an ambition to reduce degraded land by 50 per cent by 2040. To ensure the effective implementation of this goal, an Initiative Coordination Office was established at the UN Convention to Combat Desertification (UNCCD). The Initiative's activities focus on building capacity for large-scale restoration, engaging the private sector to increase investments, empowering civil society to promote advocacy and showcasing best practices for land restoration.

CTCN is the implementation arm of UNFCCC's Climate Change Technology Mechanism, mandated under the Paris Agreement. It provides accelerated development and transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries. CTCN offers a portfolio of technology solutions, capacity building and advice on policy, legal and regulatory frameworks tailored to the needs of individual countries by harnessing the expertise of a global network of technology companies and institutions.

Partners, roles, and contacts:

WIPO – Peter Oksen (peter.oksen@wipo.int)

UNCCD – Joann Lee (jlee@unccd.int)

CTCN – Rajiv Garg (gargr@un.org)

Speakers:

Green Technology Book:

Ms. Amy Dietterich (Opening, moderator), Director, Global Challenge Division, WIPO (USA) (confirmed, access)

Mr. Peter Oksen, Green Technology and Research Manager, WIPO GREEN (confirmed, access)

Mr. Rajiv Garg, Director ad temp., CTCN (India) (confirmed, access)

Mr. Mahmoud Sakr Professor, President, Academy of Scientific Research & Technology, Egypt (confirmed, need accred)

UNCCD

Mr. Muralee Thummarukudy (India), Director, G20 Global Land Initiative (confirmed, access)

Ms. Stephanie Feeney, Chief Growth Officer, RESTOR (confirmed, access)

Mr. Harold Roy-Macauley, Managing Director, Regions and Partnership (a.i.), CGIAR (confirmed, access)

Supporting partners:

Mr. Alois P. Mhlanga, Chief, Climate Technologies Innovation Unit, UNIDO (Zimbabwe) (confirmed, access)

Mr. Per Andersson, Head of Secretariat, LeadIT (confirmed)

Representatives from technology companies:

Ms. Karen Scrivener, Professor, Laboratory of Construction Material, Swiss Federal Institute of Technology Lausanne (Switzerland). Limestone Calcined Clay Cement (LC3) (confirmed from 4pm, access)

Primetals Technologies (UK)

Rumin8 (Australia) (need accred.)

Green and Seed Corporation (Republic of Korea)

Agreena (Denmark)

These companies are present. Final confirmation pending.

Beneficiaries:

The event will be of value to policy makers and the public interested in the role and capability of innovation and technology in combating climate change It will among others provide information on tangible technologies available as well as where such can be found and contacted.

SDG relevance:

SDG 2, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17

Communications plan:

Website and social media of all involved organizations

Live-streaming:

Official UNFCCC site: A link to the side events webcast will be added https://unfccc.int/cop28#schedules-and-public-webcast

and at their Youtube channel. https://www.youtube.com/c/UnfcccInt/playlists

Run-of-show programme

3.00 – 3.10 pm	Opening and welcome remarks (WIPO + UNCCD)
3.10 – 3.35 pm	WIPO Green Technology Book on climate change mitigation technology WIPO 10min intro book etc., CTCN 5min (how use and promote it etc.), ASRT 5min)

3.35 – 3.50 pm	UNCCD Showcasing innovation and technology for land restoration x2 speak 7mins each
3:50 - 4:00 pm	Q&A
4:00-4:25 pm	Impact on the ground: Best practices and lessons learned (UNIDO 5mins, LeadIt 5mins, companies). 3mins each 5 companies from front row. Short intro and then given question e.g. what the potential for emission reduction or individual
4.25 – 4.30 pm	Official launch of the Green Technology Book. Hand-over to Stig Svenningsen (TEC Chair). TBC

Programme official / public version:

3.00 – 3.10 pm	**Opening and welcome remarks** Ms. Amy Dietterich, Director of Global Challenges Division, World Intellectual Property Organization (WIPO) Mr. Muralee Thummarukudy, Director, G20 Global Land Initiative
3.10 – 3.35 pm	**The new WIPO Green Technology Book on climate change mitigation solutions** Mr. Peter Oksen, Green technology and Research Manager, WIPO GREEN Mr. Rajiv Garg, Director (a.i.), Climate Technology Centre and Network (CTCN) Prof. Mahmoud Sakr, President, Academy of Scientific Research & Technology (ASRT), Egypt
3.35 – 3.50 pm	**Innovation and technology for land restoration** Ms. Stephanie Feeney, Chief Growth Officer, RESTOR Mr. Harold Roy-Macauley, Managing Director, Regions and Partnership (a.i.), CGIAR
3:50 - 4:00 pm	Q&A
4:00-4:25 pm	**Impact on the ground: Best practices and lessons learned** Mr. Alois P. Mhlanga, Chief, Climate Technologies Innovation Unit, UNIDO (Zimbabwe) Mr. Per Andersson, Head of Secretariat, LeadIT

	Ms. Karen Scrivener, Professor, Laboratory of Construction Material, Swiss Federal Institute of Technology Lausanne (Switzerland). Limestone Calcined Clay Cement (LC3) Primetals Technologies (UK) Rumin8 (Australia) Green and Seed Corporation (Republic of Korea) Agreena (Denmark)
4.25 – 4.30 pm	**Official launch of the Green Technology Book** Amy Dietterich, WIPO Stig Svenningsen (TEC Chair). TBC

Speakers bios in order of appearance:

Ms. Amy Dietterich, Director Global Challenges Division, WIPO

Marion "Amy" Dietterich is the Director of the Global Challenges Division at the World Intellectual Property Organization (WIPO). In this role, she covers Intellectual Property (IP)-related global policy issues in the areas of Global Health, Climate Change, and Food Security.

Amy has twenty years of experience in the fields of public health, water & sanitation, and governance, spanning community-based organizations, international NGOs, global health partnerships, and United Nations institutions. Prior to joining WIPO in 2018, she worked with the International Federation of Red Cross and Red Crescent Societies (IFRC) to ensure stronger community engagement in health systems governance and service delivery, and with the Parliamentary Network on the World Bank and IMF to support parliamentary oversight of development cooperation and financing.

Ms. Dietterich earned her academic qualifications in Epidemiology, Biology, and French from the London School of Hygiene and Tropical Medicine (LSHTM) and Bucknell University in 2005 and 2000 respectively.

Mr. Muralee Thummarukudy (India), Director, G20 Global Land Initiative

Dr. Thummarukudy brings to this position over three decades of progressive senior management experience and technical expertise in land restoration issues. He has most recently served as the acting Head of the Disasters and Conflicts Programme at the United Nations Environment Programme, where he implemented a portfolio of over 100 million USD, focusing on ecosystem-based disaster reduction and partnership development.

An internationally renowned expert in disaster response, he played a key role in addressing the environmental aftermath of many major conflicts and disasters, implementing projects in over 35 countries. Prior to joining the United Nations, Dr. Thummarukudy served as Environmental Advisor to Shell Group in Southeast Asia and the Middle East.

He has a Ph.D. in Environmental Engineering from Indian Institute of Technology Kanpur. He was also a Beahr's fellow at the University of California, Berkeley. Dr. Thummarukudy is also a well-known author in his native Malayalam language.

Mr. Peter Oksen, Green Technology & Research manager, WIPO GREEN

Peter has more than 25 years' experience in socio-economic development and natural resources management and holds a PhD in International Development Studies. He has lived in SE Asia for a decade, working as researcher, consultant, and head the Danida Environmental Support Programme in Indonesia. Before joining WIPO in 2018, he helped develop the environmental and social safeguard framework and tools for the World Food Programme in Rome.

At WIPO GREEN, Peter is responsible for the Green Technology Book, acceleration projects, research, expert guidance, and development of the database of needs and technologies. Peter is also the creator and owner of the website SustainableSuccessStories.org

Rajiv Garg, Director CTCN ad interim.
Rajiv has around 27 years of experience on issues related to climate technologies in developing countries. Prior to working for UNEP, he worked for 15 years in the Indian Government on policy issues and led the implementation of a number of programmes and initiatives on energy, water management, Remote Sensing and GIS, pollution minimization and control, waste management, EIA, resource efficiency & cleaner production and Green Productivity. He has a Masters in Engineering (environment and water resources), PGCert in Industrial pollution prevention and control, and is a Certified Energy Auditor and Manager.

gargr@un.org

Prof. Mahmoud M. Sakr, President of the Academy of Scientific Research and Technology (ASRT), Egypt
Sakr has over 15 years of experience in high-level science, technology, and innovation management. He was the dean of the Genetic Engineering and Biotechnology Institute, the co-founder of the Center of Scientific Excellence for Advanced Sciences at Egypt's National Research Center (NRC), and the Vice President of SESAME, NAM, and Egypt's Plenipotentiary in JINR. Sakr has over 130 scientific publications to his name, has co-authored books, and has mentored 35 master's and Ph.D. students in the field of biotechnology. He was the founder and initiator of numerous entities and National RDI projects, including the Reference Egyptian and Ancient Egyptian Genome Projects, the National Program of Technological Incubators, the Egyptian STI Observatory, Knowledge and Technological Alliances, the Egyptian Innovation Bank, and the ASRT Company for Technology Transfer. He actively took part in the establishment of the first solar energy lab in Suhag, known as the "Egyptian-Chinese Joint Laboratory for Renewable Energy," in collaboration with China. He received the State Encouragement Award in science and technology as well as the National Research Council Award for scientific excellence in biotechnology.

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Mr. Harold Roy-Macauley, Managing Director, Regions and Partnership (a.i.), CGIAR
Dr Harold Roy-Macauley, currently CGIAR Managing Director, Regions and Partnership (a.i.), occupied this position upon retirement in March 2023 from the position of Director General of AfricaRice, a CGIAR Research Center and a pan-African association of 28 member countries, after eight years of service. He dual-hatted the position of Director General of AfricaRice with that of CGIAR Regional Director for East and Southern Africa, for two years. Dr Roy-Macauley has about 30 years of experience in agricultural research for development with extensive leadership and management expertise. Before joining AfricaRice, Dr Roy-Macauley occupied other high-level positions including that of the Executive Director of CORAF/WECARD, the Regional Director for the World agroforestry Center (ICRAF) in West and Central Africa, and Managing Director of the Regional Centre for Studies on Improving Drought Resistance (CERAAS) in Senegal, a research and training center of CORAF/WECARD. He also consulted for numerous international and bilateral organizations on agricultural research for development issues and in particular on the application of biosafety and modern biotechnology in agricultural. Dr Roy-Macauley obtained a Bachelor of Science Honours Degree in Botany from the University of Sierra Leone, his country of birth, and Masters and Doctorate degrees in Tropical Plant Biology in 1988 and 1993, respectively from the Universities of Pierre et Marie Curie and Denis Diderot, in France.

Ms. Stephanie Feeney, Chief Growth Officer, RESTOR
Ms Stephanie Feeney is the Chief Growth Officer, and a member of the Executive Committee at Restor in Zurich Switzerland. Driven by a passion for nature and a strong belief in the power of technology to accelerate impact, she strives to create partnership opportunities, and technology products, that have the potential to change the world. She has moved seamlessly between private, public and non-profit sector and sees the role that each of these sectors play in enabling change.

Mr. Alois P. Mhlanga, Chief, Climate Technologies Innovation Unit, UNIDO

Alois P. Mhlanga is the Chief of Climate Technologies Innovation Unit in the Decarbonisation and Sustainable Energy Division at the United Nations Industrial Development Organization (UNIDO). He has over 23 years of experience in the sustainable energy and climate change field and is passionate about the role of innovation and entrepreneurship in the transition to low-carbon and climate resilient economies. He was responsible for flagship programmes in UNIDO such as the establishment of the regional centres for renewable energy and energy efficiency in the ECOWAS and SADC regions and the Global Cleantech Innovation Programme. Before joining UNIDO, Alois was a Renewable Energy Expert at the African Development Bank managing investments in sustainable energy across Africa.

Mr. Per Andersson, Head of Secretariat, LeadIT

Location:

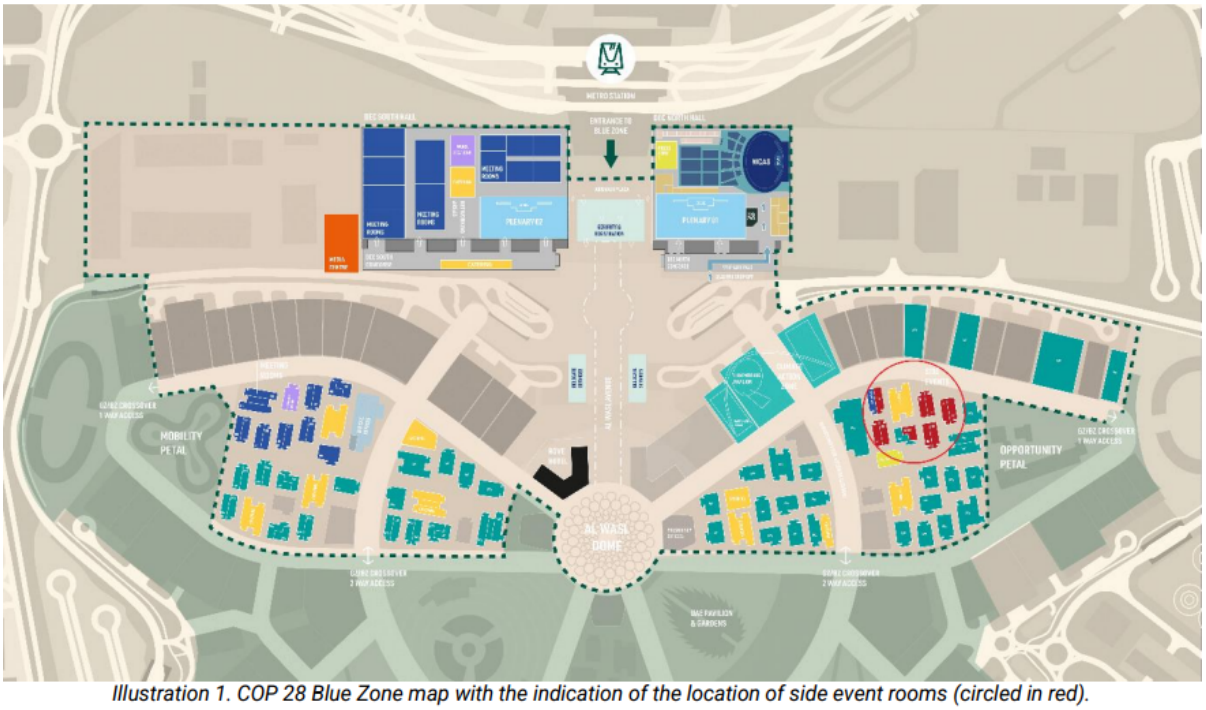

Illustration 1. COP 28 Blue Zone map with the indication of the location of side event rooms (circled in red).

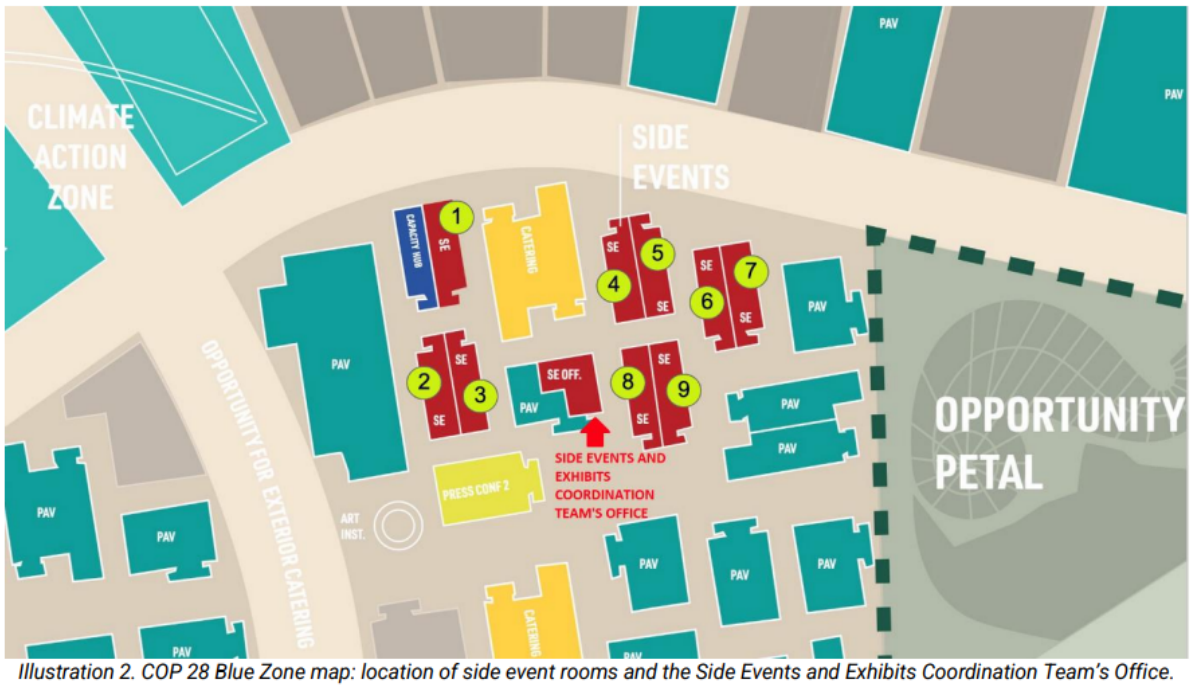

Illustration 2. COP 28 Blue Zone map: location of side event rooms and the Side Events and Exhibits Coordination Team's Office.

Room layout: