Wolfgang Obergassel

What shape for the Paris mechanisms?

A synthesis of parties' submissions on Article 6 of the Paris Agreement

Originally published in: Environmental Liability, vol. 25 (2017), no. 2, pp. 62-69



Wolfgang Obergassel a,*

What shape for the Paris mechanisms?

A synthesis of parties' submissions on Article 6 of the Paris Agreement

- a Wuppertal Institut für Klima, Umwelt, Energie gGmbH, Germany
- Corresponding author: Wolfgang Obergassel Wuppertal Institut für Klima, Umwelt, Energie gGmbH Döppersberg 19 42103 Wuppertal Germany
 E-mail: wolfgang.obergassel@wupperinst.org Phone: +49 202 2492-149 Fax: +49 202 2492-250

This is the author's version of a work that was accepted for publication. Changes resulting from the publishing process, such as editing, corrections and structural formatting, may not be reflected in this document. Changes may have been made to this work since it was submitted for publication. A definitive version was sub-sequently published in the Journal cited above.



What Shape for the Paris Mechanisms? A Synthesis of Parties' Submissions on Article 6 of the Paris Agreement

Abstract

Article 6 of the Paris Climate Agreement establishes three approaches for countries to cooperate with each other in implementing their climate protection contributions. However, Article 6 sketches out only some basic contours, the details are to be filled in by further negotiations. This paper surveys the views countries have submitted so far in order to identify the main issues at stake, points of controversy and convergence and possible ways forward. The submissions reveal some sharp differences in opinions on key issues such as the scope of the new mechanisms, how to operationalize the Article 6 requirement to increase ambition, whether to have international provisions on the promotion of sustainable development, and how to protect environmental integrity in the use of Article 6. The article concludes with a number of recommendations on how to address these controversies.

1 Introduction

The emission trading mechanisms – the Clean Development Mechanism CDM), Joint Implementation (JI) and international emissions trading – have been among the most prominent elements of the Kyoto Protocol. They allow countries to fulfil part of their emission limitation and reduction obligations by purchasing emission reductions achieved in other countries. The mechanisms are based on the assumption that the environmental impact is the same irrespective of where greenhouse gases (GHG) are emitted. The aim of the mechanisms is therefore to allow countries to reduce emissions where it is cheapest to do so, inside or beyond their national borders. However, the mechanisms have been surrounded by strong controversy. At a fundamental level, critics complained that the mechanisms have allowed countries to cheaply buy their way out of their commitments. In addition, there have been protracted debates about the environmental integrity of the transfers and the transaction costs associated with the mechanism.¹

¹ See e.g. CDM Policy Dialogue (2012): Climate Change, Carbon Markets and the CDM: A call to action - Report of the High-Level Panel on the CDM Policy Dialogue. Bonn: UNFCCC. Cames, M., R. O. Harthan, J. Füssler, M. Lazarus, C. M. Lee, P. Erickson, R. Spalding-Fecher (2016): How Additional Is the Clean Development Mechanism? Analysis of the Application of Current Tools and Proposed Alternatives'. Berlin: Öko-Institut / INFRAS / SEI; Spalding-Fecher, R., A. Narayan Achanta, P. Erickson, E. Haites, M. Lazarus, N. Pahula, N. Pandey, S. Seres, R. Tewari (2012): Assessing the Impact of the Clean Development Mechanism'. Report comissioned by the High-Level Panel of the CDM Policy Dialogue. Luxembourg.

Whether to include similar mechanisms in the Paris Agreement was therefore a highly contentious issue in the negotiations.² Nonetheless, countries ultimately agreed to establish opportunities for countries to cooperate in achieving their nationally determined contributions (NDCs). Article 6.1 of the Paris Agreement recognizes "that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity."

Art. 6 subsequently establishes three approaches for countries to cooperate with each other:

- First, Art. 6.2 and 6.3 provides the option for Parties to directly engage in "cooperative approaches" and to use "internationally transferred mitigation outcomes" (ITMOs) in achieving their NDCs. International supervision of these cooperative activities is not foreseen, but a work programme was agreed to develop guidance for Parties that want to engage in cooperative approaches.
- Second, Art. 6.4-6.7 establishes a new mechanism "to contribute to the mitigation of greenhouse gas emissions and support sustainable development", referred to by many as "sustainable development mechanism". In contrast to the cooperative approaches, this mechanism will be supervised by a body mandated by the Parties to the Paris Agreement. In addition, the Parties are to adopt rules, modalities and procedures which must be observed when implementing activities under Article 6.4.
- Third, Art. 6.8 and 6.9 provides for the use of non-market approaches. Just how these approaches are to work will be determined in the coming years with the development of a "framework for non-market approaches".

The task of developing the guidance for cooperative approaches, the rules, modalities and procedures for the new mechanism, and the framework for non-market approaches was mandated to the UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA). The SBSTA has in the meantime conducted discussed Art. 6 at several sessions and solicited several rounds of submissions of views from Parties.

The aim of this paper is to synthesise the views submitted by Parties to identify the main issues at stake, points of controversy and convergence and potential ways forward.³ To lay the basis for the discussion, the article will first recall the function of the flexible mechanisms under the Kyoto Protocol and outline the paradigm change embodied by the Paris Agreement. Subsequently, the article will introduce how the three approaches under Article 6 are supposed to work, to the extent this can be determined at this point in time based on the provisions in the Paris Agreement and the submissions from Parties. On this basis, the article will summarise and discuss the views of Parties on main challenges in the implementation of Article 6. The article concludes with a number of recommendations on how to address the outstanding issues.

² Obergassel, W., C. Arens, L. Hermwille, N. Kreibich, F. Mersmann, H. E Ott, H. Wang-Helmreich (2016): 'Phoenix from the ashes: an analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change – Part I'. Environmental Law and Management, Vol. 27, pp. 243-262.

³ The submissions are available online at

http://www4.unfccc.int/Submissions/SitePages/sessions.aspx. This article will refrain from indicating the rather lengthy URL of each individual submission that is quoted.

2 From Kyoto to Paris – New Challenges for International Emissions Trading

The Paris conference broke new ground for international climate policy: for the first time, all countries of the world committed to undertake mitigation actions. This new paradigm will also fundamentally change the functioning of international emissions trading mechanisms.

The emissions market has so far been dominated by the Kyoto Protocol, which is essentially an international cap-and-trade system. Industrialised countries commit to absolute economy-wide emission targets and are issued emission units accordingly. At the end of the commitment period, they must present an internationally recognised emission unit for each tonne of GHGs they emitted. In the interim, they are able to trade emission units with each other. All transfers are deducted from the selling country's pool of units and added to the buying country's pool, while the overall number of units stays the same ("capped environment"). Industrialised countries may also source units from CDM projects in developing countries. As developing countries do not have Kyoto commitments ("uncapped environment"), the emission credits issued to CDM projects effectively enlarge the pool of units available to industrialised countries. Inspired by the Kyoto Protocol, a number of domestic emission trading systems have emerged, most notably the EU ETS but also systems in Switzerland, New Zealand, and sub-national systems in parts of Canada, China, Japan and the USA. These systems generally use the cap-and-trade approach capping emissions in specific economic

generally use the cap-and-trade approach, capping emissions in specific economic sectors and requiring installations in these sectors to submit emission units for the GHGs they emit.⁴

The Paris Agreement differs from the Kyoto Protocol in a number of fundamental ways. First, contrary to the Kyoto Protocol, the Paris Agreement does not establish legally binding emission targets. Instead, it only establishes a commitment for all Parties to formulate, maintain and periodically update NDCs and to implement measures to achieve them. Second, as all countries make contributions, there is no longer a clear distinction at national level between "capped" and "uncapped" environment. Third, countries' contributions do not have a uniform metric as under Kyoto (absolute emissions during a commitment period). Instead, the content of contributions was left to countries to determine on their own. In practice, countries adopted a broad variety of different types of contributions, including absolute emission targets, targets to reduce emission intensity compared to GDP, and targets to reduce emissions compared to business-as-usual (BAU). Some contributions are not at all based on greenhouse gas (GHG) emissions but consist of targets for renewable energy, energy efficiency, or of individual policies and measures. Contributions also have different timeframes, for example, 2025 or 2030.⁵ Accounting for transfers under the Paris Agreement will therefore be much more complex than in the Kyoto system.

 ⁴ An interactive map of emission trading systems worldwide is provided by the International Carbon Action Partnership at https://icapcarbonaction.com/en/ets-map.
 ⁵ A database an analysis of NDCs is provided by the World Resources Institute at http://cait.wri.org/indc/#/.

3 Functioning of the New Cooperative Mechanisms

3.1 Cooperative Approaches under Article 6.2

Paris Article 6.2 contains only the barest of provisions to establish a new mechanism. It merely stipulates that Parties may engage in "cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions." That is, countries may implement joint activities, transfer mitigation outcomes and use these for achieving their NDCs. Most of the discussions therefore revolve around the nature of "internationally transferred mitigation outcomes" and what shape "cooperative approaches" could take.

A mitigation outcome could in theory be expressed in terms of GHGs or in terms of non-GHG indicators (e.g. renewable energy capacity), which some NDCs focus on. However, none of the Parties with non-GHG NDCs have so far indicated an intention to trade with other Parties directly in terms of these non-GHG outcomes.⁶

Among the Parties that have expressed themselves on this issue, there so far has been a clear preference to define ITMOs in tonnes of CO₂-equivalent. However, there is a split on what cooperative approaches are. Some countries, including the Independent Association of Latin America and the Caribbean (AILAC), the African Group of Negotiators (AGN), Canada, the Environmental Integrity Group (EIG, which includes Liechtenstein, Mexiko, South Korea and Switzerland) and the Group of Like-Minded Developing Countries (LMDCs)⁷ hold that the concept should include any kind of cooperation between two or more countries seeking to transfer mitigation outcomes, which could include:

- Direct trade between governments;
- Units from domestic mechanisms such as domestic emission trading systems;
- Units from the new Article 6.4 mechanism;
- Units from existing UNFCCC mechanisms such as the CDM and JI.⁸

By contrast, in particular Brazil holds that Art. 6.2 should only provide for international transfers of national mitigation surpluses for the achievement of NDCs. In their view Art. 6.2 is not to cover domestic, subnational or regional emissions trading schemes.⁹

⁶ Joint OECD/IEA submission to UNFCCC, September 2016. Views on "guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement" (FCCC/SBSTA/2016/2, para. 96).

⁷ The group of like-minded developing countries includes China, India and other Asian countries such as Malaysia, countries in the Organization of Petroleum Exporting Countries such as Saudi Arabia, and some Latin American countries such as Bolivia and Venezuela.

⁸ Submission by Guatemala on behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru; Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Guidance on Cooperative Approaches referred to in Article 6, paragraph 2, of the Paris Agreement (Agenda sub-item 10 (a)), 27 March 2017; Canada's submission on Article 6 of the Paris Agreement, March 2017; Submission on Article 6 of the Paris Agreement, 21.03.2017, Liechtenstein, Mexico, Monaco, Switzerland; Submission of the Like Minded Developing Countries - LMDC on the Article 6.2 & 6.4 & 6.8-6.9 of the Paris Agreement.

Another key controversy concerns the question to what extent rule setting and enforcement for cooperative approaches should be done centrally, or be left to individual countries. In contrast to Article 6.4, Article 6.2 envisages only "guidance" to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Agreement (CMA). Some countries including the Arab Group, Japan and the LMDCs propose to provide flexibility to "bottom-up" approaches, where Parties themselves would demonstrate environmental integrity.¹⁰ Other countries including the AGN, the Alliance of Small Island States (AOSIS), Brazil, Indonesia and the LDCs, posit that oversight by the implementing countries alone is not sufficient to ensure environmental integrity. They maintain that integrity can only be ensured if rules and governance structures are multilaterally-agreed and accountable to all Parties to the Paris Agreement.¹¹

3.2 The Mechanism under Article 6.4

The new mechanism under Article 6.4 is much more clearly defined than cooperative approaches under Article 6.2. The mechanism is established under the authority and guidance of the CMA and to be supervised by a body designated by the CMA. In addition, the CMA will adopt rules, modalities and procedures which must be observed when implementing activities under Article 6.4.

Aims of the new mechanism are to promote the mitigation of greenhouse gas emissions while fostering sustainable development and to incentivize participation by public and private entities authorized by a Party. As with the cooperative approaches provided for under Article 6.2, the emission reductions achieved using this mechanism can be transferred from the country in which they were achieved to another country and counted towards its NDC.

Further development of the mechanism is to build on the experiences of the flexible mechanisms of the Kyoto Protocol. ¹² However, in contrast to the Kyoto mechanisms, according to Article 6.4 the new mechanism is to "deliver an overall mitigation in global emissions". Under the Kyoto Protocol, all emission reductions achieved under its flexible mechanisms could be used by the buying country instead of reducing their domestic emissions to comply with their Kyoto target. The net effect for the atmosphere was thus

⁹ Views of Brazil on the Guidance Referred to in Article 6, Paragraph 2 of the Paris Agreement.

¹⁰ Saudi Arabia's Submission on Behalf of the Arab Group on Articles 6.2 and 6.4; Japan's Submission on SBSTA item 12 (a), Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement, (17 March 2017); LMDC submission (n. 8).

¹¹ Submission to the Articles 6.2 and 6.4 of the Paris Agreement by the Republic of the Maldives on behalf of the Alliance of Small Island States, 27 April 2017; AGN submission (n. 8), Brazilian submission (n. 9); Submission by the Republic of Indonesia, Views on Article 6 of the Paris Agreement; Submission by the Federal Democratic Republic of Ethiopia on behalf of the Least Developed Countries Group on the Operationalization of Article 6, paragraph 2 of the Paris Agreement, 22 March 2017.

¹² Decision 1/CP.21, Adoption of the Paris Agreement, FCCC/CP/2015/10/Add.1, 29 January 2016, para. 37f.

zero. Under the new mechanism, not all of the emission reductions achieved are to be used for accomplishing NDCs. How exactly this is to be done is one of the key questions for the implementation of the new mechanism (see section 4.2).

Another question is what types of activities will be possible under the new mechanism. Under the CDM and Joint Implementation, only local investment projects are eligible. The Paris Agreement does not specify that the new mechanism is about "projects", raising the question of the level of aggregation of activities (individual projects, programmes and/or sectors). There seems to be an emerging consensus supporting an "inclusive" approach in which projects, programmes of activities and sectoral approaches should all be eligible under the mechanism. However, Brazil stipulates that the scope, elements and requirements of Article 6, paragraphs 4 to 6, and of paragraph 37 of Decision 1/CP.21 clearly indicate that the mechanism is analogous to the CDM.¹³

3.3 Non-Market Approaches under Article 6.8

As a third option, use of non-market-based approaches is provided for under Article 6.8. The establishment of this option was driven in particular by left-wing Latin American countries (working under the umbrella of the Group of Like-Minded Developing Countries) who have strongly opposed the use of market-based mechanisms for climate protection. There is general agreement among Parties that non-market approaches are cooperative activities that do not involve the transfer of emission units. However, otherwise there is not yet much clarity on the way forward.

In their submission, the LMDCs outline that they envisage the main purposes of the framework to include assisting countries in implementing their NDCs in a holistic manner by facilitating access to finance, technology transfer, and capacity building for mitigation and adaptation, and contributing to map and register needs of countries and assisting them in matching them with means of implementation, as well as monitoring the support provided.¹⁴

Other Parties including AILAC, AOSIS, the EIG, the EU, and the LDCs note in their submissions that there already are processes and mechanisms under the UNFCCC to provide access to finance, technology and capacity building and caution to avoid duplication of work. They suggest to focus discussions on possible synergies and coordination in non-market cooperation. Specific issues that could in their view usefully be tackled under the new framework include:

- fossil fuel subsidy reform;
- phase-out of inefficient and polluting technology;
- policy reform to create the enabling environment for increased deployment of renewable energy;
- development of nationally appropriate mitigation actions;
- reduction of black carbon;
- joint initiatives for the conservation of oceans and other ecosystems;
- the role of state-owned enterprises in fossil energy provision.¹⁵

 ¹³ Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement.
 ¹⁴ LMDC submission (n. 8).

¹⁵ AILAC submission (n. 8); Submission on Non-Market Approaches under Article 6.9 of the Paris Agreement by the Republic of the Maldives on behalf of the Alliance of Small

4 Cross-Cutting Issues

4.1 Overview

All of the approaches under Article 6 need to adhere to the cross-cutting principles established in Article 6.1:

- Cooperation under Article 6 is to allow for raising the ambition of climate actions, that is, increasing the effort in terms of climate change mitigation or adaptation.
- Cooperation is to promote sustainable development.
- Cooperation is to ensure environmental integrity.

4.2 Raising Ambition

The requirement to raise the ambition of climate action denotes a substantial paradigm change from the Kyoto Protocol. As noted above, use of the Kyoto mechanisms was essentially a zero-sum game. All emission reductions achieved under the Kyoto mechanisms could be used by the buying countries instead of reducing their own domestic emissions to comply with their Kyoto targets. Article 6 of the Paris Agreement is supposed to go further, its use is to allow countries to increase the ambition of their climate actions.

Increasing efforts will indeed be necessary as the current collective level of ambition is far below of what would be necessary to stay within the temperature limits laid down in Article 2 of the Paris Agreement. Recognizing this, and a regular feedback process to address this situation, is at the core of the Agreement. According to Article 4, every five years, Parties are to present new NDCs that are to "represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition".

However, use of Art. 6 has the potential to create conflicting objectives, in particular for host countries, as ambitious NDCs reduce the amount of sellable mitigation outcomes. The risk of a significantly reduced effectiveness of action is exacerbated by the large leeway countries have in formulating their NDCs. Risks which need to be assessed and potentially addressed include:

- Minimising the level of ambition of subsequent NDCs;
- Minimising the sectoral scope of NDCs to be able to export mitigation outcomes from outside the scope of the NDC;
- Carry-over of 'hot air' similar to the situation under the Kyoto Protocol, that is, dilution of the level of ambition of subsequent NDCs by carry-over of mitigation outcomes that resulted from insufficient ambition in previous NDCs.

Not all submissions discuss the issue of raising ambition in detail. Some posit that linking emission pricing systems will by itself allow Parties to be more ambitious in their NDCs by allowing them to tap into lower-cost mitigation potential in other countries and/or by using foreign direct investment. However, there are also countries including AOSIS, Brazil, the EIG and the LDCs who consider that raising ambition will need to be build into the system. The suggestions include:

Island States, 11 April 2017; EIG submission (n. 8); Submission by the Republic of Malta and the European Commission on behalf of the European Union and its Member States, Valletta, 21/03/2017; LDC submission (n. 11).

- limiting eligibility for transfers to absolute emission reductions. This would essentially exclude most developing countries from use of Article 6. In most developing countries emissions will continue to rise for the foreseeable future, mitigation outcomes can for the time being therefore only be relative emission reductions compared to 'business as usual';
- making Art. 6.4 a tool for voluntary action by the private sector. A number of companies and individuals are already buying and cancelling emission units from the CDM or other standards to "compensate" their emissions. The suggestion here is to work towards a strong use of Article 6 by private actors;
- requiring a discounting of reductions to achieve a global net reduction. This would mean that emission units would not be issued for all emission reductions achieved by an activity under Article 6, but a certain percentage of the reductions would be held back or cancelled and thus not be available to buyers;
- reviewing Article 6 transfers in the 5-yearly stocktake of efforts that will take place under the Paris Agreement and excluding Parties where transfers have not contributed to increasing ambition from future participation in Article 6.¹⁶

4.3 Promoting Sustainable Development

Similar to the question of ambition, while the Paris Agreement mandates that use of Article 6 should promote sustainable development, many submissions do not discuss this issue at all. The submissions that do discuss the question mainly revolve around the question of whether the provisions on cooperative approaches and the new Article 6.4 mechanism should include international provisions on the promotion of sustainable development, or whether these should be left to the host countries.

The discussion is thus essentially a replay of one of the key controversies around the Kyoto Protocol's CDM. The CDM also has the goal to promote sustainable development, but the assessment of whether CDM projects actually fulfil this objective has been left to host countries. Developing countries have repeatedly rejected suggestions to establish international processes for the assessment of sustainable development impacts. Research has concluded that most host countries have rather general lists of non-binding guidelines instead of clear criteria and do not thoroughly investigate projects and that stakeholder consultations are often deficient.¹⁷

In their submissions on Article 6, in particular the Arab Group, Brazil and the LMDCs, maintain that sustainable development issues are a national prerogative and should therefore not be subject to multilateral analysis under the UNFCCC.¹⁸ The EIG suggests that the UN Sustainable Development Goals provide a universal definition of sustainable

¹⁶ AOSIS submission (n. 11); Brazilian submission (n. 9); EIG submission (n. 8); LDC submission (n. 11).

¹⁷ See e.g. K. Holm Olsen (2007): 'The Clean Development Mechanism's Contribution to Sustainable Development: A Review of the Literature', 84 Climatic Change 59; L. Schneider (2007): Is the CDM Fulfilling Its Environmental and Sustainable Development Objective? An Evaluation of the CDM and Options for Improvement. Berlin: Öko-Institut; Obergassel, W., L. Peterson, F. Mersmann, J. Schade, J. A. Hofbauer, M. Mayrhofer (2017): 'Human rights and the clean development mechanism: lessons learned from three case studies'. Journal of Human Rights and the Environment, Vol. 8, No. 1, pp. 51-71. ¹⁸ Arab submission (n. 10); Brazilian submission (n. 9); LMDC submission (n. 8).

development that could be used for assessing activities.¹⁹ Some countries including the AGN and Indonesia suggest that the UNFCCC could develop guidance and tools which would be voluntary for countries to use.²⁰

4.4 Promoting Environmental Integrity

While Article 6 puts the protection of environmental integrity in its application front and centre, as some submissions note, there is no clear, universally adopted definition of the term. Many submissions that discuss the issue converge on a view that environmental integrity means that one emission unit represents one ton of CO_2e and is counted only once towards a commitment. However, there is a number of challenges to meeting this requirement, some of them general, some of them due to the specific nature of the Paris Agreement:

- Emission Reductions May not Be Real and Additional: Under the CDM and JI emission reduction credits are generated by comparing the emissions from the project to a 'business as usual' reference scenario where the project is not implemented. For example, instead of renewable electricity, electricity from fossil power plants is used. However, this scenario is hypothetical and may not accurately describe what would actually have happened in the absence of the project. The project might well have been implemented anyway, regardless of the additional incentive provided by the possibility to gain emission credits. If such 'non-additional' credits are used by buyers to comply with their emission targets, there will be more GHG emissions than if the buyer had had to reduce their own domestic emissions. Research indicates that in fact a large share of CDM and JI projects may have been non-additional.²¹
- Emission Reductions May Be Double Counted: Article 6.2 requires Parties to "apply robust accounting to ensure, inter alia, the avoidance of double counting" while paragraph 36 of the decision accompanying the Paris Agreement specifies that this is to be done by making "corresponding adjustments".²² At the moment, however, there is no common understanding about what such "corresponding adjustments" are and how they are to be made.
- Emission Reductions May be Oversold: In contrast to the Kyoto Protocol, countries are not legally obliged to actually achieving their NDCs. Unless regulations are put in place, there is therefore nothing to prevent countries from selling more emission reductions than is compatible with achieving their own NDCs. Notably, only the submission by the EIG notes this risk, and even this submission does not suggest measures to be taken to prevent overselling.
- Dealing with the variety of NDCs: As noted above, while in the Kyoto Protocol all commitments are of the same type absolute multi-annual emission budgets –

¹⁹ EIG submission (n. 8).

²⁰ AGN submission (n. 8); Indonesian submission (n. 11).

²¹ See e.g. Cames et al. (2016): How Additional Is the Clean Development Mechanism?; Spalding-Fecher et al. (2012): Assessing the Impact of the Clean Development Mechanism (n. 1).

²² Decision 1/CP.21, Adoption of the Paris Agreement, FCCC/CP/2015/10/Add.1, 29 January 2016, para. 36.

countries' contributions to the Paris Agreement have a huge variety of types. Accounting under the Paris Agreement will therefore be much more complex than under the Kyoto Protocol. Targets that refer only to a single year are particularly problematic as emissions in that year may not be representative of the country's usual emissions profile. Some Parties including Brazil and the EIG therefore consider that countries wishing to participate in cooperative approaches and the new mitigation mechanism should be required to establish and quantify a budget of emission allowances or an annual trajectory of emissions towards their NDC objectives.²³

Given the various risks to environmental integrity, some Parties including AOSIS, Brazil, the LDCs and Venezuela suggest that there should be limitations on the use of transfers to minimise the potential for damage.²⁴ Suggestions include:

- Use of Article 6 should be limited to sectors that are quantifiable and easy to measure and provide lasting emission reductions.
- ITMOs should not be bankable.
- ITMOs, if not used to achieve NDCs, should be automatically cancelled after a reasonable time.
- ITMOs should only be transferred once, from the Party reducing emissions to the Party receiving the ITMOs for compliance with their NDC.
- The share of NDC achievement that could be covered by ITMOs should be limited.

5 Reflections and Recommendations

While the new mechanism under Article 6.4-6.7 seems familiar as its principles strongly resemble the Kyoto Protocol's CDM, the other two approaches have so far not been clearly defined conceptually. Consequently, submissions on the new mechanism go into implementation details whereas submissions on the other two approaches mostly try to define what the two approaches are. The submissions reveal some sharp differences in opinions on how Art. 6 should work. Key controversies include:

- what to include under and how to govern cooperative approaches;
- the scope of the Article 6.4 mechanism;
- how to operationalize the requirement to increase ambition;
- whether to have international provisions on the promotion of sustainable development
- how to protect environmental integrity.

As for the governance of cooperative approaches, the history of the Kyoto Protocol has shown that self-policing by Parties does not necessarily work. One part of Joint Implementation, the so-called Track 1, operated without international oversight and research has concluded that a large share of the emission credits issued under this track

²³ Brazilian submission (n. 9); EIG submission (n. 8).

²⁴ AOSIS submission (n. 11); Brazilian submission (n. 9); LDC submission (n. 8)., Submission by the Bolivarian Republic of Venezuela Views on article 6 of the Paris Agreement, March 2017.

are unlikely to represent additional emissions reductions.²⁵ It therefore seems recommendable to follow the position of those countries who insist that transfers under Article 6.2 must be subject to robust international oversight.

The question of raising ambition could be addressed at the level of the NDCs or at the level of the Article 6 activities. An increase of ambition is most pronounced if Article 6 is used to go beyond existing NDCs, rather than only to achieve them. For example, the EU has set itself the target to reduce GHG emissions by at least 40% below 1990 levels by 2030. The EU so far intends to achieve the 40% target by domestic reductions; Article 6 could be used to achieve further emission reductions in third countries.

Additional reductions could also be achieved at the level of individual Article 6 activities by discounting a share of the reductions achieved. In this way, only a part of the reductions would be available to buyers to use towards their NDCs.

While the question of international assessment of sustainable development impacts is highly charged politically, experience from the CDM indicates that leaving the matter to host countries is a questionable approach. Research has identified substantial flaws in national processes to assess the sustainability of projects. It therefore seems recommendable to include sustainability issues in the international process to approve activities for Article 6. The CDM does actually have a tool to assess sustainability impacts in place, but its use is so far voluntary. This tool could provide a solid basis for developing mandatory criteria for activities under Article 6. In addition, there should be clear procedures for when and how to consult local stakeholders as well as grievance mechanisms to allow stakeholders to raise complaints.

The protection of environmental integrity faces various risks, including lack of additionality, double counting, overselling, lack of robust accounting due to the variety of NDCs, and an abasement of mitigation ambition in order to maximise the potential to sell emission units.

As for the variety of NDCs, while a number of countries demand to allow all countries to use Article 6, this may not be possible. Emission intensity targets and emission targets expressed as a deviation from 'business as usual' pose substantial accounting challenges, as do targets that are defined only for a single year.²⁶

As for the risk that countries might keep their mitigation ambition low in order to maximise the potential to sell emission units, it seems recommendable not to translate emission targets into budgets of emission units as was done under the Kyoto Protocol. The Kyoto experience shows that such budgets are quickly seen as acquired possessions. Further discussions should also explore whether the determination of the additionality and baselines of individual Article 6 activities could be completely decoupled from NDCs.

The additionality problem has arguably not been really resolved in the CDM and JI and the rapid technological advances in key technologies such as renewable energy will not

²⁵ Kollmuss, A., L. Schneider, V. Zhezherin (2015): Has Joint Implementation reduced GHG emissions? Lessons learned for the design of carbon market mechanisms. Stockholm: Stockholm Environment Institute.

²⁶ Schneider, L., A. Kollmuss, M. Lazarus (2014): Addressing the Risk of Double Counting Emission Reductions under the UNFCCC'. Stockholm: Stockholm Environment Institute; Kreibich, N., W. Obergassel (2016): Carbon Markets After Paris—How to Account for the Transfer of Mitigation Results? Wuppertal: Wuppertal Institute for Climate, Environment and Energy.

make demonstrating the additionality of individual projects easier. At the same time, in aggregate the transition to renewable energy is clearly not going as fast as it could and should be. To stay below the 2°C limit, more than US\$ 1 trillion will need to be invested annually in the energy sector alone through to 2050. At the moment, only about one quarter of this is being invested annually.²⁷

Moving the implementation level from the project to the sector level, as is being discussed for the Article 6.4 mechanism, may help to overcome the difficulty to establish additionality. Taking the example of renewable energy, national scenarios for business as usual could be used to analyse why the national uptake of renewable energy is slower than might be expected given the rapidly falling technology costs. On this basis, a threshold for the expansion of renewables could be defined, where further expansion beyond the threshold would be defined as being additional. The analysis might also identify certain technologies as generally being too expensive or otherwise unattractive in the respective national context.

Opening Article 6 for national-level design options would also allow to harness national policies for climate change mitigation. Article 6 could be used to support national policy instruments that have already proven to be highly effective in mobilizing private investment for renewable energy, such as feed-in tariffs, auctions, and quota systems. For instance, investors could top up national FIT levels or auction volumes. In this way, Article 6 could be used to help catalyse sector-wide transformations, which will be very difficult to do with a project-by-project approach.

²⁷ Ceres, 'Investing in the Clean Trillion: Closing The Clean Energy Investment Gap', https://www.ceres.org/resources/reports/investing-clean-trillion-closing-clean-energy-investment-gap.