



Deadlock over Technology Implementation Programme: Deferred to Brazil

July 9, Delhi (Radhika Chatterjee): Discussions over the modalities of the Technology Implementation Programme (TIP) reached a deadlock during the climate talks that ended on 26 June in Bonn, Germany.

After seven informal consultations on the matter, presided over by co-facilitators, **Elfriede More (Austria)** and **Omar Alcock (Jamaica)**, and three iterations of texts, discussions on the TIP came to a standstill when Parties expressed diverging views on which text to forward for consideration at the next meeting of the UNFCCC's Subsidiary Bodies in Belem, Brazil. Consequently, rule 16 of the UNFCCC's draft Rules of Procedure was applied and the TIP agenda item was transmitted for consideration again in Belem, ahead of COP30 in November, 2025.

[Rule 16 of the UNFCCC's draft Rules of Procedure provides that *"Any item of the agenda of an ordinary session, consideration of which has not been completed at the session, shall be included automatically in the agenda of the next ordinary session,..."*.]

With no procedural conclusions reached or any informal note from Bonn, the TIP negotiations will have to start afresh in Belem.

[The mandate to establish the TIP stems from para 110 of decision 1/CMA.5 from Dubai under the global stocktake (GST) that provides as follows: *"Decides to establish a technology implementation programme, supported by, inter alia, by the operating entities of the Financial Mechanism, 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..."*]

[At COP29 held in Nov. 2024 in Baku, Parties had decided to launch a process for establishing the TIP through [decision 18/CMA.6](#). The work related to finalising the modalities of the TIP was to be done at the Bonn session].

Developing country groupings and countries like the **Like-minded Developing Countries (LMDC)**, the **Arab Group** and **China**, showed a preference for forwarding the [Baku text](#) [from last year] on this topic, while developed countries like the **European Union (EU)**, **United Kingdom (UK)**, **Japan**, and **Norway** wanted to forward the [text](#) that was produced at the Bonn session to Belem. The **African Group** and **Least Developed Countries (LDCs)** proposed taking forward both the Baku and

Bonn texts to Belem, while the **Independent Alliance of Latin American and Caribbean States (AILAC)** expressed a preference for the Baku text, but also said that it remained flexible on this issue.

Expressing its disappointment with the text released on June 24, the **G77 and China** said when “a group of Parties says they want ‘A’ to be reflected, and another group say they don’t want ‘A’ to be reflected ‘A’ is put in brackets to reflect the divergence”. The G77 expressed that the co-facilitators were favouring the developed countries in relation to the text they produced and that developing countries “are not being listened to.”

The G77 and China was referring to the exclusion of all the topics it had proposed for the global dialogues under the TIP. Issues like addressing trade barriers, including the intellectual property rights (IPRs) regime, and financial barriers in accessing technology by developing countries as dialogue topics were missing in the text.

Key areas of divergences at the Bonn session were:

- the bodies that should be in charge of the TIP’s implementation, i.e. whether it should be through the Subsidiary Bodies (SBs) or through the Technology Mechanism (TM) like the Climate Technology Centre and Network (CTCN) and Technology Executive Committee (TEC);
- what the TIP’s implementation should focus on: delivering on technology priorities of developing countries as identified by them in their technology needs and assessments (TNAs) and technology action plans (TAPs) and addressing challenges faced by the TM, or implementing the outcomes of the first GST;
- the topics that should be discussed at the global dialogues under the TIP, especially whether or not trade barriers and the IPR regime should be addressed;
- whether sustainable finance taxonomies should be incorporated in the TIP’s implementation and the role of Article 2.1.c of the Paris Agreement (PA) in relation to the TIP; and if Non annex I countries (developing countries) should be asked to

contribute financial resources for TIP’s implementation.

Developing countries led by the **G77 and China** wanted the TIP to be implemented through the SBs, and for focus on delivering the technology needs identified by developing countries in their TNAs and TAPs to address their adaptation and mitigation needs. They wanted this done through the provision of financial support for implementing TNAs and TAPs through the operating entities (OEs) of the Financial Mechanism (FM) of UNFCCC. They also wanted the challenges faced by the TM to be addressed instead of burdening them with further guidance.

In terms of dialogue topics, they were keen on discussing trade barriers and IPRs among others, and wanted to see a report come out of these dialogues which would be considered by the Parties to the Paris Agreement (CMA) for a decision.

China expressed that TIP should not be viewed as a 3 to 5 year programme but should be considered as a long-term process under UNFCCC. It said if Article 2.1.c of PA was to be included in TIP’s work, it should be linked to Article 9.1 of PA. [Article 2.1.c refers to “*Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development*” while Article 9.1 refers to developed countries providing finance to developing countries for mitigation and adaptation.]

Developed countries including the **EU**, and **UK** wanted to see a greater role for the CTCN and the TEC in TIP’s implementation. They along with **Japan** and **Norway** wanted the TIP to focus on implementation of GST the outcomes, particularly paras 28,29, and 30 [relating to global mitigation efforts and related technologies]. They focused on imposing targets related to renewable energy in a top-down approach. They did not want to discuss trade barriers and the IPR regime for accessing climate technologies because they said that these issues were already being discussed at the World Trade Organisation (WTO) and can therefore not be discussed under UNFCCC.

The EU wanted to incorporate sustainable finance taxonomies in the TIP’s work and said Article 2.1.c

had an important role to play in this context. It also proposed that Non annex I countries [developing countries] should be asked to contribute to the implementation of the TIP.

Highlights of interventions

Chile for the **G77 and China** expressed a preference for having global dialogues under the TIP on topics that are relevant to its objective. They asked for a report from these dialogues which would then be considered by CMA for a decision to be adopted by Parties. Calling TIP an “implementation product”, it said the programme has two main objectives: supporting developing countries for the implementation of their technology priorities identified by them and addressing the challenges of the Technology Mechanism [as identified in the first periodic assessment of TM]. It said, “what the TEC and CTCN need from TIP is more help and resources, not additional work.” It voiced a preference for acceleration of implementation and increasing the capacity of developing countries towards this. It said organizing the dialogues under the SBs would give a “higher standing” to them for making “informed decisions on those topics” at the political level.

The G77 and China also emphasized the need for discussions on “addressing trade barriers to and enablers for technology development and transfer, including IPRs and policies” in the global dialogues. It said the question is about the effect that certain measures have on developing countries’ access to technology. This dialogue topic would discuss “trade barriers that affect technology transfer and not things that are being discussed in other rooms [in an apparent reference to mitigation efforts].” Adding further, it said technology transfer is “well within the mandate of the Convention.” It said developed countries “have well developed IPR regimes and are able to protect their technology and benefit from it. Developing countries don’t have that and suffer from the lack of capacity.” It highlighted that the need for aligning IPR regime with climate change has also been pointed out in Intergovernmental Panel on Climate Change (IPCC) reports and said “we are trying to use the best available science” on this issue.

It strongly rejected the EU’s proposal of asking Non annex I countries to finance technology transfer to developing countries. On the issue of including references to paragraphs from GST outcome, it pointed out there were many paragraphs that are relevant to the work of TIP and stressed the need for enhancing means of implementation including finance, capacity building, and technology for all developing countries, including LDCs and Small Island Developing States (SIDS) in a way that aligns with national circumstances.

China said the TIP should consist of two main pillars, “ First, the implementation part shall further streamline the work of the TM with other mechanisms, arrangements and initiatives under and beyond the UNFCCC, including through the enhanced engagement with financial institutions, such as the OEs of the FM and multilateral development banks (MDBs), to assure strengthened support at different stages of the technology cycle. Second, the barrier-solution part shall become operationalized through a series of global technical dialogues, focusing on general issues including how to promote the effectiveness and efficiency of the TM and its synergy with other arrangements, how to secure access to financial support, and the impacts and possible solutions to unilateral measures on technology, as well as regional dialogues, which focus more on specific issues at the regional or national level, including priority technologies, barriers and enablers identified by developing countries in their biennial transparency reports (BTRs) and communications. We would like to ask the secretariat to prepare summary reports for each global dialogues, and ask the TEC and the CTCN to report progress at the regional level in their joint annual report.”

To make “outcomes of TIP more concrete and measurable”, it proposed the setting up of “quantifiable goals as we elaborate the TIP, and indicators to monitor and evaluate its performance” and proposed this language: “Decides to elaborate a strategic and ambitious goal for the programme to make the outcomes more concrete, including the establishment of a global technology pool covering economy-wide sectors and all greenhouse gases, and technologies needed to meet the global adaptation goal by 2030; and facilitating the establishment of a friendly, open enabling environment for climate technology

transfer and cooperation by 2035.”

It also said that “TIP should be reviewed and updated along with the GST cycle, and take the subsequent periodic assessment of the TM and other outcomes into consideration.”

It pointed out that the TIP “is not a work programme” but an “implementation programme. Its duration doesn’t have to be restricted to 3-5 years. We are not creating a new institution outside UNFCCC.” It stressed that the TIP should not be “based on the outputs of the GST, particularly paras 28,29 and 186” of the GST decision”. It said further that the TIP “should be guided by the technology framework [as provided in the PA] to strengthen the TM, not to implement specific GST outcomes, but to facilitate the achievement of ambition of technology development and transfer” and referred to Article 10.1 of the PA.

Strongly rejecting EU’s proposal of encouraging developing countries in a position to do so to make contributions to the work of TIP, it said this issue was outside the mandate of technology room and should be discussed by finance negotiators. “If we have to talk about this issue...we should follow the language used in the UNFCCC and PA. We have ‘developed’ and ‘developing’ countries, or we can define Annex I and Non-Annex I country Parties...when we add text we should be more precise and serious,” it said further.

It also disagreed with including a reference to sustainable finance taxonomies because it felt such taxonomies exist only in some countries and therefore it is not convenient to have them. Regarding the inclusion of Article 2.1.c of the PA in the text, it said that should be accompanied by a reference to Article 9.1 of the PA.

Saudi Arabia for Arab group said, “responses to climate change must be coordinated with social and economic development in an integrated way, and adhere to the principles of common but differentiated responsibilities and respective capabilities (CBDR – RC) , ensuring that no adverse impacts arise from such actions on ongoing development.” It said the “TIP should not be based on outputs from the GST decision...The only exception is paragraph 110 [which establishes the TIP].” It said the “push for targets of tripling

renewable energy is not a luxury” that developing countries have, “due to inadequate provision of means of implementation,” and that developed countries must take the lead, given that developing countries have to address their food security and development priorities.

It said further that the “TIP must fully align with, and build upon the nationally defined priorities of developing countries, which are expressed in the nationally determined contributions (NDCs), national adaptation plans (NAPs), and TNAs.” It asked for anchoring these technologies in TIP: “Carbon capture, utilization, and storage, clean hydrogen, early warning and flood management systems.”

It also said that the “TIP must not promote or impose specific technologies in a top-down manner, particularly when such technologies may not align with the priorities or needs of developing countries. This ensures that the process remains non-biased and equitable for Parties involved.” It said further that the TIP should “actively identify and address existing barriers to technology transfer. These barriers may include unilateral measures that restrict access to essential technology and the financial resources needed. Additionally, trade, regulatory, and IP-related challenges often hinder the flow of necessary technologies, or the development of indigenous ones.”

It also said that it is incorrect to think of sustainable finance taxonomies as a “tool to attract financial resources to the technology mechanism or for transfer of technology” because different regions have different taxonomies, which “don’t speak to each other yet.” It said any kind of “dictation of priorities is not in line with differing national priorities and contradicts the spirit of multilateralism.” It rejected the EU’s proposal to redefine country categories by incorporating the category of “countries in a position to do so” in the context of contributing finance for TIP.

The **African Group** called the TIP a “necessary progress on Poznan Strategic Programme (PSP) [on technology transfer] which enabled us to develop TNAs...The TIP should foster practical support for technology priorities identified in our TNAs.” It said the TIP should address technology

priorities identified by developing countries and challenges that the TM face as identified in the first periodic review. It said TIP was important for implementation of NDCs and NAPs.

Uganda for **LDCs** said it hoped that TIP could address challenges faced by developing countries in implementing their TNAs to address their mitigation and adaptation needs. It said the “CTCN has been supporting developing country requests to undertake assistance...But the outcomes need to be implemented” which the CTCN cannot do. It said developing countries face several challenges including financial barriers. It said the TIP “should address the inadequacy of functions of the TM, inadequacies of resource mobilisation and those of outcomes of TNAs and technical assessments.” It said the technology that is addressed by TIP “should be demand driven” and “should address the priorities of developing countries.” It asked for more clarification on what enhanced engagement of the private sector and academia would mean for TIP. It also asked how the TIP would be integrated in TM’s activities and how it would be separated from ongoing technology activities. It also asked for clarification regarding the issue of implementing GST outcomes through TIP. It asked for deleting references to specific technologies like clean hydrogen because many technologies are left out if Parties decide to mention a few.” A similar point on the need for excluding reference to any specific technologies in the text was made by **Grenada**.

Seychelles for **Alliance of Small Island States (AOSIS)** said it expected the TIP discussion “to focus on development and transfer of technology prioritised by SIDS and accelerate their deployment.” It said there is no “place to discuss the mandate of the GST” in the TIP.

AILAC said robust technology development and transfer is a cornerstone of the PA. It said it is important to “address systemic barriers to help technology development and transfer and implement TAPs.” It said key topics it would “want to include in TIP are: national and endogenous capacities through national systems of innovation, financing, technology like Artificial intelligence.” It laid emphasis on acceleration of implementation of technology needs as well.

Brazil said two elements were at the heart of TIP. One, the “implementation accelerator to expedite the implementation of technology priorities identified by developing countries”. Two, to make sure support is provided to developing countries in terms of their national systems of innovation and “that they are equipped with robust systems of implementation and develop technology that meets their needs.”

The **EU** said two paragraphs of the GST outcome that are “particularly important for climate technology” are paras 28 [on global mitigation efforts] and 110. It said para 28 provides “a clear indication of which technology could be important for” reducing greenhouse gas emissions (GHG) and that the TIP should contribute to its implementation in line with 1.5 °C pathways. It said tripling renewable energy, doubling energy efficiency should be mentioned as examples of reducing GHG emissions. It said para 110 provides that TIP would be supported “inter alia by the operating entities of the Financial Mechanism.”

It said the CTCN and TEC should play a “major role” in TIP and requesting the SBs to convene the global dialogues would not be “an efficient work modality.” It said the CTCN should “strengthen adoption of capacities to develop enabling environment, foster national climate technology, indigenous technology, develop endogenous technologies” and mobilise finance from a “wide variety of sources” including private, public, development finance institutions and philanthropies. It also mentioned north south, south-south, triangular technology cooperation and programmatic approaches that are multisectoral and thematic in this context.

It asked for a clear end date for the dialogues and TIP’s work, expressing them to end in 2026. It said a focus on enabling environment would help in having an impact before 2030. The purpose of this would be to bring a “shift” in public policies and “progress in market access” and mentioned sustainable finance taxonomies, private sector, MDBs and philanthropy in this context.

Responding to China’s proposal on including quantifiable goals in TIP’s work, it said “we could use the goals of PA as goals of the TIP, in particular net zero goals, global goal on adaptation in a

quantifiable form.” Elaborating further, it said impact of outcomes of the TIP could be measured through a “monitoring and evaluation system”. It pointed out existing monitoring systems under the TM and FM like the Global Environment Facility and the Green Climate Fund as “good starting points” and said there was “no point of creating new bodies.” On China’s proposal to establish a global technology pool, it said the TEC and CTCN already have joint work on databases and that “it is redundant to propose more work on technology pools.”

On the issue of discussing impacts of trade measures, it said that was “already under consideration of WTO” and therefore it cannot be considered under UNFCCC.

It said TIP “should have a workstream on sustainable finance taxonomies to channel technology implementation,” and said this workstream should “contribute to implementation of Article 2.1.c of the PA.” It also proposed “calling on Non-annex I Parties in a position to do so to provide financial resources for the implementation of TIP.” It later proposed a change to this language and asked for encouraging “organisations in a position to do so to make contributions to the work of TIP.”

Canada and Japan had positions similar to that of EU.

The **UK** said TIP is “an emanation of GST” and its decision should implement GST outcomes “most pertinent of which are contained in para 28, 29 and to some extent in para 30.” Regarding the objective of TIP, it said “it is not necessarily related to para 110 of the GST decision. We are Parties to the PA and we can choose to broaden” the objective. It insisted on the importance of implementation of GST outcomes.

It also said that the TIP “should carefully study and prioritize the needs of Parties” and address the question of how to deliver through the TM and the FM, and that the TIP is “under the PA, not the Convention.”

On EU’s proposal to include a monitoring and evaluation system for the TIP, it said “it was premature to discuss” that. It also said that the TIP

is “not the right place to address trade barriers or IPRs... those are more relevant and appropriate for discussions under the WTO. They are already discussing these [there]. The UNFCCC is not the right place to discuss issues related to trade, even trade in technology.” It also wanted to retain the text option which encouraged “developing country Parties in a position to do so to make contributions to the work of the TIP, including through South-South cooperation, on a voluntary basis.”

Norway said the decision for TIP was made in the GST outcome and that everything that is done on TIP should flow from that. It said TIP “must fit within the PA architecture; this includes the technology framework.” It said relevant GST paras must be reflected in the TIP and that it should deliver on paras 28 and 29 of the GST decision. It said programmes have a specific meaning under the PA. Drawing a comparison with Mitigation Work Programme and Just Transition Work Programme, it said, “the implementation work we do in TIP should be in the same frame that we have done for those two programmes. [They should have] 5 years duration with a possibility of review.” It also wanted the TIP to follow the GST cycle. On the question of discussing trade barriers in accessing technology in the global dialogues, it said “trade matters are [being] discussed in the response measures room. We don’t want to duplicate topics.”

South Korea said, “if para 28 of the GST outcome is to be included, then it should be para 28 (e) which specifically deals with mitigation technologies.” It also asked for including para 55 of the GST outcome “for a balanced approach” as that para addresses adaptation. It asked why paras 28 (a) and (d) should be included in TIP. It said “these are energy related climate actions. We think these can be deleted.” It also called for sustainable finance taxonomies “a good approach” for climate technology financing but that implementation of such taxonomies would be “very difficult” in different contexts. It said instead of singling out developing countries by encouraging them to contribute [financial resources] to TIP’s work, separate directives should be given to developed countries, developing countries and others who are able to do so. Finally, like other developed countries, it did not want trade barriers and IPRs to be discussed in TIP.

[Paras 28 (a), (d) and (e) of the GST outcome read:
“(a) *Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030;*

(d) Transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner,

accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science;
(e) Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production;”]