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The Paris Agreement: A New Beginning

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Abstract

The adoption of the Paris Agreement is a milestone in international climate politics and brings years of near deadlock negotiations to a conclusion. The Agreement creates a global process of engagement, follow-up, regular stock-take exercises and cooperative action. On the one hand, it represents a step forward, overcoming the many divisions that had marked the Kyoto area: between developed and developing countries, between industrialized nations inside the Protocol and those outside, and between those supportive of market mechanisms and those that vehemently opposed them. On the other hand, individual country contributions fall short of the overall climate goal, and the risk is that the Paris Agreement remains a shell without sufficient action and support. It thus remains to be seen whether the Paris Agreement is the right framework through which to address the collective action problem of climate change.

Keywords

Paris Agreement – UNFCCC – mitigation – adaptation – international climate policy – climate finance – market mechanisms – REDD+ – loss & damage

1 Introduction

On 12 December 2015, 196 Parties to the UN Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement (PA), a new legally-binding framework for an internationally coordinated effort to tackle climate change. The Agreement comes 23 years after the signing of the UNFCCC, represents the culmination of six years of international climate change negotiations under the auspices of the UNFCCC, and was reached under intense international pressure to avoid a repeat failure of the Copenhagen climate conference in 2009. Diplomacy, this time around, worked smoothly. The French government hosting the Paris negotiations with Minister of Foreign Affairs Laurent Fabius acting as President of the 21st session of the Conference of the Parties (COP 21) has been widely complemented for skilfully navigating through the two-week marathon and for securing a diplomatic success. Behind the scenes, Christiana Figueres, Executive Secretary of the UNFCCC pulled the strings to bring reluctant government officials in line. At the level of the Parties, concerted action helped broker the deal. On the way to Paris, the joint announcement¹ of the U.S. and China – the world's biggest polluters – in 2014 to commit to national mitigation targets, and the G7 Declaration of Elmau,² carefully orchestrated by the German government, to aim for a 'decarbonisation of the global economy over the course of the century', provided important milestones. During the Paris conference, the emergence of the 'High-Ambition-Coalition'3 was instrumental in consolidating the text for its ultimate adoption.

In some respects, the PA is a breakthrough which exceeded expectations. The Agreement establishes a 'global warming goal of well below 2°C on pre-industrial averages' and defines a universal, legal framework to 'strengthen the global response to the threat of climate change' (Art. 2), obligating all Parties to contribute to climate change mitigation and adaptation. In other respects, the Paris Agreement leaves countries with a great deal still to negotiate. If 'nationally determined contributions' (NDCs) do not go beyond the 'intended' NDCs

¹ U.s.-China Joint Announcement on Climate Change of 12 November 2014, accessible at https://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement -climate-change (accessed 10 Feb 2016).

² Leaders' Declaration: G7 Summit, 7–8 June 2015, accessible at https://www.g7germany .de/Content/EN/_Anlagen/G7/2015-06-08-g7-abschluss-eng_en.pdf?__blob=publication File&v=3 accessed 10 Feb 2016).

³ Originally conceived by a group of 15 countries, spearheaded by the Foreign Minster of the Marshall Islands, Tony de Brum, the high ambition coalition grew to over 100 countries, effectively cutting through the so-called 'firewall'-divide of developed and developing countries by forging an alliance of countries of all development levels including emerging economies.

communicated before the Paris COP, emissions will continue to rise at levels sufficient to trigger warming well in excess of 2°C, and the Paris Agreement neither formulates a binding emission target, nor does it bind Parties to implement their NDCs.

This article presents a critical assessment of the PA. It is divided into three sections. The first section discusses the general approach and structure of the PA, the second summarizes the content of the Agreement with a strong emphasis on the mitigation regime, and the third discusses the PA in the context of international climate policy.

2 The Architecture of the Paris Agreement

2.1 Overall Approach

In contrast to the Kyoto Protocol, the PA does not establish emission reduction and limitation targets for individual Parties. Instead, the PA formulates an overall climate change goal (Art. 2) and calls on Parties to contribute to this goal. It is up to the countries to decide how and how much they can contribute to meeting that goal in accordance with the 'principle of common but differentiated responsibility and respective capabilities, in the light of different national circumstances' (Art. 2.2). Parties have to adapt their mitigation contributions every five years (Art. 4.9), and these contributions have to increase over time to reflect with the 'highest possible ambition' their changing capabilities (Art. 4.3). To ensure that the overall goal is being met, the Conference of the Parties (COP) will, every five years, take stock of the progress of Parties 'towards achieving the purpose of this Agreement and its long-term goals' (Art. 14). NDCs shall, in turn, be informed by this stocktake (Art. 4.9).

The PA is a treaty as a matter of international law, which means that ratifying countries will be bound by its terms when it comes into effect. Yet despite the binding character, it contains few mandatory provisions that formulate precise and enforceable provisions.⁴ Most notably, NDCs and their emission reduction commitments take the form of a political aim rather than a legal obligation. Instead the PA confers trust into process, assessment procedures and inter-active follow-up to stimulate mitigation efforts.

While the PA contains more substance and detail than observers expected before the Paris COP, details on many of PA's provisions remain to be worked out at future meetings. The first meeting of the Parties of the PA shall

⁴ Cf. Abbott, K, Keohane, R., Moravcsik, A., Slaughter, A., Snidal, D., The Concept of Legalization (2000) 54 International Organization 401.

determine the following: a common time frame for NDCs (Art. 4.10); rules for the sustainable development mechanism established in Article 6 (Art. 6.7); procedures and guidelines for developed countries to report on their financial contributions (Art. 9.7); institutional arrangements for capacity building (Art. 11.5); and modalities and procedures for the compliance committee established by Article 15 (Art. 15.3).

Given the high-level nature of the PA, a lot of the details remain to be negotiated, and this will require Parties to revisit potentially contentious issues and agree on specificities. This challenge should not be underestimated and as such, there is an ongoing need for countries to maintain the international diplomatic effort that was exerted in the run up to Paris.

2.2 The Paris Decision

The PA was adopted as an annex to a decision of the COP to the UNFCCC. Together with the Paris Agreement, the COP also adopted a decision that guides pre-2020 action and sets out implementation details for the Paris Agreement before its entry into force (the Paris Decision or PD). The PD has a number of complementary functions: (i) it provides a timeline for the Paris Agreement and its entry into force (scheduled for the year 2020); (ii) it regulates and organizes action for the implementation of the Paris Agreement, including institutional arrangements concerning the establishment of a new Ad Hoc Working Group (AWGPA); (iii) it addresses a number of other substantial commitments that may evolve during the implementation of the PA, including the financial commitment to a floor contribution of 100 billion USD; and (iv) it provides guidance on pre-2020 arrangements. The PD also includes those details that the U.S. delegation considered as mandates-such as binding emission reduction targets—that would have turned the PA into a treaty that would have required ratification by a reluctant u.s. Congress. In its current form, it is expected that the U.S. government ratifies the Paris Agreement as a 'Presidential Executive Agreement'.5

2.3 Core Legal Principles

The PA has been adopted under the UNFCCC, which remains valid and binding upon Parties. The PA recognizes and builds on the principles

⁵ For the U.S. domestic options of treaty ratification see Bogdandy, D., Legal options for U.S. acceptance of a new climate change agreement, C2ES 2015, at http://www.c2es.org/docUploads/legal-options-us-acceptance-new-climate-change-agreement.pdf (accessed 10 Feb 2016).

established in the Convention, notably the principle of 'common but differentiated responsibilities and respective capabilities' (CBDRC), one of the cornerstone principles of the climate regime. The CBDRC restatement is however made with the express specification that it will be implemented 'in the light of different national circumstances' (Art. 2.2), which resonates with the notions of 'dynamic differentiation' (a term favoured by the E.U.6) and 'self-differentiation' (a term favoured by the U.S.⁷). The further qualification of the CBDRC principle is little more than the reconfirmation of its original meaning,8 but should be seen as a response to its synonymous use for the binary differentiation in developed and developing countries. It reflects the understanding by Parties that the principle's burden-sharing formula, whether understood in terms of climate justice or pragmatic problem-solving, remains essential to the legitimacy and hence viability of a long-term, global climate regime, but, at the same time, that it needs to stand for a broader concept that goes beyond the simple distinction between developed and developing countries.⁹ It is in that spirit that the PA formulates a mitigation mandate to all Parties without limiting that obligation to a set list of countries. The differentiation persists however with developing countries taking the 'lead' by undertaking 'economy-wide absolute emission reduction targets' (Art. 4.4) and being obliged to 'provide financial resources to assist developing country Parties' (Art. 9.1). In particular the finance obligations are primarily directed to developed countries, with only a weak call to other countries to provide finance voluntarily (Art. 9.2). The approach of the PA, thus, becomes more fluid, with countries being able to transition from one category to the other. Also, importantly, a wide range of provisions entail obligations (cf. Art. 3 on overall efforts) or contributions (cf. Art. 4.2. on NDCs) for Parties regardless of their status.

Other legal principles are sustainable development and equity, and concepts that are relevant for the interpretation of the goal of the PA include poverty eradication and food production (Art. 2). The PA further formulates

⁶ See for the EU negotiation position the statement of Mr Runge-Metzger, European Commission, reported at UNFCCC, ADP Summary report on the workshop on scope, structure and design of the 2015 agreement, ADP2, part 1, 29 April 2013, para. 33, accessible at http://unfccc.int/resource/docs/2013/adp2/eng/2infsum.pdf.

⁷ See for the US negotiation position ADP Workstream 1: 2015 Agreement, Submission of the United States of 11 March 2013.

⁸ Stone, C. (2004), Common but Differentiated Responsibilities in International Law, 98 The American Journal of International Law (2004) 276.

⁹ Brunnée, J., Streck, C. (2013), *The UNFCCC as a negotiation forum: Towards common but more differentiated* responsibilities. Climate Policy, 13:5, 589–607, DOI:10.1080/14693062.2013.822661.

a number of principles to guide the accounting of emissions and emission reductions. Environmental integrity, transparency, accuracy, completeness, comparability and consistency, and the avoidance of double counting, are key principles in this respect (Art. 4.13).

2.4 Entry into Force and Elaboration

The Secretary General of the United Nations acts as depositary of the Paris Agreement (Art. 26). The Agreement will enter into force once 55 Parties have deposited their ratification instrument with the depositary, accounting in total for at least an estimated 55 percent of the total global greenhouse gas (GHG) emissions (Art. 21.1)).10 The dual threshold requirement echoes a similar provision that applied to the Kyoto Protocol, adopted in 1997. By contrast however, the share-of-total-emissions threshold in the PA will apply to all countries (not just industrialized ones, as with the Kyoto Protocol) and does not allow individual countries to hold the key to the adoption of the PA. The Kyoto battle, which lasted for eight years until 2005, before the threshold was met following Russia's ratification needs not be repeated. In fact, early ratification and entry into force seems rather likely. The U.S. government may be poised to ratify the PA before the end of President Obama's tenure (2016), which in turn would put political pressure on China, where the treaty needs to be approved by the Standing Committee of the National People's Party, to follow suit. Were the two countries ('G2'), which represent about 38% of annual global greenhouse gases¹¹ to follow up on their joint mitigation announcement of 2014 and cooperate with respect to ratification, then no more than a handful of other countries would have to ratify for the PA to enter into force.¹² Once entered into force, the PA will establish the international framework for climate action beyond 2020. It will effectively replace the Kyoto Protocol whose second commitment period ends in that year.

The COP of the UNFCCC will serve as the meeting of the Parties of the Paris Agreement (CPA) (Art. 16.1), and the first session of the COP in this role will coincide with first the first UNFCCC COP after the Paris Agreement has

The UNFCCC Secretariat issued a note on the procedural steps, 'The Paris Agreements: Next steps', 29 January 2016, accessible at http://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_next_steps_post_adoption.pdf.

¹¹ World Resource Institute, at http://cait.wri.org/historical (accessed 10 Feb 2016).

For modeling of country options, see World Resources Institute, accessible at http://www.wri.org/blog/2016/01/after-cop21-what-needs-happen-paris-agreement-take-effect (accessed 10 Feb 2016).

entered into force (Art. 16.6). A high level signing ceremony will be convened on 22 April 2016 in New York, and the Paris Agreement will be open for accession from 21 April 2017 (Art. 20.1).

3 The Main Content of the Paris Agreement

Highlights from Paris

The Paris Agreement contains:

- · An ambitious collective goal to hold warming well below 2 degrees with efforts to limit warming to 1.5 degrees;
- · An aim for greenhouse gas emissions to peak as soon as possible, and to achieve net-zero emissions in the second half of this century;
- · A requirement for mitigation measures of individual countries to be expressed in nationally determined contributions (NDCs);
- A process that demands a revision of NDCs at least every 5-years representing progression beyond the last NDCs;
- · A mechanism for countries to achieve NDCs jointly, sharing mitigation targets, and a mechanism for countries to cooperate in achieving NDCs. Countries can meet their NDC targets by transferring 'mitigation outcomes' internationally either in the context of emission trading, or to allow results-based payments;
- A mechanism for private and public entities to support sustainable development projects that generate transferrable emission reductions;
- · A framework for enhanced transparency and an expert review of NDCs;
- · A global stocktake from 2023 and every 5 years thereafter to review progress;
- Encouragement for Parties to implement existing frameworks for REDD+ including through the provision of results-based payments;
- · A global goal of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, and commitment to providing enhanced support for adaptation;
- · A decision to adopt the Warsaw International Mechanism for Loss and Damage, noting that the agreement does not involve or provide a basis for any liability or compensation;

(cont.)

- · A commitment to a collective goal of providing USD 100 billion per year to 2025, and beyond 2025 with USD 100 billion as a floor. Developing countries are encouraged to provide voluntary support. Public funds will play a 'significant role' in finance, and developed countries must report twice a year on levels of support provided;
- An enhanced transparency framework for action and support with built-in flexibility which takes into account Parties' different capacities with the goal to understand climate change action in the light of the objective of the UNFCCC and the PA;
- · A non-punitive compliance mechanism that is expert based and facilitative in nature.

3.1 Mitigation

The Paris Agreement aims to hold global temperatures 'well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C' (Art. 2.1.(a)). This goes beyond what had been agreed in Copenhagen and confirmed in Cancún, namely to recognize 'the scientific view that the increase in global temperature should be below 2 degrees Celsius' (2/CP.15, para 1; 1/CP.16, para 4). While Parties could not agree on a specific date at which global emissions have to peak, the Agreement states that such a peak must be reached 'as soon as possible', and that rapid emission reductions must follow 'so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century' (Art. 4.1).

In accordance with Article 4.1., two types of action are essential to meet the 1.5°C target. First, the world has to reduce GHG emissions, not to zero, but to a point where there is a balance between emissions and sequestration (or net-zero).¹³ This means, secondly, that countries have to ramp up options to sequester GHG emissions. The higher the rate of sequestration, the more residual GHG emissions are permissible. Article 4.1 does not limit sequestration

According to some studies, continued negative emissions will become a necessity, however, see Gasser, T., Guivarch, C., Tachiiri, K., Jones, C.D., Ciais, P., Negative emissions physically needed to keep global warming below 2 C, 6 Nature Communications (2015); the European Commission reckons that negative emissions on balance will be needed to reach the 1.5 degrees scenario, see the Guardian of 14 December 2015, accessible at http://www.theguardian.com/environment/2015/dec/14/eu-says-15c-global-warming-target -depends-on-negative-emissions-technology http://cait.wri.org.

to natural carbon sinks, and leaves the door open to technology-driven carbon sequestration solutions, such as carbon capture and storage.

Nationally Determined Contributions

The core of the mitigation provisions of the PA are 'nationally determined contributions' or 'NDCs'. The term was first introduced at COP 19 (Warsaw) – then stated with the attribute 'intended' ('intended nationally determined contributions', or 'INDC') – as a catch-all phrase to address all countries and accept any form of voluntary effort. Since then, a raft of literature on INDCs has been produced. At first, the term was understood as a practical policy and/or technical concept alone lacking any legal connotation. This changed when it became clear that INDCs, or NDCs, would become a fundamental pillar of the PA. From the Lima Conference (COP 20) and for much of 2015, negotiators and legal experts considered options for the legal anchoring or mooring of NDCs in a future climate treaty. The challenge was to find both a flexible interface between the bottom-up, dynamic commitments of countries and the static group-level agreement and, at the same time, a legal formula that would reconcile the genuinely voluntary nature of NDCs with a set of legally binding provisions on the NDC process.

In all, 156 INDCs, representing 183 countries (the E.U. submitted an INDC for all 28 E.U. Member States and the Union as a whole) were submitted prior to the Paris conference. Another four INDCs (Brunei, Tonga, Saint Kitts & Nevis as well as Venezuela) followed during the Paris session. The acceptance rate to work on the basis of INDCs, thus, was virtually universal.

That said, while the pre-Paris bottom-up *process* was strong, the result in terms of aggregate *ambition* and *substance* has been mixed. A team of

For many: WRI INDC resources page: http://www.wri.org/our-work/topics/indcs; INDC tracker, http://climateactiontracker.org/indcs.html; UNDP (2015), Designing and Preparing Intended Nationally Determined Contributions, http://www.undp.org/content/undp/en/home/librarypage/climate-and-disaster-resilience-/designing-and-preparing-intended-nationally-determined-contribut.html (all accessed 10 Feb 2016).

Maljean-Dubois, S. , Wemaere, M., Spencer, T., A comprehensive assessment of options for the legal form of the Paris Climate Agreement, IDDRI Working Paper No. 15, November 2014; Bodansky, D., Rajamani, L., Key Legal Issues in the 2015 Climate Negotiaions; von Unger, M., Die Klima-Konferenz von Paris: Auf dem Weg zum Pariser Abkommen 2015, 53 Archiv des Völkerrechts (2015) 252.

For a full list see http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx; for a neatly organized collection with submission date) see http://cait.wri.org/indc/.

independent experts¹⁷ calculated that if all INDCs were fully implemented, the outcome would still fall short of the 2°C scenario by a wide margin. In 2100, the projected median warming would be around 2.7°C (compared to a 3.6°C scenario, in the absence of the future measures envisaged under the INDCs). This mitigation gap is worrying. From an in-depth assessment of 32 INDCs (standing for more than 80% of global emissions) the expert group judged only five to be sufficiently ambitious (Bhutan, Costa Rica, Ethiopia, Morocco, The Gambia), with a combined share in global emissions of 0.4%. Fifteen submitted INDCs (representing 19% of global emissions) were rated 'inadequate'. They include a number of high-income countries including Australia, Canada, Japan, New Zealand, and the United Arab Emirates. A further 11 INDCs (accounting for 62% of global emissions) were rated at 'medium' ambition. They include the submissions of China, the E.U., and the United States.

The rating of INDCs according to the underlying ambition and the comprehensive accounting for a country's emissions profile is not as simple as it may look. The Kyoto Protocol had laid down absolute GHG reduction figures for industrialized countries, so called quantified emission limitation and reduction obligations (QUELROS), measured in relation to a base year (for most countries: 1990). The INDCs, by contrast, do not require the formulation of absolute reduction targets. Rather, each country can list whatever it intends to 'contribute towards achieving the objective of the Convention' (Decision 1/CP.20, para 10) or what it sees as a 'contribution to the global response to climate change' (Article 3). Some countries – mostly those that had been under a QUELRO obligation under the Kyoto Protocol, but also the U.S. – maintain the approach of expressing their individual targets in terms of absolute emission reductions over a baseline. The E.U., for instance, pledges 'at least' 40% below its 1990 baseline until 2030, while the U.S. promises to reduce, by 2025, its absolute emissions by '26-28 per cent' compared to its 2005 emissions. Other countries, including most emerging economies, opted to express their mitigation target in either reductions below business-as-usual – e.g. Mexico – or in terms of improvement of the emissions intensity (tco2eq per unit of GDP) – e.g. Chile – or through a mix of either of these with other indicators such as an emissions

Potsdam Institute for Climate Impact Research, Climate Analytics, NewClimate Institute, and Ecofys, Climate Action Tracker, Briefing of 8 December 2015, accessible at http://climateactiontracker.org/assets/publications/briefing_papers/CAT_Temp_Update __COP21.pdf (accessed 10 Feb 2016).

For an assessment of what countries should propose from a 'fair share' perspective see Ancygier, A. et al., Mitigation Commitments and Fair Effort Sharing in a New Comprehensive Climate Agreement Starting 2020 (2015).

peak (e.g. China). A third group of countries, including a number of least-developed and low-income countries, opted to express their INDC as an action catalogue only.

The PA responds to the shortfall in overall ambition and the complexities in accounting in two ways. First, it establishes a dynamic mechanism that triggers procedural milestones to assess and improve a country's mitigation ambition over time. Each Party shall prepare, communicate and maintain successive NDCs (Art. 14.2). Every five years, countries will have to update their NDC (Art. 4.9). Each time, the update needs to represent 'a progression beyond the Party's then current nationally determined contribution' (Art. 4.3), and it needs to take into account the five-yearly 'global stocktake' exercise (the first to happen in 2023), mandated under Article 14 PA as an assessment of 'the collective progress towards achieving the purpose of this Agreement and its long-term goals' (ibid.). Note that while countries determine their NDC individually, without assuming a legal obligation or liability vis-à-vis the result, they do have an obligation to pursue mitigation actions with the 'aim of achieving the objectives' of their NDCs (Art. 4.2).

Second, the Paris Agreement lays the groundwork for installing a robust communication and accounting framework. Parties must provide their NDCs with 'necessary' levels of 'clarity, transparency and understanding' in accordance with what has been decided under the PD¹⁹ and what will be decided by the CPA (Art. 14.8). Furthermore, all Parties shall account for their actions and results achieved in implementing the NDCs (Art. 14.13). In accounting for emissions and removals 'corresponding to' their NDCs, Parties shall 'promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double-counting', in accordance with guidance to be adopted (ibid).

While the details need to be elaborated in future sessions and while the word 'promote' leaves some room for interpretation, this provision essentially entails an accounting commitment common to all countries²⁰ and is evidence that the era of strict bifurcation has come to an end.²¹

See para 31 of the Paris Decision, which mandates the AWGPA to establish relevant guidelines on the basis of IPCC methodologies.

For a model on 'organizing metrics on mitigation efforts' cf. Aldy, J., Pizer, W., Akimoto, K (2015), Comparing Emissions Mitigation Efforts across Countries.

Strict bifurcation refers to a policy where developed and developing countries take on different categories and levels of commitment. For an overview of the pre-Paris discussions on bifurcated v. common accounting rules see Herod, A., Siemons, A., Cames, M., Scheffler, M., The Development of Climate Negotiations in View of Lima (COP 20) (2014), accessible at http://www.oeko.de/oekodoc/2196/2014-742-en.pdf (accessed 10 Feb 2016).

NDCs are primarily mitigation tools. The Paris Agreement acknowledges, however, the role of 'adaptation actions and/or economic diversification plans', at least in their capacity as 'mitigation co-benefits' (Art. 4.7). The acknowledgement is as much a conceptual as a factual one; virtually all developing countries included adaptation sections in their INDCs.

Finally, Article 4 also foresees the option for countries to formulate joint NDCs (Art. 4.16–4.18). While Article 4.18 addresses the particular constellation of the E.U. as a supranational entity, which is (or will become) a Party to the PA alongside the E.U. member states, Article 4.16 PA goes further and allows any two or more Parties (whether developed or developing) to agree a joint NDC, provided 'the emission level allocated to each Party' is made and communicated to the UNFCCC secretariat and that each Party retains individual 'liability' ('shall be responsible') for such allocation (Art. 4.17).

Cooperation and Markets

Flexible mechanisms and carbon markets – first pioneered by the Kyoto Protocol with the dual purpose of assisting developing countries with achieving sustainable development and helping developed countries to comply with their mitigation targets²² – have long been elements of the international climate finance architecture. The High-Level Advisory Group on Climate Change Financing, established in 2010 by the UN Secretary-General Ban Ki-Moon, calculated that with an international carbon price of USD 20–25 raised in developed countries, around USD 30 billion annually could be leveraged for developing countries in addition to private investment flows of USD 100–200 billion in gross private capital.²³ Conversely, UNFCCC Parties have been struggling to reach common ground regarding the design of future market approaches, their scope, and their function.²⁴ For years, the discussions centred on what was referred to as 'New Market Mechanisms' (NMM) on the one hand, and the 'Framework for Various Approaches' (FVA) on the other. The NMM was mostly

For the history see Freestone, D., Streck, C. (eds.), Legal Aspects of Carbon Trading, Oxford 2009.

Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing (5 November 2010), http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF%20Report.pdf (accessed 10 Feb 2016).

Streck, C., Meijer, C., Conway, D., von Unger, M., O'Sullivan, R., Chagas, T., The Results and Relevance of the Cancun Climate Conference, 8 JEPL (2011),165; Streck, C., Chagas, T., von Unger, M., O'Sullivan, R. The Durban Climate Conference between Success and Frustration, 9 JEPL (2012), 201.

conceived as a hands-on, centralized and top-down outfit, while the FVA referred to a looser concept identified as an international tool to secure robust accounting for cross border mitigation outcomes. Both concepts foresaw the issuance, or acceptance, of units to track emission reductions and, within limits, offset a Party's mitigation obligations.

Negotiations on market mechanisms remained vague however, suffering from conceptual differences. Several countries, in particular developed countries, envisioned the NMM as a means to target whole economic sectors or broad segments of the economy and to see target countries commit to 'own contributions' when setting the baseline or reference level.²⁵ Others, in particular a number of emerging countries, wished to retain a project-based approach, inspired by Kyoto's Clean Development Mechanism (CDM) with no targets enshrined for developing countries.²⁶ In that sense, the discussions were no more than a continuation of the discussion on CBDRC. Finally, much of the discussions were overshadowed by questions on the ethical value of carbon trading, seen against the background of environmental justice,²⁷ on the one hand, and the unresolved matter of carbon trading in the context of emission reductions from deforestation (REDD+), on the other hand.

With its Article 6, the PA points to a middle-way by installing different flexibility tracks, while defining a number of thresholds and red lines. Ironically, the term 'market' survived only in the concept of 'non-market approaches'. The point of departure is the 'voluntary cooperation of their [the Parties'] nationally determined contributions' to allow for higher mitigation and adaptation ambition and the promotion of 'sustainable development and environmental integrity' (Art. 6.1). Article 6 includes three cooperation formats:

Cf. Bolscher, H., van der Laan, J., Slingerland S., Sijm, J., Bakker, S., Mikunda, T., Wehnert, T., Sterk, W., Hoogzaad, J., Wemaere, M., Conway. D. Design options for sectoral carbon mechanisms and their implications for the EU ETS (2012), http://ec.europa.eu/clima/policies/ets/linking/docs/study_20120831_en.pdf (accessed 10 Feb 2016).

For a discussion see Castro, P., Duwe, M., Köhler, M., Zelljadt, E., Market-based mechanisms in a post 2012 climate change regime (2012), Perspectives, Ecologic, University of Zurich. http://www.perspectives.cc/typo3home/groups/15/Publications/2012/2012

_Market-based-mechanisms-in-a-post-2012-climate-regime.pdf (accessed 10 Feb 2016).

See, for instance, Klein, N., This Changes Everything: Capitalism vs The Climate, Simon & Schuster (2014), who sees carbon trading as a 'perverse incentive'; for a focus on indigenous rights cf. the position papers of the Indigenous Environmental Network, accessible at http://www.ienearth.org/category/climate-justice/carbon-trading-and-offsets/; for a nuanced discussion see Hayward, T., Human Rights versus Emissions Rights: Climate Justice and the Equitable Distribution of Ecological Space, 21 Ethics & International Affairs (2007) 431.

- Cooperative Approaches. Parties may engage in 'voluntary cooperation' (Art. 6.1) and 'cooperative approaches', using 'internationally transferred mitigation outcomes' (Art. 6.2) to achieve their NDCs. The awkward terminology is reminiscent of the older FVA discussions and reveals the cumbersome atmosphere of the market discussion, and it leaves some guesswork as to what the nature of such 'outcomes' might be. Market enthusiasts have been quick to refer to 'ITMOs' as a new carbon commodity.²⁸ The UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) is mandated to develop guidance,²⁹ and CPA is to adopt such guidance under its delegated powers,³⁰ ensuring, among others, transparent governance and 'robust accounting' (Art. 6.2) to avoid double counting. Cooperative approaches can cover all sectors including sequestration (removals by sink).31 Note that the flexibility under Article 6.2 is different from the concept of joint NDCs under Article 4.16–18 (see above). Under Article 6.2, Parties link their (separate) NDCs through the use of transferred mitigation outcomes, whereas joint NDCs will fall under a common accounting framework.
- Sustainable Development Mechanism. Based on an intervention by Brazil and the E.U., the PA also defines a sustainable development mechanism that allows private and public entities to support mitigation projects that generate transferrable GHG emissions (Art. 6.4). Programs and projects – the PA avoids using either term – developed under this new mechanism can generate 'emission reductions' which may be used by another Party to 'fulfil' its NDC. The mechanism is implemented under the 'authority and guidance' of the CPA, which according to the PD is to develop relevant 'modalities and procedures'.32 The provision in the PD links back to the mechanisms of the Kyoto Protocol, namely the CDM and Joint Implementation (JI), when requesting that the new mechanism be built on their experience (para 38.f). Similar to the CDM, the mechanism addresses subnational public and private entities, and it foresees a 'share of proceeds' to cover both administrative costs and adaptation needs for nations most vulnerable to climate change (Article 6.6). This opens a future for the Adaptation Fund, created under the Kyoto Protocol.

Sharma, A., Carbon Markets Firmly Back on the Agenda, IISD of 21 January 2016, accessible at http://climate-l.iisd.org/guest-articles/carbon-markets-firmly-back-on-the-agenda/ (accessed 10 Feb 2016).

²⁹ Paris Decision, para 37.

³⁰ Articles 16.1, 16.4 (b), 6.2 PA.

³¹ Paris Decision, para 37.

Paris Decision, para 37 and 38 (the latter provision involving SBSTA).

However, unlike the CDM, the new mechanism must 'deliver an overall mitigation in global emissions' (Art. 6.4.d), that is, it must go beyond offsetting and have a net positive mitigation effect. Also, emission reductions may be accounted for only once in the context of NDCs, either by the host Party or by another Party (Article 6.5).

Framework for non-market approaches. The PA recognizes 'the importance of integrated, holistic and balanced non-market approaches' (Art. 6.8) to assist Parties with implementing their NDCs, in the context of sustainable development and poverty eradication. It aims at both mitigation and adaptation, 'enhance[s] public and private sector participation' and seeks opportunities for coordination 'across instruments and relevant institutional arrangements'. The conceptual scope and meaning of non-market approaches – as opposed to the kind of instruments, which are seen (if no longer called) market mechanisms, for which we find precedence in the Kyoto mechanisms – is hard to gauge. In a technical paper of 2014, the UNFCCC secretariat summarized non-market approaches as 'any actions that drive cost-effective mitigation without relying on market-based approaches or mechanisms (i.e. without resulting in transferable or tradable units)'.33 The technical paper listed as examples from country experience fiscal instruments (such as carbon taxes) and regulation, but also voluntary agreements on mitigation action, and results-based payments for REDD+. The concept, in this interpretation, is very wide, indeed, and there will be much work ahead for SBSTA, which is charged with preparing a draft work programme until next year's session.³⁴

Overall, for Article 6 to play a central role in the implementation of the Paris Agreement, much will depend on the modalities and procedures that will guide the implementation of the cooperative approaches. As with most of the Agreement, however, that work will mean little if Parties do not seek the opportunity for complementary action and do not show the willingness to link domestic action with action under the provisions of the PA. As regards mechanisms, the situation under the Kyoto Protocol was not that different. The market success of the CDM and JI almost exclusively relied on the willingness of the E.U. to open its domestic emissions trading market to the CDM. It is hard to see, at this stage, something similar happening at the domestic level of any of the larger economies. Several INDCs make provision for the future use of mechanisms. But these are almost exclusively INDCs from developing countries, which offer themselves

³³ UNFCCC Secretariat, Non-market based approaches: Technical Paper, FCCC/TP/2014/10, 24 November 2014, accessible at http://unfccc.int/resource/docs/2014/tp/10.pdf.

Paris Decision, paras 40 and 41.

as potential host countries. Among developed countries, there is so far little appetite for cooperative approaches or the engagement with a new international mechanism (with Switzerland as an exception).³⁵ Even among countries that indicated their willingness to participate in markets in their INDCs, the inclination to transfer emission reductions has decreased after Paris as they may need the emission reductions to meet the targets established in their NDCs.

3.2 Adaptation and Loss & Damage

The PA creates a global goal on adaptation that had been absent from previous UNFCCC agreements, aiming to enhance 'adaptive capacity, strengthening resilience and reducing vulnerability to climate change' (Art. 7.1). The Agreement determines that countries should put more emphasis on adaptation planning, and based on this planning Parties should strengthen their cooperation, including through the transfer of funds (Art. 7). The adequacy of action and support will be reviewed as part of the global stocktake.

The global goal on adaptation has been high on the agenda of African countries ever since it was first discussed in Copenhagen in 2009. Developing countries wanted such a goal to be paired with quantitative commitments, while developed countries wanted it to be qualitative (and they prevailed).

The text focuses on procedural aspects of adaptation planning, and does not mandate concrete areas of action or provide quantifiable commitments of support for developing countries. As with the CDM of the Kyoto Protocol, there is a commitment (though loosely worded) to use a share of the proceeds from the transfer of emission reductions to finance adaptation in developing countries, though the level of any 'levy' is unspecified, and it is not clear whether this would flow through the UNFCCC Adaptation Fund, as before (Art. 6.6). The decision to work within the Cancún Adaptation Framework is a commitment to continue with the National Adaptation Plans (NAPS), according to which developing countries set out medium and long term adaptation needs, with Least Developed Countries receiving specific support for NAP preparation and implementation.

The PA also extends the time-bound Warsaw International Mechanism for Loss and Damage and anchors it in the long-term climate framework. Areas of cooperation on loss and damage include early warning systems, emergency preparedness, and slow onset events (Art. 8).

The loss and damage mechanism was one of the most controversial issues right up until the end of the Paris negotiations. The question of whether and

Cf. for the EU the European Commission's Communication: The Paris Protocol – A blue-print for tackling global climate change beyond 2020, COM(2015) 81 final, 25 February 2015, which touches on the issue of market mechanisms not even in passing.

how to compensate vulnerable countries damaged by climate impacts has been a contentious issue for a number of years, and eventually, language clarifying that the mechanism does *not* provide a basis for liability or compensation was introduced into the PD (Para. 52) at the insistence of developed countries, led by the United States. The Decision also requests the Executive Committee of the Warsaw International Mechanism to establish a clearing house for risk transfer (Para. 49) and to create a task force to develop recommendations 'to avert, minimize and address' the risk of displacement (Para. 50).

3.3 Forests

Article 5 is dedicated to forests. The main purpose of that article is to anchor existing forest-related provisions, frameworks and decisions in the new Agreement. Paragraph 1 of the Article refers to the UNFCCC and the mandate to sustainably manage, conserve and enhance biological carbon reservoirs, a reference that refers to forests and other ecosystems in developed and developing countries. Paragraph 2 complements this by encouraging parties to implement the 'existing framework' already agreed under the Convention for REDD+. Through cross-referencing the decisions become part of the Agreement. Alternative policy approaches such as joint mitigation and the role of non-carbon benefits are also acknowledged.

In encouraging Parties to support existing frameworks for REDD+, the PA endorses previous UNFCCC decisions on REDD+, from the Cancun Safeguards, to the Warsaw Framework for REDD+, to the methodological guidance provided by the SBSTA.³⁶ What is important to note however is that for REDD+ to benefit from cooperative approaches laid out in Article 6, REDD+ action and support needs to form part of the NDCs of the cooperating Parties.

3.4 Finance, Technology, and Capacity-building

Financial and non-financial support to developing countries is an essential element of the PA. The Agreement is based on the recognition that developing countries need support in the implementation of their NDCs and that such support will allow for more ambitious mitigation action (Art. 4.5). More specifically, the PA mandates that developed countries provide financial resources (Art. 9), notes the importance of technology transfer (Art. 10), and calls for Parties to cooperate and enhance capacities (Art. 11).

For the Cancun Safeguards, see Decision 1/CP.16, The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Appendix 1, U.N. Doc, FCCC/CP/2010/7/Add. For the Warsaw Framework, see Decision 9/CP.19 – 15/CP.19, U.N. Doc FCCC/CP/2013/10/Add.1.

The language on finance neither provides concrete figures for climate finance nor a timetable for disbursement, though it does note the 'significant role of public funds' in climate finance (Art. 9.3). Developed countries are asked 'to take the lead in mobilizing climate finance' (Art. 9.3), but all Parties are 'encouraged to provide or continue to provide such support voluntarily' (Art. 9.2).

The lack of a concrete, time-bound commitment on climate finance in the PA was a major concession by developing countries for whom greater levels of climate finance was a key demand. To partly rectify this, the PD clarifies that the 'existing mobilization goal' (i.e. USD 100 billion per year from 2020) will continue through 2025, and that from 2025, 'Parties to the Paris Agreement shall set a new collective quantified goal from a floor of USD 100 billion per year' (Para. 54 PD).

At present, the question of what counts and does not count as climate finance is unresolved, beyond an acknowledgement that public funds should play a significant role. This is noteworthy, given the disputes about methodologies used to track current levels of climate finance which erupted during the discussions, centring on an OECD report placing developed country commitments at USD 62 billion in 2014, a figure strongly contested by some developing countries. However, the Agreement does require developed countries to submit biennial reports on levels of assistance provided through public interventions, and requires that these reports be 'transparent and consistent' (Art. 9.7). The encouragement for other countries to provide climate finance reflects emerging practice by wealthier developing countries, such as China's USD 3.1 billion climate finance commitment. Its presence in the text however was resisted by China, among other developing countries.

When it comes to technology transfer, the Agreement establishes a framework to provide guidance on the Technology Mechanism (Art. 10.4). This framework ought to strengthen cooperative action on technology transfer and development and is designed to assess needs, capabilities and barriers. The language does not provide much more detail, but this is not necessarily a sign of weakness. Parties will reconvene in May 2016 to discuss technology transfer, and there will be periodic updates to reassess progress and needs.

The Agreement also stresses the need for capacity building as a means for developing countries to take action (Art. 11.1). Building capacity is a collaborative effort of all Parties, not limited to a transfer of capacities from developed to developing countries. The PA does however provide that developed countries should enhance support for capacity building in developing countries. Capacity building activities shall be enhanced by appropriate institutional arrangements. The COP will consider and adopt decisions on institutional arrangements for capacity building (Art.11.5). The PD establishes the Paris

Committee on Capacity-building, the aim of which will be to address gaps and needs, both current and emerging, in implementing capacity-building in developing country Parties (Para. 72).

3.5 Transparency of Action

With its focus on voluntary contributions the PA depends on a mechanism that allows individual Parties and the COP to assess whether Parties are on track to meeting the overall objective of the Agreement. Only if there is transparent tracking of progress will it be possible to adjust and sufficiently strengthen the ambition of NDCs. The Agreement therefore foresees a process that evaluates the progress of individual Parties in meeting their NDCs, and another mechanism that looks at the overall accumulated progress in avoiding dangerous climate change.

Article 13 establishes an 'enhanced transparency framework for action and support' that will provide a clear understanding of mitigation action and available climate finance. Parties will have to collect and make available information necessary to track progress made in implementing and achieving its NDC and keep track of their emissions in national inventory reports. In terms of support, developed Parties shall provide information on financial, technology transfer and capacity building support provided to developing Parties. Developing Parties shall provide information on support needed and received.

The way in which progress in achieving NDCs could be verified was deeply contested in Paris with a majority of countries arguing in favour of an independent review of country actions. A number of larger developing countries were sceptical or rejected outright third-party overview. The compromise consists in a technical expert group which will review information provided. Information submitted by countries will undergo a technical expert review (Art. 13.11). The experts will check the consistency of information provided and identify areas of improvement. The transparency framework hence contains elements of a third party review while being 'facilitative, non-intrusive, non-punitive [in] manner, respectful of national sovereignty' (Art. 13.3). The fact that the new transparency framework will for the first time review the emissions of all Parties can be considered a significant step towards improving data and increasing transparency around national and global emissions and mitigation actions.

To ensure that the Agreement generally is on track, the COP will take stock of the implementation of the Agreement every five years (Art. 14.2). The first stocktaking is scheduled for 2023. Before that, the supporting COP decision also mandates a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term emissions goals (Para. 20 of the Decision). The stocktake is as an opportunity to

assess whether collective mitigation action as expressed in NDCs is consistent with meeting the global temperature goals of the Paris Agreement, which is particularly important given the gap in mitigation commitments in intended NDCs (see Para. 17 of the Decision). Beyond mitigation, the stocktake has a wide remit, and covers all of the procedural and substantive elements of the Paris Agreement.

3.6 Compliance and Enforcement

The PA does not contain an enforcement mechanism, but rather establishes a mechanism to 'promote' compliance and 'facilitate' implementation (Art. 15.1). This mechanism will consist of an 'expert committee', that will function in a manner that is 'non-adversarial and non-punitive' and will be sensitive to respective national capacities and circumstances (Art. 15.2). Rules for the expert committee will be determined at the next COP, and the committee will report annually to the COP (Art.15.3).

The compliance mechanism of the PA is facilitative with the objective of promoting treaty compliance. Unlike the Kyoto Protocol it does not foresee the withdrawal of privileges (e.g., the right to transfer mitigation outcomes) or punitive measures (e.g., sanctioning countries by prohibiting using emission reductions to meet targets). Although only established in outline form, the PA compliance mechanism is modelled after the facilitative branch of the Compliance Committee of the Kyoto Protocol and Article 13 of the UNFCCC which also points towards a facilitative design. The international assessment and review (IAR) and international consultation and analysis (ICA) processes under the Convention are other models that also have a rather weak facilitative design with limited potential.³⁷

It may appear counter-intuitive for the PA – a binding treaty – to rely entirely on soft law measures for its enforcement. However, the concept of facilitation fits into the Agreement's overall design of combining voluntary targets with a mandatory follow-up process. The enforcement mechanism of the Kyoto Protocol, for its part, did not prove successful. A few years into the Protocol's implementation, the Compliance Committee had shifted its attention from the facilitative branch to the enforcement branch, creating judicial, if not trial-style conditions³⁸ for Parties that could have been served with technical

Oberthür, S. , Options for a Compliance Mechanism in a 2015 Climate Agreement, (2014), Washington, DC, Agreement for Climate Transformation (ACT 2015), Working Paper. September 2014. http://act2015.org/ACT%202015_OptionsFor%20Compliance.pdf.

For the enforcement process see J. Klabbers, Compliance Procedures, in: D. Bodansky, Brunnée, J., Hey, E. (eds.), The Oxford Handbook of International Environmental Law,

assistance with their inventories and national systems. At the end of the process, when a Party 'lost' its case, the sanction consisted in the suspension of the Party's capacity to engage in trading. This suspension was mostly felt by private entities engaged in the mechanisms, which *notabene* had not been given any say in the enforcement proceedings proper.

The Kyoto sanction for non-compliance with the absolute target – a quota reduction for the subsequent trading period – proved of theoretical relevance only. It was easy for non-compliant Canada to simply withdraw from the Kyoto Protocol, when the end of the compliance period drew nearer.³⁹ It may be more challenging for a country to withdraw from the PA, where the sanction consists in no more than assistance with doing better in the future.

4 What is it worth? A Critical Analysis

4.1 The Paris Agreement as a Product of Negotiation History

The climate crisis with its dramatic and potentially catastrophic effects, results in the need to impose limitations on GHG emissions and provide for adaptation strategies. International climate negotiations aimed at doing so can roughly be divided into four negotiation phases and it is helpful to frame the Paris Agreement within this context.⁴⁰

The first phase ranges from the adoption of the UNFCCC in 1992 up to the adoption of the Berlin mandate in 1995. During these early years of climate policy, developing countries – which shared little, if any, responsibility for the historic carbon footprint accumulated by developed countries since the industrial revolution; which had limited technological, institutional and financial capacities to engage in mitigation action; and which had legitimate

^{999;} G. Ulfsein, Werksman, J., The Kyoto Compliance System: Towards Hard Enforcement, in: O.S. Stocke, Hovi, J., Ulfstein, G. (eds), Implementing the Climate Regime: International Compliance (2005, updated version Oktober 2011, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1937576, accessed 10 Feb 2016); M. Doelle, Early Experiences with the Kyoto Compliance System: Possible Lessons for MEA Compliance System Design (2008); S. Oberthür, Lefeber, R. Holding Countries to Account: The Kyoto Protocol's Compliance System Revisited after Four Years of Experience, Climate Law 1 (2010), 600.

The withdrawal took effect on 15 December 2011, roughly a year before the compliance period in question ended, see for the withdrawal notice and effect http://www.scribd.com/doc/116852313/Notice-of-Kyoto-Withdrawal (accessed 16 Feb 2010).

For a description of the first three phases see: Brenton, A. Sir (2013) 'Great Powers' in climate politics, Climate Policy, 13:5, 541–54.

development needs and priorities to begin with – were excluded from any regulation and constraints. The E.U.'s main goal at the time was to convince the U.S. to take on a climate commitment. At this time the U.S. was already reluctant to subscribe to a binary agreement dividing Parties into lists fixed in Annexes, but eventually went along and supported a Convention that introduced separate provisions for developed and developing countries, but failed to formulate targets.

The second phase describes the negotiations that led to the adoption of the Kyoto Protocol, and the creation of binding emission reduction targets for developed countries. The U.S. position had changed compared to Rio 1992 and a negotiation team led by Vice-President Al Gore was open to discuss the adoption of mitigation commitments.⁴¹ In the meantime, China and other emerging economies which had become responsible for a sizable share in global annual emissions (in absolute, if not per-capita terms) were unwilling to commit to pre-defined action and ultimately joined the other developing countries to remain, as a block, outside of the mitigation framework of the Protocol. This created a serious weakness of the Kyoto Protocol in terms of country coverage and effectiveness, as well as political acceptability of the Kyoto Protocol over time. The stronger the emerging economies performed and the more the emissions output increased, the fewer were the chances that the Kyoto Protocol could meet its objectives.

The Kyoto Protocol did set an emissions ceiling for industrialized countries, but at an expensive trade-off. Australia, the Russian Federation, and the Central and Eastern European countries were given virtually free passes. For Russia, Ukraine and other countries of the former Warsaw bloc this was done by setting, as base year, the year 1990, when industrial over-production was at full speed. By the time the Kyoto Protocol was negotiated, the 1990 emission figures had become fictitious. The greatest blow to the functioning of the Kyoto Protocol came in 2001 when the U.S. Bush administration, (which followed President Clinton and Vice-President Al Gore) rejected the treaty outright. This produced a long-lasting lack of confidence in international negotiations, which could still be felt in Copenhagen.

The implementation of the Kyoto Protocol had hardly begun when new efforts and partnerships emerged with the goal to bring all major emitters to the table, marking a third phase of negotiations. The G8 started to include climate change into its discussions⁴² and carried them over into the rounds

Brenton, A. Sir, Great Powers' in climate politics, Climate Policy, (2013) 13:5, 541–546.

See Peichert, H. Meyer-Ohlendorf, N., G8 Impact on International Climate Change Negotiations, Good or Bad, available at http://ecologic.eu/sites/files/download/

of G20 states. The Major Emitters Forum was created in the run up to the 2009 Copenhagen Climate Conference⁴³ and an increasing number of bilateral and subnational partnerships emerged.⁴⁴ Neither the cooperation of the Parties in the context of the UNFCCC or the Kyoto Protocol nor the various discussions outside the UN and its climate regime helped to make Copenhagen a success. In fact, COP-15 set to adopt a post-2012 climate treaty was by all measure a spectacular failure. Traumatized by logistical failure, the lack of leadership by the Presidency, shattered trust among negotiation groups and a complete disillusion by private and non-state actors set climate negotiations back to zero.

And still, despite the shortcomings of the Copenhagen conference, the formulation of a non-binding political agreement involving developed and developing countries laid the seed for the PA six years later. This fourth phase is characterised by a more horizontal, inclusive and balanced approach. The broadening of the consulted Parties over the past six years made the negotiations significantly more complex, to the extent that they stood at the brink of failure more than once. A number of commentators suggested replacing the inclusive and universal U.N. negotiations with 'club' negotiations among the largest emitters⁴⁵ or those most willing to engage in mitigation.⁴⁶ It is

zeitschriftenartikel/meyer-ohlendorf/g8_impact_on_international_climate_change_negotiations.pdf (2007).

See website of the Major Emitters Forum on Energy and Climate, available at http://www.majoreconomiesforum.org/about.html.

Streck, C., Dellas, E., Governments and Policy Networks: Chances, Risks, and a Missing Strategy (2012), A Handbook of Globalisation and Environmental Policy, Second Edition, Wijen, F., Zoeteman, K., Pieters, J., van Seters, P. (eds), Edward Elgar, UK, pp. 510–548.

See Hovi J., et al (2015), The Club Approach: A Gateway to Effective Climate Cooperation?, Working Paper presented at ISA 2015 convention, available at http://www.bath.ac.uk/ipr/pdf/events/climate-change/Hovi.pdf See also Falkner, R. (2015), A Minilateral Solution For Global Climate Change? On Bargaining Efficiency, Club Benefits And International Legitimacy, Centre for Climate Change Economics and Policy, Working Paper No. 222, available at http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/07/Working-Paper-197-Falkner.pdf.

Such as the Cartagena Group, A coalition of 27 countries seeking ambitious outcomes from the UNFCCC process and low carbon domestic output. Founded in 2010. Participating countries include Antigua and Barbuda, Australia, Bangladesh, Belgium, Colombia, Costa Rica, Ethiopia, France, Germany, Ghana, Indonesia, Malawi, Maldives, Marshall Islands, Mexico, Netherlands, New Zealand, Norway, Peru, Samoa, Spain, Tanzania, Thailand, Timor-Leste, Uruguay, UK and the European Commission.

the merit of the Presidencies of the COP since Copenhagen (Mexico, South Africa, Qatar, Poland and, in particular, France) combined with an increasingly committed U.S. leadership that prepared the road to Paris with bilateral agreements and consultations, and an extraordinary effort of the UNFCCC Secretary General that contributed to the adoption of the PA.

4.2 Best available Deal, but no Solution

The PA marks a departure from the strategy that informed international climate policy leading up to and following the adoption of the Kyoto Protocol, namely to define absolute and economy-wide emission reduction targets, and requiring only a limited number of industrialized countries to take on these targets. The PA's design acknowledges, by contrast, that developed countries must take the lead, but cannot solve the problem of climate change on their own. So the key challenge was and is how the UNFCCC's ultimate goal of 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' (Art. 2 UNFCCC) can be translated into an equitable and fair burden sharing. State parties, non-governmental organizations, and international organizations have proposed a wide variety of approaches to assign emission reduction targets and mitigation burden on the premise both of effectiveness and justice.⁴⁷ However, achieving this involves an immensely complex equation involving stringent obligations, global participation, and compliance.⁴⁸ Fixing targets based on historic emissions alone is not sufficient and a fair system has to take into account not only past emissions but also projections of future emissions. Considering the wide array of national circumstances, defining mitigation

For many: Höhne, N.; Lahme, E. Types of future commitments under the UNFCCC and the Kyoto Protocol post 2012, Briefing paper, 20 September 2005, published by wwF, Gland, Switzerland; Weisslitz, M. Rethinking the Equitable Principle of Common but Differentiated Responsibility: Differential Versus Absolute Norms of Compliance and Contribution in the Global Climate Change Context (2012) Colo. J. Int'l Envtl. L. & Pol'y, Vol. 13, pp. 473–509; Berk, M., Michael G., den Elzen J., Options for differentiation of future commitments in climate policy: how to realise timely participation to meet stringent climate goals?, Climate Policy 1 (2001), pp. 465–480; Hamdi-Cherif, M.; Guivarch C., Quirion, P, Sectoral targets for developing countries: Combining 'Common but differentiated responsibilities' with 'Meaningful participation' (2011) Climate Policy, Volume 11, Issue 1, 2011, p. 731–751; Lewis, J.; Diringer, E.. Policy-based Commitments in a Post-2012 Climate Framework, A Working Paper, Pew Center on Global Climate Change, May 2007, Washington DC.

Bodansky., D., Day O'Connor, S., The Durban Platform: Issues and Options for a 2015 Climate Agreement (2015), Center for Climate and Energy Solutions.

obligations along particular, pre-defined groups of countries has become increasingly difficult.

With the PA, international climate negotiations have now officially given up on any attempt to categorize countries and allocate specific emission reduction targets. Instead it relies exclusively on voluntary mitigation contributions. The PA hence marks a turn from distributive bargaining strategies.⁴⁹ This represents the view that 'sharing the pie' negotiations are inherently problematic and that for distribution problems gradual solutions have to be found on the basis of trust and commonly agreed principles.⁵⁰ Consequently, the PA relies on procedural norms that while not formulating mandates may create trust and greater acceptance of the outcome. In that sense the PA is well aligned with the growing body of global administrative law that focuses on administrative structures, on transparency, on participatory elements in the administrative procedure, on principles of reasoned decision-making, and on mechanisms of review.⁵¹ It is hoped that procedural credibility will build trust and help (correctly or not⁵²) to create incentives for Parties to work towards meeting the goal of the PA. On the other hand, a system is less predictable when there is less clarity about how responsibilities are to be shared between defined categories of countries based on specific criteria.⁵³

4.3 The Risk: Voluntary Mitigation and the Collective Action Problem

Climate change represents a collective action problem *par excellence*.⁵⁴ The effects of GHG emissions (and the benefits of reducing emissions) are globally distributed, whereas the costs of reducing emissions (and the benefits of business-as-usual activity) are concentrated. Although maximum benefit would be derived from all countries reducing GHG emissions to the full extent of their capabilities, an individual country risks taking on the cost without deriving the benefit where other major emitters do not reciprocate, or choose to

Gupta, J., Negotiating Strategies and Climate Change, Climate Policy, 12 (2012) 630–644.

⁵⁰ Ibid, with further literature on bargaining strategies.

Kingsbury, B., Krisch, N., Steward, R. B., The Emergence of Global Adminstrative Law, The New York University Public Law and Legal Theory, Working Papers (2005),10-1-2005, New York.

⁵² See below...for the authors differing views on this.

Gupta, J. (2012). Negotiating Strategies and Climate Change, Climate Policy, 12 (2012) 630–644.

⁵⁴ See Harris, P. (2007), Collective Action on Climate Change: The Logic of Regime Failure, Natural Resources Journal, Vol. 47 p. 195.

freeride.⁵⁵ With GHG emissions still inextricably linked to key economic sectors, often in global competition, few countries are willing to take this risk. The purpose of an international treaty is, in part, to create mutual confidence in reciprocity, diminish the risk of free-riders and overcome the collective action problem through enhanced coordination.⁵⁶ A large body of literature exists attributing the failure of the international climate regime to the absence of a mechanism to perform this function, and multiple proposals have been put forward for treaty features that could rectify this.⁵⁷

Whether the Paris Agreement represents a step forward in addressing the collective action problem is contested (including among the authors of this paper). Yet it is possible to note that whereas collectively negotiated country specific targets would typically work backwards from a desired aggregate emissions ceiling, country specific targets volunteered on a bottom-up basis are less likely to be sufficiently ambitious, in the aggregate, to meet global goals.

The large emissions gap between NDCs as currently proposed and what is required to avoid more than 2 degrees of warming is evidence of this problem. Further agreements between major emitters will be required to bridge it. On a positive note, the Paris Agreement is sufficiently flexible that it creates the space within which to negotiate such bilateral or plurilateral agreements.

5 Conclusion

The PA provides a common framework within which individual countries (or alliances of countries) are invited to define NDCs taking into account the overall goal of the Convention and the Agreement as well as their own capacities.

⁵⁵ See Esty, D. & Moffa, A. (2012), Why Climate Change Collective Action has Failed and What Needs to be Done Within and Without the Trade Regime, J Int Economic Law, Vol. 15 (3) pp 777–79.

This is a well-established concept in international law, dating back to the 1960s. See Bodansky, D. (2012), What's in a Concept? Global Public Goods, International Law, and Legitimacy, Eur J Int Law, Vol. 23 (3), pp. 651–668.

⁵⁷ See Barrett, S. & Stavins, R., (2003), Increasing Participation and Compliance in International Climate Change Agreements, International Environmental Agreements: Politics, Law and Economics, Vol. 3, pp. 349–376 [listing positive and negative incentive mechanisms for treaty compliance]. More recently, see Nordhaus, William (2015), Climate Clubs: Overcoming Free-Riding in International Climate Policy, American Economic Review, Vol. 105(4), pp. 1339–70 [proposing a 'club' agreement that combines target carbon pricing and trade sanctions that reward members and penalize non-compliance].

The hope is that with increased transparency and an ambitious overall target, countries will step forward with ambitious national plans. The risk however, is that individual country contributions fall short of the overall goal and that the PA remains a shell without sufficient action and support, unable to address the collective action problem of climate change. Addressing this risk will require a new international effort to form coalitions and agreements with which to populate the PA in the months and years ahead.

After 23 years of the UNFCCC, and six years of post-Copenhagen negotiations, a lot remains to be decided. This will be of concern to those countries, particular smaller developing countries most exposed to climate change and least able to manage its early effects. It is also of broader concern, given the pace with which global emissions must peak and decline to avoid dangerous climate change. All of which is to say that the PA, though a first step, leaves no room for complacency, and that additional action must follow at the domestic and international level as a matter of urgency.