

APEC CENTER FOR TECHNOLOGY FORESIGHT (APEC CTF)

Minutes of Meeting

International Advisory Board (IAB) Meeting 2026

Date	Monday, 22 June 2026
Time	12:00 – 13:30 hrs (UTC+7, Bangkok), Thailand (Host)
Format	Virtual Meeting via Zoom
Meeting ID	917 3494 9457
Passcode	562329

List of Participants

International Advisory Board (IAB) Members present:

No.	Name	Organization / Economy	Role
1	Prof. Dr. Kerstin Cuhls	Fraunhofer ISI — Germany	Chair
2	Dr. Hien Thu Pham	CSIRO (Data61) — Australia	Member
3	Dr. Jieni Guo	Beijing International Exchange Association — China	Member
4	Dr. Felipe Donato Valentín Rojas	CONCYTEC — Peru	Member
5	Dr. Byeongwon Park	STEPI — Republic of Korea	Member
6	Dr. Tan Shu Ying	MIGHT / myForesight — Malaysia	Member
7	Prof. Dr. Alexander Sokolov	HSE University — Russia	Member
8	Assoc. Prof. Dr. Sarah Lai-Yin Cheah	NUS Business School — Singapore	Member
9	Dr. Rafiq Dossani	RAND Corporation — United States	Member
10	Prof. Dr. Ozcan Saritas	RIT Dubai — UAE	Member

APEC CTF / NXPO Secretariat and Executives:

No.	Name	Role
1	Dr. Surachai Sathitkunararat	Executive Director, APEC CTF / President, NXPO / IAB Secretary
2	Assoc. Prof. Wongkot Wongsapai	Vice President, NXPO / Senior Strategist
3	Dr. Kommate Jitvanichphaibool	Deputy Director / IAB Assistant Secretary
4	Dr. Srichattra Chaivongvilan	Strategist 2, NXPO
5	Mr. Asira Chirawithayaboon	Senior Policy Specialist, NXPO
6	Dr. Nattawut Anuniwat	Policy Specialist, NXPO
7	Dr. Natthamon Suwannaprom	Policy Developer, NXPO
8	Ms. Jirapan Christian Linares	Policy Developer, NXPO
9	Mr. Chatkaphat Bunnag	Policy Developer, NXPO

Meeting commenced at 12:00 hrs (UTC+7).

Opening and Welcome

Dr. Surachai Sathitkunararat, Executive Director of APEC CTF and President of NXPO, opened the meeting and welcomed the International Advisory Board (IAB). He gave a brief background of the Center, noting that APEC CTF was established in 1998 following the initiative of the Thai delegation to the APEC Industrial Science and Technology Working Group (ISTWG) and endorsed by a Thai Cabinet resolution on 3 March 1998. The Center is the first and only regional foresight initiative within APEC and is hosted by the Office of National Higher Education, Science, Research and Innovation Policy Council (NXPO), Thailand. He explained that the IAB had been convened to provide strategic advice, expert guidance, and international perspectives on technology foresight, STI policy, and future-oriented cooperation in the APEC region.

Each IAB member introduced themselves and their area of expertise. Prof. Dr. Kerstin Cuhls (Chair, Fraunhofer ISI, Germany) noted her long experience in foresight and prior service on the Board some years ago. Dr. Hien Thu Pham (CSIRO, Australia) introduced her work in strategic foresight, economic modelling, forecasting, and impact assessment. Dr. Jieni Guo (Beijing International Exchange Association, China) noted her organization's active engagement with

APEC PPSTI since 2016 and with the UN system. Dr. Felipe Donato Valentín Rojas (CONCYTEC, Peru) described his work on STI planning and technology roadmaps and an upcoming Smart Mobility workshop in Lima in August. Dr. Byeongwon Park (STEPI, Republic of Korea) noted his focus on strategic foresight, national innovation systems, and his role as a Korean delegate to the OECD. Dr. Tan Shu Ying (MIGHT / myForesight, Malaysia) noted her background in public policy and emerging technologies. Prof. Dr. Alexander Sokolov (HSE University, Russia) noted the HSE Foresight Centre, the UNESCO Chair on Future Studies, and over 100 completed foresight exercises. Assoc. Prof. Dr. Sarah Lai-Yin Cheah (NUS, Singapore) noted her work on foresight, scenario planning, business model innovation, and technology commercialization. Dr. Rafiq Dossani (RAND, United States) noted his focus on the policy implications of foresight findings. Prof. Dr. Ozcan Saritas (RIT Dubai, UAE) was unable to join at the commencement of the meeting due to travel commitments. He joined the meeting during the discussion of Item 2.2 and contributed to the deliberations on the 2026 project pipeline.

Assoc. Prof. Wongkot Wongsapai (Vice President of NXPO and Senior Strategist for the Center) and Dr. Kommate Jitvanichphaibool (Deputy Director) also introduced themselves. Dr. Surachai acknowledged the Center's past Executive Directors since 1998, including the late Prof. Greg Tegart (co-founder, Australia) and subsequent directors, and noted that he currently serves as Executive Director.

Item 1 — Matters for Information

1.1 Overview of the APEC CTF Mandate

Dr. Kommate Jitvanichphaibool presented the mandate and scope of work of APEC CTF, summarized as follows:

- APEC CTF is one of the specialized centers under the APEC Policy Partnership on Science, Technology and Innovation (PPSTI). PPSTI is a working body under APEC, whose overall direction is set annually by the APEC Leaders' Meeting and its priority areas.
- APEC now requires all centers to operate under an endorsed Terms of Reference (TOR) for a four-year term (1 January 2026 – 31 December 2029). At the end of the term an evaluation determines whether each center continues or is terminated; the Center must therefore demonstrate strong performance during this period.
- The renewed TOR sets three core roles: (1) conducting APEC-wide foresight studies on STI issues and delivering policy recommendations to PPSTI and APEC; (2) capacity building in foresight for member economies through workshops and training; and (3) facilitating regional collaboration and joint policy research, including building a foresight platform and data resources for member economies.
- Examples of past work span emerging infectious diseases, smart cities, and climate change. Each report includes foresight studies and policy recommendations to APEC.

- Collaboration includes international organizations such as UNEP and ADB, and a partnership established last year with three other APEC centers (APEC Mentoring Center for the Gifted in Science; Asia-Pacific Center for Theoretical Physics; APEC Research Center for Advanced Biohydrogen Technology).
- On governance and accountability, the IAB provides strategic guidance and direction, while the Executive Director manages resources, operations, content, and activities. The IAB is proposed to meet twice a year, with a two-year, renewable term for members.
- Looking ahead over the four-year term, the Center aims to deliver actionable foresight insights for decision-making, continue capacity-building and network expansion, and pursue more joint STI policy research with member economies.

Dr. Surachai added that the two annual IAB meetings would likely be held as one online meeting and one on-site (hybrid) meeting in Bangkok, and proposed inviting IAB members to visit Thailand early next year.

1.2 Acknowledgement of the Appointment of the IAB Members

Dr. Kommate acknowledged the appointment of the IAB members for 2026 and presented the five duties and responsibilities of the Board. These are: (1) to provide views and recommendations on the Center's overall strategy, operational opportunities, and support for its activities; (2) to provide in-depth views and recommendations on technology foresight activities for APEC member economies; (3) to promote the participation of APEC members in the Center's activities; (4) to coordinate, disseminate, and promote the role of the Center through communication and awareness-building; and (5) to provide views and recommendations on monitoring the progress of the Center's implementation in accordance with its work plan.

1.3 Update on Recent Activities of APEC CTF

Dr. Srichattra Chaivongvilan presented the Center's recent activities, focused on emerging technologies, green transition, carbon neutrality, energy transition, emerging infectious diseases, and regional STI cooperation.

APEC-endorsed foresight projects

- Circular Economy Technology Foresight Workshop (2021, self-funded) — identification of key issues, solutions, and success factors for advancing the circular economy.
- APEC STI Strategic Foresight: Net Zero Emissions / Carbon Neutrality (2023, self-funded) — identification of enabling technologies and future challenges for achieving APEC net-zero and carbon-neutrality goals.
- APEC Energy Transition Towards Net-Zero: Green Hydrogen (2024, self-funded) — development of foresight scenarios and policy impact assessment for a net-zero energy landscape.
- Identification of Emerging Signals Affecting Carbon Neutrality (2024, APEC Support Fund) — application of foresight to track emerging signals that may accelerate or delay carbon-neutrality pathways.

- Comparative Analysis and Foresight of Emerging Infectious Diseases in APEC (2024) — comparative analysis and foresight assessment to enhance preparedness and resilience of APEC economies to emerging infectious diseases.

Non-APEC national and institutional projects

- Technology Needs Assessment for Climate Change in Thailand, Phase V (with UNEP, UNEP-CCC, GEF); Thailand Foresight Alliance (national foresight network); HORIZON 2030 (strategic foresight framework for Thailand's STI system); Thailand Nanotechnology R&D Roadmap (with NANOTEC); and the ICPP7 strategic foresight and policy design session (Academic Conference), etc.

PPSTI engagement and partnerships

- Participation in PPSTI Meetings and Collaboration with PPSTI (2024–2025) — participation in PPSTI meetings held twice a year, including meetings in Peru, the Republic of Korea, and China, while working closely with PPSTI to strengthen STI foresight cooperation in APEC.
- Establishment of the APEC Centers Partnership for Science and Innovation (2025) — announcement of the establishment of the APEC Centers Partnership for Science and Innovation by APEC CTF, jointly with three other specialized APEC centers: the APEC Research Center for Advanced Biohydrogen Technology, the Asia-Pacific Center for Theoretical Physics, and the APEC Mentoring Center for the Gifted in Science.
- 2025 at a Glance (2025) — implementation of three APEC projects and three workshops, engaging more than 200 participants from over ten economies, producing two publications, more than five policy recommendations, and one joint declaration with three other specialized APEC centers.

Discussion on Item 1

- **Dr. Rafiq Dossani** congratulated the team on the breadth and number of projects undertaken by the Center. He suggested that each project presentation should include a brief description of the methodology, together with two to three lines on key outcomes or findings, so that the Board can better understand where impact is being generated.
- **Dr. Surachai** agreed that the presentation style could be improved for the next IAB meeting. He noted that the methodology and outcomes of the projects are also addressed in the annual report.
- **Prof. Alexander Sokolov** asked about the number of staff working at the Center.
- **Dr. Surachai** explained that the Center operates as a virtual office, supported by a core team of around ten-plus staff. He further noted that the Center's host organization, NXPO, where he serves as President, has approximately 150 staff members who can be invited to support specific projects as needed.
- **Prof. Kerstin Cuhls, Chair of the IAB**, asked whether the Center's reports are available for review so that project outcomes can be seen. She also asked how project topics are selected, whether by a specific group, as issues arise, or according to funding opportunities.

- **Dr. Surachai and Dr. Kommate** responded that project outcomes will be identified on a project-by-project basis in the annual report. They explained that topics are selected by examining common and emerging issues in APEC that are expected to have high future impact. Climate change has been a major focus in recent years. They also noted that funding is partly self-funded, while two to three projects have received APEC funding.

Item 2 — Matters for Consideration

2.1 Annual Report 2025 of APEC CTF

Dr. Srichattra presented the draft Annual Report 2025 of APEC CTF, which consists of five sections: (1) Introduction to APEC CTF; (2) State of Technology Foresight in the Asia-Pacific in 2025; (3) Highlight Achievements in 2025; (4) Foresight Projects in 2025; and (5) Looking Ahead to 2026.

She noted that Section 2 presents key phenomena identified through horizon scanning and signal analysis, namely: AI, digital transformation and the future of work; climate transition and energy security; critical and frontier technology competition; supply chain resilience; and demographic change.

The Chair, Prof. Kerstin Cuhls, noted that the methodology and outcomes of the projects are already included in the attached report. The Center will add a concise summary of the methodology and outcomes for each project to Section 3 of the Annual Report 2025 before circulating the finalized version for endorsement.

The Board noted the draft Annual Report 2025 of APEC CTF and acknowledged the Center's activities and achievements over the past year. The Board agreed to provide written comments and suggestions to the Secretariat by the end of June 2026. The Secretariat will incorporate the feedback received and circulate the finalized version for endorsement.

2.2 Update on Ongoing Projects (Project Pipeline 2026)

Dr. Srichattr

a presented the 2026 project pipeline, which is currently awaiting endorsement by PPSTI. The pipeline includes two proposed projects.

- 1) **APEC Young Futurists: Frontier Technologies and Solutions for Future Food** is a self-funded project. The first round of endorsement has been completed, and the project is currently awaiting the second round of endorsement by PPSTI. The planned outputs include a workshop to be held in Thailand around the end of September 2026, a project summary report, a policy brief, and a final report to be submitted to PPSTI.
- 2) **Strengthening Mission-Oriented Frontier Technology Commercialization Ecosystem in APEC** has passed the first round of endorsement and is awaiting second-round endorsement. The expected outcome is to strengthen the mission-oriented frontier

technology commercialization ecosystem across APEC, with particular attention to improving commercialization pathways for SMEs.

The Board noted the update on the **2026 project pipeline** and acknowledged the Center's continued efforts to develop forward-looking projects that address emerging APEC priorities.

Discussion on Item 2.2

- **Dr. Rafiq Dossani** asked how technologies are selected, given the wide range of possible frontier technologies, citing AI and quantum technologies as examples. He noted that although not all economies may be directly involved in these technologies, they should be equipped to assess their implications. He also offered to provide feedback if the next draft proposal is circulated to the Board.
- **Dr. Nattawut Anuniwat** explained that the project on frontier technology commercialization focuses on the research-to-commercialization pathway and the broader ecosystem, rather than selecting specific technologies at this stage. He noted that commercialization ecosystems differ across economies. The project therefore aims to conduct a comparative study across APEC economies, facilitate cross-border sharing of lessons learned, and use foresight to develop scenarios and action plans. Obvious frontier areas such as AI and quantum technologies may be included, while remaining open to technologies considered relevant by each economy.
- **Prof. Alexander Sokolov** agreed with Dr. Dossani that the methodology, intended participants, and overall approach should be shared with the Board in advance. Regarding the APEC Young Futurists: Frontier Technologies and Solutions for Future Food project, he suggested inviting postgraduate students from relevant universities, not only foresight specialists, and broadening the participant base. He referred to a food-security foresight workshop in Addis Ababa, Africa, in November, and offered to support the Center through his network.
- **Dr. Tan Shu Ying** noted that the criteria for defining “young futurists” should be clarified and offered to help identify participants from Malaysia. She cautioned that engaging young people in their 20s and 30s may require a different engagement model, including the use of social media and preferred digital platforms. She asked whether the Young Futurists network would be limited to the food topic. She supported the future food theme, highlighting cultural acceptance of food technologies as an important impact dimension, and asked how the network would be built.
- **APEC CTF** further explained that future food was selected because it ranked first among emerging issues identified in the recent carbon-neutrality workshop.
- **Prof. Ozcan Saritas** expressed support for the future of food as a topic and endorsed its selection as a next-round agenda item.

- **Dr. Hien Thu Pham** supported both proposed project topics. For the future food project, she suggested including issues related to the level of adoption, adoption barriers, regulatory readiness, and uptake by farmers and small stakeholders, particularly in rural areas. She also asked what “mission-oriented” means in the APEC context and who would select the mission, whether at the APEC-wide level or by individual economies. She noted that different levels of development across economies may imply different commercialization pathways. She offered to connect the Center with relevant associations, universities, and research agencies in Australia and Viet Nam.
- **APEC CTF** responded that mission-oriented work has been discussed in APEC and PPSTI since last year. While the missions have not yet been finalized, possible areas include circular economy, energy transition, and food. The Center agreed to include adoption and readiness aspects in the workshop discussion.
- **Prof. Kerstin Cuhls, Chair of the IAB**, asked whether the Young Futurists network already exists or will be newly created. She also emphasized the value of inviting participants from heterogeneous backgrounds, rather than limiting participation to professional futurists.
- **APEC CTF** clarified that a new cohort of young futurists will be created through the existing futurist network. A new team will be formed each year to build the capacity of young people who can apply foresight tools to APEC-relevant issues.
- **Dr. Byeongwon Park** noted that, given the large number of APEC economies and the Center’s limited time and budget, the Center should focus on specific topics and plan its projects precisely. He suggested that proposals be shared in advance with the Board for feedback, particularly to help narrow the scope and depth of each project. He asked how themes are selected and suggested developing a longer-term pool of themes and a multi-year strategic plan, especially in view of the upcoming four-year mandate review. He noted that the IAB could contribute by proposing a pool of potential themes.
- **APEC CTF** responded that topics are selected based on keywords and priorities reflected in the APEC Leaders’ Meeting and the focus of the host economy each year. For example, mission-oriented approaches emerged from PPSTI discussions last year, while future food aligns with the host economy’s focus and represents a common APEC issue. The Center welcomed suggestions from the Board on both topics and methodology.
- **Dr. Byeongwon Park**, via chat, further noted that sharing the full proposals for both projects with the IAB would enable Board members to provide more concrete feedback. He also asked when the go / no-go decision on the projects would be made and whether the Secretariat intends to implement both projects together.
- **Prof. Ozcan Saritas** observed that the topic selection is sound, as it combines an exploratory theme, namely frontier technology commercialization, with a demand-oriented societal challenge, namely the future of food. He emphasized the importance of proper scoping and methodology design aligned with the goals, duration, and available resources of each project.

He suggested that the methodology should cover the full foresight process, including trends and drivers, alternative futures, visions and priorities, actions, and policy recommendations. He also noted that young participants would need training to reach a common level of understanding, as well as senior supervision, and offered to support the design of the methodology.

- **Dr. Hien Thu Pham**, echoing Dr. Park's comments, emphasized that with the four-year review ahead, the Center must demonstrate clear impact. She stressed the importance of mid- and long-term planning, suggesting that the Center should align its topics with the APEC Leaders' Declaration while also setting a strategic direction with measurable impact indicators or KPIs. This would help the Center benchmark progress and demonstrate its contribution to APEC.

2.3 IAB Discussion and Recommendations

Dr. Surachai opened the floor for broader recommendations on strategic direction, alignment with PPSTI projects, and the future foresight agenda. Key recommendations were:

- **Dr. Byeongwon Park (via chat):** Suggested a possible future foresight agenda item — assuming full deployment of AI, examining the future impact of AI on the regional economy and on the future of work.
- **Prof. Alexander Sokolov:** (1) Establish sustainable collaboration with one or two universities that host a foresight center or group (e.g., a UNESCO Chair on Future Studies), which opens doors to national organizations. (2) Improve visibility by disseminating reports more actively, using IAB members and relevant centers in APEC economies, and discussing ongoing and future projects with those centers. (3) When the next meeting is held on-site in Bangkok, combine it with a workshop or conference where IAB members present their work.
- **Dr. Surachai (response):** Noted that the Center already collaborates closely with the School of Public Policy at Chiang Mai University.
- **Dr. Hien Thu Pham:** Observed little visible activity on the APEC / ASEAN foresight side; noted the ASEAN Foresight Group and the OECD foresight group and asked about plans to connect; offered to facilitate connections.
- **Dr. Tan Shu Ying (response):** The ASEAN Foresight Alliance is active, organization-level (rather than individual), and policy-focused, spearheaded by Malaysia's Ministry of Science, Technology and Innovation; it is currently project-based. Offered to help connect the Center.
- **Dr. Rafiq Dossani:** Asked whether the Center is considering partnerships and which ones it has in mind.
- **Dr. Surachai (response):** The Center has worked with many institutions and wishes to connect more; it is already connected with several board members (e.g., MIGHT via Dr. Tan and STEPI via Dr. Park) and welcomes the Board's suggestions for further foresight-organization partners.

The Board noted the update on the 2026 project pipeline and welcomed the two proposed projects. The Board requested that full project proposals be shared with IAB members in advance of the go/no-go decision to allow for timely feedback on scope, methodology, and intended outcomes. The Secretariat agreed to circulate the proposals accordingly.

Item 3 — Other Matters

3.1 Schedule for the Next IAB Meeting

The next IAB meeting was proposed to be held in the third or last week of January 2027, preferably on-site in Bangkok, with a hybrid option available for members who are unable to attend in person.

- **Prof. Kerstin Cuhls**, Chair of the IAB, confirmed her availability and advised members to block roughly a full week for travel. She invited members to raise any objections to the proposed timing.
- **Dr. Tan Shu Ying** expressed a preference for the third week of January, noting that the fourth week would fall close to the Lunar New Year in early February.
- **Dr. Byeongwon Park**, via chat, confirmed his availability for the week of 18 January 2027, corresponding to the third week of January.

The Board agreed in principle to consider the third week of January 2027 as the preferred timing for the next IAB meeting, subject to final confirmation by the Secretariat.

The Center will coordinate with members to confirm a suitable date.

Following the deliberations under the agenda items, the Board acknowledged the constructive comments and recommendations provided by members. The Secretariat will review the inputs received, incorporate them where appropriate into the relevant documents and project plans, and undertake the follow-up actions summarized below.

Summary of Action Items

No.	Action Item	Responsible	Deadline
1	IAB members to submit comments on Annual Report 2025 to APEC CTF Secretariat (and/or to the Chair for consolidated submission)	All IAB Members	End of June 2026
2	Circulate full project proposals for (1) APEC Young Futurists and (2) Frontier Technology Commercialization to IAB members for suggestions before starting the project	APEC CTF Secretariat	Within one week after the meeting

No.	Action Item	Responsible	Deadline
3	Improve project presentation format to include methodology summary and key outcomes/findings for each project, to be reflected in future IAB presentations	APEC CTF Secretariat	Next IAB Meeting (Jan 2027)
4	Explore and develop a long-term thematic pool and multi-year strategic plan for foresight projects, with input from IAB members on proposed themes	APEC CTF Secretariat / IAB	Next IAB Meeting (Jan 2027)

Item 4 — Closing Remarks and Adjournment

Dr. Surachai expressed his appreciation, on behalf of the Center, to the IAB members for their time, constructive suggestions, and continued support. He confirmed that the Center would follow up on the comments and recommendations provided during the meeting.

Prof. Kerstin Cuhls, Chair of the IAB, delivered the closing remarks. She encouraged members to send comments on the Annual Report 2025 directly to the Center, noting the urgency of finalizing the report by the end of June 2026. For broader comments on projects, she suggested that members may send their inputs to the Chair, or to the whole group, so that comments can be collected and submitted jointly to the Center. Direct remarks to the Center would also be welcome.

- The Chair reaffirmed that the Board stands ready to support the Center through connections with other institutions, advice, and substantive input, including at short notice where needed.
- As a key piece of advice, the Chair emphasized that the Center should continue to define its distinctive role by “connecting the dots” across APEC and the Asia-Pacific, rather than duplicating existing work. She encouraged the Center to make use of existing materials and to develop new, specific contributions that reflect the cultural and technological context of the region, recalling the principle of “not reinventing the wheel.”
- The Chair thanked all participants for their active engagement and contributions. The meeting was adjourned.

Meeting adjourned at approximately 13:30 hrs (UTC+7).