



The Role of Response Measures in Ensuring the Sustainable Transition to a Low-GHG Economy

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International Centre for Trade
and Sustainable Development

Policy Brief

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LIST OF ABBREVIATIONS

CMA1	First Session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
COP21	21st Conference of the Parties
ETS	emissions trading system
EU	European Union
G77	Group of 77 developing countries
GHG	greenhouse gas
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
INDC	Intended Nationally Determined Contribution
NDC	Nationally Determined Contribution
UNFCCC	United Nations Framework Convention on Climate Change

ABSTRACT

The increasingly interconnected nature of the global economy means that the impacts of climate change mitigation measures, or response measures, are not confined within the borders of countries implementing them. Such impacts will become of even more and growing importance under the decentralised and increasingly ambitious new climate regime. This policy brief explores the issue of response measures in the context of the post-Paris climate regime from a practical and policy-relevant perspective, examining different options on how the issue may evolve.

1. INTRODUCTION

Following the historic adoption of the Paris Climate Agreement at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC), the new deal entered into force on 4 November 2016, though many details remain to be negotiated to fully operationalise it.

This policy brief explores the issue of response measures in the context of the post-Paris climate regime from a practical and policy-relevant perspective. While recognising the broader nature of the response measures issue, the focus of this brief will be on a number of important issues, also considering the interlinkages between trade and climate change.

The increasingly interconnected nature of the global economy means that the impacts of climate change mitigation measures, or response measures, are not confined within the borders of countries implementing those measures. Climate change policies can affect relative prices, market access, and competitiveness, leading to changes in the demand and supply of goods and services, and ultimately changes in trade patterns. The impacts of response measures will become of growing importance under the decentralised and increasingly ambitious new climate regime and therefore require a more sophisticated understanding and constructive engagement.

This paper draws lessons from existing experiences with impacts from the implementation of response measures, specifically from recent work in the Climate for Sustainable Growth project undertaken for the Centre for European Policy Studies,¹ and examines a number of options on how this issue can successfully be dealt with, considering both the Paris Agreement and the new post-Paris political reality.

The paper also discusses the relationship between response measures and the mitigation and international cooperation chapters of the Paris Agreement, in order to ensure that climate action contributes to, rather than undermines, sustainable development.

In a concrete way, some of the important issues and questions covered in this paper will include:

- The evolution of the discussion on climate change in light of the globalised economy and the emerging climate change regime, as well as the influence of this change on the discussion on response measures.
- What is generally understood by response measures? The issue of response measures was initially introduced, and seen, as related to compensation. Over time, the view of the issues covered by response measures, as well as the general tone of the discussion, have changed, and adapted to the political realities as well as the direction, shape and architecture of the climate change discussions. The new emerging international climate regime is an important factor, as is the world economic order: context matters.
- Why is the issue of response measures, and the trade and climate change interface in particular, of relevance? What makes the issue so pertinent in the post-Paris climate regime?
- How is the issue dealt with in the Paris Agreement/decisions and other COP21 outcomes? What do the provisions contained in the Paris outcome mean in practice? How, where applicable, can they be operationalised?

¹ Work by Andrei Marcu, Wijnand Stoefs, Tomasz Chruszczow, David Belis, and Katja Tuokko; all materials available through <http://www.ceps-ech.eu/article/climate-sustainable-growth>.

- What lessons can be drawn from existing experience with impacts from the implementation of response measures on different areas of economic activity that may be of relevance as we move towards implementation of the new climate agreement?
- How can these lessons inform the work on response measures of the UNFCCC, including the forum on response measures?
- In light of the Paris outcome, how can the issue be dealt with in an effective and positive manner in the future? What, if any, valuable functions can the response measures forum fulfil and how?
- How can the issue evolve from its contentious and sensitive nature that has so far hindered meaningful progress into a substantive and holistic discussion/process that serves to ensure a sustainable transition to a low-carbon economy for all countries?

This paper does not intend to provide recommendations, but rather seeks to examine different potential options on how the issue may evolve, explore the role and functions that existing initiatives could play, and identify ideas for new ones. It is hoped that this will facilitate the work of negotiators, and provide stakeholders with ideas on how they can contribute to this increasingly important topic.

2. THE NEW CLIMATE REGIME IN THE CONTEXT OF THE GLOBALISED ECONOMY

The road to Paris, and the Paris Agreement, reveal key differences from past climate change agreements and approaches.

The 2009 Copenhagen Conference of the Parties (COP) had shown that the Kyoto Protocol architecture, while very logical and Cartesian, no longer corresponded to the political realities. The period for strongly centralised governance had passed, and it was clear that a new approach had to be taken. United Nations bodies had less power to guide this type of process, as many parties were more interested in decentralised and bottom-up governance structures. The change in discourse and tone, and finding a new solution, took a long time, but the resulting Paris Agreement seems to be much better aligned with what is possible today.

The Paris Agreement has introduced some very significant changes, and this has been reflected in the way many issues are perceived and treated, including response measures to address climate change.

The key difference is that the firewall between developed and developing countries has been replaced by an approach in which every country is expected to make climate action contributions. The level and way the contributions are made will be different, depending on countries' individual circumstances, such as capability and level of development of each country, but all have to contribute.

The elimination of the firewall is a necessity and consequence of the changes both in economic power as well as emissions. While at the time of the Kyoto Protocol, developed countries (Annex 1 countries) represented over 50 percent of global emissions, by 2007 China was the largest emitter. This breakdown of the firewall was made possible by changes in the global pattern of emissions and economic size of countries, and by changes in trade patterns over the last 20 years.

Trade takes place along increasingly integrated and complex global value chains. Moreover, developing countries have significantly increased their role in world trade. In fact, in 2014 developing countries had a 41 percent share of world merchandise trade and a 34 percent share of trade in commercial services (WTO 2015). In this world of increasingly interconnected economies, there is a growing recognition that emissions embedded in imports and exports play a significant role. Estimates indicate that up to a quarter of global emissions are embedded in international trade (Crawford-Brown et al. 2016).

The economy, and society at large, are therefore increasingly globalised and interrelated. It is generally accepted that events and measures that occur or are put in place in one jurisdiction may have impacts beyond that jurisdiction. Impacts on competitiveness resulting from measures to address climate change are generally accepted as a legitimate concern.

At the same time, the Paris Agreement is striving to adopt a bottom-up approach which will allow parties, prodded by increased transparency, to strive to increase their individual level of ambition in order to reach the very ambitious goals of carbon neutrality by the second half of the century and limiting temperature increases, as much as possible, to 1.5°C. This bottom-up approach is characterised by each party submitting its Nationally Determined Contribution (NDC) in which it outlines its emissions reduction targets and reports which climate measures it will take. However, parties have a large degree of discretion with regard to the form and content of their NDCs. This could potentially lead to a wide variety and asymmetry of climate change measures, in terms of both the level and nature of the contributions. Some parties may have economy-wide targets; others will focus on specific sectors or activities. This asymmetry, coupled with increasingly ambitious targets, could increase concerns about potential spillover effects.

Among the measures adopted by parties to address climate change and raise their level of ambition, carbon pricing is increasingly used and among the most direct and visible responses. Different carbon pricing approaches have emerged around the world at the domestic level, in a bottom-up manner, with the Paris Agreement providing the framework for linking and convergence over time.

Between the beginning of 2012 and September 2015 the number of carbon pricing instruments, existing or scheduled for implementation, nearly doubled (from 20 to 38), covering almost 25 percent of all global greenhouse gas (GHG) emissions (World Bank Group 2015). Of the 119 Intended Nationally Determined Contributions (INDCs—a precursor to the NDCs prior to the Paris Agreement’s entry into force; covering 147 parties, with the European Union (EU) having submitted one INDC) available for analysis by the New Climate Institute (2015) by October 2015, more than 50 percent of INDCs include the use of carbon markets, either as proposed policies or expressing openness to explore or participate in markets. Only 7.5 percent of INDCs include a clear indication that the country does not intend to use carbon markets at all.

The current bottom-up climate change regime is asymmetrical, in terms of both the self-

imposed constraints, as well as socio-economic impact. Carbon pricing simply happens to be the most visible manifestation of this asymmetry. With carbon pricing come explicit carbon costs and the risk of carbon leakage, which is the risk that GHG-emitting facilities, and their emissions, relocate to jurisdictions where there are no or less stringent GHG constraints.

To mitigate the risk of carbon leakage, one of the negative unintended socio-economic impacts of a measure to address climate change, a number of approaches have been used at the national level. Currently, the most common one is to provide free allocation of emission allowances to industries at risk. Others currently being considered in some jurisdictions include Border Carbon Adjustments,² which could also cause cross-border socio-economic impacts.

This evolution of carbon pricing could exacerbate the risk of unintended socio-economic impacts, and may also lead to increasing cross-border impacts. Note that carbon pricing is only one of many different types of climate change policies being put in place globally, and that others such as fuel efficiency standards, fossil fuel subsidy reform or renewable energy support could also have cross-border impacts.

2 Border Carbon Adjustments are trade measures that attempt to level the playing field between domestic producers under climate change related constraints and foreign producers under less stringent or no climate change related constraints by imposing an equivalent charge on imported goods and rebating the climate-related costs of domestic products destined for export. Border Carbon Adjustments are politically and legally controversial.

3. EVOLUTION OF RESPONSE MEASURES UNDER THE UNFCCC

In UNFCCC negotiations the issue of trans-border impacts of climate change mitigation measures is known as response measures. The Kyoto Protocol in Article 2.3 states that Annex I parties “shall strive to implement policies and measures (...) in such a way as to minimize (...) effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties.”

The international socio-economic impacts of response measures to climate change have been under the remit of the UNFCCC since its adoption. Clear reference is made to the overlap between trade and response measures in Article 3.5 of the Convention: “The Parties should cooperate to promote a supportive and open international economic system (...). Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.”

In addition, Article 4.8 stipulates that “Parties shall give full consideration to what actions are necessary (...) to meet the specific needs of developing country Parties arising from the (...) impact of the implementation of response measures.”

For the purpose of this paper the “impacts of the implementation of response measures” is understood as the unintended, negative cross-border effects of any climate change policy implemented by a country on other countries. These impacts can be social, economic or environmental, and this brings a strong connection to sustainable development.

Initially, “response measures” was perceived as an issue “owned” by oil-producing countries to obtain compensation for not exploiting their oil reserves. As discussions continued, other G77 countries—a UNFCCC Party Grouping

encompassing nearly all developing countries—have increasingly engaged in these discussions, and the circle of G77 interested parties has increased.

The developed countries, both the EU and the Umbrella Group,³ have been more cautious about a topic that they perceived could involve financial obligations. The “response measures” topic, negotiated in the Contact Group in the UNFCCC under a joint agenda item of the UNFCCC’s technical negotiation bodies, the Subsidiary Body for Implementation and the Subsidiary Body for Scientific and Technological Advice, became known for always running overtime, and for strong debates that did not lead to any conclusions. It became one of the most divisive issues in the UNFCCC, one that was very politicised and polarised.

In 2010, at COP16 in Cancun, a “forum on the impact of the implementation of response measures” was set up with the objective of improving the understanding of these impacts in eight distinct areas, including the sharing of information and expertise, cooperation on response strategies, the assessment and analysis of impacts, economic diversification, and the just transition of the workforce.

Though this forum was seen as the site of constructive dialogue and cooperation, practical progress was limited and difficult, and the polarisation and politicisation of the discussion proved difficult to shake off. The forum’s mandate expired in 2013, and because of the sensitivity of the topic, it proved difficult to renew it that year at the Warsaw COP.

“Response measures” was seen as one of the issues that was a “must” for COP21 if there was to be a new climate agreement. On the road to COP21 efforts were made to depoliticise the issue.

3 The Umbrella Group is a loose coalition in the UNFCCC including a large number of developed countries such as Australia, Canada, Japan, New Zealand, Russia, the US and Norway.

At COP21, in COP Decision 11/CP.21, and in the Paris Agreement, the decision was made that the forum would continue its work, but under two tracks. The forum would serve both the Convention and the Paris Agreement:

1. The track under the Paris Agreement focuses on developing the specifications (modalities, work programme and functions) for the “improved forum”; the basis for this track is found in Decision 11/CP.21.
2. The track under the UNFCCC comes from Article 4.15 of the Paris Agreement and specifies that “Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties,” and Article 34 of Decision 11/CP.21. This track deals with the functioning of the forum under the Paris Agreement and requires modalities and procedures, functions and a work programme for the role of the forum under the Paris Agreement.

Meanwhile, work in the forum has continued under the current work programme on two topics: economic diversification and transformation, and enabling workers to progress to a low-GHG economy and carbon neutrality through a just transition, with quality jobs. Additionally, the Subsidiary Bodies were instructed to draft a work programme for the forum under the UNFCCC.

At this time, while the title remains that of “response measures,” the discussion has shifted significantly. The issue of response measures is now starting to be seen in the context of sustainable development, and especially in the context of a sustainable transition to a low-GHG economy. Given the provisions of the Paris Agreement, it is clear that we need to transition to a GHG-neutral economy by the second half of this century.

The fundamental issue is how to manage countries’ low-carbon development transition in such a way that there will be harmony between all three pillars of sustainability: integrity of environmental protection, economic growth

that leads to better living standards, and social solidarity and cohesion.

Proper management is critical for ensuring an orderly transition, including stable markets, as well as for speedy and ambitious implementation of mitigation measures. The buy-in to climate change policies from stakeholders is critical, because if stakeholders (such as businesses and unions) see that there is a good understanding of the impacts of response measures, and that provisions are being put in place to manage the transition, then there will be less resistance and more support for a more ambitious and speedy transition. The general long-term sustainability of the transition implies a need for progress on all three dimensions in a harmonious way.

Another significant change, and the Paris Agreement plays an important role, is that “response measures” is now seen as an issue that affects both developed and developing countries, albeit in different ways. For developed countries, internationally, the issue of response measures is viewed through the lens of competitiveness. For developing countries, these issues are mainly seen through the lens of potential impacts from international policies or policies in other jurisdictions and the need for a safety net to adjust to such challenges. Developing countries usually need to focus first on resilience, vulnerability, economic and social transformation, and diversification. Similarly, human development, and the improvement of standards of living, are also a part of development policies containing measures to address climate change. For a number of developing countries, the issue of response measures is also linked to competitiveness concerns.

It is important to mention that developed countries, in undertaking the transition to a low-GHG economy, will want to put in place a safety net for both the social and economic impacts of these measures, through a variety of instruments. For example, countries that have introduced carbon-pricing mechanisms often introduce measures to “protect” industries that are exposed to global competition, thus avoiding carbon leakage. This protection is generally being addressed by exempting trade-

exposed sectors, mainly through giving them free emission permits.

What is currently also becoming clear is the fact that most parties and stakeholders (but not all) see response measures, and the forum where these matters are being discussed, as a place for developing the software, that is the concepts, knowledge and exchange of experiences on this

topic. Programmes and projects which would concretely mitigate the international impacts of mitigation measures are to be implemented through other mechanisms.

Finally, addressing response measures is also starting to be seen as a non-market form of international cooperation, and possibly connected to Article 6.8 of the Paris Agreement.

4. WHAT HAS BEEN LEARNED SO FAR AND WHAT IS NEEDED?

Over the last number of years there has been a significant amount of discussion about process and principles on the issue of response measures. The current work programme under the Subsidiary Bodies is focused on issues that are more easily identified with research and implementation, specifically economic diversification and a just transition of the workforce.

For these two issues, which are treated under the Subsidiary Bodies but not directly related to the concept of the international impact of mitigation measures, a number of organisations are recognised as having done a significant amount of work, including the International Labour Organization, Organisation for Economic Co-operation and Development, European Commission, World Bank, Global Green Growth Institute, United Nations Conference on Trade and Development, etc.

However, currently there is a lack of empirical studies to provide substance to the UNFCCC discussions on response measures. A first set of empirical studies, which also had, by necessity, to include the development of new methodology, was done by a team which includes the author of this brief, through five case studies and a White Paper, under the Climate for Sustainable Growth project mentioned above.

A few conclusions, or lessons learned, are important, and may be useful for future discussions on response measures. First, climate change mitigation policies have real and concrete impacts both domestically and internationally. They affect developed and developing countries. Understanding, identifying and managing these impacts when necessary must in no way be seen as a case for slowing down the efforts related to mitigation. On the contrary, they are to be seen as allowing for more speed and greater ambition.

Some of these impacts are positive, and referred to as co-benefits, while others are negative. At the same time, some are intended, and some unintended.

Intended impacts include GHG emission reductions, internalisation of environmental externalities through carbon costs, increased energy/fuel costs and improved access to energy (for example through renewable energy off-grid solutions). The positive effects need to be recognised, nurtured, and amplified.

The unintended impacts can also be positive or negative. Carbon leakage is a classic and easy to understand unintended negative impact. The negative effects need management in order not to slow down the transition.

What is also important to understand is that the impacts will be felt in all three areas of sustainable development, with the focus of response measures on socio-economic impacts.

Impacts can result from three sources:

1. Domestic measures: the impacts of a climate change policy in the jurisdiction where it is implemented. These effects are frequently relatively well understood, and are detected through environmental impact assessments or stakeholder meetings which are mandated in many developed countries. In developing countries these effects are often also well understood, especially when they relate to internationally-funded projects or activities. Many international institutions (such as the World Bank) require that stringent impact assessment procedures are followed before funding is made available.
2. Measures in other jurisdictions: GHG mitigation policies may have effects in jurisdictions other than those where they were implemented. These types of impacts have in general not been closely examined and are not the object of a regulatory requirement. The effects identified in literature are mostly socio-economic in nature.
3. International measures: international GHG mitigation policies or projects can have

impacts in jurisdictions where they are applicable. There are currently not many international climate change mitigation policies and approaches that are operational. Two types which have been identified are the Clean Development Mechanism and carbon footprint food labelling. While food labelling is usually a private initiative, and therefore not a national or international policy, it is a good example of a climate change measure that has strong cross-border impacts on consumers and producers. However, discussions are underway at the global level on two other high-profile mitigation policies. These would entail the introduction of a market-based mechanism to reduce GHG emissions from international aviation and international maritime transportation, regulated by the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) respectively. The negotiations within ICAO have successfully concluded on the development of the Carbon Offsetting and Reduction Scheme for International Aviation, which is to be further defined in the coming years and will start with a pilot phase in 2021. In the IMO the discussions have not yet reached this level. These initiatives have the potential to impact developing and developed countries significantly.

The analysis of these impacts requires that they are identified, and that a qualitative and quantitative analysis is undertaken before they can be addressed. This is even more so the case with respect to the cross-border impacts of mitigation policies. Very few countries analyse in depth whether domestic climate change measures could have impacts across the border, or indeed whether policies in other jurisdictions are impacting them in an adverse manner. There is currently a lack of practical understanding or knowledge of the problems related to identifying impacts, quantifying impacts, and addressing impacts.

4.1 Identifying Impacts

Impacts need to be identified and measured before they can be addressed. While some countries focus on identifying cost and employment effects, other socio-economic and environmental impacts are ignored. Income distribution effects, especially for low-income households, impacts on competitiveness and trade, and environmental protection are frequently not included in procedures that parties use to analyse and identify impacts.

There are two main tools for identifying impacts: impact assessments and stakeholder consultations. These tools have been available for many years, and many jurisdictions have a lot of experience with using them, though frequently in other fields than climate change. However, these tools are still not used in many countries. Developing countries especially have little experience with these tools, lack the capacity to invest in them, or do not see them as pressing concerns.

This is linked to the lack of awareness of the impacts of climate change policies. While a few policies, such as the inclusion of aviation in the EU emissions trading system (ETS), have received a lot of attention, in general only a limited circle of civil servants are aware of the issue. This lack of awareness is a first hurdle that must be overcome before response measures can be handled in a mature manner.

Another issue is the lack of available information. No lists or registries of climate change policies exist with potential impacts, nor is one being compiled. Such a list would, however, imply that there is a framework, methodology or protocol for gathering and reporting data on the impacts of climate change policies. An international framework for the identification of impacts is a necessary second step for a comprehensive and coherent approach to response measures.

Note that there is also a lack of methodologies to separate the impacts of climate change policies from the impacts of other policies.

4.2 Quantifying Impacts

Once an impact has been identified, it needs to be quantified in order to ensure that measures to mitigate it are not disproportionate: either excessive or inadequate. While effects are sometimes identified to a certain level, and policies are put in place to mitigate them, there is frequently a lack of precise quantification of impacts, which leads to a discontinuity between the “illness” and the “cure.”

As with the identification of impacts, there is also a lack of an internationally accepted methodology to quantify them. If countries quantify impacts in different ways, without following a commonly agreed methodology, there is a risk that countries overestimate risks, without there being a means to comprehensively review their analysis.

There are jurisdictions that use ex-ante mechanisms (such as simulations and scenario analysis) to quantify impacts, but there are very few examples of comprehensive ex-post collection of data on impacts or review of ex-ante expectations. Rectifying this could help improve ex-ante impact identification by analysing the differences between ex-ante simulations and the impacts that actually materialise.

4.3 Addressing Impacts

This is the final issue when tackling response measures. And the first step in this regard is clear communication on the impacts of response measures. In order to gather support for the climate transition, we need to engage stakeholders and assuage their concerns about response measures that might affect them. Mitigation of impacts is not sufficient to relieve stakeholders, they need clear and transparent communication about how the impacts are understood and how they are being addressed.

It is important that tools to address impacts do not weaken the climate change policies

themselves. Free allocation in the EU ETS weakens the price signal that the EU ETS relies on to incentivise low-carbon incentives. A transparent timeline on the phasing out of such impact mitigation measures ensures that stakeholders will take the implications of the policies into account, even if they are still (partially) shielded, as they know the protection will disappear at some specified point.

On the other hand, there are measures that address the impacts of response measures while increasing the potential of the climate change policy for mitigation. They include technical retraining, for example of employees working in electricity generation from fossil fuels so that they can help build and strengthen the renewable energy sector.

The five Climate for Sustainable Growth case studies documented a large number of measures that countries use to address the impacts that they have identified. An international registry of such measures, for example a response measures toolbox, could help countries with little capacity to pick and choose the most appropriate policy responses for this issue. But it remains important to invest in capacity building around the issue of response measures.

Addressing impacts needs an international framework. This framework could include the toolbox mentioned above, as well as an interface where stakeholders can signal local capacity-building needs. International and cross-border impacts could also become an integral part of such a framework. Jurisdictions implementing climate change policies have a responsibility to take potential international impacts into account.

Currently, there are two operational international frameworks that aim at global cooperation in order to achieve sustainable development: the UNFCCC itself, and the Sustainable Development Goals. Either forum deals with issues closely related to the issue of response measures, and either could be a constructive forum with respect to response measures.

5. DEALING WITH RESPONSE MEASURES IN THE POST-PARIS REGIME

5.1 A New Paradigm

As discussed above, the Paris Agreement has opened a new chapter in how to deal with climate change issues, and has broadened action to both developed and developing countries. The new approach has also had some impact on response measures, and some of them have been identified above.

These changes were evident in the results in Paris, both in the Paris Agreement and Decision 11/CP.21. This change continued to be evident from the outcome of the UNFCCC negotiating session in May 2016.

To recap the main elements that underpin this change:

- The language is refocused as more positive and constructive, also as one that society at large can comprehend, namely that of sustainable transition. The increased focus of the discussion is on sustainable transition and the measures that need to be put in place to ensure that we move harmoniously on the three axes of sustainable development: environmental, social, and economic.
- The issue is now seen as relevant for both developed and developing countries, but in different ways and maybe with different labels. For developing countries, the issue is seen as an impediment to development and economic diversification. For developed countries, this should be seen as an issue of competitiveness. National methods used to address competitiveness concerns in an asymmetrical climate change regime will only go so far, and international cooperation will become more and more necessary as the impacts of increasingly ambitious climate actions intensify. As economies develop and

mitigation measures start to bite, the concerns of developed and developing countries are likely to converge.

- It is becoming generally accepted that the discussions under the UNFCCC, and the forum, are a place to develop the “software” part of response measures.
- Response measures are also seen as a form of international cooperation, in the aspects of both economic diversification and a just transition of the workforce.

5.2 To Paris and After Paris

After Paris, the discussions on response measures have followed two tracks. One track deals with the improved forum on response measures and comes out of Decision 11/CP.21. The second track comes from Paris Agreement Article 4.15 and specifies “Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties” and Article 34 of Decision CP.21. This track deals with the functioning of the forum under the Paris Agreement and requires modalities and procedures, functions and a work programme for the role of the forum under the Paris Agreement.

For the first time significant, and some may say unexpected, progress was made on a topic that had been plagued by stubborn confrontation. A spirit of cooperation and a desire to move forward on the two tracks especially marked the 44th session of the Subsidiary Bodies (SB 44) in May 2016. However, a healthy dose of caution still remains on both sides of the negotiating table. Subtle differences also exist within the two sides, with some higher expectations and a specific focus on some parts of the G77 and China constituency.

Since the Paris Agreement came into force before COP22, which was also the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA1), the two tracks are rapidly becoming indistinguishable, as logically there can be only one forum.

As a follow-up to Decision 11/CP.21, a more detailed work programme was developed, which includes a number of elements. This in itself shows the increased trust that has been built between parties as it leaves open the possibility of creating ad hoc technical working groups for priority work areas. These can advance the technical aspects of discussions and create practical knowledge that can feed into the formal negotiations and/or help parties better understand the issues underlying response measures. These technical working groups may then work in session, or inter-sessionally, as the parties may decide.

Additional ideas may or may not have emerged as priority areas at COP22, from the in-session work at COP22 or based on the October inter-sessionally workshop. They will have to stay within the boundaries of the approved work programme, however, which covers two areas: economic diversification and a just transition of the workforce. They will also have to overcome the reluctance of some parties to launch new work, given the constraints on resources.

The track under the Paris Agreement requires submission from parties on the work programme, the modalities and procedures, and the functions. This will also be discussed under a joint Contact Group under the Subsidiary Bodies.

It is quite clear that with the entry into force of the Paris Agreement, the work programme under 11/CP.21 will have to merge with the realities of the elements under the Paris Agreement work programme. There will be only one forum, which currently in the UNFCCC parlance is not spelled with a capital F, with the implication that a new institution has not been created.

It will, however, work both ways. It is unlikely that the track under the Paris Agreement will complete its work under the Subsidiary Bodies and develop the three elements (modalities, work programme, and functions of the forum) right from the start of CMA1. There will be a significant amount of work to be done before an agreement is reached for the 1/CP.21 mandate. This will also allow the work under 11/CP.21 to progress, discover areas of priority, undertake work under the technical working groups, and contribute to the development of the final format of the elements of the forum under the Paris Agreement.

So what can we distinguish from the form and content of the forum under the Paris Agreement, which, one way or another, is what we will use once that work is completed?

As mentioned, in terms of functions, it is becoming abundantly clear that most parties that have been active and influential in this topic see the forum as place to create knowledge, exchange experience, and develop and maybe create frameworks. Most parties do not see the forum as the place where measures are implemented in a “hardware on the ground” type of way.

Even if these actions are not seen as part of the forum, they are necessary in order to ensure a sustainable transition to a low-GHG economy.

Currently the focus is on economic diversification and the just transition of the workforce, which is another way to look at the economic and social pillars of sustainable development and a sustainable transition. They are somewhat mixed, as the just transition of the workforce is an objective, while economic diversification is seen mostly as a tool to address the impacts of mitigation measures. Some see addressing the impact of mitigation measures on efforts towards diversification as another key issue.

The current functions are unlikely to change, but a clearer and explicit focus would certainly be welcome, and would clear the air and build confidence. For example, an

explicit reference to the forum being a place to develop knowledge, software and systems to identify and measure impacts, and to exchange experiences on these impacts, is what may be an option for clarification. This can also be the place to identify the tools that exist and suggest tools that may be developed to bridge gaps.

The work programme may also need to evolve and become more specific and more technical. Discussion in the UNFCCC, but especially work done under the Climate for Sustainable Growth project, have clearly indicated that quantitative discussions are possible but that quantitative analysis is difficult, if not impossible, due to the lack of data.

This can be attributed to a number of gaps that have been identified and that the forum could examine as possible areas of work in a more precise work programme.

This should first and foremost include building awareness of the issue. There is currently precious little awareness of these issues, especially when it comes to international impacts. While the issue of response measures deals with international impacts, the same data and methodology can and should be applied to domestic impacts in both developed and developing countries.

Case studies which focus on a country which has experienced, and continues to experience, a transition, such as Poland, or on a specific sector, such as the EU soda ash industry, which were undertaken under the Climate for Sustainable Growth project are examples that validate this view.

The lack of data is not only due to a lack of awareness and attention to the issue, which will inevitably become more acute over the coming years. It is primarily due to the lack of a framework for collecting these data, and a consistent methodology to do so. This is another gap that the forum may wish to examine in the future. Putting in place such a framework will require significant efforts that may only be possible at the regional and continental levels, with institutions such as regional development bodies providing an anchor as a viable solution.

In time, under the Paris Agreement, the work of the forum is likely to become increasingly sophisticated and complex, requiring lengthy interactions and deliberations. It will require more stability than ad hoc working groups can provide. These needs will be met in some instances through its current modalities and procedures, but these may not be enough in other cases. This development will likely come gradually, as the work, and topic, becomes more technical and professionalised.

These needs could be met in a number of ways: through increasing inter-sessional work of the technical working groups; through increasing formalisation of the forum into a Forum; through carrying out part of the work, both from a technical point of view and in more experimental and discovery terms, through external initiatives, coordinated and in cooperation with the UNFCCC process, but freed from some of the constraints and formalities of the formal process. It is possible that transitional forms, between the Contact Group like the current forum, and a full Forum, will emerge, to ensure that concerns about trust are met.

6. CONCLUSION

Climate change policies are already having impacts beyond the jurisdictions implementing them, and can affect both developed and developing countries through changes in trade patterns or market access.

The impacts of these policies can be intended or unintended and are set to become stronger as climate change policies become increasingly stringent in line with the Paris Agreement, as it has become clear that we need to transition to a GHG-neutral economy by the second half of this century.

Therefore, the issue of response measures is an important topic within the framework of international climate change negotiations, and the discussion on this topic under the UNFCCC has changed substantially in the last few years. The issue is now starting to be seen in the context of sustainable development, and especially in the context of a sustainable transition to a low-GHG economy.

Managing the domestic and cross-border impacts of response measures is crucial for ensuring an orderly transition, as well as for the speed and ambition with which mitigation measures can be implemented. The buy-in to climate change policies from stakeholders

is critical, because if stakeholders see that there is a good understanding of what the impacts of response measures are, and that measures are being put in place to manage the transition, then there will be less resistance and more support for a more ambitious and speedy transition.

There are still significant gaps in the knowledge and understanding of the issue that need to be addressed, however. Limited technical work has been done, but more is necessary in order to develop the core concepts and knowledge, and exchange experiences on the topic. Additionally, quantitative discussions are impaired by the lack of quantitative data on the prevalence and size of cross-border impacts. A framework and consistent methodology to gather and analyse data on impacts of response measures need also to be defined.

The response measures forum could look into the gaps mentioned above in order to define possible areas of work. This could help inform the negotiations on response measures and generate a broader awareness of the issue. A more stable and predictable governance structure for the forum would empower it to address these issues.

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