

International Conference on the Commercialization of Intellectual Property Assets and PHILIPPiNExT: Philippines' International Exposition of Technologies

14-17 July 2025

Manila, Philippines

Jointly organized by:

Technology Application and Promotion Institute (TAPI), Department of Science and Technology (DOST),
Philippines, and

Asian and Pacific Centre for Transfer of Technology (APCTT) of the
United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Meeting Report

A. Introduction

1. The International Conference and Exposition brought together over 350 participants from 7 member States of ESCAP, namely India, Indonesia, Malaysia, Philippines, the Republic of Korea, Singapore, Thailand as well as international organizations and the private sector. The participants included policymakers and government officials, business leaders, academicians, researchers, innovators, startup entrepreneurs, and intellectual property experts.
2. The conference featured a series of technical sessions: i) Understanding the essence of IP protection in Climate Solutions; ii) A Multi-sectoral Perspective on Climate Techs; iii) Intellectual property to increase adaptive capacity? Shifting the focus on the 'Climate Action' Sustainable Development Goal; and iv) Financing Climate Crisis Innovations and Technologies. In addition, the exposition hosted a Technology Pitching and Judging Session, where exhibitors presented the key features of their innovations to both the audience and a panel of judges.
3. The conference deliberated greater alignment of IP policies, harmonization of regulatory environment for cross-border transactions, and common frameworks and methodologies for IP valuation which can facilitate smoother transactions between member States with focus on climate resilience. The exhibition provided a platform for innovators from member States (namely India, Indonesia, Malaysia, Philippines and Singapore) who showcased and pitched their technology innovations to explore cross-border collaboration and networking opportunities. During field visits to key research and development institutions and technology business incubators in Manila and Bataan (namely Philippine Nuclear Research Institute, Department of Science and Technology, Manila; Weather & Flood Forecasting Center (PAGASA), Manila; and Bataan Peninsula State University – School of Engineering and Architecture, and Agri-Aqua Technology Business Incubator. The international experts and innovators learned about the development and commercialization of local innovations and to explore collaboration opportunities.

B. Summary of Discussions

1. Innovative and emerging technologies, when inclusive and accessible, are essential to climate resilience and sustainable development, requiring urgent investment and collaboration. Effective climate action depends on governance, partnerships, local innovations, and scaling integrated and resilient technology solutions.
2. Innovations span across technology, nature-based solutions, data systems, and climate finance. Nature-based solutions, climate-smart agriculture, resilient infrastructure, and real-time climate data systems are pivotal. Key innovation trends in climate resilience include: Decarbonization (e.g., hydrogen and batteries); Digitization (e.g., IoT and blockchain); and Decentralization (e.g., peer-to-peer energy).
3. Asian countries are advancing climate action through localized innovations—India with solar energy, Southeast Asia with wind power, Japan with urban adaptation, and Bangladesh with coastal resilience. Meanwhile, the Republic of Korea leads in smart grids, Viet Nam in agritech, Thailand in digital risk tools, and Indonesia in forest conservation.
4. Agriculture is a major economic driver in Asia, and Climate-Smart Agriculture (CSA) offers a holistic approach to boost productivity and resilience. Innovations like smart greenhouses, drone mapping, and community-based projects in Indonesia, along with comparative insights from Thailand and China, showcase the potential of CSA when supported by policy and local engagement.
5. CSA is vital for mitigating climate impacts on agriculture, with success depending on localized technologies and community involvement. Knowledge sharing, mechanization, and supportive policies are crucial for scaling and sustaining CSA initiatives across regions.
6. Successful climate innovation requires understanding what customers aim to achieve, not just offering new technologies. Enabling strategies involve strong governance, public–private partnerships, and community-driven innovation. Future focus should be on empowering local innovators, integrating systems, and scaling finance and resilience.
7. The deliberations highlighted the urgent need to scale global climate finance and the pivotal role of innovation in driving decarbonization and inclusive growth. Key approaches include collaborative financing models, such as blended finance, PPPs, and IP commercialization, to bridge early-stage funding gaps in green innovation.
8. Universities and R&D institutions are central to resource mobilization, technology commercialization, and addressing global challenges. Their success is measured by knowledge generation, commercialization, and socio-economic impact.
9. Structured IP frameworks and collaborative R&D and business models are essential for scaling climate solutions from lab to market.
10. Localized, market-driven approaches backed by blended finance and policy alignment can unlock transformative climate innovation at scale.
11. The challenges of climate technology adoption include high upfront costs, skill gaps, regulatory barriers, IP restrictions, and need for partnerships. Impact-driven adoption should be preferred over cost-driven decisions.

C. Recommendations

1. There is a need to strengthen regional cooperation, innovation ecosystems, and cross-border technology transfer through enabling policies, financing, and inclusive capacity-building.
2. Climate finance must balance mitigation and adaptation, with a country-driven approach to ensure alignment with national priorities. To accelerate climate innovation in developing countries, it is recommended to strengthen climate-focused incubators, accelerators, and joint ventures that facilitate technology transfer and venture scaling. Additionally, expanding blended finance mechanisms and public venture capital can de-risk early-stage investments and attract private sector participation in climate solutions.
3. Public-private partnerships could be strengthened to de-risk investments and support IP-based green technologies, especially in the Global South. It is essential to promote joint ventures and climate technopreneurship programs to facilitate technology transfer, commercialization, and regional replication.
4. To accelerate climate resilience, universities and industries must collaborate through joint research, technology transfer offices, and open innovation models that support startups and scalable solutions. Governments and institutions should prioritize investment in mid-stage technologies (TRL 5–7), enhance IP management, and foster inclusive ecosystems that enable impactful adoption of climate technologies.
5. Innovators should adopt appropriate methodology to identify underserved market segments and tailor IP portfolios accordingly for maximum impact. Companies must shift from reactive to proactive IP strategies, ensuring patents protect core value propositions and enable commercialization.
6. Integrated practices such as agroforestry, waste valorization, and precision agriculture should be promoted to enhance climate resilience. Scaling smart technologies and fostering collaboration among stakeholders are essential for sustainable and inclusive agricultural transformation.

D. Technology Exhibition

1. The PHILIPPiNExT: Philippines' International Exposition of Technologies featured innovative technologies from about 30 innovators from Philippines and other member States from the region including India, Indonesia, Malaysia and the Republic of Korea and Singapore with the goal of promoting their market potential through collaborative engagement. The innovations were in the areas of energy transition & renewables, climate-resilient infrastructure, digital & 4IR technologies, and air pollution control.

2. Ten innovators pitched their innovations for technology transfer, investor search, research collaboration and won various awards and prizes. Three innovators invited by APCTT – one from India and two from Malaysia – showcased their technologies addressing sustainability and healthcare. Gryogen Pvt Ltd. (India) showcased a novel catalyst that enables direct green hydrogen production from seawater, eliminating the need for costly desalination. From Malaysia, MIMOS Berhad presented advanced silver and graphene-based conductive inks that offer sustainable, high-performance solutions for printed electronics, alongside their REVA platforms for non-invasive blood analysis and real-time liquid sample testing, combining cutting-edge photonics and machine learning for portable healthcare diagnostics. The innovators from MIMOS Berhad Malaysia won four awards based on a competitive assessment by judges.

Technology pitching companies / institutions: Dhanaayu Holistic Ayurveda Wellness and Research Private Limited (India), Dr. Hiremath Global Enterprises Pvt. Ltd. (India), SMSIMSR - CAESER HB (India), Gryogen Pvt. Ltd (India), IOTA Diagnostic (India), IFIA Bharat (India), MIMOS BERHAD (Malaysia), Padjadjaran University (Indonesia), TACK ONE / INFINEON (Singapore)

List of winners:

Technology	Company / Institutions	Title of Award
Conductive Ink (Silver and Graphene based inks)	MIMOS Berhad	Erovoutika Choice Award
Measurement Analysis NIR Spectroscopy Non-Invasive for Blood Glucose (Manies)	Padjadjaran University	Murata Choice Award
Measurement Analysis NIR Spectroscopy Non-Invasive for Blood Glucose (Manies)	Padjadjaran University	International People's Choice Award
CardioBionic MedTech	Dr. Hiremath Global Enterprises Private Limited	International Power Pitch Award
Gynopons	Dhanaayu Holistic Ayurveda Wellness and Research Private Limited	Bronze Award
Tackevo Floodfinder™	Infineon	Silver Award
M- Strip	IOTA Diagnostic	Silver Award
Measurement Analysis NIR Spectroscopy Non-Invasive for Blood Glucose (Manies)	Padjadjaran University	Silver Award

Non-invasive and Portable Blood and Liquid Sample Analysis	MIMOS Berhad	Silver Award
Conductive Ink (Silver and Graphene based inks)	MIMOS Berhad	Gold Award
Conductive Ink (Silver and Graphene based inks)	MIMOS Berhad	Grand Prix Award

E. Field Visits

1. Field visits were organized to R&D and innovation agencies in Manila and Bataan, Philippines such as 1) Philippine Nuclear Research Institute (DOST-PNRI), Department of Science and Technology, Manila, 2) Weather & Flood Forecasting Center (PAGASA), Manila, and 3) Bataan Peninsula State University (BPSU) – School of Engineering and Architecture, and Agri-Aqua Technology Business Incubator (housing 22 incubatees supported by DOST Philippines).
2. The participants gained knowledge of a range of innovative technologies and their applications related to - weather forecasting, early warning systems, and flood control (PAGASA); radiation-induced plant growth promoters, recycled plastic products and adsorbents for water treatment (DOST-PNRI); bamboo dust compressed products; and IoT-driven solutions for aquaculture ((BPSU – School of Engineering and Architecture, Agri-Aqua Technology Business Incubator)
3. Some of these R&D / innovation institutions and agencies in the Philippines expressed interest in cross-border collaboration including joint R&D and product development (DOST-PNRI), R&D partners for collaboration, investors and funding (BPSU – School of Engineering and Architecture)