



Consensus reached on TIP modalities but ambition falls short

Kuala Lumpur, Dec 4 (Hilary Kung): Parties reached consensus on the modalities for the Technology Implementation Programme (TIP) at the climate talks that concluded on 22 November in Belém, Brazil. The [outcome](#) however fell short of the level of ambition envisioned by developing countries.

Palau for the Alliance of Small Island States (AOSIS), in statement [submitted online] at the closing plenary on Nov. 22nd, said that “Regarding the TIP, this outcome does not fully reflect the ambition we had envisioned. Nevertheless, we see it as a starting point. We urge all stakeholders to implement the TIP mandate with determination and to work toward removing the persistent barriers that hinder Small Island Developing States [SIDS] from deploying climate technologies at scale.”

Iraq, for the G77 and China, in its remarks at the closing plenary, said that “the true breakthrough on technology lies in the new functions and hosting criteria of the Climate Technology Centre and Network (CTCN)”, adding that “by agreeing on [the] new functions and hosting criteria, we have made this Centre fit for [addressing] the climate change.”

Along with 15 other agenda items, the TIP is part of the delicate [Belém Political Package](#). One

important outcome of the decision, which provides developing countries with a measure of reassurance, is the agreed duration of the TIP. Its implementation will begin immediately after Belém and undergo a review in 2034, reflecting developing countries’ interest in ensuring the TIP functions as a long-term programme, instead of a 2-year programme preferred by developed countries.

[The TIP was established at COP28 in 2023 through the first global stocktake (GST 1) decision (decision 1/CMA.5). Huge divergence on the modalities of the TIP emerged between developed and developing countries and no agreement was reached in Bonn at the 62nd sessions of the UNFCCC’s Subsidiary Bodies (SB62) in June 2025. [See [TWN Bonn update 16](#)]

During the second week of COP30, TIP remained one of the outstanding agenda items and continued to be addressed through the technical consultations co-facilitated by **Omar Alcock (Jamaica)** and **Elfriede Anna More (Austria)**. In parallel, ministerial consultations led by **Chris Bowen (Australia)** and **Bhupender Yadav (India)** focused on several issues that would benefit from political guidance. These included: references to the Convention; the emphasis on aligning TIP with the implementation of GST outcomes, especially

paragraph 28 on global mitigation efforts; the need to address trade barriers and intellectual property rights (IPR) regimes and the aspects of financial support for TIP, which are key concerns for developing countries to fully realise technology development and transfer in developing countries.

Developing countries envisioned a mandate to effectively operationalize the TIP consistent with the mandate coming from the GST1 outcome – one that would prioritise technology needs of developing countries as identified by them in their technology needs and assessments (TNAs) and technology action plans (TAPs), address the challenges faced by the Technology Mechanism (TM) to fully realising technology development and transfer, and ensure predictable and adequate financial support through the operating entities of the Financial Mechanism (FM).

Developed countries preferred the TIP to be limited to implementation through the CTCN and the Technology Executive Committee (TEC) but resisted to explicitly invite the operating entities of the Financial Mechanism to incorporate financing TIP into their replenishment processes, and they also argued that support comes in various forms and not solely through the operating entities. They also opposed any discussion on trade barriers and the IPR regime for accessing climate technologies and preferred TIP to prioritise implementation of GST outcomes by imposing targets related to renewable energy in a top-down manner.

[The Technology Mechanism was established by COP 17 in 2010, which consists of two bodies: the Technology Executive Committee (TEC) as the policy arm and the Climate Technology Centre and Network (CTCN) as the implementation arm.]

REFERENCES TO CONVENTION AND ALIGNING TIP WITH GST IMPLEMENTATION

The [adopted decision](#) confirmed that “...the objectives of the technology implementation programme, supported by, inter alia, the operating entities of the Financial Mechanism, are to strengthen support for the implementation of technology priorities identified by developing countries and to address the challenges identified in the first periodic assessment of the Technology Mechanism”.

During the informal consultations, the reference to the Convention was opposed by developed countries including **Norway**, the **European Union (EU)**, **Australia**, **Canada**, **Türkiye**, and **Switzerland** which argued that the TIP, having been created by the GST, is under the Paris Agreement (PA) and not under the Convention.

Norway said it is “very clear that this is under the PA and not under the Convention”. The **EU** agreed and further noted that, “The scope of this programme must focus on supporting developing countries especially the Least Developed Countries (LDCs) and SIDS in the implementation of technology priorities, if they are aligned with all the directions set by the GST.”

In contrast, **Chile** for **the G77 and China** and later in its national capacity, the **Arab Group**, the **Like-minded developing countries [LMDC]**, **China**, and **India** insisted that the principles of both the Convention and the PA should be reflected in the text, given that both of them are instruments that should be read and implemented together.

The adopted decision recalls Article 2.1 of the in the preambular section, which provides that the PA, “in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty”.

On whether the TIP should prioritize implementing technology needs identified by developing countries or emphasis on aligning TIP with the implementation of GST outcomes, especially para 28 of decision 1/CMA.5 on global mitigation efforts, the final adopted text in Para 5 reads, “*Agrees that the technology implementation programme shall support the implementation of Parties’ nationally determined contributions, national adaptation plans and long-term low-emission development strategies, noting their importance for implementing the global stocktake outcomes.*”

In para 6 of the decision, Parties also decided “*that the technology implementation programme shall be implemented based on the following:*

a) “*Be implemented in a coherent, inclusive and results-oriented manner;*

- b) *Be based on the technology priorities of developing countries in alignment with their national circumstances, including at the local level, and draw on Indigenous Peoples' knowledge and capacities, and endogenous technologies;*
- c) *Be gender-responsive, enhance gender equality, empower women and recognize the special needs and circumstances of children, youth, persons with disabilities and local communities;*
- d) *Contribute to the availability of and access to enhanced financial, technical and capacity-building support for developing countries, recognizing the special needs and circumstances of the least developed countries, small island developing States and other developing countries that are particularly vulnerable to the adverse effects of climate change;*
- e) *Take into account the report on the evaluation of the Poznan strategic programme on technology transfer and the findings of the independent reviews of the Climate Technology Centre and Network."*

ON TRADE BARRIERS AND IPR REGIMES

During informal consultations, the issue of trade barriers and IPR regimes proved to be contentious, with the **G77 and China**, supported by the **LMDC**, the **Arab Group**, **India**, and **China** advocated for their inclusion, while the **EU**, **Australia**, **Canada**, **UK** and **Japan** opposed to having this discussed in the TIP.

As listed below, a total of 3 paragraphs addressing this issue were included in previous draft versions of the decision, but were ultimately excluded from the final decision following strong pushback from developed countries.

- *"Exchanging information, including on good practices, challenges and lessons learned, regarding enablers for and barriers to, including trade barriers and intellectual property rights, the implementation of the technology priorities of developing countries at all stages of the technology cycle.*
- *Addressing systemic and structural barriers for technology development and transfer, including trade barriers and restrictive intellectual property regimes.*
- *Decides that the topics of the global in-session dialogues...are to include....the addressing of financial barriers and enablers, including the capacity to develop proposals for fundable projects;*

trade barriers and enablers, including intellectual property rights....;"

During the informal consultations, **Chile** for the **G77 and China** commented that the current wording mentions trade barriers and IPR but is framed too narrowly which focuses only on exchanging information and good practices without capturing the need to address the underlying barrier elements.

Saudi Arabia for the **Arab Group** said, "For decades, the promise of effective technology development and transfer under the Convention and its PA has not been realised. The result is a persistent structural imbalance, a two-tier system that has kept developed countries dominating the value chain of restrictive intellectual-property regimes, proprietary software, patent-dependent platforms, and closed-source technologies. This has constrained market access, reduced affordability, and limited meaningful participation by developing countries."

China for the **LMDC** commented that the draft versions "didn't reflect some [other] key points raised by developing country Parties in the first informal consultations, especially the restrictive intellectual-property regimes, closed-source technologies, and unilateral trade measures that limit the access, affordability and capacity of technology innovation, absorption, adoption and incubation of developing countries".

The **United Kingdom [UK]** said this [issue] "goes beyond the mandate of TIP"; while **Australia** said "trade barriers and IPR should be removed...."

The **EU** said that, "the Technology Mechanism is not the appropriate [place] to address IPRs, [and that the] Mechanism [is] already cooperating with [a] wide network, [so] this room is not to have this discussion". The **EU** also provided textual proposal to replace "regarding enablers for and barriers to, including trade barriers and intellectual property rights" with "regarding enabling barriers such as those identified in TEC reports and UNEP Climate Technology Progress Reports".

The textual proposal was supported by **Canada**, who added further that the dialogue topics should be left to the TEC to decide. [Trade barriers and IPR

were also listed as one of the areas to be included in the global dialogue topics].

In response, **India** said that it is hard to see how this [issue] could be deemed irrelevant to the TIP, adding further that while each country has its own experience with developing and using climate-related technologies, it highlighted that developing countries face substantial, material barriers to accessing, deploying, and adapting such technologies, barriers that go beyond issues of policy or enabling environments.

“Intellectual Property Rights are one such barrier....The development of technologies is made possible in developed countries by many years of unfettered and unrestricted use of the global carbon budget, leading to the warming we are experiencing today. The enablers in developed countries are not just a matter of policy and governance but the actual availability of public finance, support for research and development, all in turn also made possible through the availability of infrastructure. Enabling environments are therefore not abstract and intangible governance and policy structures but the material availability of the means to develop technologies,” stressed **India**

This remained a major point of contention throughout the informal and ministerial consultations. Para 8 of the adopted decision, which listed the key elements that the TIP should include, saw the issue on trade barriers and IPRs removed.

The final adopted text reads:

- a) *“Addressing challenges to implementing the technology priorities of developing countries at different stages of the technology cycle and challenges identified in the first periodic assessment of the Technology Mechanism, including through the exchange of information on enablers, good practices, challenges and lessons learned”;*
- b) *“Strengthening national systems of innovation as well as enabling environments, such as policy and regulatory environments, for technology deployment and diffusion, while ensuring research, development and demonstration continue to inform effective technology implementation, including for Indigenous and endogenous technologies”;*

c) *“Providing support to developing countries, including national designated entities, for integrating their climate technology priorities into national policies, programmes and projects”;*

d) *“Building capacity for the development of project concept notes and the preparation of fundable projects, and fostering matchmaking and partnership-building to enhance access to support for climate technology implementation by leveraging the resources and expertise of relevant bodies and entities”;*

e) *“Mobilizing both financial and non-financial resources to enhance the support provided to the Technology Mechanism for supporting the implementation of the Paris Agreement”.*

FINANCIAL SUPPORT FOR TIP TO ENSURE ALL DECISIONS ARE IMPLEMENTED

Financial support for the TIP remained another issue of contestation between developed and developing countries.

Chile proposed having a standalone paragraph in the decision text to transmit specific guidance to the Financial Mechanism (FM) and its operating entities during the first informal consultation on 11 November. The proposal led to a “Placeholder for a draft decision of the COP regarding guidance to the operating entities of the Financial Mechanism” in the second iteration of the text. However, due to opposition from developed countries, the details of this proposal never saw the light of day.

Throughout the informal consultations, the **G77 and China** and many sub-groups highlighted the persistent gaps and challenges developing countries face and the importance of predictable and enhanced financial support to fully realising technology development and transfer.

However, developed countries largely argued that support comes in various forms and not solely through the operating entities of the FM. Hence, for them, the issue is not about providing guidance to the FM, and they suggested that the TEC and CTCN identify opportunities across different financial institutions. Developing countries, however, felt that this is not sufficient due to longstanding concerns over the governance and ability of these institutions to promote coherence, consistency and responsiveness to developing country needs for

action and support with respect to technology transfer.

The final agreed language in the TIP decision in this regard is in para 18 which read: Parties agreed to “invite the operating entities of the Financial Mechanism and the Adaptation Fund to support the implementation of the technology implementation programme, within their mandates.” (This para was watered down from an earlier draft version where it explicitly invites the operating entities of the FM to include “by incorporating financing for the elements ... [referring to the key elements of the TIP] into their replenishment processes”.)

Further, the decision in para 19 also requests “the CTCN, with the support of the operating entities of the Financial Mechanism and interested partners, where applicable, to undertake demand-driven programmatic capacity-building efforts in support of the implementation of the elements referred to in paragraph 8 above, and to report on such efforts as part of its annual reports....”.

Another point of contention concerned a draft text that would “invite developed country and other Parties in a position to do so, as well as multilateral development banks and other financial institutions, United Nations entities, private sector entities and philanthropic organizations, to provide support for work under the technology implementation programme”.

The **EU** said it would like to replace “Parties in a position to do so” with “encourages developing countries to make contributions, through South-South cooperation, on a voluntary basis”, which it argued was an “agreed text from Baku” [from COP 29].

The **LMDC** rejected this, saying that this seriously deviated from the differentiation of responsibilities for contributions as stipulated in Article 9.1 of the PA, which is that developed country Parties shall provide financial resources to assist developing country Parties. (This is based on the view that there is no equivalence between the obligations of developed countries to provide financing under the Convention and PA and the voluntary support that developing countries provide to each other through South-South

cooperation.)

The final agreed language in para 22 reads, “*Invites* developed country Parties and *encourages* other Parties, on a voluntary basis, as well as multilateral development banks and other financial institutions, United Nations entities, private sector entities and philanthropic organizations, to provide support for work under the technology implementation programme.”

HIGHLIGHTS OF OTHER MAIN ASPECTS OF THE DECISION

On duration and review of the TIP, the **G77 and China** in response to an earlier draft text for the TIP to conclude in November 2027, said that a 2-year implementation for TIP is too short. It reiterated that it was in Article 10.1 of the PA that “Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions”.

On the contrary, **Japan** suggested to “revisit the TIP in 2027 and discuss whether there is a need to continue the activities under TIP or if it needs to be amended”. This was supported by the **EU** and the **UK**. **Australia** said the programme should respond to the first GST and conclude in 2028, where the second GST will take place.

The final decision in para 24 reads, “Decides that the implementation of the technology implementation programme shall commence immediately after the seventh session of the CMA and shall be reviewed at the sixteenth session of the CMA (2034) with a view to deciding on its continuation taking into account the outcomes of the third global stocktake”.

Therefore, the TIP will have a nine-year duration, commencing immediately after Belém and undergoing a review in 2034, an arrangement that aligns with developing countries’ preference for a long-term programme.

In the para 9 of the adopted decision, Parties agreed to “request the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN) to incorporate, as

appropriate, the elements [of the TIP] referred to in paragraph 8...into their workplans and programmes of work respectively, as well as into the joint work programmes of the Technology Mechanism, which should also inform the monitoring and evaluation of their activities”.

Para 10 requested that TEC and the CTCN “to include information on actions taken to implement the technology implementation programme in their joint annual reports to the CMA.”

On modalities of the TIP, para 11 of the decision “requests the Technology Executive Committee and the Climate Technology Centre and Network, with the support of the secretariat and interested partners, in consultation with the Chair of the Subsidiary Body for Implementation, and with the participation of a broad range of stakeholders, to convene global in-session dialogues at the first session of the Subsidiary Body for Implementation each year, starting in 2027, to address the element referred to in paragraph 8(a) above”.

There is also a call for submissions in para 12 which “*Invites* Parties, observers and other non-Party stakeholders to submit via the submission portal, annually, by 1 July, starting in 2026, suggested topics in line with the technology implementation programme to be discussed under the global dialogues...”

According to the decision in para 13, the topic of the global in-session dialogues will be decided by TEC, taking in account the submissions, the key messages and recommendations contained in the joint annual reports of TEC and CTCN, and also the challenges identified in the most recent periodic assessment of the Technology Mechanism. The TEC is also tasked to prepare a summary report on each global in-session dialogue, which will be included in its annual report to the CMA as per para 14 of the decision.

Further, in para 15, Parties agreed to convene a high-level ministerial dialogue on technology development and transfer at CMA10 in November 2028.

The decision in Para 16 also requests “...the CTCN, in collaboration with the TEC and with the support of interested partners, to convene regional dialogues in conjunction with its regional forums for national designated entities, starting in 2027, subject to the availability of resources”. In addition, the CTCN is also requested to ensure that the regional dialogues are thematically aligned with the topic of the respective year’s global in-session dialogue and to prepare summary of the regional dialogues for inclusion in the annual report.

Developed countries including the **UK, Norway**, and the **EU**, preferred to have the two constituted bodies, the CTCN and TEC, as the responsible body to implement TIP and expected them to play a major role in the governance of TIP. Developing countries, on the other hand remained wary about the persistent challenges faced by TEC and CTCN, which needs to be addressed, instead of burdening them with further guidance.

Papua New Guinea (PNG) made a remark on the funding of the TIP during one of the final informal consultations, saying that, “this [referring to the proposed modalities of TIP] is putting a lot of pressure and responsibility on the CTCN, and doesn’t come necessarily attached with resources towards these extra services that are expected....When we are adding all these actions and capabilities to the TIP, we should consider how it will carry them out and keep funding question in mind.”

Chile for G77 and China added that, “This is an essential question regarding the funding of the TIP – supported inter alia by the governing entities....Significant funding for TIP will come from the operating entities of the Financial Mechanism.”

The coming years will be critical to ensuring that the TIP is able to fully deliver on its technology development and transfer objectives.