

Meeting Report

Side Event of the 13th APFSD

“From Ideas to Impact: Youth-led AI Innovation for Climate Action and the SDGs”

27 February 2026, UN Conference Centre, Bangkok and Online

Organized by

Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology,
Government of India; and

Asian and Pacific Centre for Transfer of Technology (APCTT), ESCAP

I. Opening Session

Ms. Preeti Soni, Head, APCTT

- Welcomed participants to the side event organized on the margins of the 13th Asia-Pacific Forum on Sustainable Development (APFSD) and highlighted the importance of strengthening regional innovation ecosystems to accelerate progress towards the Sustainable Development Goals (SDGs).
- Noted that youth-led innovation, particularly in emerging technologies such as Artificial Intelligence (AI), offers significant potential to address complex development challenges including climate change, energy transitions and infrastructure resilience.
- Emphasized that AI technologies are transforming how risks are assessed, decisions are made and climate solutions are deployed across sectors.
- Highlighted that despite the emergence of promising youth-led innovations, many ideas struggle to transition from prototype stage to real-world implementation due to gaps in financing, regulatory support and partnerships.
- Stated that the objective of the side event was to bring together **innovators, investors and policymakers** to explore pathways for scaling AI-enabled climate innovations across the Asia-Pacific region.

II. Innovation Presentations

Two winning innovations from the Hackathon on “AI for Climate Action and Resilience”, organized under the Technology and Innovation Conclave 2.0 by DSIR and APCTT, were presented during the session.

Mr. Saurabh Kapil, Co-Founder, Biosky Space Innovations Pvt. Ltd., India

- Presented an AI-enabled platform that integrates satellite data, remote sensing and physics-informed models to improve forecasting of renewable energy generation.
- Explained that increasing integration of solar and wind energy introduces variability into power systems, creating challenges for grid stability and energy planning.
- Demonstrated how the platform can predict renewable energy generation more accurately and support power grid operators in managing supply-demand fluctuations.
- Highlighted that the solution combines AI models with physical climate models to better anticipate extreme weather events that affect energy infrastructure.
- Emphasized that the innovation aims to enhance grid resilience and support the expansion of renewable energy systems across the Asia-Pacific region.
- Noted that improved access to climate data and satellite information is essential for enabling startups working on climate analytics to scale their solutions.

Mr. Sagar Garg, Chief Data Officer, Himalayan Sustainable Energy Pvt. Ltd. (Takachar)

- Presented a decentralized technology that converts agricultural biomass waste into biochar and other valuable bio-products using mobile reactor systems.
- Explained that crop residues are often burned in agricultural fields across Asia due to logistical challenges in transporting biomass, resulting in significant air pollution and carbon emissions.
- Demonstrated how the reactor technology enables farmers to convert biomass waste into soil-enhancing biochar directly at the farm level.
- Highlighted that the system integrates AI-enabled monitoring tools to optimize production processes, improve operational efficiency and generate data for carbon accounting.
- Noted that the solution supports rural livelihoods, promotes circular bioeconomy models and contributes to climate mitigation.
- Reported that the technology has already supported thousands of farmers and reduced significant amounts of carbon emissions through biomass conversion.

III. Keynote Address

Mr. Themba Kalua, Director for Pact for the Future Implementation, Executive Office of the Secretary-General, United Nations

- Highlighted the importance of bridging the gap between youth-led innovation and policy frameworks needed for scaling solutions.
- Noted that many innovative ideas remain at pilot stages due to limited access to financing, regulatory support and institutional partnerships.
- Emphasized that this challenge reflects a systemic gap rather than a lack of talent among young innovators.
- Referred to global initiatives such as the Pact for the Future and the Global Digital Compact, which aim to strengthen international cooperation on science, technology and innovation.
- Explained that these initiatives seek to support digital entrepreneurship, expand market access for startups and strengthen innovation ecosystems globally.
- Highlighted the establishment of new global mechanisms on AI governance under the United Nations General Assembly to ensure inclusive and responsible development of artificial intelligence technologies.
- Encouraged young innovators to actively engage with international platforms and partnerships to scale their solutions.

IV. Panel Discussion

The panel discussion explored the pathways required to move innovations from ideas to scalable impact.

Mr. Atthakrit Chimplapibul, Co-Founder, Bitkub Group, Thailand

- Shared insights from an investor perspective on evaluating startup ventures, noting that investors typically assess factors such as the track record of founders, scalability of ideas, market potential and demonstrated traction, and that innovations showing practical results and measurable progress are more likely to receive support than ideas alone.
- Emphasized that resilience, adaptability and the willingness to pivot are critical qualities for entrepreneurs, as startups often require multiple iterations before achieving success.
- Reflected on his own entrepreneurial journey, noting that his first startup failed despite significant effort and investment, highlighting the importance of learning from failure and continuously acquiring knowledge beyond formal education.
- Noted that as technological capabilities become increasingly accessible, particularly with the rapid development of AI tools, future competitiveness will depend less on access to technology and more on governance, sustainability and responsible innovation, encouraging young innovators to consider the perspectives of investors, regulators and other stakeholders when designing their solutions.

Dr. Ranjeet Bairwa, Scientist E and Chief Vigilance Officer, Department of Scientific and Industrial Research (DSIR), Government of India

- Provided insights into how governments evaluate innovation proposals and determine policy support.
- Highlighted that government programs often prioritize innovations that align with national development priorities, including job creation, rural development, digital inclusion and sustainability.
- Described several initiatives introduced by the Government of India to support innovation ecosystems, including programs promoting industrial research, startup incubation and technology commercialization.
- Noted that these initiatives aim to strengthen domestic technological capabilities while supporting entrepreneurship and economic development.

Ms. Kuanlee Pan, Innovation Counsellor, National Innovation Agency (NIA), Thailand

- Discussed Thailand's approach to supporting innovation-driven startups.
- Highlighted priority sectors such as food and agriculture technology, health technologies, artificial intelligence, electric mobility and environmental innovation.
- Explained that government programs combine equity-free grants, corporate co-investment mechanisms and deep-tech incubation initiatives.
- Emphasized that governments assess innovation solutions not only on technological novelty but also on scalability, real-world applicability and measurable development impact.

Mr. Themba Kalua, Director for Pact for the Future Implementation, Executive Office of the Secretary-General, United Nations

- Emphasized that translating youth-led innovation into real-world impact requires strong partnerships across governments, the private sector, innovators and international organizations.
- Noted that while global frameworks such as the Pact for the Future and the Global Digital Compact provide direction, implementation must take place primarily at national and regional levels through collaboration and coordinated action.
- Encouraged young innovators to actively engage with governments, UN country teams and other stakeholders, emphasizing that opportunities for collaboration often require proactive outreach and networking.
- Highlighted the importance of peer-to-peer learning among innovators, as many startups across different countries face similar barriers in scaling technological solutions.
- Reaffirmed that the United Nations aims to ensure meaningful participation of young innovators in global processes, moving beyond symbolic engagement toward co-creation of policies and initiatives.

V. Key Takeaways from the Panel

- **Access to Data and Enabling Infrastructure:** Early-stage startups highlighted limited access to critical datasets—particularly climate and satellite data—as a key barrier to developing and scaling AI-based climate solutions.
- **Administrative and Funding Constraints:** Complex administrative procedures and lengthy processes associated with public funding schemes often make it difficult for startups to access timely financial support.
- **Need for Pilot Opportunities and Market Validation:** Participants emphasized the importance of complementing grant schemes with pilot projects, proof-of-concept initiatives and procurement-based innovation programmes that allow startups to demonstrate practical applications and build credibility.
- **Strengthening Collaborative Innovation Ecosystems:** The discussion underscored the need for stronger collaboration among governments, investors, research institutions, startups and international organizations. Regional platforms such as APCTT and ESCAP play an important role in facilitating partnerships, knowledge exchange and scaling of youth-led AI innovations for climate action and sustainable development.

VI. Closing

- The session concluded with reflections on the importance of sustained collaboration among governments, innovators, investors and international organizations. Participants emphasized that platforms such as APCTT and ESCAP play a critical role in facilitating regional dialogue, knowledge exchange and partnerships that support the scaling of innovative technologies. Strengthening these collaborative ecosystems will be essential for enabling youth-led AI innovations to contribute meaningfully to climate resilience and sustainable development across the Asia-Pacific region.