

**Subsidiary Body for Scientific and Technological Advice and
Subsidiary Body for Implementation**

**Chairs' summary, informal technical expert meeting on tools and methodologies
for assessing the impact of the implementation of response measures,
18th May 2021**

Background

The Bureau at its meeting on 25 February 2021 requested the presiding officers to make available a plan of upcoming activities in preparation for a successful COP 26 in November 2021. Following this guidance, the Chair of the Subsidiary Body for Scientific and Technological Advice (SBSTA), Tosi Mpanu Mpanu, and the Chair of the Subsidiary Body for Implementation (SBI), Marianne Karlsen, convened, under their authority, a series of activities including informal consultations, technical expert meetings and other events.

The informal technical expert meeting on tools and methodologies for assessing the impacts of the implementation of response measures was convened on 18 May 2021.

Decision 7/CMA.1 mandates the forum on the impacts of the implementation of response measures to convene under the subsidiary bodies. The adopted workplan for the forum on the impact of the implementation of response measures and its KCI contained in annex II to decisions 4/CP.25, 4/CMP.15 and 4/CMA.2 requires the forum to implement a set of activities at its meetings using modalities such as receiving input from experts, practitioners and relevant organizations, and building awareness and enhancing information-sharing through the exchange and sharing of experience and best practices.

As a result of the postponement of SB 52 to 2021, these workplan activities have not yet been formally implemented. The objective of the informal technical expert meeting was to support the implementation of the six-year workplan, providing an informal space where Parties, experts, practitioners, and relevant organizations could hold technical discussions related to the workplan activities.

The Chairs of the SBSTA and the SBI facilitated the informal technical expert meeting and this summary has been produced under their authority. The discussions held aimed to complement the work already undertaken by the KCI on this topic. This summary aims to capture the discussions held and insights provided by experts during this meeting, specifically with regard to best practices, limitations, opportunities and challenges associated with existing tools and methodologies, so that these can be applied in the domain of response measures and taken into account by the forum while delivering on its six-year workplan. It is informal in nature, has no status and not exhaustive; it does not attempt to provide a record of all of the views expressed during the meeting, nor indicate the level of support for any of the views expressed.

Summary of the informal technical expert meeting

The Parties indicated their commitment to making progress on this matter. Any intervention was generally in line with the guidance included in the concept note by the Chairs of the SBSTA and the SBI to share experience and best practices focusing on limitations, opportunities and challenges associated with existing tools and methodologies.

Tools and methodologies

- A variety of tools and methods for assessing the impact of the implementation of response measures were presented by experts during the meeting.
- Experts on the panel shared their experience, challenges and lesson learned based on their work with four different tools and methodologies and their application to different case studies.
- The range of tools and methods presented included qualitative, quantitative and mixed methods.
- The Wuppertal Institute for Climate, Environment and Energy presented the Gender Impact Assessment (GIA) methodology developed by the Government of Germany after many years of research in many European countries, which facilitates concrete analyses in order to create more political options and evaluations at different levels of strategies, programmes, projects or concrete measures
- This tool is intended for industrialized states for international cooperation purposes with the Global South and has already been applied to many national key climate strategies by the Commission of the German Environment Agency, including the long-term low-emission development strategy.
- The regular application of this tool includes several steps each containing a set of questions for each of the seven gender dimensions. Gender impact assessments are used to determine, for example, whether there are scientific data available for examination and whether androcentric findings are adequately considered. In the absence of data, assumptions are made on the basis of impact chains. One of the most important goals of this methodology is to derive more adequate options through gender expertise interviews with experts. It is also supported by workshops, conferences and committees at the expert level to facilitate the formulation of specific, constructive modifications to strategies, if relevant.
- The European Roundtable on Climate Change and Sustainable Transition presented a methodology developed over the last five years for assessing the macroeconomic impact of international response measures such as carbon tax, CORSIA, subsidies, border carbon adjustments and cap and trade schemes.
- The methodology was initially applied to undertake assessments of the impact of response measures on Chile. It is currently being applied to Ghana. The methodology includes identification of country characteristics, followed by identification of important economic sectors which are potentially vulnerable to international response measures, identification of response measures that could potentially affect these sectors and, finally, performance of the assessment itself using a modelling tool.
- The results demonstrated, among others, that a CO₂ tax reduces the export prices received by producers by increasing transport costs, but has limited

impacts on GDP. The results also demonstrated that CORSIA leads to reduced spending by travellers in the retail sector. His presentation covered challenges faced in the application of the methodology, for instance limited availability of disaggregated sectoral data on GHG intensities, employment and value added.

- A professor from the Humboldt University of Berlin and University of Hohenheim, presented the results of a pilot project assessing the impacts of achieving a 20% reduction in global emissions through three types of response measures: carbon tax, energy input tax and input quantity reduction. The assessment was conducted using linked global analysis and single country analysis for Senegal and Kenya, chosen owing to the availability of good data for these countries. These studies were static, i.e. they examined how economies might respond to a particular shock without going through any other transition paths. Both models are computational general equilibrium (CGE) models. The study included assessment of impacts on GDP, trade, commodity demand, factor return, and rural and urban household income.
- The results of the global model for West Africa showed three policies have negative impacts on global prices, except for coal, mining and gas, different depreciation in interest rate and minimal changes in oil and gas prices. The major macroeconomic impacts were a small reduction in real GDP, some changes in imports and exports and a change in commodity demand. Negative impacts related to wage rates, mainly for poor households, and increases in return to land and agriculture, which may not be ideal for low-income countries. The study also showed how the impact of different response measures can vary radically depending on the response measure taken.
- The presentation also presented an overall picture of whether implementing particular response measures brings a country closer to or further away from the SDGs, i.e. highlights the positive and negative impacts of response measures.
- The Anderson-Interface Chair in Natural Systems at Georgia Tech University presented the use of an atmosphere pollution model to assess the impacts of power plants on the health of people living nearby. In her presentation, it was mentioned that states used to prefer running operate low-emitting power plants with high running costs. However, by using an atmosphere pollution model the cycle of operation of coal-based and gas-based power plants was altered during different times of the year, resulting in a substantial reduction in emissions. This had significant impacts on people's health. This approach can be used if countries are considering closing their power plants or considering how to operate their second-best power plants.

Discussion

The discussion revolved around criteria for selecting countries, experience related to data collection, assessing both positive and negative impacts, usability of methodologies and tools and their adaptability to other countries and regions, among other things. The following points emerged from the discussion:

- Assessing the impact of the implementation of response measures enables countries to maximize the positive and minimize the negative impacts of response measures.

- Initial studies demonstrate undertaking assessments, create awareness of use of tools for assessment and catalyse more work in this area.
- The studies presented are very relevant and informative. Presentation of and discussion on these studies in the KCI and forum should be explored.
- There is a big risk of feminizing climate responsibility in the strategies being developed by countries.
- There should be civil rights for people to act sustainably. There should be a bottom-up approach from governments in order to ensure better conditions within households.
- The transport sector strategy can be seen as a valuable resource. for instance, Indonesia created women-only wagons in regional trains to address the two gender dimensions i.e. distribution of resources and male violence in public spaces.
- The cost of gender impact assessments will fall as gender becomes more mainstreamed and institutional capacity is increased. Gender considerations in policy analysis are important, and in particular gender dimensions should be considered as an integral, rather than additional, part of assessments. Further, executives need to be granted the time to undertake this work.
- Undertaking assessments is the most challenging part of methodology presented by ERCST and the complexity of undertaking assessments increases with the number of sectors impacted by response measures, the number of trading partners and the availability of data.
- Data availability is one of the key challenges in conducting impact assessments. The absence of comprehensive and detailed national account data substantially limits the quality of analyses and the countries that can be analysed in this way.
- Methodologies need to be adjusted according to data availability. For example, Chile has much more disaggregated data in comparison to Ghana and called for a change in the methodologies for the two countries.
- The models have limitations and weaknesses. For instance, if comparative static assessment is carried out, the transition paths that individual countries and the global economy may follow are not examined.
- The positive impacts of implementation of response measures should be highlighted and communicated with policymakers and citizens to enhance the acceptability of mitigation policies.
- One of the challenges also relates to the provision of domestic funding and mechanisms to support just transition.
- Result indicators for just transition are yet to be included in these impact assessment studies.
