



**Katowice Committee on impacts of the  
implementation of response measures**

28 February 2022

**Inputs to the technical assessment component of the first  
global stocktake on the impacts of the implementation of  
response measures**

**A synthesis report**

**I. Introduction**

**A. Mandate**

1. At its third session, recalling decisions 19/CMA.1 and 4/CMA.2, the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) requested the Katowice Committee of Experts on the Impacts of the Implementation of Response Measures (KCI) to submit by February 2022, with the assistance of the secretariat, a synthesis report reflecting the relevant work of the forum on the impact of the implementation of response measures (hereinafter referred to as the forum) and its KCI as an input to the technical assessment component of the first global stocktake.<sup>1</sup>
2. In accordance with decision 19/CMA.1, paragraph 6(b)(i), the global stocktake may take into account, as appropriate, efforts related to the work that address the social and economic consequences and impacts of response measures.
3. In accordance with decision 19/CMA.1, paragraph 24, the CMA invited the relevant constituted bodies and forums and other institutional arrangements under or serving the Paris Agreement and/or the Convention to prepare for the technical assessment, with the assistance of the secretariat, synthesis reports on information in their areas of expertise.
4. In accordance with decision 4/CMA.2, annex II, table, activity number d, the forum prepares information for the technical assessment component of the global stocktake related to the impacts of the implementation of response measures<sup>2</sup> and forwards an outcome document for consideration in the technical assessment of the global stocktake.

**B. Scope of the synthesis report**

5. In accordance with decisions 19/CMA.1, 4/CMA.2 and 23/CMA.3, this report synthesizes the work of the forum and its KCI since the adoption of the Paris Agreement, guided by the questions prepared by the Chairs of the subsidiary bodies,<sup>3</sup> related to:
  - (a) The current state of, and progress towards enhancing understanding and addressing the impacts of, the implementation of response measures;
  - (b) Good practices and challenges in understanding and addressing the impacts of the implementation of response measures;

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<sup>1</sup> Decision 23/CMA.3, para. 13.

<sup>2</sup> Decision 19/CMA.1, paras. 8 and 24.

<sup>3</sup> The revised non-paper on preparing for the first global stocktake, prepared by the Chairs of the subsidiary bodies, is available at [https://unfccc.int/sites/default/files/resource/REV\\_Non-paper\\_on\\_Preparing\\_for\\_GST1\\_forSBS\\_15Sept.pdf](https://unfccc.int/sites/default/files/resource/REV_Non-paper_on_Preparing_for_GST1_forSBS_15Sept.pdf).

(c) Opportunities to further enhance understanding and address the impacts of the implementation of response measures.

## **II. Current state and progress towards enhancing understanding and addressing the impacts of the implementation of response measures**

### **A. Efforts towards enhancing understanding and addressing the social and economic consequences and impacts of response measures**

6. Paragraph 15 of article 14 of the Paris Agreement recognizes that Parties may be affected not only by climate change but also by the impacts of the measures taken in response to it, and that Parties shall take into consideration, in the implementation of the Paris Agreement, the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties.

7. Parties have been working under the forum to enhance understanding and address the impacts of the implementation of response measures. In addition, the KCI has supported the work of the forum to perform its functions as agreed by decision 7/CMA.1 and to implement the workplan as agreed by decision 4/CMA.2.

8. The activities that contribute to enhancing the understanding and addressing the impacts of the implementation of response measures can be grouped into four categories:

(a) **Knowledge products** to enhance capacity and build awareness through technical papers, case studies, guidelines, etc.:

(i) A technical paper containing guidance to assist developing country Parties to assess the impact of the implementation of response measures, including guidance on modelling tools;<sup>4</sup>

(ii) Technical paper on “Enhance capacity and understanding of Parties, through collaboration and input from stakeholders, on the assessment and analysis of the impacts of implementation of response measures to facilitate the undertaking of economic diversification and transformation and just transition” (hereinafter referred to as the technical paper on capacity-building);<sup>5</sup>

(iii) A technical paper on “Facilitate the development, enhancement, customization and use of tools and methodologies for modelling and assessing the impacts of the implementation of response measures, including identifying and reviewing existing tools and approaches in data-poor environments, in consultation with technical experts, practitioners and other relevant stakeholders” (hereinafter referred to as the technical paper on tools and methodologies);<sup>6</sup>

(iv) A database for existing tools and methodologies for modelling and assessing the impacts of the implementation of response measures (hereinafter referred to as the database);<sup>7</sup>

(b) **Workshops**<sup>8</sup> to enhance capacity and build awareness through the exchange and sharing of experience and best practices:

(i) An in-forum training workshop on the use of economic modelling tools related to the areas of the work programme;

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<sup>4</sup> FCCC/TP/2016/4.

<sup>5</sup> KCI/2021/5/4.

<sup>6</sup> KCI/2021/5/5.

<sup>7</sup> Available at <https://unfccc.int/documents/274695>.

<sup>8</sup> More information available at <https://unfccc.int/topics/mitigation/workstreams/response-measures/workshops-and-events>.

- (ii) A workshop on sharing views and experiences on “economic diversification and transformation” and “just transition of workforce and creation of decent work and quality jobs” in the context of sustainable development;
- (iii) Regional awareness creation workshops on existing tools and methodologies to maximize the positive and minimize the negative impacts of the implementation of response measures;
- (c) **Technical expert meetings**<sup>9</sup> to exchange information with a view to recommending specific actions:
  - (i) Exchange of information, sharing experiences, case studies and best practices in accordance with workplan activities during KCI meetings;
  - (ii) Technical expert meetings for sharing experiences, case studies and best practices related to areas of the work programme of the forum;
- (d) **Meeting reports and annual reports of the KCI** to document progress on various activities undertaken by the KCI.

9. The technical papers and database developed by the KCI provide information for enhancing the understanding of ways to assess and analyse the impacts of the implementation of response measures to facilitate the undertaking of economic diversification and transformation and just transition.

10. The paper on capacity-building explains how climate policies interact within the economy and translate to social, economic and environmental impacts; possible indicators that can be used to measure and assess the economic and social impacts of a climate policy; and some possible direct, indirect, domestic and cross-border impact areas of selected climate mitigation measures, such as the removal of subsidies for carbon-intensive goods and services, subsidies for low-carbon goods and services, carbon trading, green tariffs and carbon border adjustments.

11. The paper on capacity-building also included an overview of methodologies and a step-by-step process for assessing and analysing the impacts that can facilitate economic diversification and just transition.

12. The technical paper on tools and methodologies and the accompanying database were developed based on the technical paper on capacity-building and provides detailed information about a number of existing tools and methods available to be enhanced, customized and used for modelling and assessing the impacts of the implementation of response measures, thereby helping to lower the informational barrier faced by potential users of such tools and methods. The database was compiled through stakeholder interactions with the authors and developers of the tools and methods via an online survey.

13. To encourage the effective use of the database by Parties and stakeholders, the paper on tool and methodologies includes a selection process that supports Parties and stakeholders in identifying the most appropriate tools and methods for their context via three overarching steps:

- (a) Shortlist available tools and methods using general criteria;
- (b) Narrow the shortlist further using user specific criteria;
- (c) Compare the detailed summaries of the possible tools and methods.

14. To create awareness about existing tools and methodologies and to promote their use to facilitate economic diversification and transformation, and just transition of the workforce and creation of decent work and quality jobs by Parties, five regional workshops<sup>10</sup> were organized to cover regional issues and to share relevant case studies.

<sup>9</sup> More information available at <https://unfccc.int/topics/mitigation/workstreams/response-measures/workshops-and-events>.

<sup>10</sup> More information available at <https://unfccc.int/topics/mitigation/workstreams/response-measures/workshops-and-events>

15. Parties also organized an in-session training workshop on using economic modelling tools.

16. To support the implementation of the workplan by the forum, several technical expert meetings were organized that were also open to the public. These meetings covered the topics of tools and methodologies for assessing the impacts of the implementation of response measures, economic diversification and transformation, and just transition of the workforce and the creation of decent work and quality jobs.

17. These technical expert meetings presented, among others, case studies, exercises and experiences in some countries. On the topic of methodologies for assessing the impacts of the implementation of response measures, these included a methodology to assess the gender impacts of the strategies, programmes, projects or measures, and case studies that assess the macroeconomic impacts of response measures.

## **B. Efforts towards enabling just transition and economic diversification in developing country Parties**

18. The secretariat prepared the following:

(a) A technical paper on the concept of economic diversification in the context of response measures;<sup>11</sup>

(b) A technical paper on just transition of the workforce and the creation of decent work and quality jobs.<sup>12</sup>

19. In addition, a technical paper on capacity-building included specific indicators that can be used to assess the impact of the implementation of response measures to facilitate economic diversification and transformation and just transition.

20. All five regional awareness creation workshops included case studies and lessons learned in using tools and methods to undertake just transition and economic diversification.

21. Two virtual technical expert meetings were organized: one for practical approaches to just transition of the workforce and creation of decent work and quality jobs, and one for economic diversification and transformation. At these meetings experts shared their views, challenges and lessons learned while implementing or supporting countries in their economic diversification and just transition initiatives.

22. In line with workplan activity 2, the KCI is compiling concrete examples on strategies, programmes or best practices on just transition of the workforce and creation of decent work and quality jobs and on economic diversification and transformation, focusing on challenges and opportunities from the implementation of low greenhouse gas emission policies and strategies towards the achievement of sustainable development, that are carried out by different countries and in different sectors. In some cases, the strategies, programmes or best practices cover multiple sectors.

## **C. Policies to enhance international cooperation**

23. The technical paper on capacity-building mapped relevant stakeholders and their work and identified possible collaborations with stakeholders to enhance capacity on assessing and analysing the impacts to facilitate undertaking economic diversification and transformation and just transition.

24. Further, on the basis of its technical work, the KCI made a set of recommendations for consideration by the forum,<sup>13</sup> which among others identified policy recommendations to enhance international cooperation:

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<sup>11</sup> FCCC/TP/2016/3.

<sup>12</sup> FCCC/TP/2016/7.

<sup>13</sup> KCI/2021/5/10.

(a) Encourage Parties to foster international cooperation to identify and share best practices and experiences of countries that have successfully diversified their economies.

(b) Encourage the identification of barriers, including domestic and non-domestic barriers, along with ways in which the international community could facilitate sustainable economic development of all Parties.

(c) Encourage Parties to establish capacity building partnerships and networks for increasing the representation of developing countries in the use and development of impact assessment tools and methods to assess the impacts of implementation of response measures.

### **III. Good practices and challenges in understanding and addressing the impacts of the implementation of response measures**

#### **A. Good practices**

25. Experts shared a range of good practices while implementing various workplan activities at KCI meetings, in technical papers and at technical expert meetings. Drawing from these discussions, the KCI agreed on a set of recommendations for consideration by the forum and/or key findings contained in its meeting reports and annual reports<sup>14</sup>

26. Drawing from the work of the KCI and the exchange of information and good practices, Parties adopted the following recommendations:<sup>15</sup>

(a) Encourage Parties to engage relevant stakeholders at each step of the process of designing and implementing climate mitigation policies and policies to achieve sustainable development including through social dialogue, when possible and subject to national circumstances. The relevant stakeholders, among others, include workers, employers, organizations, academia, public and private sectors, women, and civil society;

(b) Encourage Parties to explore complementary policies, such as economic policies, social protection, and labour policies, to help strengthen the outcomes of the implementation of mitigation strategies, plans, policies and programmes including nationally determined contributions and low-emission development strategies;

(c) Encourage Parties to strengthen international and regional cooperation as it contributes towards planning and implementation of mitigation policies with environmental and socio-economic benefits. For example, to help facilitate technology development and transfer in accordance with article 10 of the Paris Agreement, and strive towards harmonized regional approaches;

(d) Encourage Parties to use existing qualitative and quantitative assessment methodologies and tools to understand social, economic and employment effects of proposed mitigation measures as a way to inform and guide climate policies and to maximize the positive and minimize the negative effects of the implementation of response measures. More analysis of impacts, including, inter alia, sectoral, national, sub-national, domestic, and cross border, would be useful for informing climate policies and understanding how to maximize the positive and minimize the negative effects of the implementation of response measures;

(e) Encourage the forum and its KCI to enhance the capacity of Parties, particularly developing country Parties, through training and capacity building efforts, including the existing initiatives. This will enable Parties to carry out their own assessments and analyses of the impacts of response measures.

27. The database for tools and methods for assessment of impacts of response measures prepared by the KCI can serve as a starting point for stakeholders to select the most appropriate tools or methods for their assessment.

<sup>14</sup> <https://unfccc.int/process-and-meetings/bodies/constituted-bodies/KCI/documents#eq-1>.

<sup>15</sup> See decisions 19/CP.26, 7/CMP.16 and 23/CMA.3.

28. Quantitative and qualitative methodological approaches complement each other when performing assessment and analysis of impacts of implementation of response measures.

29. Qualitative methods, that collect data using, for example, observation, interviews, and reviewing text, can provide context specific insights, increase transparency in the policy development process and can validate empirically quantitative findings, improving the quality and relevance of impact assessments.

## **B. Challenges**

30. Discussions during KCI meetings, two technical papers published by the KCI, technical expert meetings and workshops related to response measures have also identified challenges in assessing and addressing the impacts of the implementation of response measures and achieving economic diversification and transformation and just transition.

31. Data availability is one of the key challenges in conducting impact assessments when using certain quantitative tools and methodologies that require an abundance of data. When using those tools and methods, the absence of comprehensive and detailed national account data substantially limits the quality of analyses and the countries that can be analysed.

32. In many instances, in particular in developing countries, national capacities to collect data, make assumptions and develop or apply modelling tools as well as formulate case studies relevant to national circumstances are limited.

33. There is an emerging body of literature, tools and methodologies for evaluating the positive and negative impacts of the implementation of response measures that spans across numerous disciplines and geographies. However, there are areas in which gaps in the assessment and analysis and understanding of the impacts of the implementation of response measures exist, in particular country-, region- and sector-specific assessments.

34. There is a recognition of existing analytical and assessments tools and that they have their strengths and weaknesses, but also a recognition of the need for additional methodologies and tools to be developed and deployed to assess and analyse the impacts of the implementation of response measures.

35. Several guidance documents are available on undertaking impact assessments. However, none of them provide specific guidance on assessing social and economic impacts with a view to undertaking economic diversification and/or just transition.

36. The complexity of undertaking assessments increases with the number of sectors impacted by response measures and the availability of data.

37. One of the challenges in transitioning to decarbonization is to rebalance the broad portfolio of national assets. Some assets will be stranded in carbon intensive sectors, while others might be migrated to new sectors and new ones will be created.

38. One of the challenges in enabling just transition relates to the provisions of domestic funding and mechanisms to support just transition.

## **IV. Opportunities to further enhance understanding and addressing the impacts of implementation of response measures**

39. Opportunities to further enhance understanding and addressing the impacts of the implementation of response measures, as well as enhancing economic diversification and transformation, and just transition of the workforce and the creation of decent work and quality jobs, were identified and emerged in the discussions during KCI meetings, two technical papers published by the KCI, technical expert meetings and workshops related to response measures.

40. The presence of a strong regulatory framework for decarbonization and private sector competition can lead to technology development and investment in green technology and therefore expand economic diversification.
  41. Active labour-market policies are essential to facilitate the shift to green jobs.
  42. Investing in new sectors that can provide productive capacity, which can also allow for export diversification, is one of the diversification strategies.
  43. Stakeholder engagement is a consensus-building process that will allow governments to establish higher levels of ambition for implementation of mitigation actions.
  44. Investing in data collection can assist countries in the effort to assess the impacts of the implementation of response measures.
  45. Capacity-building partnerships and networks may increase the representation of developing countries in the use and development of impact assessment tools and methodologies.
  46. The technical paper on capacity-building identified collaboration opportunities, including specific examples, with potential partners in different areas pertaining to tools and methodologies for assessment, economic diversification and transformation, and just transition.
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