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REVIEW

SPECIAL ISSUE ON THE PARIS RULEBOOK

Guest Edited by Harro van Asselt, Kati Kulovesi and Michael Mehling

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The Issues that Never Die

Daniel Bodansky and Lavanya Rajamani

Human Rights and the Paris Agreement's Implementation Guidelines

Sébastien Duyck, Erika Lennon, Wolfgang Obergassel and Annalisa Savaresi

The Interplay between Accounting and Reporting on Mitigation Contributions under the Paris Agreement

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MISCELLANEOUS

Imprint II

Masthead III

Publisher

Lexxion Verlagsgesellschaft mbH
 Güntzelstraße 63 · 10717 Berlin · Germany
 Phone: +49 30/81 45 06-0 · Fax: +49 30/81 45 06-22
 www.lexxion.de

Typeset

Automatic typesetting by metiTEC-software
 me-ti GmbH, Berlin

CCLR annual subscription rates 2018*

printed version only	386,00 €
printed version + online edition (incl. archive)**	434,00 €
online edition only (incl. archive)**	386,00 €

* Prices include Postage and Handling. EU Member States: VAT will be added if applicable.

** Single user online access via user name and password.

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Ownership and shareholdings pursuant to Section 7 lit. a No. 2 and Section 2 No. 6 of the Berlin Press Act: Shareholder of Lexxion Verlagsgesellschaft mbH is Dr. Wolfgang Andreae, Publisher, Berlin.

This journal may be cited as [2018] CCLR.

ISSN Print 1864-9904 · ISSN Online 2190-8230

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Negotiating the Paris Rulebook: Introduction to the Special Issue

*Harro van Asselt, Kati Kulovesi and Michael Mehling**

At COP24 in Katowice in December 2018, Parties to the Paris Agreement on climate change are due to adopt the 'Paris Rulebook', with a view to providing detailed guidance to Parties in the implementation of the Agreement. Negotiations on the Paris Rulebook cover a variety of issues that were left unresolved in Paris, including further guidance for the contents and features of Parties' five-yearly nationally determined contributions (NDCs), accounting rules, modalities for the Agreement's review mechanisms (transparency framework, global stocktake and implementation and compliance mechanism), and rules for the operation of the new cooperative mechanisms established by the Agreement. With COP24 fast approaching, this special issue offers an overview of the negotiations on the Rulebook. In this introductory overview, we summarise the various contributions, place them in the broader context of international climate cooperation, and highlight interlinkages between the various issues under negotiation. We conclude with a brief discussion of the possible outcomes of the negotiations process, and the likely implications of the Paris Rulebook going forward.

I. Introduction

With the adoption of the Paris Agreement on 12 December 2015,¹ its 195 signatories committed to a collective 'paradigm that, over time, catalyses ever stronger global action to combat climate change.'² Unique in its approach, this paradigm is grounded in decentralised policy planning and implementation, with specific targets adopted at the domestic level and expressed in the form of Nationally Determined Contributions (NDCs); yet it also defines overarching objectives, principles, and a process to assess progress and enhance national efforts.³ At 29 articles, the Paris Agreement is comparatively short. Many of its provisions are worded in sparse and ambiguous terms, often because of lacking consensus on more detailed language at the time of their adoption. Not only does that contribute to uncertainty about various elements of the Paris Agreement, it also threatens to compromise effective implementation of key rights and obligations due to their divergent interpretation.

When adopting the Paris Agreement, countries have therefore included a mandate to elaborate more detailed implementing guidelines on a broad set of issues ranging from mitigation, adaptation, transparency, accounting, and compliance to the use of cooperative mechanisms, finance, and periodic assessment of over-

DOI: 10.21552/cclr/2018/3/3

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1 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740. As of 1 October 2018, the Paris Agreement had been ratified by 181 parties, see UNFCCC, 'Paris Agreement: Status of Ratification' <<https://unfccc.int/process/the-paris-agreement/status-of-ratification>> accessed 1 October 2018.

2 Daniel Bodansky, 'The Paris Climate Change Agreement: A New Hope' (2016) 110 AJIL 288, 290.

3 Yamide Dagnet et al, 'Setting the Paris Agreement in Motion: Key Requirements for the Implementing Guidelines' (World Resources Institute August 2018) 9 <https://wriorg.s3.amazonaws.com/s3fs-public/pact-setting-paris-agreement-motion-key-requirements-implementing-guidelines_0.pdf?_ga=2.112045068.948951085.1539273463-1923796347.153168380> accessed 15 September 2018.

all progress.⁴ Collectively elaborated as part of the ‘Work Programme under the Paris Agreement’ (PAWP)⁵ – and informally known as the ‘Paris Rulebook’ – these operational details are being negotiated with a view towards adoption by the Meeting of the Parties to the Paris Agreement (CMA)⁶ in December 2018 at Katowice, Poland.⁷

Working through three subsidiary bodies of the United Nations Framework Convention on Climate Change (UNFCCC), namely the Ad Hoc Working Group on the Paris Agreement (APA), the Subsidiary Body for Scientific and Technical Advice (SBSTA), and the Subsidiary Body for Implementation (SBI), Parties have successively come up with draft negotiating texts for the various agenda items. At the close of the latest round of discussions, held from 4 to 9 September 2018 in Bangkok, Thailand, progress made across all three bodies was compiled into a 307-page document.⁸ Parties also agreed to mandate the Presiding Officers of the APA, SBI and SBSTA with preparing a joint note before Katowice that identifies possible ways forward, including in the form of textual proposals.⁹ As this issue was going to press in October 2018, the Presiding Officers’ joint reflection note was made available, and its addenda containing textual proposals on the various issues under the PAWP had also begun to appear.¹⁰ As the Presiding Officers observe in their joint note, progress under the PAWP remains ‘uneven’ and ‘insufficient on certain issues.’¹¹ The objective of their textual proposals is therefore to bring ‘all PAWP items to a comparable level of maturity and of readiness for the final phase of the Parties’ negotiations.’¹² This is important given the expectation that the outcome of the PAWP negotiations will be a package of substantive outcomes on all relevant issues.¹³ Whether the Presiding Officers’ efforts to streamline text have succeeded to form the basis for such a package will only be known as the negotiations resume at COP24 in Katowice.

With limited time left to finalise the substantive negotiations under the PAWP, this special issue of the *Carbon & Climate Law Review* seeks to shed light on the many legal and normative questions raised by the main agenda items currently under discussion. Specifically, it includes contributions by leading experts on the prescriptiveness and binding nature of the Paris Rulebook, differentiation between developed and developing countries, accounting for and reporting of mitigation contributions, transparency, compliance, climate finance, cooperative approaches, and the potential for application of a human rights framework. Our introductory article summarises these rich and varied contributions, places them in the broader context of international climate cooperation, and highlights interlinkages between the relevant negotiation streams. It also ventures some conclusions about possible outcomes of the negotiations process, and the likely implications of the Paris Rulebook going forward.

4 See Section III of Decision 1/CP.21, ‘Adoption of the Paris Agreement’ (29 January 2016) UN Doc. FCCC/CP/2015/10/Add.1.

5 See Decision 1/CMA.1, ‘Matters Relating to the Implementation of the Paris Agreement’ (31 January 2017) UN Doc. FCC/PA/CMA/2016/3/Add.1 paras 5–7.

6 Formally, the ‘Conference of the Parties serving as the meeting of the Parties to the Paris Agreement’, see Paris Agreement (n 1) art 16.

7 Formally the third part of the first session of the CMA, see Decision 1/COP.23, ‘Fiji Momentum for Implementation’ (8 February 2018) UN Doc. FCCC/CP/2017/11/Add.1, para 2. Given the early entry into force of the Paris Agreement, the first session – which began in 2016 – was extended to allow more time for negotiations of the PAWP.

8 Ad Hoc Working Group on the Paris Agreement (APA), ‘PAWP Compilation’ (9 September 2018) <https://unfccc.int/sites/default/files/resource/Latest%20PAWP%20documents_9Sep_0.pdf> accessed 15 September 2018.

9 APA, ‘Paris Agreement Work Programme’ (9 September 2018) UN Doc. FCCC/PA/2018/L.4 para 3; SBI Conclusions, ‘Paris Agreement Work Programme’ (9 September 2018) UN Doc. FCCC/SBI/2018/L.19 para 3; SBSTA Conclusions, ‘Paris Agreement Work Programme’ (9 September 2018) UN Doc. FCCC/SBSTA/2018/L.16 para 3.

10 APA, SBI and SBSTA, ‘Joint Reflections Note by the Presiding Officers of the Ad Hoc Working Group on the Paris Agreement, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation’ (15 October 2018) <https://unfccc.int/sites/default/files/resource/APA_SBSTA_SBI.2018.Informal.pdf> accessed 18 October 2018.

11 *ibid* para 18.

12 *ibid* para 7.

13 *ibid* para 15.

II. Elements of the Paris Rulebook

1. Crosscutting Issues

As with previous operational rules adopted under the international climate regime,¹⁴ the Paris Rulebook raises important questions about its legal character, including its prescriptiveness and binding effect on Parties to the Paris Agreement. All important elements of the Rulebook will be adopted by consensus as formal decisions of the CMA, representing an established instrument of multilateral cooperation with contested normativity under international law.¹⁵ Daniel Bodansky and Lavanya Rajamani frame their analysis of these questions by reminding us of the dialectic process of climate cooperation across two decades that has resulted in a tenuous balance between substantive and procedural obligations – including a binding international framework on ambition, progression, and transparency – and flexible, nationally determined pledges in the Paris Agreement.¹⁶ As such, they argue, the Paris Agreement and its hybrid architecture reflect a series of compromises that can be traced back to the very origins of the international climate regime, but also embody the very same divisions that have persisted over the same period and have yet to be fully resolved.

By deconstructing the carefully chosen language that underlies the mandate to elaborate the Paris Rulebook, Bodansky and Rajamani conclude that Parties retain considerable latitude when adopting operational rules. Such latitude extends to the decision whether to adopt further implementation guidance in the first place, and whether to frame it in terms of a binding obligation, a recommendation, or merely an expectation of conduct or outcome. By the same token, the elements of the Paris Rulebook could all share the same hortatory, permissive, or expectational character, or they could have varying degrees of legal bindingness. Where the Paris Agreement directs the CMA to adopt operational rules, moreover, it still affords Parties broad discretion as to how detailed and precise these rules should be. Bodansky and Rajamani highlight the implications of a greater or lesser degree of prescriptiveness, and recall that an absence of detailed provisions will default to national determination by individual Parties or, in the case of international processes such as expert review, determination by the entities charged with implementing those processes. As they document, views on these matters vary widely across Parties, and are not always consistent; achieving consensus in Katowice may force a decision to prioritise issues that require central guidance for operationalisation, and to defer other issues that can be elaborated over time – or where positions are still too far apart for consensus.

Another key cross-cutting theme in the Paris Rulebook negotiations relates to differentiation. The concept has a long and contested history in the climate change regime and, as Bodansky and Rajamani explain, the carefully balanced compromise reflected in the Paris Agreement is often perceived as one of the biggest breakthroughs at COP21.¹⁷ All references to the principle of common but differentiated responsibilities and respective capabilities (CBDRRC) in the Paris Agreement have been linked to the phrase ‘in the light of different national circumstances,’ thereby introducing a dynamic element into the interpretation of the CBDRRC principle.¹⁸ Instead of the categorical, annex-based distinction between developed and developing countries charac-

14 See, for instance, the Marrakesh Accords implementing the Kyoto Protocol, Decisions 2 to 14/CP.7, ‘The Marrakesh Accords’ (21 January 2002) UN Doc. FCCC/CP/2001/13/Add.1, and the Cancun Agreements operationalising the Copenhagen Accord, 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’ (15 March 2011) UN Doc. FCCC/CP/2010/7/Add.1.

15 Jutta Brunnée, ‘COPing with Consent: Law-Making under Multilateral Environmental Agreements’ (2002) 15 *Leiden J Intl L* 1; Thomas Gehring, ‘International Environmental Regimes: Dynamic Sectoral Legal Systems’ (1990) 1(1) 35.

16 Daniel Bodansky and Lavanya Rajamani, ‘The Issues That Never Die’ (2018) 12 *CCLR*, in this issue.

17 *ibid.*

18 Lavanya Rajamani and Emmanuel Guérin, ‘Central Concepts in the Paris Agreement and How They Evolved’ in Daniel Klein et al (eds), *The Paris Climate Agreement: Analysis and Commentary* (Oxford University Press 2017) 84.

terising the UNFCCC and the Kyoto Protocol, the Paris Agreement incorporates ‘tailored differentiation’ with respect to mitigation, financial commitments and transparency. However, hopes that ‘Paris had decisively resolved the issue of differentiation have proved unfounded.’¹⁹ Instead, differentiation has re-emerged as one of the most contested issues during the PAWP negotiations,²⁰ demonstrating that Parties’ views differ significantly on what the delicate compromise reached in Paris means, and how it should be operationalised. The group of Like-Minded Developing Countries (LMDC) in particular has been advocating bifurcated rules for developed and developing countries in such key areas of the PAWP as NDCs guidance,²¹ while proposals to reintroduce the controversial ‘firewall’ with respect to rules governing developed and developing country mitigation have met with strong opposition from developed countries.

According to Bodansky and Rajamani, the Paris Rulebook could be built around a variety of options regarding differentiation, ranging, *inter alia*, from no differentiation to differentiation based on differences between Parties, differentiation based on type of NDC, or differentiation that is implicit or self-determined. For the transparency framework, for example, it would seem that Parties’ options are much more nuanced than a blunt choice between common rules, and categorically bifurcated rules for developed and developing countries. Instead, a set of common rules could be adjusted to provide different flexibilities to different categories of countries. Concerning the overall outcome, Bodansky and Rajamani highlight important links and trade-offs between bindingness, prescriptiveness and differentiation in the Paris Rulebook, predicting that the Rulebook is ‘unlikely to include many rules that are both detailed and binding.’²²

The human rights dimension is another theme with general relevance for various different areas of the Rulebook. The Paris Agreement constituted a landmark in that its preamble includes an explicit reference to human rights. Accordingly, the Parties ‘should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights.’²³ As Duyck, Lennon, Obergassel and Savaresi observe, the Paris Agreement is the first international environmental treaty to explicitly reference human rights, and as such it can be ‘celebrated as a milestone towards greater integration of human rights in environmental and climate governance.’²⁴ The authors emphasise, however, that the significance of the human rights references largely depends on ‘how they ultimately inform the implementation of the Paris Agreement at the local, national, and international levels.’²⁵ Their contribution analyses five entry points for incorporating a human-rights based approach into the Paris Rulebook, through guidance for NDCs, adaptation communications, the transparency framework, the global stocktake, and the cooperative mechanisms under Article 6. In their view, negotiations on information to facilitate clarity, transparency and understanding (CTU) of NDCs, for example, constitute a promising avenue to develop a rights-based approach to NDCs. With Parties required to provide information on their NDC planning process, such information could include information on human rights, public participation, indigenous peoples and local communities, just transition and gender. The authors develop similar arguments for the four other entry points, concluding that the Paris Rulebook provides ‘the first real test of Parties’ commitment to achieve greater, better, and more equitable international cooperation on climate change.’²⁶

19 Bodansky and Rajamani (n 16).

20 See, for example, Cleo Verkuijl et al, ‘Summary of the Bangkok Climate Change Conference, 4–9 September 2018’ (2018) 12 Earth Negotiations Bulletin 1.

21 Bodansky and Rajamani (n 16).

22 *ibid.*

23 Paris Agreement (n 1) preamble.

24 Sébastien Duyck, Erika Lennon, Wolfgang Obergassel and Annalisa Savaresi, ‘Human Rights and the Paris Agreement’s Implementation Guidelines: Opportunities to Develop a Rights-Based Approach’ (2018) 12 CCLR, in this issue.

25 *ibid.*

26 *ibid.*

2. Operationalising Nationally Determined Contributions

A defining feature of the Paris Agreement is its reliance on a decentralised mechanism – domestically defined NDCs – to realise the overarching, long-term objective of limiting global warming to well below 2°C above preindustrial levels and pursuing efforts to limit it to 1.5°C. NDCs are to be prepared, communicated, and maintained by Parties based on their national circumstances and capabilities, embodying the efforts of each country to reduce their emissions and adapt to the impacts of climate change. Although NDCs are thus a vital expression of national commitment to collective climate action, the Paris Agreement fails to operationalise central aspects of NDCs. As with many other substantive and procedural obligations under the Paris Agreement, operational details – including the features and time frames of NDCs, the information to be included in their communication, and accounting for progress towards their achievement – have been left for later elaboration by the Parties.

In her contribution on the interplay between accounting of and reporting on NDCs,²⁷ Kelly Levin dissects three provisions of the Paris Agreement and the related mandates for operational details: the obligation to provide the information necessary for clarity, transparency, and understanding when communicating NDCs;²⁸ the obligation to account for NDCs and, in doing so, promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting;²⁹ and the obligation to provide information necessary to track progress made in implementing and achieving NDCs.³⁰ As she points out, clear guidance on the implementation of these obligations is vital to understand what countries have pledged and track progress and achievement towards their NDCs.

Referencing the divergent views currently held by Parties in the PAWP negotiations, Levin notes that further guidance on information to facilitate CTU of NDCs could possess varying degrees of detail and be purely voluntary in nature. Based on the experience with already communicated national pledges and the elective character of guidance set out in existing decisions,³¹ she cautions that lacking specificity and binding force of the relevant Rulebook provisions could perpetuate current transparency gaps with regard to the assumptions and methodologies underlying many current NDCs. By contrast, the mandate to elaborate further guidance on accounting of NDCs is more specific, setting out a number of considerations Parties must include when operationalising the provisions of the Paris Agreement,³² and specifying the obligatory nature of such guidance for the second and all subsequent NDCs.³³

Still, the most recent negotiations in Bangkok saw differences on overarching matters hold back negotiations on technical aspects of accounting, prompting Levin to consider alternative scenarios in which progress on one or more of the foregoing PAWP agenda items could make up for slower momentum or gridlock on another. While she concedes the possibility of such trade-offs, she also points out that guid-

27 Kelly Levin, 'The Interplay between Accounting and Reporting on Mitigation Contributions under the Paris Agreement' (2018) 12 CCLR, in this issue.

28 Paris Agreement (n 1) art 4(8).

29 *ibid* art 4(13).

30 *ibid* art 13(7(b)).

31 See para 27 of Decision 1/CP.21 (n 4), which draws on para 14 of Decision 1/CP.20, 'Lima Call for Climate Action' (2 February 2015) UN Doc. FCCC/CP/2014/10/Add.1.

32 See para 31 of Decision 1/CP.21 (n 4), which requests the APA to elaborate accounting guidance which ensures that '(a) Parties account for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the Intergovernmental Panel on Climate Change and adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement; (b) Parties ensure methodological consistency, including on baselines, between the communication and implementation of nationally determined contributions; (c) Parties strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions and, once a source, sink or activity is included, continue to include it; (d) Parties shall provide an explanation of why any categories of anthropogenic emissions or removals are excluded'.

33 Decision 1/CP.21 (n 4) para 32.

ance on each issue area fulfills a unique purpose, limiting the extent to which weak guidance on any one item could be offset by more specific guidance on the other two. Echoing the observations by Bodansky and Rajamani, thus, her analysis underscores the importance of adequate levels of prescriptiveness and legal bindingness in the outcome of the Paris Rulebook negotiations on CTU, accounting, and transparency.

3. Reviewing Implementation, Compliance, and Effectiveness

Together with the regular submission of progressively more ambitious NDCs, the Paris Agreement places great faith in the functioning of three inter-related mechanisms to review implementation, compliance, and overall effectiveness. First, it provides for an ‘enhanced transparency framework’, through which Parties need to report on their emissions and progress made towards their NDCs.³⁴ Developed country Parties, in addition, are to report on financial, technology transfer, and capacity-building support provided,³⁵ whereas developing countries should report on the support needed and received.³⁶ These reports, in turn, are subject to a review by technical experts, and a peer review by other Parties termed ‘multilateral consideration’.³⁷ Second, the Paris Agreement puts in place a five-yearly ‘global stocktake’, starting in 2023, to assess collective progress towards achieving the purpose and long-term goals of the Agreement.³⁸ Third, the Paris Agreement establishes a mechanism to facilitate implementation and promote compliance through a committee that is expert-based, non-adversarial and non-punitive.³⁹

But while the Agreement offers rudimentary details on how each of these mechanisms is to function, it has left crucial questions unanswered.⁴⁰ It is these questions that have become the focus of the Rulebook discussions.

The enhanced transparency framework could in theory shine a light on the extent to which Parties are making progress in implementing their NDCs. However, disagreements remain on the extent to which the modalities, procedures, and guidelines (MPGs) of the transparency framework should follow existing guidelines for reporting and review under the UNFCCC. This is closely related to the contested issue of flexibility, which raises question about whether and how to differentiate between developed and developing country Parties in the detailed rules on reporting and review. Accordingly, Bodansky and Rajamani observe that the questions raised here reflect deeper underlying disagreements between Parties that the Paris Agreement only temporarily managed to resolve.⁴¹

As Christopher Campbell-Duruflé explains,⁴² the draft MPGs for the enhanced transparency framework also raise several other pertinent issues that will affect the functioning of the Paris Agreement as a whole.

34 Paris Agreement (n 1) art 13(7).

35 *ibid* art 13(9).

36 *ibid* art 13(10).

37 *ibid* art 13(11).

38 *ibid* art 14.

39 *ibid* art 15.

40 See Harro van Asselt et al, ‘Maximizing the Potential of the Paris Agreement: Effective Review in a Hybrid Regime’ (Stockholm Environment Institute 2016) <<https://www.sei.org/mediamanager/documents/Publications/Climate/SEI-DB-2016-Maximizing-potential-Paris-Agreement.pdf>> accessed 15 September 2018.

41 Bodansky and Rajamani (n 10).

42 Christopher Campbell-Duruflé, ‘Clouds or Sunshine in Katowice: Transparency in the Paris Agreement Rulebook’ (2018) 12 CCLR, in this issue.

First, should the MPGs be backward-looking, or also try to improve *ex ante* accountability (i.e. accountability for actions yet to be taken)? Second, should the transparency framework help countries improve future reports or, more broadly, their policies implementing their NDCs? And third, what roles should the MPGs assign to non-Party stakeholders?⁴³ Analysing the draft MPGs, Campbell-Duruflé finds that the rules for the enhanced transparency framework may help improve *ex ante* accountability. He further argues that the rules can help improve both reporting and Parties' policies. Finally, echoing the contribution by Duyck et al,⁴⁴ he emphasises the crucial role that non-Party stakeholders can play in the functioning of the transparency framework.⁴⁵

Regarding the global stocktake, key unresolved questions from Paris centre around the process to be followed in 2023 and every five years thereafter, the inputs that would inform the stocktake, the outcomes flowing from the exercise, and how to reflect equity. Huang's contribution reflects on these key questions, but also offers an original analysis of how the global stocktake compares with, and can complement, the process created for the Sustainable Development Goals (SDGs) under the United Nations' High-Level Political Forum (HLPF).⁴⁶ She reflects on how both processes include a regular cycle based on country reports and technical inputs, which are then considered by a political process, and ultimately need to lead to an outcome and improved implementation. Huang suggests that lessons can be learned from the SDGs process as well as existing processes under the UNFCCC such as the 2018 Talanoa Dialogue – which in many ways can be regarded as a dry-run for the stocktake – and the Structured Expert Dialogue held in 2013–2015.

For the third review mechanism, the Paris Agreement offers basic guidance by establishing 'a committee that shall be expert-based and facilitative in nature and function in a manner that is transparent, non-adversarial and non-punitive'.⁴⁷ Yet, as Meinhard Doelle explains in his contribution on the implementation and compliance mechanism, there are several issues left unaddressed – some of which are still highly contested – including the purpose and functions of the mechanism, its institutional arrangements, the scope of obligations to be included in the committee's mandate, triggers of the mechanism, the functioning of the process, and eventual outcomes and outputs.⁴⁸ Interestingly, Doelle suggests that Parties are well-advised to build on the model of the Kyoto Protocol's compliance mechanism – even if that model proved too controversial for some Parties to adopt in the Paris Agreement. Doelle further points to the challenge of addressing systemic issues – related to Parties' collective obligations – in a facilitative and non-adversarial way.

Perhaps most importantly, a challenge for the rulebook negotiations will be to establish linkages between the three mechanisms. For instance, how will the national reports and reviews generated through the enhanced transparency framework inform the global stocktake, and can they trigger the implementation and compliance mechanism? And how to ensure that the latter mechanism will have added value given its facilitative nature?⁴⁹ Parties will need to address these key questions if they are to make the 'review' part of the Paris Agreement's 'pledge-and-review' model work.

43 See Harro van Asselt, 'The Role of Non-State Actors in Reviewing Ambition, Implementation, and Compliance under the Paris Agreement' (2016) 6(1–2) *Clim L* 91, 103.

44 Duyck et al (n 24).

45 Campbell-Duruflé (n 42).

46 Jennifer Huang, 'What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals?' (2018) 12 *CCLR*, in this issue.

47 Paris Agreement (n 1) art 15(2).

48 Meinhard Doelle, 'Compliance in Transition: Facilitative Compliance Finding its Place in the Paris Climate Regime' (2018) 12 *CCLR*, in this issue.

49 For a critique, see Alexander Zahar, 'A Bottom-up Compliance Mechanism for the Paris Agreement' (2017) 1(1) *Chinese J Envtl L* 69.

4. Finance and Markets

One of the innovations of the Paris Agreement – and a breakthrough in the final hours of COP21 – is Article 6, allowing Parties to use international cooperative approaches towards achievement of their NDCs.⁵⁰ It builds on prior experience with the project mechanisms of the Kyoto Protocol and international transfers of emission credits and allowances, and introduces a measure of compliance flexibility for countries which economic theory suggests should considerably reduce the cost of achieving their pledged mitigation targets. Ideally, over time, such cost reductions would translate into an increase in the ambition of collective climate efforts, and thus address both environmental and economic concerns. As Rishikesh Bhandary convincingly argues in his contribution to this special issue, however, the relevant provision of the Paris Agreement enshrines an uncomfortable tension between flexibility and ambition whose successful resolution will greatly depend on the adoption of further operational rules.⁵¹

Focusing on two elements of the provision on international cooperative approaches, the option to voluntarily engage in internationally transferred mitigation outcomes, and a new mechanism to promote mitigation of greenhouse gases and further sustainable development, Bhandary traces the evolution of market approaches in the international climate regime over time, highlighting the growing emphasis on ambition as developing countries have become gradually more engaged in climate action. Whereas earlier project mechanisms merely served to increase the cost effectiveness of developed country efforts by offsetting their emissions, the cooperative approaches under the Paris Agreement are meant to result in net emission reductions. Still, as the relevant language in the Paris Agreement leaves central concepts and procedures undefined, the guidance and rules, modalities, and procedures currently under negotiation as part of the PAWP will play a crucial role in ensuring that these instruments contribute to greater overall ambition.

Bhandary highlights the many open issues and divisions characterising these negotiations, notably on questions such as environmental integrity, sustainable development, and the appropriate balance between national flexibility and centralised governance. Given the importance of robust accounting in the operationalisation of cooperative approaches, the Rulebook negotiations have to address complex interlinkages between various related agenda items, threatening to complicate progress on any one issue as long as other issues remain unresolved. In a later part of his analysis, Bhandary also discusses the potential of international cooperative approaches to advance the emerging regimes to reduce emissions from deforestation and forest degradation – including carbon stock enhancement, sustainable management of forests, and conservation (REDD+) – as well as from international aviation under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) recently adopted by the International Civil Aviation Organization (ICAO).

Despite welcome progress on narrowing down options in the draft negotiating text, the latest discussions in Bangkok still highlighted important remaining divisions. Included among these is the extent of centralised oversight needed when governing the implementation of cooperative approaches, limits to the sectors and types of NDCs that are eligible for participation in cooperative approaches, whether and how to adjust for mitigation efforts transferred across jurisdictions ('corresponding adjustment'), and the treatment of activities and credits approved under the existing framework for project mechanisms of the Kyoto Protocol.

Finance, like cooperative approaches, is a crucial enabler for climate action, particularly for developing country Parties. Yet while the Paris Agreement includes an elaborate provision on climate finance that goes

50 On the tumultuous history of related negotiations, see Andrei Marcu, 'Carbon Market Provisions in the Paris Agreement (Article 6)' (Centre for European Policy Studies 2016) 1 <<https://www.ceps.eu/system/files/SR%20No%20128%20ACM%20Post%20COP21%20Analysis%20of%20Article%206.pdf>> accessed 5 September 2018.

51 Rishikesh Ram Bhandary, 'Trying to Eat an Elephant (again): Opportunities and Challenges in International Cooperative Approaches of the Paris Agreement' (2018) 12 CCLR, in this issue.

beyond the UNFCCC in several ways,⁵² it left several challenging issues up to the CMA to decide. In Katowice, at least four climate finance issues will be on the agenda. First, although the Paris Agreement contains a novel provision on communicating *ex ante* information on public financial resources to be provided by developed country Parties to developing country Parties,⁵³ the precise information to be communicated still needs to be decided.⁵⁴ Second, while developed country Parties are under a legally binding commitment to biennially report on finance provided and mobilized through public interventions,⁵⁵ the CMA needs to agree on modalities for the accounting of financial resources.⁵⁶ Third, and related to the previous point, the MPGs for the enhanced transparency framework will also need to establish rules for the reporting of climate finance and the review of that information.⁵⁷ Fourth, while Decision 1/CP.21 clarifies that the ‘Green Climate Fund and the Global Environment Facility, the entities entrusted with the operation of the Financial Mechanism of the Convention, as well as the Least Developed Countries Fund and the Special Climate Change Fund, administered by the Global Environment Facility’ will all serve the Paris Agreement,⁵⁸ it leaves the contested issue of whether the Adaptation Fund will also serve the Agreement to the first session of the CMA to decide.⁵⁹

In their contribution, Bodle and Noens first offer an overview of the various climate finance issues on the table at COP 24,⁶⁰ and then zoom in on two issues in particular. The first issue concerns transparency of support. Bodle and Noens emphasise the essential trust-building role of improving transparency on whether countries live up to their climate finance-related commitments. However, they also argue that it will be difficult to build this trust given diverging views on the goals of transparency of support and on what actually counts as ‘climate finance’. Therefore, they posit, it is insufficient to just make data on climate finance available; instead, the data should be subject to various types of analyses, which may serve different purposes. They further argue that the negotiations on transparency of support have perhaps unduly focused on transparency of financial support provided by developed country Parties. While this is of course a key piece of the puzzle, Bodle and Noens suggest that it is likewise important to keep in mind the linkages between different provisions of the Paris Agreement, transparency of support needed and received by developing countries, as well as transparency of technology development and transfer and capacity-building support.

But perhaps Bodle and Noens’ most important point is that while transparency of support may be a crucial recurring issue in the climate change negotiations, it should be remembered that the Paris Agreement has also introduced a new goal that is deserving of much more attention. The goal enshrined in Article 2(1)(c) to ‘[make] finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development’⁶¹ is, in their words ‘under-discussed’. Indeed, there is not even an agenda item dedicated to discussing the goal, although it is mentioned in the negotiation documents on the global stocktake. Accordingly, Bodle and Noens call for creating a new ‘home’ for discussing Article 2(1)(c), and how to achieve it. This could

52 Paris Agreement (n 1) art 9. See Jorge Gastelumendi and Inga Gnittke, ‘Climate Finance (Article 9)’ in Daneil Klein et al (eds), *The Paris Climate Agreement: Analysis and Commentary* (Oxford University Press 2017) 239; Yulia Yamineva, ‘Climate Finance in the Paris Outcome: Why Do Today What You Can Put Off Till Tomorrow?’ (2016) 25 RECIEL 174.

53 Paris Agreement (n 1) art 9(5).

54 Decision 1/CP.21 (n 4) para 55.

55 Paris Agreement (n 1) arts 9(7) and 13(13).

56 Decision 1/CP.21 (n 4) para 57.

57 Paris Agreement (n 1) art 13(13). See also Harro van Asselt, Romain Weikmans, Timmons Roberts and Achala Abeysinghe, ‘Transparency of Action and Support under the Paris Agreement’ (European Capacity Building Initiative 2016) 14–16.

58 *ibid* para 58.

59 *ibid* paras 59–60.

60 In addition to the three questions left up to the first session of the CMA to decide, Bodle and Noens also note that the question of when and how to increase the collective goal of mobilising US\$100 billion per year from 2025 looms in the background of COP 24. See Ralph Bodle and Vicky Noens, ‘Climate Finance: Too Much on Detail, Too Little on the Big Picture?’ (2018) 12 CCLR, in this issue.

61 Paris Agreement (n 1) art 2(1)(c).

be done, for instance, through introducing a new agenda item, establishing a dedicated workstream under the global stocktake talks, or through taking up the issue under the agenda of long-term finance.

III. Conclusions

Unlike the two previous COPs after Paris, COP24 in Katowice is under pressure to deliver important results, bringing negotiations under the PAWP to a close and adopting a solid rulebook that will enable Parties to start implementing the Paris Agreement in earnest. However, uneven progress on the different elements of the PAWP remains one of the key challenges for a successful outcome. Negotiations on issues such as the global stocktake and technology have made reasonably good progress, whereas negotiations on key aspects of the Paris Agreement's mitigation regime such as NDC guidance and transparency have been slow, overshadowed by Parties' long-standing controversies over differentiation and bifurcated rules for developed and developing countries. The mandate given to the Presiding Officers of the APA, SBI and SBSTA in Bangkok to prepare textual proposals before Katowice represents an important opening to try and bring all negotiating texts to a comparable level of technical maturity, and provide a more streamlined basis for completing the Paris Rulebook negotiations in Katowice. Whether their efforts have succeeded in this respect will only be known as the official negotiations resume at COP24.

In addition to technical issues related to the negotiations, broader policy developments will play a part in shaping the outcome of COP24. The recent report by the Intergovernmental Panel on Climate Change (IPCC) sent a loud and clear message on the benefits of the 1.5°C target, as well as the urgency and unprecedented scale of action needed to reach it.⁶² It has already motivated a call by 15 Member States of the European Union (EU) to increase the ambition of the EU's 2030 climate target, and, in the best-case scenario, the IPCC 1.5°C report will generate a widespread sentiment of political urgency, reinvigorating the global climate process in Katowice and beyond.

Given the announced withdrawal of the United States from the Paris Agreement and the extensive rollback of domestic climate efforts by the current administration, it remains difficult to predict the role the US delegation will play in the final stages of the Paris Rulebook negotiations. At present, there is reason to expect that US negotiators will display benign disinterest or remain moderately engaged in technical negotiations, while having to abstain from negotiations on more fundamental issues due to a lack of political guidance. Should international climate cooperation rise to a priority issue in the administration, however, the United States could quickly become a major obstacle to progress on the PAWP negotiations, a situation with potentially far-reaching consequences for the broader Rulebook process.

As always, the willingness of China, India and other key members of the LMDC group to find compromises on differentiation and other key issues will shape important parts of the Paris Rulebook. Brazil could also become highly relevant for the outcome. For one, the country has traditionally held strong views on reporting and review of developing country emissions, and is likely to do so also during the final stages of the Paris Rulebook negotiations on transparency and related issues. However, Jair Bolsonaro, the clear winner of the first round of the 2018 Presidential elections, has alluded to the possibility of Brazil withdrawing from the Paris Agreement should he be elected on 28 October 2018. This would constitute an unfortunate blow to global climate policy given Brazil's constructive role during the negotiations for the Paris Agreement, and its im-

62 IPCC, 'Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5 °C above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty' Summary for Policymakers (6 October 2018) <http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf> accessed 19 October 2018.

plications for Katowice and beyond are hard to predict.

As always, the COP Presidency will also shape the outcome in many important ways.⁶³ There are widespread concerns over the commitment of the incoming Polish COP Presidency to steer Parties towards a strong outcome on the PAWP. Thus far, it seems that the incoming Presidency's priorities have been geared more towards the country's domestic audience, reflected in the importance that Poland has given to forests, as well as the narratives of 'just transition' and solidarity with workers in the fossil fuel industry.⁶⁴

Against this background, a whole spectrum of outcomes from COP24 – from a total breakdown of the negotiations and no outcome to a strong Rulebook – seems conceivable. A successful outcome should – in the words of the APA, SBI and SBSTA Presiding Officers – 'enable all mechanisms, institutions and processes under the Paris Agreement to operate effectively and efficiently, in accordance with the purpose of the Agreement'.⁶⁵ However, as contributions to this special issue demonstrate, the final package will be technically complex and is bound to entail many delicate and carefully crafted compromises.

Some general standards for assessing the Paris Rulebook include the outcome's flexibility and prescriptiveness on the one hand, and trade-offs made between political convenience and climate ambition on the other. Ideally, the Rulebook would lay down clear and prescriptive rules for operationalising key aspects of the Paris Agreement's mitigation regime. This would mean, *inter alia*, providing concrete guidance on NDCs that goes beyond a mere repetition of the language contained in the Paris Agreement and Decision 1/CP.21, as well as creating an effective system for reporting and review that allows other Parties and non-State actors to assess the progress made towards the achievement of NDCs, as well as support provided and mobilised. Ideally, the Rulebook would also specify a clear role for non-State actors, providing them useful opportunities to contribute to the Agreement's implementation. A strong outcome from the PAWP negotiations would also give adequate consideration to interlinkages between key areas of the Rulebook such as NDC accounting, cooperative mechanisms, transparency, the implementation and compliance mechanism, and the global stocktake.

However, as noted above, there are several reasons to expect a less-than-ideal outcome from COP24. These include difficulties experienced in key areas of PAWP negotiations thus far, as well as concerns over a weak COP Presidency, and absence of strong political leadership from key players such as the EU, the US and China. In any case – as also highlighted by Bodansky and Rajamani in this issue – the outcome is likely to contain important trade-offs and compromises between legal bindingness, prescriptiveness and differentiation. The eventual outcome of the Paris Rulebook negotiations will therefore require careful evaluation and analysis in order to understand what it means for the integrity, effectiveness and implementation of the Paris Agreement.

63 Antto Vihma and Kati Kulovesi, 'Can Attention to the Process Improve the Efficiency of the UNFCCC Negotiations?' (2013) 7 CCLR 242.

64 COP 24, Katowice 2018, 'Key Messages' (2018) <<http://cop24.gov.pl/presidency/key-messages/>> accessed 19 October 2018.

65 APA et al (n 10) para 15.

The Issues that Never Die

Daniel Bodansky and Lavanya Rajamani*

This article analyses three overarching issues that have bedevilled the climate negotiations right from the start and options for addressing them in the ongoing Paris Agreement Work Programme negotiations. These issues are: (1) How legally binding should the United Nations (UN) climate change regime be? (2) How prescriptive should the UN climate change regime be, and how much should it leave to national discretion? (3) To what extent should the rules of the UN climate change regime be common or differentiated and, if the latter, on what basis and how?

I. Introduction

In our recent book, *International Climate Change Law* (co-authored with Jutta Brunnée), we observed that in the UN Framework Convention on Climate Change (UNFCCC) negotiations, governments ‘fought each other to a standstill. They did not resolve issues so much as paper over them either through formulations that preserved the position of all sides, that were deliberately ambiguous, or that deferred issues until later. From this perspective, the adoption of the convention in 1992 represented not an end point, but rather a punctuation mark in an ongoing process of negotiation.’¹

To what degree can the same be said of the Paris Agreement? After more than a quarter century, has the UN climate regime finally settled on a governance paradigm that allows the negotiations to move into a more technical, less political phase? Or did the Paris Agreement contain enough constructive ambiguity that it allowed each side to live on to fight another day?

Given the nearly universal acclaim with which the Paris Agreement was greeted, it is perhaps understandable that people inferred more agreement in Paris than was actually there. Now, more than two years later, the process of elaborating the Paris ‘rule-book’ through the Paris Agreement Work Programme has made clear that the same three overarching issues that have beset the United Nations climate regime from the start are still with us:

- How legally binding should the UN climate change regime be?
- How prescriptive should the UN climate change regime be, and how much should it leave to national discretion?
- To what extent should the rules of the UN climate change regime be common or differentiated and, if the latter, on what basis and how?²

This short article briefly analyses these three issues and how they might be addressed in the Paris Agreement Work Programme negotiations.

II. The Climate Negotiations Dialectic

On each of these three issues, the climate regime has followed a similar dialectical development, moving from one end of the policy spectrum to the other, before settling in the Paris Agreement on a hybrid approach somewhere in between:

- On the issue of legal form, the 1997 Kyoto Protocol imposed legally binding targets and timetables on Annex I Parties to limit their greenhouse gas emissions, together with procedural obligations regarding accounting, reporting, and review. The 2009 Copenhagen Accord was its antithesis: a political agreement without any legal force, providing for Parties to submit self-selected national actions and commitments. The 2015 Paris Agreement represents a synthesis: it is a legal instrument establishing a number of procedural obligations; but some of its core elements, including

DOI: 10.21552/cclr/2018/3/4

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1 Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (Oxford University Press 2017).

2 For a general discussion of these three issues, see *ibid.*

Parties' nationally determined contributions (NDCs), do not create legally binding obligations of result.

- On the issue of prescriptiveness, most of the key elements of the Kyoto Protocol were internationally negotiated rather than nationally determined, including, in particular, its emissions limitation targets. The Copenhagen Accord was its antithesis, with virtually no internationally negotiated rules (although the 2010 Cancun Agreements prescribed enhanced transparency procedures). The Paris Agreement represents a hybrid approach, combining nationally determined mitigation contributions with internationally negotiated rules on ambition, progression, and transparency.
- Finally, on the issue of differentiation, the 1995 Berlin Mandate, which initiated the Kyoto Protocol negotiations, explicitly ruled out any new commitments for non-Annex I Parties, and led to the Kyoto Protocol's so-called 'firewall' between Annex I and non-Annex I countries. The 2011 Durban Platform, in contrast, contained no explicit reference to differentiation. The Paris Agreement represents a middle ground, not employing the categorical, annex-based approach of the UN Framework Convention on Climate Change and the Kyoto Protocol, but incorporating tailored differentiation with respect to mitigation expectations, financial commitments, and transparency.

Elements of the Paris Agreement's hybrid approach to legal form, prescriptiveness, and differentiation were present at the creation of the UN climate regime. Like the Paris Agreement, the Framework Convention was a legal agreement with provisions spanning the spectrum of legal character. Like the Paris Agreement, it allowed Parties to nationally determine their mitigation and adaptation policies, but imposed some normative expectations and procedural rules (primarily with respect to reporting). And, like the Paris Agreement, it set forth both common and differentiated obligations. So, in important respects, the

Paris Agreement harks back to the original architecture of the Framework Convention.

The question now is whether the Paris Agreement will prove a more stable political equilibrium than the UNFCCC. The UNFCCC was perceived, from the outset, as only the first step in a multi-step process, to be followed by the negotiation of regulatory protocols establishing stronger mitigation commitments. So, while its framework of governance was intended to be durable, its regulatory approach was merely a starting point. The Paris Agreement, by contrast, does not contemplate its own supersession. It is intended to establish a durable regulatory approach that evolves not through the negotiation of new international commitments, but through its cycle of contributions.

III. The Paris Agreement Work Programme Negotiations

Although, in Paris, states were able to negotiate delicate compromises on the issues of legal bindingness, prescription, and differentiation – compromises that virtually every state proved willing to accept – the Paris Agreement Work Programme negotiations demonstrate that these compromises were tenuous and did not reflect a broader meeting of the minds. Instead, all three issues have continued to be contentious, as states seek to push the limits of the Paris Agreement's hybrid architecture, take advantage of constructive ambiguity in its provisions, or use the Paris Agreement Work Programme negotiations as an opportunity to renegotiate the agreement itself.

1. Legal Bindingness

The degree to which the UN climate change regime should impose legally binding obligations on states has been a central question since the climate negotiations first began more than a quarter century ago. The compromise reached in the Paris Agreement rested on the distinction between the legal form of the instrument as a whole and the legal character of its constituent provisions.³ The Paris Agreement itself is a legal instrument – a 'treaty' in the parlance of international law. But its constituent provisions vary widely in their normative force.⁴ On the one

3 Daniel Bodansky, 'The Legal Character of the Paris Agreement' (2016) 25(2) RECIEL 142.

4 Lavanya Rajamani, 'The 2015 Paris Agreement: Interplay between Hard, Soft, and Non-Obligations' (2016) 28(2) JEL 337.

hand, the agreement establishes a number of new procedural obligations relating to the preparation, communication, accounting, and review of NDCs;⁵ adaptation planning;⁶ and, for developed countries, reporting on support.⁷ On the other hand, the agreement does not make the content of Parties' NDCs legally binding, nor, more generally, does it create new substantive obligations relating to mitigation or finance.

The question in the Paris Agreement Work Programme negotiations is the degree to which the rules, modalities, procedures, and guidelines (MPGs) elaborating the Paris Agreement will themselves be legally binding. In some instances, the Paris Agreement authorizes the Conference of the Parties (COP) serving as Meeting of the Parties to the Paris Agreement (CMA) to adopt legally binding rules by providing that Parties 'shall' act 'in accordance with' relevant CMA decisions.⁸ But whether the CMA chooses to exercise its authority to adopt legally binding rules remains an open question. In drafting decisions, the CMA has considerable latitude to calibrate a rule's bindingness through its choice of verb. For example, it could:

- Make a rule legally binding by providing that Parties 'shall' act in accordance with it.
- Recommend that Parties use a rule, by providing that Parties 'should' follow it.
- Identify a rule but make its use optional, by providing that Parties 'may' follow it.
- Identify a rule and generate an expectation that countries 'will' follow it.

The fact that the Paris Agreement made most of its procedural provisions legally binding and authorised the CMA in discrete instances to adopt legally binding decisions might seem to suggest an expectation that the CMA should do so. But the language of the COP decision that adopted the Paris Agreement illustrates that there was no such agreement in Paris about the legal character of further guidance. Although the decision made its guidance on accounting legally binding by using the verb 'shall', it made its guidance on the information necessary for clarity, transparency, and understanding optional by using the verb 'may'.⁹

The submissions of Parties on the various elements of the Paris Agreement Work Programme illustrate the continuing divergence of views among the Parties on the issue of legal bindingness. In re-

solving this issue, the CMA decisions could adopt a common approach, making all of the MPGs hortatory, permissive, or expectational. Or, like the COP decision that adopted the Paris Agreement, the CMA decisions could give different rules different levels of bindingness – for example, the guidance on accounting of NDCs might be mandatory, as authorized by the Paris Agreement, while the guidance on NDC features might be optional. And some Parties suggest that the CMA decisions could impart different levels of bindingness to rules applicable to different groups of Parties.¹⁰

2. Prescriptiveness

As is well known, the Paris Agreement adopted a hybrid approach to prescriptiveness that combines top-down and bottom-up elements. It prescribes a variety of both substantive and procedural rules – for example, that Parties prepare, communicate and maintain NDCs; provide the information necessary for clarity, transparency and understanding when communicating their NDCs; and account for their NDCs.¹¹ But, unlike the Kyoto Protocol, the Paris Agreement does not prescribe the content of Parties' NDCs. Instead, it allows Parties to nationally determine the type and stringency of their contributions.

In the Paris Agreement Work Programme negotiations, the Parties are now trying to decide what additional rules to prescribe. In some cases, the Paris

5 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740 arts 4(2), 4(8), 4(9), 4(13), 13(7), and 13(11).

6 *ibid* art 7(9).

7 *ibid* arts 9(5), 9(7), and 13(9).

8 *ibid* 4(8), 4(13), and 13(13) (the Parties 'shall' do [x] 'in accordance with' relevant COP decision or guidance).

9 UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016). Compare paras 31 and 32 (Parties 'shall apply' the guidance in para 31 to their second and subsequent NDCs) with para 27 (Parties 'may' include the information identified when communicating their NDCs).

10 See eg, The Bolivarian Republic of Venezuela, 'LMDC Submission on "Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support referred to in Article 13 of the Paris Agreement"' (2017) <http://www4.unfccc.int/sites/SubmissionPortal/Documents/591_323_131340502613901594-LMDC%20submission%20on%20Transparency%20MPGs%20Feb%202017%20final.pdf> accessed 25 August 2018.

11 Paris Agreement (n 5) arts 4(2), 4(8), and 4(13).

Agreement authorises but does not require the CMA to prescribe additional rules – for example, regarding the features of NDCs and common time frames¹² – so on these issues, the threshold question is whether the CMA prescribes any rules at all. On other issues, the Paris Agreement directs the CMA to prescribe rules, modalities, procedures, and guidelines – for example, with respect to the new sustainable development mechanism and the enhanced transparency framework¹³ – so on these issues, the question is how detailed and precise these rules should be. In general, more detailed and precise rules provide greater consistency, predictability, and international discipline, and lend themselves to assessments of compliance or non-compliance. But they require greater agreement and thus are more difficult to negotiate. By contrast, less detailed rules may be simpler to agree and enable the regime to evolve more easily in response to experience and emerging science.

The issues relating to prescription differ for rules that spell out Parties' obligations and for rules elaborating international processes such as technical expert review, the global stocktake, and the compliance and implementation mechanism. For rules that elaborate Parties' obligations, the alternative to international prescription by the CMA is national determination by individual Parties. Consider accounting by Parties of their NDCs. Article 4(13) prescribes a num-

ber of accounting standards that Parties must satisfy. For example, they must account in a manner that promotes environmental integrity and ensures the avoidance of double counting. If the CMA does not adopt any additional accounting guidance, then so long as Parties satisfied the general standards in Article 4(13), they would be free to nationally determine their accounting rules. The question, then, is how far the CMA should limit national discretion through the elaboration of additional accounting guidance. In descending order of prescriptiveness, the CMA could:

- Adopt detailed, precise accounting guidance.
- Identify a number of alternative approaches, among which a Party could choose.
- Prescribe minimum requirements, and allow Parties to nationally determine any additional rules.
- Prescribe general standards that national accounting rules must satisfy (in addition to those already prescribed in Article 13(13)), but allow Parties to develop their own rules.
- Allow Parties to develop their own accounting rules, and simply require them to report on their rules.
- Not adopt any additional accounting guidance at all.

Rules elaborating international processes like technical expert review and the implementation and compliance mechanism also raise a 'who decides?' question. But, here, the alternative to international prescription by the CMA is not national determination, but rather international elaboration by the technical expert review teams themselves or the implementation and compliance committee. The less detailed and precise the rules prescribed by the CMA, the more discretion the technical expert review teams and the implementation and compliance committee will have to resolve issues on their own, either on an *ad hoc* basis, in the context of individual reviews, or more systematically.¹⁴

As with the issue of legal bindingness, the various elements of the Paris rulebook could vary in their prescriptiveness. Umbrella Group Parties tend to support more detailed rules elaborating the procedural requirements of the Paris Agreement – for example, on accounting and reporting – but want a lighter touch for Article 6(2) guidance, focusing on the issue of ensuring that internationally transferred mitigation outcomes are not double counted.¹⁵ Many devel-

12 *ibid* arts 4(9) and 4(10).

13 *ibid* arts 6(7) and Article 13(13).

14 In the case of technical expert reviews, more general rules could be elaborated through meetings among lead reviewers, as has been the practice under the UNFCCC technical expert review process.

15 Contrast for instance, Australian Government, 'Submission on Further Guidance in relation to the Mitigation Section of Decision 1/CP.21' (2017) <http://www4.unfccc.int/sites/SubmissionPortal/Documents/261_321_131357642219580657-AUSTRALIA-APA%20Mitigation-Apr-2017.pdf> (suggesting provision of detailed information to accompany NDCs) with Australian Government, 'Submission to the Subsidiary Body for Scientific and Technological Advice on Guidance on Cooperative Approaches referred to in Article 6, paragraph 2 of the Paris Agreement' (2016) <http://www4.unfccc.int/sites/SubmissionPortal/Documents/261_262_131219395035622791-Australia%20UNFCCC%20Sub%20Article%206.2%20final.pdf> accessed 25 August 2018. On the negotiations relating to Article 6(2), see generally Sandra Greiner and Axel Michaelowa, 'Cooperative Approaches under Art 6.2 of the Paris Agreement: Status of Negotiations – Key Areas of Consensus and Contentious' (Perspectives Climate Research and Climate Focus 2018 <<https://climatefocus.com/sites/default/files/20180301%20Discussion%20Paper%20-%20Cooperative%20Approaches%20consent%20and%20dissens%5B1%5D.pdf>> accessed 25 August 2018).

oping countries take the opposite approach, supporting detailed rules on cooperative approaches under Article 6, but a less prescriptive approach on accounting and transparency.¹⁶ And the European Union generally supports more detailed rules across all of the elements of the Paris Agreement Work Programme.¹⁷

The process of elaborating rules for different provisions of the Paris Agreement is at different levels of maturity, in part because some areas are more politically fraught than others, in part because there is more experience with some issues than others, and in part because some areas lend themselves to detailed rule-making while others do not. The more detailed and prescriptive the rules are, the more challenging it will be for Parties to reach agreement on them by December 2018. Parties will therefore need to address a set of substantive questions at the intersection of prescriptiveness and timing:

- Which rules, and at what level of prescriptiveness, are critical to the effective operationalization of the Paris Agreement and achievement of its long-term goals, and thus need to be adopted at COP 24 in Katowice?
- Which rules can be left for subsequent elaboration – either because there is not enough known or because there is not enough agreement among states to allow for a detailed rule now?
- Which rules, if less prescriptive at this point in time, could function to enable to exclude the future participation of certain key Parties?

3. Differentiation

Perhaps the biggest perceived breakthrough in the Paris Agreement negotiations was on the issue of differentiation. In contrast to the annex-based bifurcation between Annex I and non-Annex I Parties in the Kyoto Protocol, the Paris Agreement reflects a carefully balanced compromise:

- On the one hand, the Paris Agreement's mitigation obligations are generally not differentiated, in contrast to the Kyoto Protocol. Instead, Parties are able to self-differentiate their mitigation efforts through their choice of NDCs.
- In addition, the Paris Agreement does not employ annex-based differentiation, which was central to both the UNFCCC and the Kyoto Protocol.
- On the other hand, the Paris Agreement's provisions on financial assistance continue to be differentiated, along similar lines as the UNFCCC.¹⁸
- In addition, the Paris Agreement continues to establish different normative expectations for developed and developing countries. For example, developed countries are expected to continue to demonstrate leadership in mitigation by undertaking economy-wide emission reduction targets, while developing countries are only encouraged to move in the direction of economy-wide targets over time.¹⁹
- The Paris Agreement also provides for differentiation in its transparency framework, but on the basis of developing countries' capacities, rather than for developing countries in general.²⁰

16 Contrast for instance, 'Views of Brazil on the Guidance referred to in Article 6, paragraph 2, of the Paris Agreement' <http://www4.unfccc.int/sites/SubmissionPortal/Documents/525_262_131198656223045434-BRAZIL%20-%20Article%206.2%20final.pdf> and '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))' (2017) <http://www4.unfccc.int/sites/SubmissionPortal/Documents/586_317_131350320609564622-Submission%20by%20the%20Republic%20of%20Mali%20on%20behalf%20of%20the%20AGN_SBSTA%2046_Art.%206.2%20March%202017.pdf>, with 'Views of Brazil, Argentina and Uruguay on APA Agenda Item 5: "Modalities, Procedures and Guidelines (MPG) for the Transparency Framework for Action and Support referred to in Article 13 of the Paris Agreement"' <http://www4.unfccc.int/sites/SubmissionPortal/Documents/525_323_131324648255521982-Bra%20Arg%20Uy%20-%20Submission-Art13%20Transparency%20Framework%20FINAL.pdf> accessed 26 August 2018, and Venezuela (n 10).

17 See eg 'Submission by the Republic of Malta and the European Commission on behalf of the European Union and its Member States: Submission on Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support referred to

in Article 13 of the Paris Agreement' <http://www4.unfccc.int/sites/SubmissionPortal/Documents/783_323_131324010340848514-MT-02-23-EU%20Submission%20Transparency%20APA%205%20FINAL.pdf> and 'Submission by the Republic of Malta and the European Commission on behalf of the European Union and its Member States: under Article 6, paragraphs 2, 4 and 8 of Paris Agreement' <http://www4.unfccc.int/sites/SubmissionPortal/Documents/783_317_131345685428746919-MT-03-21-EU%20SBSTA%2012a%20b%20and%20c%20EU%20Submission%20Article%206.pdf> accessed 25 August 2018.

18 The Paris Agreement's approach to financial commitments differs from that of the UNFCCC in two respects. First, the UNFCCC differentiated its financial commitments on an annex basis, requiring Annex II country Parties to provide assistance, whereas the Paris Agreement differentiates based on the less clear-cut categories of 'developed' and 'developing' countries. Second, the Paris Agreement does not focus only on developed countries; it also encourages other countries to provide financial assistance. See, Paris Agreement (n 5) art 9(2).

19 *ibid* art 4(4).

20 *ibid* art 13(2).

- Finally, the Paris Agreement reiterates the principle of common but differentiated responsibilities and respective capabilities, but appends the language ‘in light of different national circumstances’²¹ – an addition that could be interpreted as introducing a more dynamic, flexible approach to differentiation or as merely underscoring the existing dynamism in the terms ‘responsibilities’ and ‘capabilities’, which evolve as national circumstances evolve.²²

Under the pressure of reaching agreement in Paris, all states accepted this non-annex-based, nuanced approach to differentiation. But hopes that Paris had decisively resolved the issue of differentiation have proved unfounded. Instead, differentiation continues to be a central point of contention in the Paris Agreement Work Programme negotiations. The Like-Minded Developing Countries group, in particular, continues to push in some areas for bifurcated, developed-developing country differentiation, on the basis that the Paris Agreement is intended to enhance the implementation of the Convention, which relies on annexes.²³

Broadly, options regarding differentiation in the Paris rulebook include:

- *No differentiation.* This is for those authorizations to the CMA that do not explicitly provide for differentiation in the MPGs.
- *Differentiation in relation to the provision of support.* For example, the CMA could provide scaled-up financial resources and targeted capacity-building support to least developed countries (LDCs) and small island developing states (SIDS) to help them implement the rules.
- *Differentiation based on type of NDC.* For example, the CMA might specify different informational elements or accounting rules for absolute targets, BAU targets, intensity targets, peaking targets, and policies and measures.

- *Differentiation based on differences between Parties.* The Paris Agreement’s transparency framework reflects this type of differentiation, by giving flexibility to ‘those developing countries that need it in light of their capacities’.²⁴ On this basis, the CMA could differentiate a transparency rule for particular categories of Parties such as LDCs or SIDS, which generally need flexibility in light of their capacities, or it could develop agreed measures of capacity (such as gross domestic product per capita).
- *Differentiation in relation to timing.* Some rules might apply to developing countries generally, or to LDCs and SIDS in particular, at a later point in time that is either self-determined or written into the rules.
- *Differentiation that is implicit or self-determined,* as for instance in the use of language (such as ‘to the extent possible’) that gives Parties discretion and flexibility in how they apply the rules.

As with the issue of legal bindingness and prescriptiveness, the various elements of the Paris Agreement Work Programme negotiations could vary in the nature, extent and form of differentiation, as well as the Parties or groups of Parties entitled to avail themselves of differentiation and flexibility. Indeed, even those who continue to support bifurcated, developed-developing country differentiation for some issue areas (for instance transparency) are not advocating such categorical differentiation across the board. They accept the more tailored, issue-specific approach to differentiation reflected in the Paris Agreement, rather than a one-size-fits-all approach.

IV. Relationships among the Issues

Conceptually, the issues of bindingness, prescriptiveness, and differentiation are independent. But, politically, Parties tend to view them together in the context of an overall package. In seeking an agreement in Katowice, Parties will need to decide what trade-offs to make across the three issues.

Many developing countries, for example, are concerned about the burdens imposed by highly prescriptive, legally binding rules on accounting and reporting; so if others push for such rules, they will likely insist on greater differentiation. Developed states will then need to decide: are they willing to ac-

21 *ibid* arts 2(2) and 4(1).

22 See generally Lavanya Rajamani, ‘Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics’ (2016) 65(2) ICLQ 493; Sandrine Maljean-Dubois, ‘The Paris Agreement: A New Step in the Gradual Evolution of Differential Treatment in the Climate Regime?’ (2016) 25(2) RECIEL 151; Christina Voigt and Felipe Ferreira, ‘Dynamic Differentiation’: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ (2016) 5(2) TEL 285.

23 See *eg* LMDCs (n 10).

24 Paris Agreement (n 5) art 13(2).

cept greater differentiation, if that is the price for stronger rules?

Similarly, many states are likely to see a trade-off between prescriptiveness and bindingness. States that want detailed, binding rules will need to decide: if they cannot get both, which is a higher priority, prescriptiveness or bindingness? Do they prefer a more detailed rule that is non-binding, or a less detailed rule that is binding? Countries that are wary of the potential burdens imposed by binding, detailed rules must then make the same choice: would they prefer detailed but non-binding rules, or binding but less detailed rules?

The Paris Agreement was successful, in large part, because of its carefully calibrated, hybrid solutions to the issues of bindingness, prescriptiveness, and differentiation. Similarly, the success of the Paris Work Programme negotiations will likely depend on the willingness of states to make compromises across

these same three issues. Developed countries are unlikely to retreat from the Paris outcome on differentiation by accepting differentiated rules. And developing countries are unlikely to accept detailed, binding rules that are not differentiated. So the likely trade-offs in Katowice will involve the issues of prescriptiveness and bindingness. The Paris rulebook could include detailed rules that are non-binding, and binding rules that are very general. But it is unlikely to include many rules that are both detailed and binding.

Whatever the ultimate outcome, the decisions adopted in Katowice decisions will not finally resolve the issues of bindingness, prescriptiveness, and differentiation. States that do not get everything they want will continue to press their positions. Thus, like its forebears, Katowice will not be the end of the road, but rather a further punctuation mark in the ongoing process of negotiations.

Human Rights and the Paris Agreement's Implementation Guidelines: Opportunities to Develop a Rights-based Approach

Sébastien Duyck, Erika Lennon, Wolfgang Obergassel, and Annalisa Savaresi*

The inclusion of references to human rights in the Paris Agreement was celebrated as a milestone towards greater integration of human rights in environmental and climate governance. Beyond their symbolic value, the significance of these provisions however depends on the extent to which they inform the implementation of the Paris Agreement both at the national and international levels. This article takes stock of the integration of human rights in climate governance and identifies concrete opportunities to ensure that human rights considerations are included in the Paris implementation guidelines to be adopted at the Conference of the Parties in Katowice in December 2018, promoting climate action that aligns with Parties' human rights obligations. We first consider the relevance of human rights to climate action and the incremental recognition of these linkages in the international climate regime – both in the lead up to the adoption of the Paris Agreement and since. We then consider in specific terms how human rights could inform five key dimensions of the Paris Agreement's implementation guidelines: guidance for nationally determined contributions, adaptation communications, transparency framework, global stocktake, and the Article 6 mechanisms. The article reflects on past experience of how climate policy impacts human rights and on proposals put forward in the context of the negotiations of the implementation guidelines, and concludes with recommendations on a rights-based approach to implementing the Paris Agreement.

I. Introduction

Climate change poses a significant threat to the realisation of human rights, and measures to address the impacts of climate change also risk producing perverse outcomes.¹ The Paris Agreement, acknowledg-

ing this intertwined reality, became the first international environmental treaty to explicitly reference human rights. Its preamble specifies that Parties 'should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights', citing 'the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity'.² By forging an explicit link with human rights law, the Paris Agreement recalls and strengthens the expectation that Parties will take into account their existing human rights obligations concerning matters such as, for example, public participation or the rights of women and indigenous peoples when they design and implement climate change responses.

The references to human rights in the Paris Agreement are in many connections ground-breaking, and

DOI: 10.21552/cclr/2018/3/5

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1 See eg United Nations Office of the High Commissioner for Human Rights, 'A New Climate Change Agreement Must Include Human Rights Protections for All' (17 October 2014) <https://www.ohchr.org/Documents/HRBodies/SP/SP_To_UNFCCC.pdf> accessed 17 September 2018.

2 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740 preamble.

gravid with consequences for the interpretation of Parties' obligations. However, the significance of these references largely depends on how they ultimately inform the implementation of the Paris Agreement at the local, national, and international levels.

A robust set of implementation guidelines – resulting from a work programme initiated at the COP 21³ and to be adopted at the 24th Conference of the Parties (COP) in Katowice in December 2018⁴ – will be critical to ensure that the Paris Agreement contributes to mitigating the impacts of climate change on the enjoyment of human rights by present and future generations. A rights-based approach to the implementation of the Paris Agreement should therefore take into account the scale of climate change responses, informing Parties' level of ambition of both action and support.

Other contributions to this special issue address specific elements of the guidelines in greater detail.⁵ This article reflects specifically on the evolving relationship between climate change and human rights law, and how this has affected the development of the Paris Agreement's implementation guidelines. We explore how human rights can inform the Paris Agreement's implementation guidelines, drawing on lessons learned from past policies, proposals put forward by Parties and observers, and good practices from other United Nations (UN) processes.

II. Setting the Stage: Human Rights and the Implementation of the Paris Climate Agreement

Human rights are widely recognised in both international and national law as a set of basic rights and freedoms that belong to every person.⁶ Together, the corpus of human rights law provides substantive rights, such as the rights to life, food, water, the highest attainable level of health, and housing, as well as procedural rights, such as the rights to information and participation in environmental matters.⁷ While these international instruments were drafted at a time when climate change was either not understood or not perceived as an immediate threat, the rights provided in these legal instruments – as well as states' obligations associated with them – must be interpreted in light of current circumstances and in the context of climate change. All Parties to the climate regime have ratified at least one international human rights treaty. References to Parties' 'existing obligations' in the Paris Agreement should therefore be interpreted to refer to obligations in human rights treaties each Party has already ratified.⁸

Conversely, measures adopted to tackle climate change may themselves have (and indeed have already had) negative impacts on the enjoyment of human rights.⁹ This is especially the case for measures affecting access to, and the use of, natural resources, such as land, water, and forests, which can interfere

3 UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016) para 9.

4 UNFCCC, 'Decision 1/CP.22, Preparations for the Entry into Force of the Paris Agreement and the First Session of the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement' UN Doc FCCC/CP/2016/10/Add.1 (31 January 2017) para 10.

5 See eg Christopher Campbell-Duruflé, 'Rain or Sunshine in Katowice? Transparency in the Paris Agreement Rulebook' (2018) 12 CCLR; Jennifer Huang, 'What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals?' (2018) 12 CCLR (both in this issue).

6 The core international instruments include: Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III)); International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171; International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3. Additional specialised international instruments include: Convention on the Elimination of All Forms of Discrimination Against Women (adopted 18 December 1979, entered into force 3 September 1981) 1249 UNTS 13; Convention on the Rights of the Child (20 November 1989, entered into force 02 September 1990) 1577 UNTS 3 (20 November 1989). Finally,

there are regional human rights treaties: African Charter on Human and Peoples' Rights (adopted 27 June 1981, entered into force 21 October 1986) (1982) 21 ILM 58; American Convention on Human Rights, (adopted 22 November 1969, entered into force 18 July 1978) 1144 UNTS 123; European Convention for the Protection of Human Rights and Fundamental Freedoms (4 November 1950, entered into force 3 September 1953) 2889 UNTS 221.

7 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447; Regional Agreement on Access to Information, Participation and Justice in Environmental Matters in Latin America and the Caribbean (adopted 4 March 2018, not yet in force) <https://repositorio.cepal.org/bitstream/handle/11362/43583/1/S1800428_en.pdf> accessed 15 September 2018.

8 Annalisa Savaresi, 'Climate Change and Human Rights: Fragmentation, Interplay and Institutional Linkages' in Sébastien Duyck, Sébastien Jodoin, and Alyssa Juhl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 31, 32.

9 OHCHR 'Report on the Relationship between Climate Change and Human Rights' UN Doc A/HRC/10/61 (2009) 65–68.

with the enjoyment of human rights, such as that to food, culture, the respect for family life, access to safe drinking water and sanitation, and indigenous peoples' self-determination.¹⁰

The complex relationship between climate change and human rights obligations has increasingly been recognised in the literature,¹¹ by the Parties to the climate regime,¹² and by human rights bodies.¹³ A string of Human Rights Council (HRC) resolutions emphasises the potential of states' existing human rights obligations to 'inform and strengthen' climate change law- and policy-making, by 'promoting policy coherence, legitimacy and sustainable outcomes'.¹⁴ The HRC has also called upon states to integrate human rights in their climate actions.¹⁵ When applied to the context of climate change, states' human rights obligations may be summarised as follows:

- (i) Mitigation: States must act to limit anthropogenic emissions of greenhouse gases and protect natural carbon sinks, including through regulatory measures, in order to prevent, to the greatest extent possible, the current and future negative human rights impacts of climate change;
- (ii) Adaptation: States must ensure that appropriate adaptation measures are taken to protect and fulfil the rights of all persons, particularly those most endangered by the negative impacts of climate change such as those living in vulnerable areas;

- (iii) Accountability and remedies: States must guarantee effective remedies for human rights violations;
- (iv) Regulation of business activities: States must take adequate measures to protect all persons from human rights harms caused by business activities and, where such harms do occur, provide effective remedies;
- (v) International cooperation: States must participate in international negotiations and ensure that mitigation and adaptation activities do not themselves contribute to human rights violations.¹⁶

Human rights law leaves states some discretion in striking a balance between the pursuit of climate change mitigation and adaptation and other legitimate societal interests. As noted by former UN Special Rapporteur on Human Rights and the Environment John Knox, however, this balance may not be 'unjustifiable or unreasonable'.¹⁷ Furthermore, states owe *heightened obligations* to members of groups *in vulnerable situations* or who are *particularly vulnerable to harm*.¹⁸

Well ahead of the adoption of the Paris Agreement, UN Framework Convention on Climate Change (UNFCCC) Parties took heed of the linkages between human rights and climate change law obligations. In 2010, the Cancun Agreements noted that 'adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of hu-

10 OHCHR 'Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment' UN Doc A/HRC/31/52 (2016) 50–64.

11 See eg Stephen Humphreys (ed), *Human Rights and Climate Change* (Cambridge University Press 2009); 'Symposium: International Human Rights and Climate Change' (2010) 38 Georgia J Intl & Comp L; Lavanya Rajamani, 'The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change', (2010) 22 JEL 391; Siobhán McInerney-Lankford, Mac Darrow and Lavanya Rajamani, *Human Rights and Climate Change: A Review of the International Legal Dimensions* (World Bank 2011); Ottavio Quirico and Mouloud Boumghar (eds), *Climate Change and Human Rights: An International and Comparative Law Perspective* (Routledge 2015); Sébastien Duyck, Sébastien Jodoin and Alyssa Johl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018).

12 The Mary Robinson Foundation – Climate Justice, 'Incorporating Human Rights into Climate Action' (May 2016) <<https://www.mrfcj.org/wp-content/uploads/2016/05/Incorporating-Human-Rights-into-Climate-Action-Version-2-May-2016.pdf>> accessed 15 September 2018.

13 See eg *Solicitada por la República de Colombia, Medio Ambiente y Derechos Humanos, Opinión Consultiva* [2017] OC-23/17 IACtHR para 47 (consultative opinion 2017), <http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf> accessed 15 September 2018. For a compendium, see Center for International

Environmental Law (CIEL) and Global Initiative for Economic, Social and Cultural Rights (GIESCR), 'State Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change Adopted by UN Human Rights Treaty Bodies' (January 2018) <<http://www.ciel.org/wp-content/uploads/2018/01/HRTBs-synthesis-report.pdf>> accessed 15 September 2018.

14 See HRC 'Res 7/23, Human Rights and Climate Change' UN Doc A/HRC/Res/7/23 (2008); HRC 'Res 10/4, Human Rights and Climate Change' UN Doc A/HRC/Res/10/4 (2009); HRC 'Res 18/22, Human Rights and Climate Change' UN Doc A/HRC/Res/18/22 (2011); HRC 'Res 26/27, Human Rights and Climate Change' UN Doc A/HRC/Res/26/27 (2014); HRC 'Res 29/15, Human Rights and Climate Change' UN Doc A/HRC/Res/29/15 (2015); HRC 'Res 32/33, Human Rights and Climate Change' UN Doc A/HRC/RES/32/33 (2016); HRC 'Res 34/20, Human Rights and the Environment' UN Doc A/HRC/34/20 (2017).

15 Res 32/33 (n 14) para 9; Res 34/20 (n 14) para 5.

16 OHCHR, 'Understanding Human Rights and Climate Change' (2015) 3.

17 OHCHR 'Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment' UN Doc A/HRC/37/59 (2018) para 33(e).

18 *ibid* para 3, principles 14–15.

man rights¹⁹ and acknowledged that Parties ‘should, in all climate change related actions, fully respect human rights.’²⁰ The functioning of the Clean Development Mechanism (CDM),²¹ REDD+,²² and the disbursement of climate finance²³ confronted states and international agencies with challenging questions over the interplay between climate change and human rights law obligations. The need to ensure compatibility between climate action and the protection of human rights has been progressively emphasised²⁴ and included in standards adopted by some climate finance institutions.²⁵

Numerous textual suggestions for references to human rights were made during the negotiations of the Paris Agreement.²⁶ The reference to human rights eventually included in the preamble does not create new and separate legal obligations for Parties, but merely draws attention to obligations they already have undertaken under the human rights treaties they ratified, or may ratify in future, and to relevant customary norms and domestic laws.²⁷ Further, the operative part of the treaty makes reference to gender-responsiveness, the importance of traditional knowledge, and the need for further cooperation related to public participation and access to information.²⁸

The Paris Agreement thus breaks new ground, with significant implications for the implementation and further development of Parties’ obligations un-

der the climate regime, which are already evident in the context of the newly established Local Communities and Indigenous Peoples Platform,²⁹ the Paris Committee on Capacity-building,³⁰ the Gender Action Plan,³¹ and the Talanoa Dialogue.³² The remainder of this article analyses how the relationship with human rights obligations is being addressed in the context of the on-going development of the Paris Agreement implementation guidelines.

III. Human Rights in the Paris Agreement Implementation Guidelines

While the Paris Agreement lays out the main framework for future international cooperation on climate action, it does not provide detailed guidance on the design of national climate plans or the operationalisation of the review and reporting processes it envisions. Consequently, when adopting the Paris Agreement, the contracting Parties also established a process to negotiate a set of ‘implementation guidelines’. The task of negotiating these guidelines was primarily attributed to a new subsidiary body established for this purpose – the Ad-hoc Working Group on the Paris Agreement (APA) – with other subsidiary bodies also addressing discrete aspects of the guidelines. The outcome of these negotiations is ‘essential

19 UNFCCC ‘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’ UN Doc FC-CC/CP/2010/7/Add.1 (15 March 2011) preamble, recital 7.

20 *ibid* para 8; see Sébastien Duyck, Sébastien Jodoin, and Alyssa Johl, ‘Integrating Human Rights in Climate Governance: An Introduction’ in Duyck et al (n 11) 3.

21 See eg Lambert Schneider, ‘Is the CDM Fulfilling Its Environmental and Sustainable Development Objectives? An Evaluation of the CDM and Options for Improvement’ (Öko-Institut 2007); Christof Arens, Hanna Wang-Helmreich and Timon Wehnert, ‘Mitigation versus Sustainable Development? Why NAMAs Shouldn’t Repeat the CDM’s Mistakes’ (2011) 17 Joint Implementation Quarterly 6; Lena Ruthner et al, ‘Study on the Integrity of the Clean Development Mechanism (CDM)’ (AEA 2011); Wolfgang Obergassel et al., ‘Human Rights and the Clean Development Mechanism: Lessons Learned from Three Case Studies’ (2017) 8 JHRE 51.

22 See Annalisa Savaresi, ‘The Human Rights Dimension of REDD’, (2012) 21 RECIEL 102; Annalisa Savaresi, ‘REDD+ and Human Rights: Addressing Synergies Between International Regimes’, (2013) 18 Ecology & Society 5; Annalisa Savaresi, ‘The Role of REDD in Harmonising Overlapping International Obligations’ in Erkki Hollo, Kati Kulovesi and Michael Mehling (eds), *Climate Change and the Law* (Springer 2013) 391.

23 See Alyssa Johl and Yves Lador, ‘A Human-Rights Based Approach to Climate Finance’ (FES 2012), <<http://library.fes.de/pdf-files/iez/global/08933.pdf>> accessed 15 September 2018; Damilola S Olawuyi, *The Human Rights-Based Approach to Carbon Finance* (Cambridge University Press 2016).

24 Decision 1/CP.16 (n 19) Appendix I, para 2(a).

25 See eg Adaptation Fund, ‘Environmental and Social Policy’ (2016) 15; Green Climate Fund, ‘Environmental and Social Policy’, GCF/B.19/10 (March 2018) <https://www.greenclimate.fund/documents/20182/574763/GCF_policy_-_Environmental_and_Social_Policy.pdf/aa092a12-2775-4813-a009-6e6564bad87c> accessed 15 September 2018; Green Climate Fund, ‘Indigenous Peoples’ Policy’, GCF/B.19/11 (March 2018) <https://www.greenclimate.fund/documents/20182/574763/GCF_policy_-_Indigenous_Peoples_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042> accessed 15 September 2018.

26 See Annalisa Savaresi and Jacques Hartmann, ‘Human Rights in the 2015 Agreement’ (Legal Response Initiative 2015) <<https://www.stir.ac.uk/research/hub/publication/552778>> accessed 15 September 2018.

27 Savaresi, ‘Climate Change and Human Rights’ (n 8) 32.

28 Paris Agreement (n 2) arts 7(5), 11(2), and 12.

29 Decision 1/CP.21 (n 3) paras 135–136; UNFCCC ‘Report of the Conference of the Parties on its Twenty-second Session, Held in Marrakech from 7 to 18 November 2016’ UN Doc FC-CC/CP/2016/10 (31 January 2017) paras 163–167.

30 Decision 1/CP.21 (n 3) para 71.

31 UNFCCC ‘Decision 3/CP.23, Establishment of a Gender Action Plan’ UN Doc FCCC/CP/2017/11/Add.1 (8 February 2018).

32 UNFCCC ‘Decision 1/CP.23, Fiji Momentum for Implementation’ UN Doc FCCC/CP/2017/11/Add.1 (8 February 2018) paras 10–11, and Annex II.

to operationalise national and international commitments to combat intensifying climate change in a fair and effective manner'.³³

The international climate change governance architecture established by the Paris Agreement has been described as 'hybrid' in that it combines an international system of rules to review the implementation, compliance, and effectiveness of Parties' action.³⁴ In this context, the guidelines are expected to provide details on designing national plans on mitigation, adaptation, and provision of support, as well as on procedures and modalities for the review of implementation, compliance, and effectiveness.³⁵ The guidelines therefore will significantly inform the operationalisation of the Paris Agreement. Several countries, institutions, and stakeholders have sought to ensure that the human rights language contained in the treaty's preamble is reflected in the guidelines.³⁶ This section explores the elements of the implementation guidelines that could further integrate human rights considerations in the operationalisation of the Paris Agreement.

1. Further Guidance in Relation to Nationally Determined Contributions

The nationally determined contributions (NDCs) that all Parties are under the legal obligation to prepare, communicate, and maintain on the basis of successive five-year cycles are the central feature of the Paris

Agreement.³⁷ Parties' obligations concerning NDCs are largely obligations of conduct, rather than of results,³⁸ meaning that states must submit NDCs and pursue measures to achieve them.³⁹

The NDCs submitted by Parties thus far differ widely in scope and nature. Developed countries' NDCs primarily consist of quantified emission reductions targets similar to those submitted under the Kyoto Protocol, while most developing countries' NDCs, instead, also address adaptation, capacity, and finance needs. Many NDCs include information regarding the human and social dimensions of the implementation of climate response measures, or their linkages with broader goals associated with sustainable development.⁴⁰ Seventeen Parties have committed to implement their response measures in a rights-based manner,⁴¹ while another seven mentioned human rights as elements of the legal framework providing the context for the implementation of the contribution.⁴² In addition, many NDCs refer to concepts closely related to human rights, such as public participation, food security, gender equality or the participation of women, and indigenous peoples and traditional knowledge.⁴³ Several Parties therefore do recognise, explicitly or implicitly, the link between climate action and the protection of human rights in their NDCs.

During the negotiations of the Paris Agreement, several actors sought to limit Parties' discretion in the drafting of their NDCs.⁴⁴ Ultimately, the Agreement requires Parties to prepare NDCs in accordance with guidance to be developed by the COP serving as the

33 Yamide Dagnet et al, 'Setting the Paris Agreement in Motion: Key Requirements for the Implementing Guidelines' (2018) Project for Advancing Climate Transparency (PACT) 2 <<https://www.wri.org/publication/pact-implementing-guidelines>>.

34 Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative possibilities and underlying politics' (2016) 65 ICLQ 493; Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani, *International Climate Change Law* (Oxford University Press 2017) 217.

35 Annalisa Savaresi 'The Paris Agreement: Reflections on an International Law Odyssey' in Ineta Ziemele and Georg Ulrich (eds), *How International Law Works in Times of Crisis?* (Oxford University Press 2018, fc).

36 Christel Cournil and Camila Perruso, 'Réflexions sur "l'Humanisation" des Changements Climatiques et la "Climatisation" des Droits de l'Homme. Émergence et Pertinence' (2018) 14 La Revue des Droits de l'Homme 24.

37 Paris Agreement (n 2) arts 4(2)-4(9).

38 See eg Daniel Bodansky, 'The Legal Character of the Paris Agreement' (2016) 25 RECIEL 142, 145; Annalisa Savaresi, 'The Paris Agreement: A New Beginning?' (2016) 34 J Energy & Natural Resources L 16, 21.

39 Paris Agreement (n 2) art 4(2).

40 Eliza Northrop et al, 'Examining the Alignment between the Intended Nationally Determined Contributions and Sustainable Development Goals' (World Resources Institute 2016) <https://www.wri.org/sites/default/files/WRI_INDCs_v5.pdf>.

41 Bolivia, Brazil, Chad, Chile, Costa Rica, Ecuador, Georgia, Guatemala, Guyana, Honduras, Malawi, Marshall Islands, Mexico, Morocco, Philippines, South Sudan, and Uganda.

42 Cuba, El Salvador, Indonesia, Nepal, Venezuela, Yemen, and Zimbabwe.

43 Authors have mapped the original intended NDCs (INDCs) submitted by Parties for references to various principles. The importance of public participation in the implementation of climate commitments is explicitly stated in 71 INDCs. Additionally, 97 INDCs refer to the importance of food production or food security, 56 INDCs refer to gender aspects or the participation and empowerment of women, and 19 INDCs include references to indigenous peoples or traditional knowledge. More information can be found on <<https://www.climatechange.org>>. On the gender dimension of NDCs, see also Paul Tobin, Nicole M Schmidt, Jale Tosun, and Charlotte Burns, 'Mapping States' Paris Climate Pledges: Analysing Targets and Groups at COP 21' (2018) 48 Global Environmental Change 11.

44 Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement' (n 34) 500.

Meeting of the Parties to the Paris Agreement (CMA).⁴⁵ Since 2016, these negotiations have taken place under the auspices of the APA, and have been structured around three issues: the features of NDCs (their scope); the information to facilitate clarity, transparency, and understanding (ICTU); and accounting for NDCs.

The ICTU negotiations provide the most promising avenue to develop a human rights-based approach to NDCs. Parties have agreed that they may provide information related to their NDC planning process.⁴⁶ Some Parties have suggested that this could include information related to human rights, stakeholder consultations, indigenous peoples and local communities, elders and youth, just transition, and gender.⁴⁷ More specifically, these Parties have suggested adopting non-mandatory guidance enabling Parties to ‘opt-in’, by providing relevant information in their NDCs. This approach could create a virtuous cycle, allowing Parties to share information related to the preparation of their second NDC (i.e. 2019–2020), with more countries potentially following suit in subsequent cycles. The provision of information would also allow Parties to reflect on their domestic experience regarding rights-based and participatory climate decision-making, thereby enabling others to benefit from lessons learned.

This proposal is included in the ‘additional tool’, prepared by the APA co-chairs in August 2018 as a basis for future negotiations.⁴⁸ The draft guidelines could be further strengthened by differentiating more explicitly the invitation for Parties to provide information on procedural aspects related to the planning of NDCs (i.e. how stakeholders have participated throughout the preparatory process) and to the substance of NDCs (i.e. how considerations related to human rights and related principles will be reflected in the implementation of NDCs). Also, the invitation to provide information related to the integration of human rights considerations in the planning of NDCs should refer not only to human rights, but build on the language used in the preamble of the Paris Agreement, and refer to the rights of indigenous peoples, gender equality, food security, just transition, and the importance of traditional knowledge.

2. Adaptation Communications

Adaptation communications are the second entry point for developing a rights-based approach to the

implementation of the Paris Agreement. The Paris Agreement provides that Parties ‘should, as appropriate, submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions’.⁴⁹ The Agreement specifies that adaptation communications may be part of existing reporting processes under the climate regime, such as NDCs, national communications, and developing countries’ national adaptation plans.⁵⁰

The guidance for adaptation communications under negotiation by the APA at the time of drafting could provide a means for Parties to identify, monitor, and share their experiences with regards to rights-based climate adaptation measures and policies. This approach would contribute to fulfilling the Paris Agreement’s vision that adaptation action should follow ‘a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems’, based on and guided by, among others, ‘traditional knowledge, knowledge of indigenous peoples and local knowledge systems’.⁵¹

Former UN Special Rapporteur John Knox has noted that, even though rights-based adaptation measures will vary from situation to situation, states must nevertheless comply with relevant national and international standards.⁵² These standards include those defined under the Sendai Framework,⁵³ as well as relevant human rights instruments, such as the

45 Paris Agreement (n 2) art 4(8).

46 Decision 1/CP.21 (n 3) para 27.

47 See the original proposal in ‘Norway’s Submission on Features, Information to Facilitate Clarity, Transparency and Understanding and Accounting of Parties’ Nationally Determined Contributions’ (September 2017) 6 <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/854_356_131501386398003119-APA%203_Norway.pdf> accessed 15 September 2018. Canada and the European Union have expressed support for this proposal.

48 See eg ‘Further Guidance in Relation to the Mitigation Section of Decision 1/CP.21 on: (a) Features of Nationally Determined Contributions, as Specified in Paragraph 26; (b) Information to Facilitate Clarity, Transparency and Understanding of Nationally Determined Contributions, as Specified in Paragraph 28; and (c) Accounting for Parties’ Nationally Determined Contributions, as Specified in Paragraph 31’, APA1.6.Informal.1.Add.1 (6 August 2018) 9, 11.

49 Paris Agreement (n 2) art 7(10).

50 *ibid* art 7(11).

51 *ibid* art 7(5).

52 OHCHR ‘Report of the Special Rapporteur (n 17) para 70.

53 UNGA ‘Sendai Framework for Disaster Risk Reduction 2015–2030’ UN Doc A/RES/69/283 (2015).

Convention on the Elimination of All Forms of Discrimination Against Women.⁵⁴ By focusing on the personal condition of individuals exposed, a human rights approach can inform adaptation policies to better protect those most at risk, instead of focusing on aggregate assessments of economic interests.⁵⁵ Additionally, human rights frameworks can contribute to enhance adaptation planning by clarifying the legal duty of branches of the government to protect their citizens and thereby enhance the accountability of decision-makers.⁵⁶

Some Parties' NDCs already identify human rights, gender equality, just transition, and local and indigenous knowledge as factors to prioritise in adaptation action.⁵⁷ Several Parties have furthermore suggested that the guidelines on adaptation communications include references to a gender-sensitive and participatory approach, relying on indigenous peoples' and traditional knowledge.⁵⁸ The 'additional tool' produced by the APA co-chairs in August 2018 includes references to this language, for instance in relation to 'adaptation priorities, plans, strategies, planned actions', and to the monitoring and evaluation of adaptation action.⁵⁹ These suggestions, however, fall short of requesting that Parties provide information on rights-based approaches to adaptation. To date, international cooperation under the UNFCCC and support provided by the various bodies established under the Convention have largely failed to adopt a rights-based approach to adaptation.⁶⁰

The guidelines for adaptation communications offer an opportunity for Parties to change course, learn from earlier shortcomings, and provide greater sup-

port for rights-based adaptation. The guidelines on the preparation of adaptation communications could invite Parties to submit information concerning specifically rights-based approaches to adaptation, both in the context of planning and priorities, and of the monitoring of measures taken.⁶¹

3. Transparency Framework

The successful implementation of the Paris Agreement will depend to a large extent on Parties' ability to review individual and collective progress towards achieving the treaty's objectives.⁶² The transparency framework envisioned under Article 13 is a crucial means to this end.

The success of this model will depend to a significant extent on whether the review will solely consider information concerning greenhouse gas emissions, or whether it will also consider whether climate policies are implemented in line with other societal objectives and existing legal frameworks.⁶³ The Paris Agreement's references to human rights seem to suggest that to get a 'clear understanding of climate change action',⁶⁴ the transparency framework should include information on good practices, including rights-based approaches to mitigation and adaptation action, as well as support.

Existing UNFCCC guidelines on the reporting of climate action already invite Parties to submit information on issues of direct relevance to the protection of human rights, such as legal frameworks applicable to climate action, the impacts of climate change

54 Committee on the Elimination of Discrimination against Women 'General Recommendation No. 37 on Gender-related Dimensions of Disaster Risk Reduction in the Context of Climate Change' UN Doc CEDAW/C/GC/37 (2018).

55 See eg John C Mutter and Kye Mesa Barnard, 'Climate Change, Evolution of Disasters and Inequality' in Stephen Humphreys (n 11) 272.

56 See Ian Christoplos, Mikkel Funder, Colleen McGinn and Winnie Wairimu, 'The Role of Human Rights in Climate Change Adaptation: Evidence from civil society in Cambodia and Kenya' (17 December 2014) 3 <<https://www.diiis.dk/en/research/human-rights-based-approaches-can-protect-people-vulnerable-to-climate-change>> accessed 15 September 2018.

57 UNFCCC, 'Technical Paper: Adaptation-Related Information Included in Nationally Determined Contributions, National Adaptation Plans and Recent National Communications' UN Doc FCCC/TP/2017/7 (2 October 2017).

58 These Parties included Australia, the Independent Association of Latin America and the Caribbean (AILAC), Norway, Canada, and the Least Developed Countries, with the African Group of Nego-

tiators making a similar proposal focused on addressing only the gender dimension.

59 APA Co-chairs, 'Additional Tool under Item 4 of the Agenda: Further Guidance in Relation to the Adaptation Communication, Including, inter alia, as a Component of Nationally Determined Contributions, Referred to in Article 7, Paragraphs 10 and 11, of the Paris Agreement', APA1.6.Informal.1.Add.2 (2 August 2018).

60 See eg Sven Harmeling 'Climate Change Impacts: Human Rights in Climate Adaptation and Loss and Damage' in Duyck et al (n 11) 104.

61 APA Co-chairs, 'Additional Tool under Item 4 of the Agenda' (n 59) 13, 16.

62 Charlotte Streck, Paul Keenlyside, and Moritz von Unger, 'The Paris Agreement: A New Beginning' (2016) 13 J Eur Envtl & Planning L 3, 21.

63 For example, Parties' human rights obligations under the core human rights instruments referenced above (n 6).

64 Paris Agreement (n 2) art 13(5).

on health and food security,⁶⁵ as well as the promotion of public participation and access to information.⁶⁶ These guidelines, however, do not ask Parties to submit information specifically concerning the integration of human rights in climate action.⁶⁷ However, several Parties have included references to human rights in their latest national communications under the UNFCCC.⁶⁸ Nevertheless, most of these references do not clearly indicate the steps adopted to incorporate human rights considerations into climate action. So far, only two states – Belgium and Luxemburg – have included a sub-section dedicated to human rights and gender in the context of their domestic climate action.⁶⁹ Ecuador's national communication also provides detailed information on the relevance of human rights to domestic climate action throughout the document.⁷⁰ Other countries mention human rights in their national communications in relation either to general statements of principles or to address only one discrete aspect of climate policies.

Beyond the UNFCCC, states already report information concerning climate action under various human rights processes, including the HRC's Universal Periodic Review, the reporting procedures of human rights treaty bodies, and the voluntary national reviews conducted by the High-Level Political Forum. As such, many states already provide information concerning the interlinkages between human rights and climate impacts or policies through one or several of these forums.⁷¹ However, at the time of draft-

ing, there is little coherence between the information states submit under the climate regime and under human rights mechanisms.⁷² It would therefore be desirable to strengthen synergies across climate and human rights reporting obligations, promoting coherence while avoiding additional reporting burdens.⁷³

The guidelines on the transparency framework should ask Parties to provide information concerning how human rights are mainstreamed in the implementation of the Paris Agreement. Such information could be included in the sections of the reporting guidelines related to national circumstances and institutional arrangements, mitigation co-benefits, climate impacts and adaptation measures, and means of implementation provided and received. Furthermore, expert bodies such as the Least Developed Countries Expert Group or the Adaptation Committee could elaborate additional guidance to ensure that Parties' reporting is meaningful and fosters synergies with relevant international processes.

Finally, civil society actors should be involved in the Paris Agreement's transparency framework to enable the consideration of independent information about Parties' action.⁷⁴ Reporting mechanisms established under other multilateral environmental agreements already give similar roles to civil society actors, as do international human rights mechanisms.⁷⁵ The Paris Agreement implementation guidelines should replicate these practices, taking on board the proposals put forward by various states about this.⁷⁶

65 Sébastien Duyck, 'Respecting Human Rights in Climate Action, An Assessment of Countries' Policies through a Review of National Reports' (2015) (report commissioned by the Mary Robinson Foundation for Climate Justice, on file with authors).

66 UNFCCC 'Decision 15/CP.18, Doha Work Programme on Article 6 of the Convention' UN Doc FCCC/CP/2012/8/Add.2 (28 February 2013) Annex, para 31.

67 See UNFCCC 'Decision 3/CP.1, Preparation and Submission of National Communications from the Parties Included in Annex I to the Convention' UN Doc FCCC/CP/1995/7/Add.1 (6 June 1995); UNFCCC 'Decision 10/CP.2, Communications from Parties not Included in Annex I to the Convention: Guidelines, Facilitation and Process for Consideration' UN Doc FCCC/CP/1996/15/Add.1 (29 October 1996); UNFCCC 'Decision 4/CP.5, Guidelines for the Preparation of National Communications by Parties Included in Annex I to the Convention, Part II: UNFCCC Reporting Guidelines on National Communications' UN Doc FCCC/CP/1999/6/Add.1 (17 January 2000) 8.

68 See a mapping of these references at 'Incorporating Human Rights into Climate Action' <<https://www.mrfcj.org/incorporating-human-rights-into-climate-action/>> accessed 15 September 2018.

69 See Belgium, '7th National Communication to the UNFCCC' (2017) 58; Luxemburg, '7th National Communication to the UNFCCC' (2017) 212.

70 Ecuador, '3rd National Communication to the UNFCCC' (2017) 69, 219, 468.

71 For a study of references to climate change in states' reports submitted to the Universal Periodic Review, see Edward Cameron and Marc Limon, 'Restoring the Climate by Realizing Rights: The Role of the International Human Rights System' (2012) 21 RECIEL 204. For an overview of the references to climate change in the States reports submitted to the Human Rights Treaty Bodies, see CIEL and GIESCR (n 13) Figure 2.

72 The Mary Robinson Foundation – Climate Justice (n 12) 11.

73 As also suggested in Savaresi, 'Climate Change and Human Rights' (n 8) 37.

74 Harro van Asselt, 'The Role of Non-State Actors in Reviewing Ambition, Implementation, and Compliance under the Paris Agreement' (2016) 6 Climate L 91.

75 Sébastien Duyck, 'MRV in the 2015 Climate Agreement: Promoting Compliance through Transparency and the Participation of NGOs' (2014) CCLR 175.

76 See APA Co-Chairs, 'Additional Tool under item 5 of the Agenda: Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support Referred to in Article 13 of the Paris Agreement', APA1.6.Informal.1.Add.3 (3 August 2018) 71–72.

4. Global Stocktake

The Paris Agreement envisions a process to carry out a review of collective progress towards the implementation of the Agreement every five years, in light of the principle of equity and on the best available science. The outcome of this ‘global stocktake’ is meant to inform Parties in updating and enhancing their ‘actions and support’.⁷⁷ This process is crucial to ensuring that the bottom-up architecture envisioned in the Paris Agreement will deliver the results it was designed to produce.⁷⁸

Article 14 explicitly provides that the global stocktake should be conducted in a comprehensive and facilitative manner. To deliver on this mandate, the review of collective progress must therefore consider all dimensions provided in the Paris Agreement, including the crosscutting principles listed in its preamble – such as human rights, the rights of indigenous peoples, and gender equality – and in Article 2 – sustainable development and the eradication of poverty.⁷⁹ Consequently, the global stocktake should review climate action not only from a quantitative but also a qualitative perspective. Such a review would help identify good practices and barriers to implementation, and inform future NDCs and international cooperation.

The Subsidiary Body for Implementation has suggested that Parties may address issues related to cli-

mate education, public participation, and access to information in the context of the global stocktake.⁸⁰

During APA negotiations on guidance for the global stocktake, several developing countries have stressed the need to consider, among other issues, ‘efforts to eradicate poverty, food security, job creation, and social justice in developing countries, climate refugees and displaced people’.⁸¹ Equally, several Parties have insisted that the process should be as inclusive as possible by allowing for the participation of non-Party stakeholders. These proposals are reflected in the co-chairs’ August 2018 ‘additional tool’.⁸² Importantly, including these considerations should not overshadow the significance for the global stocktake to address equity as mandated explicitly in the Paris Agreement.

As the stocktake is expected to play a leading role in framing climate action and inform the development of future NDCs, ensuring that this process increases awareness of rights-based solutions will be crucial. Inclusion of these proposals in the implementation guidelines would therefore turn the global stocktake into an opportunity to promote policy coherence and cooperation with other intergovernmental organisations whose mandate and expertise overlap with that of the climate regime. A participatory approach would furthermore promote rights-based climate action also in the context of international organisations outside of the UNFCCC by encouraging these organisations to develop knowledge products and operational tools that can feed into the global stocktake.

5. Article 6 Mechanism

Article 6 of the Paris Agreement provides several options for Parties to cooperate in achieving their NDCs, including through internationally transferred mitigation outcomes and a proposed mechanism. Such cooperation is supposed ‘to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity’.⁸³ Article 6(4) establishes a new ‘mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development’ (the so-called Sustainable Development Mechanism (SDM)), to be developed on the basis of, inter alia, ‘[e]xperience gained with and lessons learned from existing mechanisms’.⁸⁴ These existing mechanisms are the Kyoto Protocol’s CDM and Joint Implementation (JI).

77 Paris Agreement (n 2) art 14 (3).

78 Annalisa Savaresi ‘The Paris Agreement: Reflections on an International Law Odyssey’ in Ineta Ziemele and Georg Ulrich (eds), *How International Law Works in Times of Crisis?* (Oxford University Press 2018, fc) 15. See also Wolfgang Obergassel et al, ‘Phoenix from the Ashes: An Analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change, Part I’ (2015) 27 *Envtl L & Management* 243; Wolfgang Obergassel et al, ‘Phoenix from the Ashes: An Analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change, Part II’ (2016) 28 *Envtl L & Management* 3.

79 Paris Agreement (n 2) preamble, art 2.

80 UNFCCC ‘Draft decision -/CMA.1, Ways of Enhancing the Implementation of Education, Training, Public Awareness, Public Participation and Public Access to Information so as to Enhance Actions under the Paris Agreement’ UN Doc FC-CC/SBI/2018/L.3/Add.2 (2018) para 9.

81 APA Co-Chairs, ‘Additional Tool under Item 6 of the Agenda: Matters Relating to the Global Stocktake Referred to in Article 14 of the Paris Agreement: (a) Identification of the Sources of Input for the Global Stocktake; and (b) Development of the Modalities of the Global Stocktake’, APA1.6.Informal.1.Add.4 (2 August 2018) para 63.

82 *ibid* paras 13, 29, 42, and 49.

83 Paris Agreement (n 2) art 6(1).

84 Decision 1/CP.21 (n 3) para 38.

The CDM has repeatedly been criticised for its poor record on human rights protection and failure to consider rights of indigenous peoples. While some CDM projects have had positive impacts on local livelihoods,⁸⁵ others have been associated with outright human rights violations. For example, the Barro Blanco hydropower project in Panama was based on a faulty environmental and social impact assessment which erroneously concluded that the project would not displace people. On the contrary, the project involved forced relocations of indigenous communities, and did so without first obtaining their free, prior, and informed consent. Moreover, there was no clear resettlement plan and no structured planning of compensation measures.⁸⁶ The Bujagali hydropower project in Uganda and the Olkaria IV geothermal energy project in Kenya similarly were based on flawed impact assessments and failed to at least restore the livelihoods and standards of living of the people displaced by the project.⁸⁷

The CDM has been criticised for failing to screen out projects such as these, and for the fact that its procedures almost exclusively focus on how to quantify emission reductions. The only openings to consider human rights concerns in the CDM rulebook are the requirements that projects contribute to sustainable development and that stakeholders need to be consulted.⁸⁸ However, the CDM Executive Board has never adopted internationally agreed criteria or procedures for assessing contributions to sustainable

development. Instead, host countries have had to define sustainable development criteria (and confirm that the project helps achieve it) and to develop procedures for local stakeholder consultations. Until recently, the limited rules on how to conduct local stakeholder consultations merely required that comments be invited, and that the project proponents provide a summary of comments received and a report on how these were taken into account.⁸⁹ Notably, the CDM rules on consultation do not reference the rights of indigenous peoples or the right of free, prior, and informed consent, which is a critical protection related to projects like those approved by the CDM.

Research has shown that most host countries have only adopted non-binding guidelines, which make it easy to comply as project documentation on sustainable development and validation reports has tended to be vague and difficult to verify. Similarly, stakeholder consultation has often been rudimentary, unregulated, and badly documented.⁹⁰

When presented with information about abuses related to the Bajo Aguan project, the CDM Executive Board declared that it could not consider human rights information when assessing projects.⁹¹ In November 2015, however, the CDM Executive Board decided that if stakeholders submit comments expressing human rights concerns over projects, such information should be forwarded to the respective national authorities and to 'relevant bodies within the United Nations system', that is, UN human rights bodies.⁹² Thus, the CDM Ex-

85 Emily Boyd et al, 'Reforming the CDM for Sustainable Development: Lessons Learned and Policy Futures' (2009) 12 *Env'tl Sci & Pol'y* 820; Adam Bumpus, 'Realizing Local Development in the Carbon Commodity Chain: Political Economy, Value and Connecting Carbon Commodities at Multiple Scales' (United Nations Research Institute for Social Development 2011); Wolfgang Sterk et al, 'Further Development of the Project-Based Mechanisms in a Post-2012 Regime' (Wuppertal Institute for Climate, Environment and Energy 2009).

86 See eg Movimiento 10 de Abril, Earthjustice, CIEL, and Inter-American Association for Environmental Defense, 'Letter to UN Special Rapporteurs on Imminent Forced Evictions of Indigenous Ngöbe Families due to Barro Blanco Dam in Panama' (18 February 2014) <https://www.ciel.org/wp-content/uploads/2014/11/BarroBlanco_Appeal_18Feb2014.pdf>; Obergassel et al, 'Human Rights and the Clean Development Mechanism' (n 21).

87 Jeanette Schade, 'Kenya "Olkaria IV" Case Study Report: Human Rights Analysis of the Resettlement Process' (COMCAD Working Papers 2017) <https://www.ssoar.info/ssoar/bitstream/handle/document/51409/ssoar-2017-schade-Kenya_Olkaria_IV_Case_Study.pdf?sequence=1>; Fivas, 'Human Rights Lessons from the Bujagali Dam in Uganda' (16 June 2015), <<http://fivas.org/fronstak/human-rights-lessons-from-the-bujagali-dam-in-uganda/>> accessed 15 September 2018; Obergassel et al, 'Human Rights and the Clean Development Mechanism' (n 21).

88 UNFCCC 'Decision 3/CMP.1, Modalities and Procedures for a Clean Development Mechanism as Defined in Article 12 of the Kyoto Protocol' UN Doc FCCC/KP/CMP/2005/8/Add.1 (30 March 2006) para 40(a).

89 *ibid* para 37(b).

90 Karen Holm Olsen, 'The Clean Development Mechanism's Contribution to Sustainable Development: A Review of the Literature' (2007) 84 *Climatic Change* 59; Obergassel et al, 'Human Rights and the Clean Development Mechanism' (n 21); Schneider (n 21); Sterk et al (n 85).

91 Annie Bird, 'Human Rights Abuses Attributed to Military Forces in the Bajo Aguan Valley in Honduras' (20 February 2013) 9, <http://rightsaction.org/sites/default/files/Rpt_130220_Aguan_Final.pdf> accessed 15 September 2018; Biofuel Watch, 'Palm Oil in the Aguan Valley, Honduras: CDM, Biodiesel and Murders', <<http://www.biofuelwatch.org.uk/2011/palm-oil-in-the-aguan-valley-honduras-cdm-biodiesel-and-murders/>> accessed 15 September 2018; Arthur Neslen, 'Carbon Credits Tarnished by Human Rights "Disgrace"' (3 October 2011), <<http://www.euractiv.com/climate-environment/carbon-credits-tarnished-human-r-news-508068>> accessed 15 September 2018; Jeanette Schade and Wolfgang Obergassel 'Human Rights and the Clean Development Mechanism' (2014) 27 *Cambridge Rev Intl Aff* 717.

92 UNFCCC, 'Meeting Report, CDM Executive Board Eighty-Seventh Meeting, Version 01.1 (No. CDM-EB87)' (2015) para 52.

ecutive Board refused to accept the due diligence responsibility of having to consider these human rights concerns in assessing projects. At the same session, the Board also approved a concept note on improving local stakeholder consultation processes. According to the new rules, the scope of local stakeholder consultations needs to cover at least the potential direct positive and negative impacts of projects on local stakeholders. At a minimum, representatives of local stakeholders directly affected by the project and representatives of local authorities relevant to the project must be invited to participate in the project planning phase, and the project proponents need to provide evidence that the respective invitations were sent. Information should be disseminated 'in ways that are appropriate for the community that is directly affected', and include a non-technical summary of the project and its alleged positive and negative impacts, plus the means to provide comments. Project proponents need to report on how they have taken the comments received into account.⁹³ However, these *de minimis* rules fail to incorporate the rights of indigenous peoples, including the right of free, prior, and informed consent.

Experience accrued with the CDM is important to understand how the SDM could and should be designed to align with human rights law and practice. Former UN Special Rapporteur John Knox has drawn attention to the need to ensure that the SDM incorporates strong social safeguards that accord with international human rights obligations.⁹⁴ Similarly, the

Office of the High Commissioner for Human Rights (OHCHR) has noted that the SDM's rules, modalities, and procedures must honour the commitment to respect, promote, and consider Parties' respective obligations on human rights.⁹⁵ As such, it recommended that Parties adopt an adequate social and environmental safeguard system and exercise human rights due diligence to ensure development actions do not harm communities.⁹⁶ The OHCHR also recommended that the SDM should aim to finance projects that benefit those most vulnerable to the impacts of climate change.⁹⁷

Therefore all projects should be required to undergo a human rights impact assessment (HRIA) with clear procedural requirements for stakeholder consultations, with only projects with positive impacts being eligible for registration. While environmental impact assessments have long been required, international financial institutions are increasingly recognising the need to conduct more comprehensive assessments that also consider human rights impacts when considering projects. Projects should be required to monitor socio-economic impacts throughout their lifetime. In addition, procedural safeguards should include complaints mechanisms, internationally, nationally, and at the project level. Finally, a procedure to de-register projects in cases where human rights violations become apparent only at the implementation stage should be created. Such a procedure would create a risk for credit buyers that projects may not deliver on their purchase agreements. Also, the creation of such a risk would prompt buyers to take the HRIA of projects into account in their purchases.

However, many countries have rejected the adoption of international standards concerning sustainability, HRIA, and stakeholder consultations.⁹⁸ If no progress is achieved at the international level, individual buyer countries or coalitions of willing countries could introduce their own requirements. Three main options may be envisioned in this regard.⁹⁹ First, since the transfer of emission reductions will likely require a letter of approval by the recipient country, the latter could simply decide to approve only projects that have undergone an HRIA. Second, where countries themselves are the buyers of credits, they could require projects meet certain standards, as some countries (Belgium and Sweden) have already done in the context of the CDM.¹⁰⁰ Third, countries using emission trading systems could de-

93 UNFCCC, 'CDM Project Standard for Project Activities Version 01.0 (No. CDM-EB93-A04)' (2017) paras 89–105.

94 John Knox, 'Letter from the Special Rapporteur on Human Rights and the Environment to Climate Negotiators' (4 May 2016) <<http://srenvironment.org/wp-content/uploads/2016/06/Letter-to-SBSTA-UNFCCC-final.pdf>> accessed 15 September 2018.

95 See OHCHR, Comments and Recommendations of OHCHR regarding the future UNFCCC Sustainable Development Mechanism (4 November 2016) 1 <https://www.ohchr.org/Documents/Issues/ClimateChange/OHCHR_SBSTA.pdf> accessed 15 September 2018.

96 *ibid.*

97 *ibid.*

98 Wolfgang Obergassel and Friederike Asche, 'Shaping the Paris Mechanisms Part III – An Update on Submissions on Article 6 of the Paris Agreement' (Wuppertal Institute for Climate, Environment and Energy 2017) <<https://epub.wupperinst.org/frontdoor/index/index/docId/6987>> accessed 15 September 2018.

99 Christel Cournil et al, 'Human Rights and Climate Change: EU Policy Options' (European Parliament 2012); Obergassel et al, 'Human Rights and the Clean Development Mechanism' (n 21).

100 Sterk et al (n 85); Swedish Energy Agency, 'Questionnaire Regarding Sustainable Development Co-benefits, no Harm and Stakeholder Engagement' (2015) (on file with authors).

cide to only allow the use of credits from projects that have undergone an HRIA, thus limiting the commercial appeal of other projects – like the European Union has done in the past with projects in the forest sector.

All these scenarios, however, would not create a level playing field, as other countries may still disregard human rights when approving projects and purchasing emission reductions. This would potentially expose projects undergoing a rigorous HRIA process to a competitive disadvantage. Moreover, as carbon credits are fungible internationally, credits from projects with negative human rights impacts may enter the systems operated by countries with strong standards through the backdoor. The experience of the CDM strongly suggests that full human rights compliance should be guaranteed in the SDM modalities and procedures.

IV. Conclusion

With increasingly strong storms, draughts, wildfires, and sea-level rise, the world is already witnessing the impacts of climate change on the enjoyment of the human rights of present and future generations. At

the same time, climate change responses have already affected the rights of the most vulnerable, as seen in the context of REDD+ and CDM projects. The development of a rights-based approach to climate action is therefore critical.

In 2015, Parties decided that the implementation of the Paris Agreement would be guided by Parties' respective human rights obligations. However, this aspiration still has to be put into practice. The implementation guidelines provide the first real test of Parties' commitment to achieve greater, better, and more equitable international cooperation on climate change.

This article has suggested that there are several entry points for incorporating a human rights-based approach into the Paris Agreement's implementation guidelines, namely: guidance for NDCs, adaptation communications, the transparency framework, the global stocktake, and the rules of the Article 6 mechanism. The operationalisation of the Paris Agreement is not just about emissions reductions, but also requires the adoption of people-centred, human rights-based climate action. In Katowice, Parties should seize the opportunities available to deliver this vision, and to comply with the human rights obligations that they already have.

The Interplay between Accounting and Reporting on Mitigation Contributions under the Paris Agreement

Kelly Levin*

This paper explores the linkages between accounting for and reporting on mitigation contributions under the Paris Agreement. Specifically, it explores the relationship between the provisions related to communicating nationally determined contributions (NDCs) under Article 4, paragraph 8; accounting for NDCs under Article 4, paragraph 13; and reporting on progress and achievement made on NDCs under Article 13, paragraph 7(b). It finds that there are significant consequences if progress made on these different elements is uneven; if a weak outcome is reached on one of these provisions, the integrity of the Agreement will rest on greater progress made on the other provisions.

I. Introduction

Under the Paris Agreement, Parties put forward their contributions to address climate change in the form of Nationally Determined Contributions (NDCs). The NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The concepts of ‘contribution’ and ‘national determination’ are reflected in Articles 3 and 4.2 of the Paris Agreement, which are based on the premise that each government decides, based on its own circumstances and capacities, the actions it will take to contribute to achieving the objectives of the Agreement. The efforts of individual Parties to reduce national emissions should, in aggregate, set the world on a path to limit average temperature rise to well below 2°C, or aspirationally 1.5°C, above pre-industrial levels, the long-term goals of the Paris Agreement. As of August 2018, 194 Intended Nationally Determined Contributions (INDCs) or NDCs have been submitted.¹

The Paris ‘rule book’ is to be agreed at the 24th session of the Conference of the Parties (COP24) to the UNFCCC by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement

(CMA) in Katowice, Poland. It will operationalize the provisions of the Paris Agreement, and several components of this rule book will establish the guidance, modalities, and procedures for understanding Parties’ NDCs and progress made towards achieving them.

This article explores three interrelated provisions of the Paris Agreement that have relevance for understanding NDCs and their achievement:

- Communication of the NDCs: Article 4, paragraph 8 of the Paris Agreement states that in communicating their nationally determined contributions, all Parties shall provide the information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 and any relevant decisions of the CMA;
- Accounting of the NDCs: Under Article 4, paragraph 13 of the Paris Agreement, Parties are to account for their NDCs and, in doing so, promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting; and
- Reporting on progress and achievement of NDCs: According to Article 13, paragraph 7(b), Parties are to provide information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

The first section of the article is dedicated to a brief description of each of these three provisions. The ar-

DOI: 10.21552/cclr/2018/3/6

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¹ This figure counts the individual European Union [EU] member states and the European Union itself.

ticle then turns to an exploration of the linkages among these provisions and argues that if the rule-book is not uniformly robust across all of the provisions, it will need to be strengthened for the other provisions accordingly, with resultant tradeoffs.

II. Communication of NDCs

The Paris Agreement requests Parties to prepare, communicate and implement NDCs every five years. Successive NDCs are to represent a progression beyond the current one, and Parties are to take into account the results of the global stocktake under the Paris Agreement, a process by which the international community will evaluate progress towards achieving the objectives of the Paris Agreement.

When communicating their NDCs, per Article 4, paragraph 8, Parties are to submit information necessary for clarity, transparency and understanding (CTU) of the NDCs. If CTU is sufficiently detailed, it can allow for holding Parties accountable to their NDCs and help with the assessment of individual and collective progress.² With adequate CTU provisions, Parties would clarify the nature of their NDC, along with the assumptions and methodologies underpinning it. Without this information, it will be difficult, if not impossible, to understand what countries have committed to and track progress and achievement towards their NDCs.

Parties are to provide information necessary for CTU of NDCs in accordance with Decision 1/CP.21, which includes a list of information that Parties may choose to include.³ This list of information elements is drawn from the Lima Call for Climate Action (Decision 1/CP.20, paragraph 14) which Parties voluntarily used to accompany the first intended NDCs. Decision 1/CP.21 further requests the Ad Hoc Working Group on the Paris Agreement to develop more guidance for the information to be provided by Parties in order to facilitate CTU. It remains to be seen whether this guidance will be more detailed, and whether Parties will embrace such guidance more than they have adhered to the foregoing elements in Decision 1/CP.21 with their initial NDCs. Significant transparency gaps exist given the lack of information accompanying many of the first NDCs, resulting from some Parties not adhering to the list of information from the Lima Call for Climate Action, as well as the list being insufficiently detailed for understanding the

NDCs.⁴ It is worth noting that the Lima Call for Climate Action's reference to Parties' providing information on CTU was voluntarily. The Lima decision's language stated that Parties 'may include, as appropriate, *inter alia*...'. In contrast, the Paris Agreement requires all Parties to provide the information necessary for CTU in accordance with Decision 1/CP.21. However, the further guidance under development could be as flexible as that in the Lima decision, or include all or some voluntary elements of information.

Parties met in informal consultations on CTU at the sixth part of the first session of the Ad Hoc Working Group on the Paris Agreement (APA 1-6), held in Bangkok in September 2018. However, the consultations did not result in a revised version of the 'tool' developed by the Co-Chairs ahead of the session.⁵

III. Accounting of NDCs

While information to enhance CTU provides information on the NDC itself, accounting of NDCs determines how to track progress towards the NDC. Accounting is the process of: determining the quantity of emissions, removals, transactions related to internationally transferable mitigation outcomes (ITMOs), and land sector emissions and removals

2 Yamide Dagnet, Nathan Cogswell, Eliza Northrop, Niklas Höhne, Joe Thwaites, Cynthia Elliott, Neil Bird, Amy Kirbyshire, Sebastian Oberthür, Marcelo Rocha, Kelly Levin, and Pedro Barata, 'Setting the Paris Agreement in Motion: Key Requirements for the Implementing Guidelines' (2018) Working Paper. Washington DC: Project for Advancing Climate Transparency (PACT).

3 Para 27 notes that instead of 'information to be provided by Parties communicating their nationally determined contributions, in order to facilitate clarity, transparency and understanding, may include, as appropriate, *inter alia*, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its nationally determined contribution is fair and ambitious, in the light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2; 28.'

4 Thomas Damassa, Taryn Fransen, Barbara Haya, Mengpin Ge, Krisztina Pjeczka, and Katherine Ross, 'Interpreting INDCs: Assessing Transparency of Post-2020 Greenhouse Gas Emissions Targets for 8 Top-Emitting Economies' (2015) Working Paper. Washington, DC: World Resources Institute.

5 'Earth Negotiations Bulletin: Summary of the Bangkok Climate Change Conference' <<http://enb.iisd.org/vol12/enb12733e.html>> accessed 24 September 2018

that may be applied toward a mitigation contribution within an NDC; calculating the target level of emissions specified by the contribution; comparing the two quantities to evaluate NDC progress and achievement; and recording and communicating the results.⁶

There are three stages of accounting, each with its own purposes:

- Before implementation: Accounting guidance defines ‘what counts’ and lays out a clear framework for assessing progress;
- During implementation: Accounting guidance defines how Parties track and report progress in a comparable and transparent manner; and
- After implementation: Accounting guidance defines how Parties assess whether their contributions have been achieved.

Accounting can also assist in ex ante aggregation of global emissions reductions and tracking progress towards Paris Agreement’s global goals, enable comparability, and enable participation in internationally transferable mitigation outcomes.

Article 4, paragraph 13 requires Parties to account for their NDCs according to principles including transparency, accuracy, completeness, comparability, and consistency, while avoiding double counting. The accompanying Decision 1/CP.21 calls for the elaboration of accounting guidance, with additional specifications to consider when designing such guidance. Parties can voluntarily elect to use the guidance for their first NDC, but Parties are required to apply the guidance only to their second and subsequent NDCs. Parties are currently negotiating the contours and details of accounting guidance related to NDCs and ITMOs. Little progress was made on the accounting

guidance APA 1-6, the last official negotiating session before COP24. Parties were not able to consider the technical details of accounting, as there was a stalemate on broader issues related to differentiation and the scope of accounting (i.e., whether accounting was constrained to mitigation aspects of NDCs). The Co-Chairs’ tool will now be revised to correct an omission, but did not incorporate the broader exchange in Bangkok.⁷ Negotiations at COP24 will be based on this tool.

IV. Reporting on Progress and Achievement of NDC

While accounting determines how Parties should track progress and achievement of the NDCs, reporting guidance outlines the information that should be provided to allow others to understand NDC progress and achievement. In other words, accounting guidance would stipulate *how* Parties track NDC progress and achievement, while reporting guidance would stipulate *what* information Parties report regarding NDC progress and achievement.⁸ Ideally, information provided for CTU of NDCs is sufficient enough to be the basis of both accounting and reporting of progress during and after NDC implementation.

Article 13, paragraph 7(b) requires Parties to regularly provide information necessary to track progress made in implementation and achievement of NDCs, and according to Article 13, paragraph 13, the CMA is to adopt common modalities, procedures and guidelines for such reporting. Parties are currently negotiating the scope and details of such reporting requirements.

The co-facilitators of the negotiations on this item were able to revise the tool prepared prior to the session to capture the progress of Parties’ work in the Bangkok session.⁹ Many brackets and options remain in the text.

V. Interplay between Accounting and Reporting of NDCs

Ideally, the guidance related to CTU, accounting, and reporting of NDCs will be robust and provide sufficient detail and accuracy so that the Paris Agreement’s aims and principles are met and there is con-

6 Kelly Levin, David Rich and Cynthia Elliott, ‘Recommendations for Accounting for Mitigation Components of Nationally Determined Contributions (NDCs) under the Paris Agreement’ (2018) Working Paper. Washington, DC: World Resources Institute.

7 ‘Revised Additional Tool under Item 3 of the Agenda’ <<https://unfccc.int/documents/182109>> accessed 24 September 2018

8 Christina Hood and Carly Soo, ‘Accounting for Mitigation Targets in Nationally Determined Contributions under the Paris Agreement’ (2017) OECD/IEA Climate Change Expert Group Paper 2017/05. Paris: Organisation for Economic Cooperation and Development and International Energy Agency.

9 ‘Revised Additional Tool under Item 5 of the Agenda’ <https://unfccc.int/sites/default/files/resource/APA1.6_Revised%20Tool_Item%205_Revised%20final%20iteration_v2.pdf> accessed 24 September 2018

fidence in Parties' individual and collective effort. However, progress remains uneven. This section examines the tradeoffs between progress made on guidance related to each of the abovementioned areas: CTU, accounting, and reporting on NDCs. It outlines the implications of weaker guidance in one area on the need for greater requirements in the other areas. See Table 1 for a summary of such scenarios.

1. Insufficient Guidance Related to Information Necessary for CTU of NDCs

If insufficient guidance is agreed for information necessary for CTU of NDCs, it will be critical that information on the NDC, including its underlying assumptions and methodologies, not only be captured as part of Parties' reporting under Article 13, paragraph 7(b), but also be captured early enough so that it can inform accounting and tracking of progress. Such an approach could resemble an initial report under the Kyoto Protocol, which provided enough information about the Parties' commitment to enable the tracking of progress toward it.¹⁰ There are several complications with this, however. First, the guidance for reporting under negotiation may not take into account weak outcomes of guidance related to CTU and provide for related reporting requirements. Second, unlike with information for CTU, if such information is reported under Article 13, there would be a time lag between NDC communication and the information provided on the NDC. Under the Kyoto Protocol, the initial report was communicated to the UNFCCC after the determination of a Party's commitment. If the same approach were used for NDCs, and further information on the NDC was communicated with the first biennial transparency report, this would be several years after the NDC would have been communicated.

It is worth mentioning another way insufficient CTU guidance could be mitigated through strengthening of other Agreement provisions. If future accounting guidance constrains choices (e.g., with regard to requiring quantification of NDCs for those that use ITMOs, reference level calculations, land use accounting methods, and/or others), then some information may not be needed when the NDC is communicated, as there would be more consistency across Parties. For example, given the complications

of transferring ITMOs calculated with different global warming potentials (GWPs), if the accounting guidance constrained GWP choice for those Parties engaging in ITMOs, those Parties would not necessarily have to provide information on their GWP as part of their NDC, as GWPs would be harmonized across these countries. However, accounting guidance, even if it constrains some choices, will not constrain all choices, given the 'nationally determined' nature of NDCs, necessitating strong information for CTU of NDCs, at least for those aspects of NDCs that are not constrained by accounting guidance. Also, accounting guidance is only to be voluntarily applied to the first NDCs.

2. Weak Accounting Guidance

If accounting guidance is not sufficiently detailed to ensure accurate, consistent, and comparable tracking of progress and achievement, there will need to be more reported information under the Paris Agreement's transparency provisions. It may also require new processes. For example, when convergence has not been possible in the past, e.g. in the case of developing forest management reference levels, a transparent process for technical review provided more standardization and safeguards.

Additionally, if accounting guidance is weak or lacking in certain areas, guidance related to CTU would need to be more detailed to ensure sufficient detail is provided on assumed accounting methods, which would be nationally determined in this scenario. This would allow for other Parties and reviewers to have further information for the basis of assessing the NDC and progress made towards its achievement.

While there is an important interplay between accounting and reporting, it should be noted that reporting alone will not be sufficient to make up for the absence of accounting guidance. Weak accounting guidance will lead to significant divergence across Parties' methods for tracking NDC progress

¹⁰ Cynthia Elliott, Kelly Levin, Joe Thwaites, Kathleen Mogelgaard, and Yamide Dagnet, 'Designing the Enhanced Transparency Framework: Reporting under the Paris Agreement' (2017) Working Paper. Washington, DC: Project for Advancing Climate Action Transparency (PACT).

Table 1: Ways to compensate for weak guidance on CTU, accounting or reporting

	CTU Guidance	Accounting Guidance	Reporting Guidance
Scenario 1	Insufficient	Stronger accounting guidance which constrains Parties' choices so that less information on assumptions and methodologies is necessary	Information on NDCs, including assumptions and methodologies, to be reported under Article 13 as part of first biennial transparency report
Scenario 2	More upfront information on accounting assumptions and methodologies necessary	Insufficient	More detailed reporting necessary on outcomes of accounting, as well as assumptions and methodologies. Further review procedures likely necessary.
Scenario 3	Further information necessary so that independent efforts can assess progress	Accounting-related information captured in another vehicle; stronger accounting guidance which constrains Parties' choices so that progress can be understood	Insufficient

and achievement, compromising comparability. Importantly, if there are no limits to the flexibility of Parties' accounting approaches, Parties can take advantage of faulty methods that make it appear NDCs are being achieved, when they are not, or suggest that emissions reductions resulted, when they are, in fact, not reflective of what the atmosphere 'sees.'

3. Insufficient Guidance Related to Reporting on NDC Progress and Achievement

In the event that Parties agree on insufficient guidance for reporting on NDC progress and achievement, accounting guidance would have to be all the stronger and constrain Parties' choices if progress is to be understood. For example, if Parties have limited choices regarding baseline scenario recalculations, less information would need to be reported accordingly. In other words, the fewer methodological choices that the accounting guidance provides Parties, the more standardization there is across Parties' approaches to tracking progress, and the less information Parties would need to report to understand NDC progress and achievement.

There is also a possible avenue in which accounting-related information is captured elsewhere. For

example, if an 'accounting balance sheet' is used by Parties for reporting progress, it could be submitted through another reporting vehicle, to be determined under accounting-related negotiations.

Nevertheless, even with strong accounting that limits Parties' flexibility on accounting approaches and other reporting vehicles, compromised reporting under Article 13, paragraph 7(b) can lead to an erosion of trust among Parties and in the Paris Agreement itself.

VI. Conclusion

Each of the guidance documents under development – regarding information necessary for CTU of NDCs, accounting, and reporting of progress and achievement towards NDCs – fulfills separate objectives. Guidance related to information necessary for CTU of NDCs will provide critical upfront information on the NDCs and their assumptions, which forms the basis of accounting and reporting and is critical for building trust among Parties. Accounting guidance will be necessary for understanding the emissions reduction implications of the NDCs and tracking progress and achievement in a consistent and accurate manner. And reporting on progress and achievement of NDCs allows other Parties and reviewers to

understand whether Parties are on track to meet their commitments, which is at the heart of delivering on the Paris Agreement.

This article has illustrated the consequences of developing weak guidance on CTU, accounting or reporting on the design of guidance in the other areas. While stronger guidance for one of these areas can help make up for weaker guidance in another, each guidance fulfills unique purposes. Accordingly, it is

not possible for the other two sets of guidance to completely make up for deficient guidance in the other area. Ideally Parties can come together at COP24 to agree on robust guidance for all three areas. Only then will we have sufficient understanding of the NDCs, have confidence that they are being accounted for accurately, and have information on their progress and achievement. The Paris Agreement's success rests on such capabilities.

Clouds or Sunshine in Katowice? Transparency in the Paris Agreement Rulebook

Christopher Campbell-Durufle*

This article identifies outstanding issues regarding the adoption of MPGs for the transparency framework of the Paris Agreement at the Conference of the Parties in Katowice in December 2018. The article first offers a definition of the concept of transparency, and reviews certain salient elements in the literature. This includes a warning that adopting transparency rules that elude questions of accountability of Parties for their domestic policies and equity in burden sharing may fail the objective of building the trust and confidence for which the transparency framework was adopted. The article next offers a brief overview of the requirements of Article 13 of the Paris Agreement, before assessing three key matters raised by the August 2018 draft of the MPGs in light of the literature and recent submissions by Parties. The article underscores the relevance of including a focus on ex ante accountability for climate policies in the way the transparency framework is set to operate, in view of the overall focus of the Paris Agreement on prevention of environmental harm. Comparing the potential of transparency rules to promote accountability of reporting and accountability of implementation of Parties' commitments, it further argues for the inclusion of both foci in the modalities. Lastly, the article highlights that the Paris Rulebook presents a unique opportunity to craft specific roles for non-Party stakeholders in the operation of the transparency framework, thereby developing the links between the United Nations Framework Convention on Climate Change and transnational climate governance initiatives.

I. Introduction

The Parties to the 2015 Paris Agreement decided that their Conference of the Parties (CMA) would adopt the modalities, procedures and guidelines (MPGs) for the implementation of the new treaty's transparency framework by the end of its first session.¹ Because of the amount of work necessary for the completion

of this task, which forms part of what is known as the Paris Rulebook, the first session of the CMA was extended until the UNFCCC's 24th Conference of the Parties (COP 24) in 2018. The Parties also delegated the critical task of preparing the MPGs for the transparency framework to the Ad Hoc Working Group on the Paris Agreement (APA),² which has met six times since COP 21 and has one last meeting planned to complete its work in December 2018 in Katowice, Poland.

This short article identifies three important issues that stand before Parties for resolution regarding the MPGs of the transparency framework. In Section 2, I start by offering a definition of the principle of transparency, based on a brief overview of international law scholarship. In Section 3, I provide an outline of Article 13 of the Paris Agreement, and contrast it with pre-existing reporting processes under the United Nations Framework Convention on Climate Change (UNFCCC).³ Lastly, in Section 4, I assess the August

DOI: 10.21552/cclr/2018/3/7

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1 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740 art 13.

2 UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016) paras 92-99.

3 United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107.

2018 draft of the MPGs prepared by the APA Co-Chairs for Agenda Item 5,⁴ released as a result of the work at their meeting in Bonn, Germany in May 2018. A sense of urgency is palpable in the draft conclusions released by the Co-Chairs, who write that ‘work needs to be accelerated across all items [...] to ensure that all issues achieve the degree of maturity and detail needed to fully operationalize the Paris Agreement’.⁵

Specifically, I first show the relevance of including a focus on *ex ante* accountability for climate policies in the way the transparency framework is set to operate, in view of the overall focus of the Paris Agreement on prevention of environmental harm. Second, I compare the potential of transparency rules to promote accountability of reporting and accountability of implementation of Parties’ commitments, and I argue for the inclusion of both foci in the MPGs. Third, I highlight that the Paris Rulebook presents a unique opportunity to craft specific roles for non-Party stakeholders in the operation of the transparency framework.

II. Transparency: Clouds or Sunshine?

I start by reviewing a brief selection of international law scholarship on the principle of transparency. Interestingly, authors have both noted the potential of transparency-oriented provisions to illuminate and to obscure global environmental issues. This cautionary note is of high relevance to the ongoing efforts to design MPGs that ‘build mutual trust and confidence and [...] promote effective implementation’,⁶ rather than cynicism or indifference.

Weiss and Jacobson, for example, situate transparency as an approach to promoting compliance within the broader category of ‘sunshine methods’, understood as those ‘intended to bring behavior of parties [to a multilateral environmental agreement (MEA)] and targeted actors into the open for appropriate scrutiny, and thereby to encourage compliance’.⁷ These can take a variety of forms, including national reporting, scrutiny of reports, on-site monitoring, and access to information by non-governmental organisations (NGOs). Both authors also identify a variety of factors that will influence whether compliance will in fact be induced, including the sensitivity of the Party in question to its reputation, whether there exists a culture of compliance, capacity and access to the resources necessary to engage

in reporting, and the degree of involvement of civil society and the business sector.⁸

In the context of the application of MEAs, Brunnée and Hey argue that the notion of transparency can be subdivided in two: transparency *of* governance and transparency *for* governance. While the former refers to the degree to which the activities and decisions of an international organisation are accessible to stakeholders, the former is of greater interest for the present purpose. Transparency for governance is understood as comprising the ‘policy instruments deployed by an [international environmental institution], used in support or in lieu of regulation, to influence the conduct of States and non-State actors’.⁹ In the climate regime specifically, Brunnée and Hey argue that transparency has played a central role in fostering ‘common understandings of what it would take to meet the regime’s objective’, providing a clear picture of the baseline for the negotiations, building trust among Parties that their performance will be matched by that of others, monitoring implementation, and determining what role should be exercised by third parties (such as treaty secretariats and the private sector).¹⁰ In this sense, if one understands legality as a characteristic of norms that flows both from social interactions between international actors and from respect of certain agreed-upon formal criteria, transparency for governance can even be considered as a precondition for ‘governance anchored in law’.¹¹

4 This article was written before the September 2018 meeting of the APA in Bangkok, Thailand. See: UNFCCC ‘Additional Tool under item 5 of the Agenda, Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support Referred to in Art 13 of the Paris Agreement, Informal Document by the Co-Chairs’ UN Doc AP A1.6.Informal.1.Add.3 (3 August 2018) (Draft MPGs).

5 UNFCCC ‘Agenda Items 3–8, Draft Conclusions Proposed by the Co-Chairs’ UN Doc FCCC/APA/2018/L.2 (10 May 2018) para 3.

6 Paris Agreement (n 1) art 13(1).

7 Edith Brown Weiss and Harold K. Jacobson, ‘Assessing the Record and Designing Strategies to Engage Countries’ in Edith Brown Weiss and Harold K. Jacobson (eds), *Engaging Countries: Strengthening Compliance with International Environmental Accords* (MIT Press 1998) 543.

8 *ibid* 543–546.

9 Jutta Brunnée and Ellen Hey, ‘Transparency and International Environmental Institutions’ in Andrea Bianchi and Anne Peters (eds), *Transparency in International Law* (Cambridge University Press 2013) 23, 47.

10 *ibid* 38–39.

11 *ibid* 29. See also: Jutta Brunnée and Stephen J Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press 2010).

More specifically in the context of the climate regime, Gupta and van Asselt warn that the effects of transparency mechanisms on compliance 'are inextricably tied up with (and mirror) first-order conflicts over the scope of accountability and burden sharing' with regard to adaptation and mitigation.¹² To the extent that the approach to accountability adopted in the climate regime eludes answerability of Parties for their domestic policies and some form of enforceability at the outcome of the accountability process, they warn, it is unlikely that transparency will promote favourable environmental outcomes. They argue that transparency-oriented provisions that focus on capacity-building to enable developing countries to participate in increasingly elaborate reporting and review schemes, instead of shining light on issues of ambition and fairness, 'might even distract from the search for more far-reaching accountability in this global context'.¹³ In this sense, as Bianchi has warned, the mere sharing of information does not amount to transparency in and of itself and may be instrumentalised for many purposes, thereby more akin to a

mirror for the expectations of those in power than to a clean window that welcomes the public's gaze.¹⁴

III. Article 13: Framework for Transparency of Action and Support

Article 13 of the Paris Agreement establishes a framework for transparency of action on climate change and support to developing country Parties. The strength of this approach to implementation is essential for, as Bodansky notes, 'the Paris Agreement's transparency framework is the main mechanism to hold states accountable' for the realisation of their nationally determined contributions (NDCs) and, ultimately, for the achievement of the UNFCCC's overall objective.¹⁵ Tabau has argued that this mechanism can even be considered as the '*raison d'être*' of the new treaty, because it complements the self-determined nature of the NDCs with some element of external supervision.¹⁶ In this section, I outline the content of Article 13 and succinctly contrast it with pre-existing reporting and review processes under the UNFCCC, the Kyoto Protocol¹⁷ and the Cancun Agreements.¹⁸

Under the transparency framework, all Parties are required to provide biennial communications that must contain the following: (1) a national inventory report of greenhouse gas emissions by sources and removals by sinks, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change (IPCC); and (2) information necessary to track progress in implementing and achieving NDCs.¹⁹ Furthermore, developed country Parties shall provide information regarding their financial, technology transfer, and capacity-building support measures.²⁰ This requirement is optional for developing countries that also provide support.

Furthermore, two processes must be fleshed out in the Paris Rulebook in a way that aims at providing a clear understanding of the information submitted and identifying good practices, priorities, needs and gaps.²¹ First, the information presented under Article 13, paragraphs 7 and 9 will be subject to a Technical Expert Review (TER). This process is aimed at assessing the consistency of the information presented with the MPGs currently under negotiation and identifying 'areas of improvement'.²² It should show flexibility towards developing countries and pay particular attention to their respective national

12 Aarti Gupta and Harro van Asselt, 'Transparency in Multilateral Climate Politics: Furthering (or Distracting From) Accountability?' (2017, 1c) Reg & Gov 14. See also Aarti Gupta and Michael Mason, 'Disclosing or Obscuring? The Politics of Transparency in Global Climate Governance' (2016) 18 Current Opinion in Environmental Sustainability 90; and Michael Mason, 'Transparency for Whom?: Information Disclosure and Power in Global Environmental Governance' (2008) 8(2) Global Env'tl Pol 8.

13 Gupta and van Asselt (n 14).

14 Andrea Bianchi, 'On Power and Illusion: The Concept of Transparency in International Law' in Bianchi and Peters (n 11) 1, 15.

15 Daniel Bodansky, 'The Paris Climate Change Agreement: A New Hope?' (2016) 110(2) AJIL 288, 311.

16 Anne-Sophie Tabau, 'Evaluation of the Paris Climate Agreement According to a Global Standard of Transparency' (2016) 10(1) CCLR 23, 30.

17 Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 11 December 1997, entered into force 16 February 2005) 2303 UNTS 162.

18 UNFCCC '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' UN Doc FCCC/CP/2010/7/Add.1 (15 March 2011) para 40ff. See also UNFCCC 'Decision 2/CP.17, Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' UN Doc FCCC/CP/2011/9/Add.1 (15 March 2012) para 23-31.

19 Paris Agreement (n 1) art 13(7). The information to be submitted to facilitate clarity, transparency and understanding of progress on intended NDCs had already been discussed in the Lima Call for Climate Action. See UNFCCC 'Decision 1/CP.20, Call for Climate Action' UN Doc FCCC/CP/2014/10/Add.1 (2 February 2015) para 14.

20 Paris Agreement (n 1) art 13(9).

21 *ibid* art 13(5).

22 *ibid* art 13(11).

capabilities and circumstances.²³ Second, a process called Facilitative Multilateral Consideration of Progress (FMCP) will be conducted with the objective of assessing advances in the implementation of NDCs and the provision of financial support to developing countries for both mitigation and adaptation under Article 9.²⁴ The description of this process is limited, and leaves it to the APA to design this new forum for engagement by Parties and possibly non-Party stakeholders (NPS) with the information reported and the conclusions of the TER.

The COP decision adopting the Paris Agreement indicates that the MPGs will 'build upon and eventually supersede' pre-existing transparency mechanisms under the UNFCCC, and in particular the Cancun Agreements.²⁵ This reveals the intention of the Parties to incorporate the accumulated experience with the National Communications and Biennial (Update) Reports, the International Assessment and Review, and the International Consultation and Analysis, among others, in the MPGs. Similarly, under the Kyoto Protocol, signatory Parties have gained experience with annual reports on compliance with assigned greenhouse gas emissions amounts (Article 7). Furthermore, an initial report had to be submitted by Annex I Parties at the commencement of both commitment periods (2008-2012 and 2013-2020) for the purpose of demonstrating their capacity to account for emissions and respect their assigned emission amounts.²⁶ Likewise, a so-called true-up period report is due at the end of each commitment period in order to assess Parties' compliance with their respective assigned amounts.²⁷

Doelle has observed that building on previous experiences presents potential for 'more regular and comprehensive reporting, a more harmonized verification process, and common MPGs, procedures, and guidelines', while at the same time minimising the burden of compliance for Parties, and in particular developing countries.²⁸ On this note, Article 13(2) explicitly links the transparency requirements to the principle of flexibility in view of the different levels of capacity of Parties. The focus on capacity as differentiator is also present in Decision 1/CP.21 and accompanied by the establishment of a Capacity-Building Initiative for Transparency.²⁹ Article 13 does not, however, include the expression 'equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances' found elsewhere in the treaty. This raises

the question of how the MPGs for the transparency framework should incorporate flexibility and whether they should reflect both differences in capacity and responsibilities, an issue to which I return in the following section.³⁰

IV. Outstanding Issues for Katowice

In August 2018, the APA Co-Chairs released a new version of the draft MPGs for the transparency framework, which contains different textual alternatives on all issues where consensus has not yet been reached. This document builds on the informal note prepared by co-facilitators responsible for Agenda Item 5, Xiang Gao (China) and Andrew Rakestraw (United States of America), following the Bonn session of APA 1.5 in May 2018.³¹ The sheer size of this piece of the Paris Rulebook (69 pages) hints at the amount of work left for Parties before the draft MPGs are transmitted to the CMA in Katowice.

In this section, I discuss three outstanding issues that are particularly important for the successful completion of the negotiations on the Paris Rulebook

23 *ibid* art 13(12).

24 *ibid* art 13(11).

25 Decision 1/CP.21 (n 2) para 98.

26 See UNFCCC, 'Decision 13/CMP.1, Modalities for the Accounting of Assigned Amounts under Art 4, paragraph 4 of the Kyoto Protocol' UN Doc FCCC/KP/CMP/2005/8/Add.2 (30 March 2006), and UNFCCC, 'Decision 2/CMP.8, Implications of the implementation of decisions 2/CMP.7 to 5/CMP.7 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Arts 5, 7 and 8 of the Kyoto Protocol' UN Doc FCCC/KP/CMP/2012/13/Add.1 (28 February 2013).

27 UNFCCC, 'Decision 3/CMP.10, Date of the completion of the expert review process under Art 8 of the Kyoto Protocol for the first commitment period' UN Doc FCCC/KP/CMP/2014/9/Add.1 (12 December 2014) para 3.

28 Meinhard Doelle, 'The Paris Agreement: Historic Breakthrough or High Stakes Experiment?' (2016) 6 *Climate Law* 1, 15.

29 Decision 1/CP.21 (n 2) paras 85-91.

30 See also Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics' (2016) 65 *ICLQ* 1, Christina Voigt and Felipe Ferreira, 'Differentiation in the Paris Agreement' (2016) 6 *Clim L* 58; and Sandrine Maljean-Dubois, 'The Paris Agreement: A New Step in the Gradual Evolution of Differential Treatment in the Climate Regime?' (2016) 25(2) *RECIEL* 151.

31 UNFCCC, 'Draft Elements for APA Agenda Item 5, Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support Referred to in Art 13 of the Paris Agreement, Informal Note by the co-facilitators – Final Iteration' (9 May 2018) <https://unfccc.int/sites/default/files/resource/APA%20item%205_informal%20note_final%20iteration_09052018%201514.pdf> (Draft MPGs, 9 May 2018) accessed 25 August 2018.

and the actual implementation of the treaty: (1) the potential of the transparency framework to promote a prospective form of accountability, over and above scrutinising past achievements; (2) the debate on focusing the transparency framework on substantive environmental outcomes, as opposed to reporting requirements only; and (3) the unique opportunity of engaging non-Party stakeholders in the operation of the transparency framework.

1. Transparency and *Ex Ante* Accountability

One outstanding question for the APA is the extent to which the MPGs of the transparency framework will promote a prospective form of accountability, over and above answerability for past achievements and shortcomings. As Curtin and Nollkaemper have noted, transparency may not only promote accountability through its retrospective focus, but also result from processes that are continuous and participative, including standard-setting by those actors affected by a given issue.³² Werner notes that the proliferation of non-compliance procedures that have grown parallel to state responsibility mechanisms – including those that rely on reporting and offering of assistance – go beyond ‘the restoration of a broken normalcy’ occasioned by compliance issues, and seek ‘the realization of a common goal through a co-operative effort’.³³ In this sense, Hey distinguishes ‘prior assessment’ from ‘post-assessment’ under MEAs,³⁴ something that appears crucial in the framework of multilateral efforts to *prevent* human interference with the climate system, rather than to hold those responsible once such a misfortune has happened.

Several sections of the draft MPGs contain indications that Parties are considering ways to give a forward-looking dimension to the transparency framework. One example is the proposed sections on ‘Improvement Plans’, which would require Parties to outline the steps that they expect to take to improve transparency, accuracy, completeness, consistency, and comparability (TACCC) of the information contained in their national inventory reports of emissions.³⁵ Engagement by the TER with this plan itself would constitute a concrete example of prior assessment, although one textual proposal specifically opposes this possibility.³⁶ Similarly, the MPGs contain a proposal for Improvement Plans focusing on planned activities to improve TACCC of the reported information on progress in implementing NDCs. One proposal would have the Improvement Plans discuss how a Party intends to implement the areas of improvement identified by the TER, but the previous mention of expected steps for the ‘review and adjustment of NDCs’³⁷ in an earlier version of the MPGs has been removed. Another proposal would have the TER identify ‘barriers to implementation’ of NDCs and sources of support to overcome these barriers.³⁸

The FMCP also presents opportunities for forward-looking engagement with the information provided. The draft MPGs envision a phase of ‘question and answer’ and a workshop on the different inputs of the process, including the information presented under Article 13, the TER report, and inputs by other Parties and NPS. The discussions held and the written submissions would be made available on the UNFCCC website and recorded in a procedural summary prepared by the Secretariat, which could identify ‘possibilities of collaboration and/or improvements identified during the process’.³⁹ Both phases of the FMCP thus open the door to future-oriented exchanges on activities pertaining to both reporting TACCC and NDC implementation, subject to Parties’ and participants’ willingness to recognise this form of prior assessment as part of the scope of the exercise.

Two final issues highlight the complexity of giving a prospective dimension to the MPGs. One is the debate surrounding developed country Parties’ biennial communications on projected levels of public climate finance, mandated by Article 9(5) and referenced in Article 13. The debate as to whether to delegate the elaboration of the MPGs on this point to the Subsidiary Body for Implementation ran for so long

32 Deirdre Curtin and André Nollkaemper, ‘Conceptualizing Accountability in Public International Law’ (2005) 36 Neth YB Intl L 3.

33 Wouter G Werner, ‘Responding to the Undesired: State Responsibility, Risk Management and Precaution’ (2005) 36 Neth YB Intl L 57, 69.

34 Ellen Hey, ‘Increasing Accountability for the Conservation and Sustainable Use of Biodiversity: An Issue of Transnational Global Character’ (1995) 6 Colo J Intl Envtl L & Pol’y 1, 4.

35 Draft MPGs (n 4) S B.8. Improvement plan, 25.

36 *ibid* S G.3, 63.

37 Draft MPGs, 9 May 2018 (n 31) S C13, 23.

38 Draft MPGs (n 4) S G.3, Scope, 63.

39 *ibid* S H.6, Summary report content and format, 73.

that it significantly pushed back the conclusion of the entire COP 23.⁴⁰ Another is the requirement for Parties to prepare Adaptation Communications under Article 7(10), also referenced in Article 13. As noted by Elliott and others, the multiple purposes of the transparency framework would be better achieved by including in such reports ‘both forward-looking and backward-looking information on adaptation as well as contextual elements such as national circumstances and impacts, vulnerabilities, and risks’.⁴¹

This section suggests that the pursuit of prospective accountability through transparency finds a multiplicity of anchors in the current draft MPGs. Given the overall focus of the Paris Agreement on the realisation of a common goal, these avenues could be expanded over the course of the remaining negotiations. Over and above a focus on past individual successes and shortcomings, requiring Parties to explain and justify their future actions may contribute to build common understandings regarding the implementation of the new treaty and greater trust between Parties.

2. Improvement of Reporting or Improvement of Implementation?

The preceding section brought to the fore the tension between the distinct but related goals of *improving reporting* and of *improving implementation* of climate targets. Article 13(9) mandates the TER to ‘identify areas of improvement for the Party’, which could apply both to the issues of conformity of the information provided with the applicable MPGs and to that of adequacy of NDC implementation or of support provided in view of the requirements of the Paris Agreement. How the transparency framework should strike a balance between review of procedural and substantive requirements of the new treaty is a complex question currently on Parties’ agenda and will likely occupy their attention beyond COP 24.

Gupta and van Asselt warn that the current approach to transparency within the UNFCCC is confined ‘to revealing progress made on implementing existing commitments, with virtually no answerability for actual achievement of commitments or whether they reflect ambition or fairness’.⁴² Kramarz and Park’s note of caution regarding the use of accountability mechanisms concerning global environmental issues goes further along the same line: a fo-

cus on functional requirements such as monitoring, compliance and enforcement as ends in themselves may lead to the absence of accountability for those actors that established the goals in the first place, with possible adverse consequences for environmental outcomes.⁴³ A focus on whether the rules on TACC are complied with without consideration of environmental outcomes could result in what Stewart has termed ‘pervasive structural disregard’ of certain issues, generally (although not necessarily), with adverse impacts on the rights and interests of those less powerful actors.⁴⁴

The draft MPGs display the complexity of this issue. The provisions on Adaptation Communications, for example, refer to the question of ‘adequacy and effectiveness of support’ on two occasions.⁴⁵ The consideration a Party’s ‘implementation and achievement of its NDC’, ‘support provided’, and ‘areas of improvement’ is also contemplated under the scope of work for the TER.⁴⁶ Yet, another textual proposal would mandate that the TER ‘not review the adequacy of a Party’s nationally determined contribution, domestic actions, or support provided’,⁴⁷ an exclusion that could be understood as barring review of progress on implementation. Support for this approach has been manifested by the Like-Minded Developing Countries (LMDC) negotiation group, according to which the TER shall be limited to the issues of transparency, completeness, timeliness and adherence to the MPGs, and ‘shall refrain from making any political judgment’.⁴⁸ For the Least Devel-

40 UNFCCC ‘Decision 12/CP.23, Process to Identify the Information to be Provided by Parties in Accordance with Art 9, Paragraph 5, of the Paris Agreement, 14th Plenary Meeting 18 November 2017’ UN Doc FCCC/CP/2017/11/Add.1 (8 February 2018).

41 Cynthia Elliott and others, ‘Designing the Enhanced Transparency Framework: Reporting under the Paris Agreement’ (World Resources Institute 2017) 17.

42 Gupta and van Asselt (n 14) 14.

43 Teresa Kramarz and Susan Park, ‘Accountability in Global Environmental Governance: A Meaningful Tool for Action?’ (2016) 16(2) Global Envtl Pol 1, 19.

44 Richard B Stewart, ‘Remedying Disregard in Global Regulatory Governance: Accountability, Participation, and Responsiveness’ (2014) 108 AJIL 211, 231.

45 Draft MPGs (n 4) S D.1, Objectives and Principles, 42 and S D.8, Monitoring and evaluation of adaptation actions and processes, 45.

46 *ibid* S G.3, Scope, 63.

47 *ibid*.

48 ‘LMDC Submission on Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support under the Paris Agreement, Iran’ (9 October 2017) paras 48 and 59.

oped Countries (LDC) group, by contrast, the TER should include a '[f]ocus on individual Party actions,' in order to identify 'country successes and challenges in meeting the objectives of NDCs' and '[f]acilitate advice and knowledge sharing amongst Parties'.⁴⁹

The FMCP also shows potential to promote some form of accountability for actual achievements, going beyond strengths and weaknesses in reporting efforts. While there seems to be agreement between Parties that the goals set in the NDCs are beyond discussion within the transparency framework, the FMCP could foster accountability of Parties for the extent to which they have progressed towards reaching these goals. One textual option from the draft MPGs includes an elaborate list of activities on which the FMCP could focus: 'implementation and achievement of [a Party's] nationally determined contribution, including emissions, removals, participation in voluntary cooperation under Article 6, assumptions, conditions, and methodologies related to the attainment of its nationally determined contribution'.⁵⁰ The draft MPGs also indicate that a Par-

ty may decline to answer a question put to it during the FMCP 'if it believes a written question is outside the scope' of the FMCP. Given the importance of a consistent practice to sustain Parties' sense of legal commitment towards the Paris Agreement, it appears crucial that this last provision is not used in a way that would overly narrow the scope of Parties' interpretation of what the FMCP comprises.

This section suggests that there are some risks associated with excluding a consideration of barriers, successes, and best practices in the attainment of individual NDCs from the scope of work of the TER or of the FMCP. For transparency provisions to encourage compliance with the notion that Parties 'shall pursue domestic mitigation measures, with the aim of achieving the objectives' of their NDC,⁵¹ some level of scrutiny appears necessary. Likewise, the primary purposes of the transparency framework are to 'build mutual trust and confidence and to promote effective implementation'.⁵² Rather than an intrusion into national sovereignty, it seems that a transparency framework that fosters both improvement of reporting *and* of implementation would nurture sense that their efforts will be met with reciprocity rather than free-riding.⁵³

3. NPS Participation

A third significant question that stands before the APA and ultimately the CMA is the degree to which the MPGs will involve non-Party stakeholders in the shining of sunlight on the steps taken by Parties to implement the Paris Agreement. Given the abundance of transnational climate governance initiatives that developed alongside the multilateral regime on the basis of voluntary standards and the collaboration of public and private actors,⁵⁴ the multiple references to NPS in the Paris outcome appear to pursue the aim of making it 'better converge with the realities of international society'.⁵⁵ Most notably, Decision 1/CP.21 'welcomes' and 'invites' non-state actors' climate actions,⁵⁶ which were identified by the COP President Laurent Fabius as nothing less than the 'Fourth Pillar' of the new treaty.⁵⁷ Still, Article 13 does not explicitly establish any role for NPS in the operation of the transparency framework, an absence that, as noted by van Asselt, could even be invoked by those Parties resisting their stronger in-

49 'Submission by the Federal Democratic Republic of Ethiopia on behalf of the LDC Group on APA Agenda Item 5' (3 November 2017) (LDC Submission).

50 Draft MPGs (n 4) S H.2, Scope, 71.

51 Paris Agreement (n 1) art 4(2).

52 *ibid* art 13(1).

53 See DW Greig, 'Reciprocity, Proportionality, and the Law of Treaties' (1994) 34 Va J Intl L 295. For an analysis of the same challenge as it applies to the implementation and compliance committee of the Paris Agreement, see: Christopher Campbell-Durufé, 'Accountability or Accounting? Elaboration of the Paris Agreement's Implementation and Compliance Committee at COP 23' (2018) 8 Clim L 1.

54 See for example: Harriet Bulkeley and others, *Transnational Climate Change Governance* (Cambridge University Press 2014), Thomas Hale and Charles Roger, 'Orchestration and Transnational Climate Governance' (2014) 9(1) Rev Intl Org 59, and Harro van Asselt & Fariborz Zelli, 'Connect the Dots: Managing the Fragmentation of Global Climate Governance' (2014) 16(2) Environmental Economics and Policy Studies 137.

55 Ellen Hey (n 34) 2. See also Asher Alkoby, 'Non-State Actors and the Legitimacy of International Environmental Law' (2003) 3(1) Non-State Actors and International Law 23; and Steve Charnovitz, 'Nongovernmental Organizations and International Law' (2006) 100(2) AJIL 348.

56 Decision 1/CP.21 (n 2) paras 118 and 134.

57 'Climate change – COP 21 – Press Briefing by Laurent Fabius, Minister of Foreign Affairs and International Development, President of the COP 21, New York (29 June 2015) <<http://www.diplomatie.gouv.fr/en/french-foreign-policy/climate/events/article/climate-change-cop21-press-briefing-by-laurent-fabius-new-york-29-06-15>> accessed 25 August 2018.

volvement in the review of all the information to be submitted.⁵⁸

By contrast, several sections of the draft MPGs that define the information that Parties must submit as part of the transparency framework mention NPS. This is the case, for example, with the provision of information on institutional arrangements regarding the involvement of NPS in 'domestic compliance, monitoring, reporting and evaluation of policies' on mitigation.⁵⁹ Another section references reporting on the knowledge generated by stakeholders and their respective roles in capacity-building activities.⁶⁰ Other sections of the draft go one step further to expand on what was agreed to in Article 13 and propose concrete roles, albeit limited, for NPS in the operationalisation of the transparency framework. This includes involving non-state actors in the nomination process of the technical experts for the TER,⁶¹ the possibility of allowing either 'relevant stakeholders' or only 'registered observers' to submit written questions in the course of the FMCP,⁶² and the unresolved issue of whether stakeholders and observers will be authorised to raise questions or simply to observe during the workshop phase of the FMCP.⁶³

Backing for a broad role for NPS can be found in submissions such as that of the LDC group, that also supports offering non-state actors an opportunity to provide feedback on all the documentation submitted by Parties through the transparency framework, direct participation of NPS in the TER process as expert reviewers, and a role for NPS to 'provide inputs' during the FMCP process, over and above the possibility of raising questions.⁶⁴ Similarly, the Argentina-Brazil-Uruguay group suggests that the online portion of the FMCP be designed so as to 'facilitate communication between Parties and relevant stakeholders'.⁶⁵ Most other Parties, however, do not address this issue in their most recent submission.

Dagnet and others press for the adoption of MPGs that institutionalise the participation of NPS in both the TER and the FMCP, as a way to make the transparency framework more effective, adapted to specific country contexts, dynamic and inclusive.⁶⁶ This would constitute a significant advance, since both antecedents for reporting and review under the Cancun Agreements, namely the International Assessment and Review for developed countries and the International Consultation and Analysis for developing countries, contain nothing of the sort. In this context,

van Asselt identifies some precedents which may be of use, including the case when a compliance procedure is triggered by an expert review under the Kyoto Protocol,⁶⁷ the consideration of information presented by civil society in the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora,⁶⁸ and throughout the conduct of the Universal Periodic Review by the Human Rights Council.⁶⁹

This section suggests that there is much potential in crafting avenues for the formal involvement of NPS in the transparency framework. On the one hand, non-state actors could bring significant expertise and resources to the pursuit of the framework's goals, including regarding prior- and post-assessment of the information provided by Parties, improvement of TACCC in reporting, and improvement in the implementation of NDCs and other climate policies. On the other hand, creating a role for NPS in the MPGs offers the potential to strengthen the links between transnational climate governance and the UNFCCC, including through a more direct exposure of state Parties' policies to the innovations, experimentations, and best practices developed by non-state and

58 Harro van Asselt, 'The Role of Non-State Actors in Reviewing Ambition, Implementation, and Compliance under the Paris Agreement' (2016) 6:1-2 *Clim L* 91, 103.

59 Draft MPGs (n 4) S C.6, Mitigation policies and measures, actions, and plans, including those with mitigation co-benefits resulting from adaptation actions, related to the implementation and achievement of an NDC under Art 4, 37.

60 *ibid* S E.6, Information on capacity-building support provided under Art 11, 53. See also S F.9 on capacity-building support received.

61 *ibid* S G.6, Technical expert review team and institutional arrangements, 67.

62 *ibid* S H.4, Format and steps, including events to be convened, the roles of Parties and the secretariat, 71.

63 *ibid* 72.

64 LDC Submission (n 49) 17.

65 Views of Brazil, Argentina and Uruguay on APA Agenda Item 5 (16 October 2017), 15.

66 Yamide Dagnet and others, 'Designing the Enhanced Transparency Framework, Part 2: Review under the Paris Agreement' (World Resources Institute 2017) 4.

67 See also Lars H Gulbrandsen and Steinar Andresen, 'NGO Influence in the Implementation of the Kyoto Protocol: Compliance, Flexibility Mechanisms, and Sinks' (2004) 4(4) *Global Envtl Pol* 54.

68 Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973, entered into force 1 July 1975) 993 UNTS 243.

69 van Asselt (n 59) 101ff. See also: Harro van Asselt and Thomas Hale, *How Non-State Actors Can Contribute to More Effective Review Processes under the Paris Agreement* (Stockholm Environment Institute 2016).

sub-state actors in the context of voluntary initiatives.⁷⁰ Not including a clear and strong role to NPS in the transparency framework would thus constitute an important ‘missed opportunity’ to facilitate the implementation of the new treaty and promote compliance with its terms.⁷¹

V. Conclusion

This article has provided an assessment of three key matters raised by the August 2018 draft of the MPGs for the transparency framework of the Paris Agreement, in light of legal scholarship on transparency and recent submissions by Parties. First, I have argued that the multiplicity of anchors for a forward-looking approach to transparency could be expanded over the course of the remaining negotiations. Requiring Parties to explain and justify the projected actions contained in their Improvement Plans may

contribute to build common understandings regarding the implementation of the new treaty, something which Brunnée and Hey have identified as a precondition for governance anchored in law.

Second, I have argued against excluding a consideration of barriers, successes and best practices in the attainment of individual NDCs from the scope of work of the transparency framework. Shining light both on reporting and on implementation efforts by Parties could nurture the sense that their initiatives will be met with reciprocity by other Parties and foster what Weiss and Jacobson have called a ‘culture of compliance’.⁷² Lastly, I have highlighted the opportunity before the APA to design avenues for the formal involvement of NPS in the transparency framework. Their expertise, which flows from many sources including the transnational climate governance initiatives in which they could be also be involved, could significantly enrich the pursuit of the transparency framework’s different goals.

The work that stands before Party negotiators under Agenda Item 5 for the short period between the Bangkok and Katowice negotiation sessions of the APA is considerable and extends far beyond the three issues that I have identified. Rather than seeing COP 24 as an ‘all or nothing’ moment for the Paris Rulebook, it may be helpful to envision the MPGs as part of an ongoing experiment with how and where to cast sunshine. Indeed, the periodic review of the transparency framework could be one way of continually improving its alignment with the goal of promoting Parties’ accountability for the actions taken to implement the Paris Agreement.

70 Sander Chan and others, ‘Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action’ (2015) 6(4) *Glob Pol’y* 466, 467. See also M Betsill and others, ‘Building Productive Links between the UNFCCC and the Broader Climate Governance Landscape’ (2015) 15 *Global Envtl Pol* 1 and Karin Bäckstrand and others, ‘Non-State Actors in Global Climate Governance: From Copenhagen To Paris and Beyond’ (2017) 26(4) *Envtl Pol* 561.

71 van Asselt (n 59) 108. See also Sébastien Duyck, ‘MRV in the 2015 Climate Agreement: Promoting Compliance Through Transparency and the Participation of NGOs’ (2014) 8(3) *CCLR* 175, 186 and Eric Dannenmaier, ‘The Role of Non-state Actors in Climate Compliance’ in Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (Cambridge University Press 2012).

72 Weiss and Jacobson (n 8) 545.

What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals?

Jennifer Huang*

In December 2018, countries will adopt the rules and guidelines that will bring the elements of the Paris Agreement to life. One key element is the global stocktake, a unique multilateral review mechanism focusing on collective action and achievement. Parties to the Paris Agreement may want to look to the United Nations (UN) Sustainable Development Goals (SDGs) and its High-level Political Forum on Sustainable Development (HLPF), which offer parallels to both the Agreement's enhanced transparency framework and the global stocktake. A review of the potential similarities and differences in their review and reporting cycles, their high-level events and outcomes, measuring progress, managing technical expert input, sharing knowledge, information and experience, as well as including non-state actors could provide some relevant lessons for the upcoming international climate negotiations. In some ways, the SDGs process is structurally and politically too dissimilar to offer a template but its approach to adaptation offers insight into how adaptation could be addressed in the global stocktake. Both processes also highlight the need to build the capacity of governmental processes to continuously improve the reporting of key information over time. Because these processes are complementary and meant to evolve, countries could begin to look to the long-term integration of aspects of both regimes to enhance coherence and reduce redundancies. At the climate conference in Katowice, Poland, Parties will need to narrow the broad outlines of the global stocktake down to specifics. Cycles need to be defined and ways to aggregate or synthesize the vast amounts of information must be determined. Parties can begin to draw on parallels between relevant processes and any early lessons they offer as they consider what key features to include in the modalities, rules, and guidelines to be decided in Katowice.

I. Introduction

The Paris Agreement establishes a global stocktake to periodically review Parties' collective progress towards achieving its global climate change goals.¹ In global governance terms, the global stocktake is a multilateral review mechanism but one quite unlike those of other multilateral regimes.² Most have been

designed to review individual progress and none have long-term global goals with similar timeframes.³ What distinguishes the global stocktake process is the importance placed on driving ambitious climate action over time and its focus on collective rather than individual achievement.⁴

The United Nations (UN) Sustainable Development Goals (SDGs) and its High-level Political Forum

DOI: 10.21552/cclr/2018/3/8

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1 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740 art 14.

2 Manjana Milkoreit and Kate Haapala, 'Designing the Global Stocktake: A Global Governance Innovation' (C2ES 2017) <<https://www.c2es.org/site/assets/uploads/2017/11/designing-the-global-stocktake-a-global-governance-innovation.pdf>> accessed 15 August.

3 *ibid* 1, 5.

4 Paris Agreement (n 1) art 14.

on Sustainable Development (HLPF) offer some interesting parallels to both the Paris Agreement's enhanced transparency framework and global stocktake. The SDGs processes review Member States' actions, qualitatively and quantitatively, to assess collective progress towards the Goals. Engaging in the SDGs process is both a management tool, helping countries develop implementation and monitoring strategies for achieving the SDGs, and a report card, measuring progress towards achieving the Goals.⁵

This article explores the similarities and differences between the SDG and HLPF processes and the broad outlines of the Paris Agreement's global stocktake, drawing some key lessons learned and identifying potential opportunities for complementary evolution.

II. Measuring Collective Achievement and Enhancing Implementation and Ambition

International environmental lawyers may be more familiar with traditional accountability frameworks

enforced by punitive measures,⁶ as exemplified by the Kyoto Protocol,⁷ but the Paris Agreement takes a new approach, tying together complementary processes in a cyclical system. The global stocktake is a crucial piece of that framework, together with the regular submission of nationally determined contributions (NDCs),⁸ an enhanced transparency process that requires each Party to report on their action and support every two years,⁹ and an implementation and compliance committee, whose functions have yet to be negotiated but are meant to be facilitative rather than punitive.¹⁰

To raise ambition, every five years Parties will conduct a global stocktake of collective progress toward the Agreement's long-term goals (LTGs) on mitigation, adaptation and support.¹¹ The outcome will inform Parties' submission of a new NDC two years later.¹² The first stocktake is set for 2023,¹³ but Parties at the Paris conference decided to kick-start the process with a 'facilitative dialogue' in 2018.¹⁴ Rechristened the Talanoa Dialogue by the Fijian presidency and similar to but more limited in scope than the global stocktake, it will run through the year and culminate at the 24th Conference of the Parties (COP 24) to the United Nations Framework Convention on Climate Change (UNFCCC) in Katowice, Poland.¹⁵ It is intended to inform the new or revised NDCs Parties will submit by 2020 and could offer lessons for the design of future global stocktakes.¹⁶

UNFCCC Parties are currently negotiating the framework and modalities for the global stocktake, aiming for key decisions at the end of 2018. A broad outline is taking shape: a preparatory phase in which information is gathered and compiled; a technical phase in which inputs are considered; and a political phase concluding the stocktake.¹⁷ But crucial issues remain to be addressed. Because Parties will report on domestic action and progress, how will the global stocktake assess collective progress towards the LTGs? Parties also want to reflect the principle of equity in the global stocktake process but diverge on how it can be operationalized. A third question is defining where the stocktake links to other major elements of the Paris Agreement framework and elaborating the details of those linkages.

Separately, the UN set out the 17 SDGs (also known as the Global Goals) in 2015, to build on the success of the Millennium Development Goals,¹⁸ including new areas such as climate change and sustainable

5 Leadership Council of the Sustainable Development Solutions Network, 'Indicators and a Monitoring Framework for the Sustainable Development Goals: Launching a Data Revolution for the SDGs' (2015) <<https://sustainabledevelopment.un.org/content/documents/2013150612-FINAL-SDSN-Indicator-Report1.pdf>> accessed 15 August.

6 Conventionally, punitive measures include the withdrawal of benefits and/or the application of penalties or sanctions.

7 Geir Ulfstein and Jacob Werksman, 'The Kyoto Compliance System: Towards Hard Enforcement' in Jon Hovi, Olav Stokke, and Geir Ulfstein (eds), *Implementing the Climate Regime: International Compliance* (Earthscan 2005).

8 Paris Agreement (n 1) art 4(2).

9 *ibid* art 13.

10 *ibid* art 15.

11 *ibid* art 14(2).

12 *ibid* art 14(3).

13 *ibid* art 14(2).

14 UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016) para 115.

15 UNFCCC 'Decision 1/CP.23, Fiji Momentum for Implementation' UN Doc FCCC/CP/2017/11/Add.1 (8 February 2018) Annex II, paras 10-11.

16 F Lesniewska and L Siegle, 'The Talanoa Dialogue: A Crucible to Spur Ambitious Global Climate Action to Stay Within the 1.5°C Limit' (2018) 12 CCLR 41.

17 UNFCCC 'Draft Conclusions Proposed by the Co-Chairs' (10 May 2018) UN Doc FCCC/CPA/2018/L.2/Add.1 (10 May 2018) 123.

18 'The Millennium Development Goals' (United Nations Foundation) <<http://www.un.org/millenniumgoals/>> accessed 15 August.

consumption.¹⁹ All UN Members are invited to make efforts to achieve those goals. An annual HLPF provides a public opportunity to voluntarily highlight individual achievements and concludes with a high-level report from the Secretary-General describing progress towards the SDGs.

III. Comparing the SDGs, HLPF, and the Global Stocktake

The SDGs and global stocktake processes broadly share the same objectives: measuring collective progress, providing an opportunity for experience- and lessons-sharing, and enhancing implementation and ambition.²⁰ Therefore, a review of their potential similarities and differences in how they function, their methodology, inputs and outputs, and key actors ought to provide some relevant lessons for the negotiations on the global stocktake. A review is timely: as of July, the SDGs process finished its fourth HLPF since the adoption of the SDGs in 2015.²¹ This article compares key elements of the SDG process with those being negotiated or decided for the global stocktake.

1. Measuring Progress

There are 17 SDGs, each with their own set of targets and indicators.²² The indicators are tiered based on their level of methodological robustness and the availability of data globally. For most indicators, the values represent global, regional and sub-regional aggregates and are calculated from data from national statistical systems, compiled by international agencies and often adjusted to allow for international comparability or supplemented by estimates where data is lacking.²³ The indicators, targets, and goals together serve as an organizing framework for action.

The global stocktake will be an opportunity to measure UNFCCC Parties' progress against the LTGs of the Paris Agreement, though those goals for adaptation and finance are not well-defined and not measurable in the same way emissions reductions can be correlated to the temperature goal.²⁴ While it is generally assumed that each Parties' reported greenhouse gas emissions inventories will be tallied and measured against the temperature goal, as of writing

Parties have not yet agreed on the ways that the global stocktake will measure progress towards the LTGs, particularly with respect to adaptation or finance.

2. Timing and Review Cycle

Each year, five to six SDGs are reviewed at the HLPF under the UN Economic and Social Council (ECOSOC) or UN General Assembly, completing all 17 SDGs every four years. There is no pause in the review process, with a high-level event occurring every year.

While the Paris Agreement mandates that the global stocktake occur every five years, Parties are considering just how long the stocktake process itself should be, given timing and resources. According to the early options drafted by Parties at the UNFCCC sessions in Bonn in May 2018 (Bonn informal notes), Parties are largely envisioning a one- to two-year process from start to finish.²⁵

3. Reporting

In the SDGs process, all government reporting is strictly voluntary; the UN encourages regular and inclusive country progress reviews but does not stipulate their frequency.²⁶ Where a Member State wish-

19 United Nations Development Programme, 'Background on the Goals' <<http://www.undp.org/content/undp/en/home/sustainable-development-goals/background.html>> accessed 15 August.

20 Sustainable Development Knowledge Platform, 'Objectives' <<https://sustainabledevelopment.un.org/hlpf/objectives>> accessed 15 August; Paris Agreement (n 1) art 14.

21 ECOSOC 'Ministerial declaration of the high-level segment of the 2018 session of the Economic and Social Council on the annual theme 'From global to local: supporting sustainable and resilient societies in urban and rural communities', 'Ministerial declaration of the 2018 high-level political forum on sustainable development, convened under the auspices of the Economic and Social Council, on the theme 'Transformation towards sustainable and resilient societies' UN Doc E/HLS/2018/1 (1 August 2018).

22 Sustainable Development Knowledge Platform, 'Sustainable Development Goals' <<https://sustainabledevelopment.un.org/sdgs>> accessed 15 August.

23 ECOSOC 'Progress Towards the Sustainable Development Goals' UN Doc E/2018/64 (10 May 2018) 1.

24 Paris Agreement (n 1) arts 2, 4, 7 and 9; Decision 1/CP.21 (n 13) para 53.

25 Draft Conclusions Proposed by the Co-Chairs (n 15) 123.

26 United Nations Development Group, 'Guidelines to Support Country Reporting on the Sustainable Development Goals' (2017) 16.

es to be reviewed on the SDGs, it can submit a voluntary national review (VNR) synthesis report on, *inter alia*, the status of their progress towards the SDGs, several examples of good practices, challenges encountered, and areas in which it needs additional support. Over a week at the HLPF, governments give a 30-minute presentation of their VNR report.²⁷ In addition to individual national reports, the HLPF accepts input by Regional Commissions.²⁸

Every five years, the Paris Agreement requires Parties to submit an NDC, or a Party's commitment to reduce greenhouse gas emissions and adapt to the impacts of climate change.²⁹ Parties are also mandated to report at least biennially through the enhanced transparency framework on their actions and support, as well as through the national communications required every four years under the Convention.³⁰ The Agreement states that the purpose of the transparency framework is to provide a clear understanding of climate change action and to track progress towards Parties' achievement of their NDCs *to inform the global stocktake*.³¹ Parties' reports will then undergo both a technical expert review and peer review process.³²

Parties are converging around a multi-phased global stocktake process, in which the first two preparatory and technical phases will gather information before compiling and 'considering' it.³³ They are also further refining a non-exhaustive list of inputs, which will include outside sources like the Intergovernmental Panel on Climate Change (IPCC) reports but must define whether outputs from other Paris processes will link to the stocktake.³⁴

4. High-Level Event(s)

To review progress, the HLPF annually discusses five to six SDGs and their interlinkages, meeting under the ECOSOC for eight days, including a three-day ministerial segment, and every four years at the level of Heads of State and Government under the General Assembly for two days.³⁵ Five Regional Forums on Sustainable Development review progress on the SDGs and offer an opportunity for countries to share lessons learned, best practices, and challenges in implementation.³⁶

To raise the profile of climate action, UNFCCC Parties seem inclined for a final, political phase of the global stocktake to take on a role similar to that of the HLPF. However, it would not likely be a stand-alone event but take place during a COP meeting. The length of the event is under debate, from a single day to the entirety of the COP session. Like the HLPF, Parties are considering this event or event series to involve ministers.³⁷

5. Outcome(s)

Each year, the HLPF concludes with an intergovernmentally negotiated joint ministerial declaration featuring a list of priorities. The UN Secretary-General also releases a high level, largely narrative report with some statistics outlining progress on the thematic SDGs for that year. The report also summarizes how countries are improving their data management, monitoring and accountability systems and methodology.³⁸ In the 2018 report, four paragraphs are dedicated to efforts on climate change, mostly referencing action under the UNFCCC.³⁹

The Bonn informal notes reveal Parties are considering a range of potential outputs for the global stocktake, from high-level events (options include a dedi-

27 Sustainable Development Knowledge Platform, 'Voluntary National Reviews Database' <<https://sustainabledevelopment.un.org/vnrs/>> accessed 15 August.

28 United Nations Regional Commissions, 'Regional Forums on Sustainable Development' <<http://www.regionalcommissions.org/regional-forums-on-sustainable-development>> accessed 15 August.

29 Paris Agreement (n 1) art 4(2).

30 UNFCCC 'Decision 1/CP.17, Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' UN Doc FCCC/CP/2011/9/Add.1 (15 March 2012) para 90.

31 Paris Agreement (n 1) art 13(5) (emphasis added).

32 *ibid* art 13(11-12). See also Christopher Campbell-Durufflé, 'Rain or Sunshine in Katowice? Transparency in the Paris Agreement Rulebook' (2018) 12 CCLR.

33 Draft Conclusions Proposed by the Co-Chairs (n 15) 123-128.

34 Decision 1/CP.21 (n 13) para 99.

35 Sustainable Development Knowledge Platform, 'High-Level Political Forum' <<https://sustainabledevelopment.un.org/hlpf>> accessed 15 August.

36 United Nations Regional Commissions (n 26).

37 Draft Conclusions Proposed by the Co-Chairs (n 15) 128.

38 UN General Assembly 'Transforming Our World: the 2030 Agenda for Sustainable Development' UN Doc A/RES/70/1 (21 October 2015) para 83 (Transforming Our World).

39 United Nations, 'The Sustainable Development Goals Report 2018' (2018) <<https://unstats.un.org/sdgs/files/report/2018/TheSustainableDevelopmentGoalsReport2018-EN.pdf>> accessed 15 August.

cated political ministerial segment, high-level ministerial dialogues or roundtables), a presidential statement or final report, a summary of key messages, a decision by the COP serving as meeting of the Parties to the Paris Agreement, or a formal declaration.⁴⁰ A combination of the above is also possible. Given that the stated purpose of the outcome of the global stocktake is to 'inform Parties in updating and enhancing [...] their actions and support' and to influence the next round of NDCs, Parties will have to consider which outcome or combination of outcomes will best achieve these purposes.⁴¹

6. Technical Expert Input

Composed of Member States and including regional and international agencies as observers, the Inter-Agency Expert Group on SDG Indicators (IAEG-SDGs) was established to develop and implement the global indicator framework for the SDGs. The Group then formed three technical working groups to address specific areas relevant to indicator implementation: Statistical Data and Metadata Exchange, Geospatial Information, and Interlinkages. Each group is responsible for their own work plans, methods of work, coordination with other partners and reports on their progress at each of the IAEG-SDGs meetings.⁴²

As noted above, UNFCCC Parties have called for the inclusion of IPCC reports in the global stocktake.⁴³ A number of Parties also want to replicate or repurpose the Structured Expert Dialogue (SED) that was conducted from 2013-2015 to ensure the scientific integrity of the 2013-2015 review of the agreed long-term global goal to reduce greenhouse gas emissions to hold the global average temperature below 2°C above pre-industrial levels. The SED considered relevant scientific information via regular scientific workshops and expert meetings, providing input into the synthesis reports on the review.⁴⁴

7. Sharing Knowledge, Information, and Experience

An aim of the VNR process is to facilitate the sharing of successes, challenges, and lessons learned among governments and to mobilize multi-stakeholder support and partnerships for the implemen-

tation of the SDGs.⁴⁵ Through their VNR presentations, countries can share that information and experience on an individual basis. The Regional Forums on Sustainable Development further offer an opportunity for countries to share lessons learned, best practices, and challenges in implementation.⁴⁶

To promote the exploration, analysis, and use of authoritative SDG data sources for evidence-based decision-making and advocacy by Member States, the Open SDG Data Hub serves as a repository for official SDG data and Member States' own open data sites (where available). Its goal is transparent access to enable data providers, managers, and users to better see and communicate trends and relationships out of the wealth of technical information.⁴⁷

UNFCCC Parties are exploring options for supporting databases or platforms for the global stocktake. One possible template is the platform for the Talanoa Dialogue, which publicly stores Party and non-Party submissions in response to the three guiding questions upon which the Dialogue is framed: 'Where are we?', 'Where do we want to go?', and 'How do we get there?'⁴⁸ Parties could choose to be economical, considering the number of registries that will be established under the Paris Agreement. For example, the Agreement calls for an NDC registry to house NDCs⁴⁹ and an adaptation registry to house Parties' adaptation communications.⁵⁰ If mediated input like synthesis reports will aggregate these sources, yet another registry or platform may not be useful unless it houses additional information that will need to be considered by the global stocktake.

40 Draft Conclusions Proposed by the Co-Chairs (n 15) 128-129.

41 Paris Agreement (n 1) art 14(3).

42 United Nations Statistics Division, 'IAEG-SDGs: Inter-agency and Expert Group on SDG Indicators' <<https://unstats.un.org/sdgs/iaeg-sdgs/>> accessed 15 August.

43 The IPCC is the scientific and intergovernmental council set up under the UN to provide the international scientific consensus on climate change and its political and economic impacts. Decision 1/CP.21 (n 13) paras 21, 99(b), 100.

44 UNFCCC 'Report on the Structured Expert Dialogue on the 2013-2015 Review' UN Doc FCCC/SB/2015/INF.1 (4 May 2015).

45 Sustainable Development Knowledge Platform (n 25).

46 United Nations Regional Commissions (n 26).

47 United Nations Statistics Division, 'Welcome to the Open SDG Data Hub' <<http://unstats-undesa.opendata.arcgis.com/>> accessed 15 August.

48 Decision 1/CP.23 (n 14) 8.

49 Paris Agreement (n 1) art 4(12).

50 *ibid* art 7(12).

UNFCCC Parties also expect that active engagement in the global stocktake process will facilitate knowledge- and experience-sharing. Under the Paris Agreement's enhanced transparency framework, UNFCCC Parties will be able to engage with one another on their individual NDCs through a facilitative, multilateral consideration of process.⁵¹ Most likely modelled on the current multilateral assessments and facilitative sharing of views for developed and developing countries, it could consist of a peer questions-and-answers session. However, the means by which Parties can engage and learn from one another during the global stocktake is yet to be determined.

In May 2018, the first Talanoa Dialogue event of the year provided a mix of Parties, intergovernmental organizations and non-state actors the opportunity to literally have a dialogue in small groups, structured around the three guiding questions. These conversations took place over seven parallel sessions in a single day.⁵² Replicating these intimate conversations on a larger scale while still addressing all the workstreams of the global stocktake process would be costly, both in terms of time and expense to Parties and the UNFCCC secretariat.

Another possibility is that a SED-like process could provide an opportunity for Parties to engage with experts and stakeholders in a more structured and focused setting. The SED consisted of fact-finding, face-

to-face exchanges of views between over 70 experts and Parties over the course of four sessions and was well-received by Parties.⁵³ A final report summarized discussions and technical information.

8. Non-State Actor Participation

The international climate community has increasingly recognized the need for all actors to work towards a better future. While the 2030 Agenda underlines that governments carry the primary responsibility to implement the SDGs, it also states that the scope and ambition of the Agenda requires countries and concerned stakeholders to work together in the implementation and follow-up processes.⁵⁴ Non-state actors in the SDG process are generally limited to the role of observer but can be involved in the SDG process in other ways.

The UN launched the Partnerships for the SDGs online platform as a tool to inform businesses, organizations and individuals, and to encourage global partnerships around the goals. Non-Member stakeholders can find information on initiatives implemented as a result of global partnerships and commitments made to reach the SDGs.⁵⁵

The voluntary VNR guidelines encourage governments to develop a stakeholder engagement plan, identifying key stakeholders across all sectors and levels of government, civil society, the private sector and others, and methods of engagement.⁵⁶ In 2018, the UN experimented with so-called VNR Labs, which provided an informal platform for dialogue between countries, the UN system, and stakeholders. Participants will reflect on how to further improve the VNR process at next year's HLPF.⁵⁷

To the extent that a non-Member stakeholder can engage more formally and directly in the SDG process, the General Assembly resolution on the format and organizational aspects of the HLPF includes a paragraph that sets out ways in which the representatives of major groups of civil society can participate, including intervening in official meetings and presenting written and oral contributions.⁵⁸ International organizations, civil society, academia and the private sector are also invited to participate in the IAEG-SDG groups mentioned above. Subject to the criteria established by each working group, non-state actors can provide technical input to their work on the global indicator framework.⁵⁹

51 *ibid* art 13(11).

52 UNFCCC, 'Summary of the Talanoa Dialogue at the May Sessions' (May 2018) <https://img1.wsimg.com/blobby/go/9fc76f74-a749-4eec-9a06-5907e013dbc9/downloads/1cgc0710q_77988.pdf> accessed 15 August.

53 'Report on the Structured Expert Dialogue on the 2013–2015 Review' (n 42).

54 'Transforming Our World' (n 36) 1, paras 32, 34, 39, 55 and 79.

55 Sustainable Development Knowledge Platform, 'New Online Platform Encourages Global Engagement in Support of Global Goals for Sustainable Development' <<https://sustainabledevelopment.un.org/?page=view&nr=956&type=230&menu=2059>> accessed 15 August.

56 UN Division for Sustainable Development Department of Economic and Social Affairs, 'Handbook for the Preparation of Voluntary National Reviews' (2018) <https://sustainabledevelopment.un.org/content/documents/17354VNR_handbook_2018.pdf> accessed 15 August.

57 Catherine Benson Wahlén, 'DESA Debuts VNR Labs at HLPF 2018' (International Institute for Sustainable Development/SDG Knowledge Hub 9 July 2018) <<http://sdg.iisd.org/news/desa-debuts-vnr-labs-at-hlpf-2018/>> accessed 15 August.

58 UN General Assembly 'Format and Organizational Aspects of the High-Level Political Forum on Sustainable Development' UN Doc A/RES/67/290 (23 August 2013) para 15.

59 United Nations Statistics Division (n 40).

How UNFCCC Parties envision the breadth and depth of stakeholder engagement in the global stocktake remains an important open question. The trend since the start of the Paris Agreement negotiations has been for greater involvement of civil society and recognition of sub-national action. The establishment of an online portal cataloguing non-state action, the appointment of Climate Champions, and promotion of the achievements of key sectors at high-level COP events, indicate a new respect for the role of civil society in effective and global climate action.⁶⁰

If the Talanoa Dialogue is any indication, it is entirely possible that non-state actors could have their voices heard in the global stocktake. A select, representative, and carefully vetted group of non-party stakeholders was invited to participate in the parallel dialogue sessions with negotiators and Party representatives at the May 2018 meeting in Bonn.⁶¹ A similar channel for Party and stakeholder dialogue could be established for the global stocktake. But Parties do not envision that non-state actors will also participate and interact with ministers at the conclusion of the Talanoa Dialogue in December 2018 in Poland.⁶² For civil society to engage at such a high level would be singularly unique to any process under the Convention.

In the same spirit of inviting non-party experts to participate in technical working groups in the SDG process, civil society could engage with Parties through a SED-like process. The focus of the SED would limit the discussion to scientific and technical experts but allow for face-to-face exchanges between them and Parties.

IV. Lessons Learned

Given that the SDGs process, though relatively new, has several years' worth of experience, are there any lessons learned that UNFCCC Parties can take forward into the negotiations towards the decision text that should be drafted and adopted in Katowice this year?

First, it is worth examining what relevant lessons learned on the SDG review process may have emerged. In examining the feedback from VNR countries, civil society, experts and thought leaders, the UN Foundation has identified four key takeaways. One important result of the voluntary process is that

Parties are valuing early learning over early accountability. Both the UN and governments are learning from their experience in this process and the emphasis on doing so is encouraging openness and change.⁶³ A second observation is that embedding civil society and private sector involvement in the VNRs can improve self-reporting, understanding, and reduce duplicative and sometimes critical parallel processes.⁶⁴ A third lesson is Parties are more willing to be candid and open about challenges they face if discussed in a 'safe space'. Countries may be less willing to ask for help when opening themselves up to criticism by civil society and media. A challenge is creating an open and balanced but facilitative environment.⁶⁵ The fourth realization is that the process needs to help countries move from plans to impact. Rather than simply restating existing or modest policies, the SDG process needs to incentivize countries to leverage political support, economic resources, and experiences to take real and significant steps forward towards achieving their goals.⁶⁶

Second, it will be important to see what nascent lessons can be learned from the Talanoa Dialogue process, which will conclude at COP 24. At the same meeting, the modalities and guidelines for the global stocktake process will be adopted. Some early observations can, however, be drawn from the May Talanoa session.

The Talanoa Dialogue's online platform, inclusive dialogues, and a ministerial level event at the COP follow a similar structure to that proposed for the global stocktake. These dialogues featured a broad group of stakeholders that were able to engage with

60 David Wei, 'Linking Non-State Action with the U.N. Framework Convention on Climate Change' (C2ES October 2016) <<https://www.c2es.org/site/assets/uploads/2016/10/linking-nonstate-action-unfccc.pdf>> accessed 15 August.

61 'Summary of the Talanoa Dialogue at the May Sessions' (n 50); UNFCCC, 'Sunday Talanoas' <<https://talanoadialogue.com/sunday-talanoas>> accessed 15 August.

62 UNFCCC, 'Political Phase' <<https://talanoadialogue.com/political-phase>> accessed 15 August.

63 Minh-Thu Pham, '4 Lessons Learned Tracking SDG Progress' (UN Foundation 4 July 2018) <<http://unfoundationblog.org/4-lessons-learned-tracking-sdgs-progress/>> accessed 15 August.

64 *ibid.* See Adam Fishman, 'SDG Knowledge Weekly: 2018 High-level Political Forum, Part 2' (International Institute for Sustainable Development/SDG Knowledge Hub 24 July 2018) <<http://sdg.iisd.org/commentary/policy-briefs/sdg-knowledge-weekly-2018-high-level-political-forum-part-2/>> accessed 15 August.

65 *ibid.*

66 *ibid.*

one another on the three-question format.⁶⁷ But simply planning for a bigger Talanoa Dialogue in 2023 will neither be manageable nor fulfil the mandate of the global stocktake. Not all Parties felt comfortable engaging in candid dialogue and resorted to stock statements avoiding the articulation of real challenges. Moreover, the three questions that frame the Talanoa Dialogue are not enough to make a meaningful global assessment of progress on mitigation, adaptation, and support. Eliciting qualitative, narrative responses to these broad questions will not provide a clear snapshot of global greenhouse gas emissions, efforts to adapt to the impacts of climate change, financial flows, and technical and other capacity-building support, nor address the Paris Agreement's imperative to take stock of Parties' implementation in light of the best available science.⁶⁸

Reflections on these two processes can inform the negotiations on the 2023 global stocktake, as well as later iterations, particularly on the key issues identified earlier in this article: How will the global stocktake assess collective progress towards the Paris Agreement's LTGs? How will equity will be operationalized? Has the Paris Agreement elaborated all necessary linkages between the global stocktake and other processes and how do Parties need to define those relationships?

1. Assessing Collective Progress

The SDGs process relies on voluntary reporting around sets of indicators. Quantification of some of the information provided can provide a numerical assessment of progress but the UN Secretary-General's final report is still generally an independently

supplemented qualitative assessment because of lack of data, lack of quality data, or the inability to sufficiently aggregate the data provided.

With greater and regular participation, reporting on greenhouse gas inventories in the UNFCCC regime is likely sufficiently comprehensive and robust enough to reasonably assess progress on emissions reductions. However, given the unique and specific nature of adaptation and that the UNFCCC has not previously measured Parties' adaptation efforts, Parties will need to innovate or borrow how they will measure progress towards the new global adaptation goal, like adopting adaptation indicators in order to measure progress on adaptation. The SDG indicators in adaptation-related areas like water or land (SDGs 14 and 15, respectively) could provide useful frames of reference. Another way to integrate adaptation data could be to include regional reports, similar to how the HLPF accepts regional information by the Regional Commissions.

2. Operationalizing Equity

The Paris Agreement, in establishing a global stocktake in Article 14(1), states that when the Parties assess collective progress, they shall do so 'in the light of equity'.⁶⁹ Neither the Convention nor the Paris Agreement defines equity, and it is often used in conjunction with or interchangeably with the principle of common but differentiated responsibilities (CBDR), which distinguishes between developed and developing countries with respect to the climate challenge. This concept has, with some resistance, found its way into the SDGs process, as well.⁷⁰ The ways in which it is reflected take several forms.

CBDR in the SDGs can be seen as operationalized in the voluntariness of reporting and because governments can report according to the methodologies as best they can (via tiered indicators). This issue has been similarly raised in the UNFCCC negotiations, as Parties consider flexibility in reporting methodologies for developing countries that need it in light of their capacity and where the IPCC greenhouse gas inventory guidelines also provide for choice in tiered reporting methodologies.⁷¹

The SDGs themselves can also be considered to capture specific equity-related goals. For instance, SDG 17, which aims to strengthen the means of implementation and revitalize global partnerships, em-

67 UNFCCC, 'Talanoa Sessions' <<https://talanoadialogue.com/talanoa-sessions>> accessed 15 August.

68 Paris Agreement (n 1) art 14(1).

69 *ibid.*

70 See, eg, Shelley Ranii, 'Do Common but Differentiated Responsibilities Belong in the Post-2015 SDGs?' (NYU Center on International Cooperation 21 March 2014); Ingeborg Niestroy, 'Common But Differentiated Governance: Making the SDGs Work' (International Institute for Sustainable Development/SDG Knowledge Hub 21 April 2015) <<http://sdg.iisd.org/commentary/guest-articles/common-but-differentiated-governance-making-the-sdgs-work/>> accessed 15 August; Jiang Ye, 'The CBDR Principle in the UN 2030 Agenda for Sustainable Development' (China Quarterly of International Strategic Studies 2016).

71 Draft Conclusions Proposed by the Co-Chairs (n 15) 57-58, 61-62.

phasizes the need to build capacity for developing countries.⁷² SDGs 1 and 5, eradicating poverty and promoting gender equality respectively, also promote aspects of equity and mirror CBDR principles reflected in the Paris Agreement.⁷³

UNFCCC Parties are still exploring how equity can be meaningfully reflected in the global stocktake process. Some Parties feel that equity is already captured in the structure and the implementation of the Paris Agreement, including in the preambular text that asks Parties to ‘respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations, the right to development, as well as gender equality, empowerment of women and intergenerational equity’.⁷⁴

Other Parties prefer for certain equity elements to be highlighted, such as whether there will be sufficient support for the participation of developing countries or an adequate balance between developing and developed country participation in the global stocktake.⁷⁵ The global stocktake could play a role in enabling donor countries to match with recipient countries where they demonstrate their need.⁷⁶ Other Parties would prefer for equity to be measured, via equity indicators or through an equity framework, with possible reference to historical responsibility.⁷⁷ Still other Parties have suggested that, because it will inform the ambition of future NDCs, the consideration of equity in Parties’ NDCs should be assessed or reported in some way.⁷⁸

3. Linkages

The structure of the SDGs process is such that Members’ voluntary reporting is designed to feed directly into the HLPF and the final report. By contrast, UNFCCC Parties have yet to fully define all the channels and modalities by which information may flow into the global stocktake. The Paris Agreement makes clear that the purpose of the framework for transparency of action is ‘to provide a clear understanding of climate action’ against its LTGs, including progress towards achievement of Parties’ NDCs and their adaptation actions to inform the global stocktake.⁷⁹ The framework for transparency of support is to ‘provide clarity on support provided and re-

ceived’ and a full overview of aggregate financial support provided to inform the global stocktake.⁸⁰

However, the links between the transparency frameworks have yet to be made operationally clear. Parties must tackle how individual mitigation, adaptation, and financial data are submitted in a meaningful way to the stocktake. For example, if individual greenhouse gas inventories, adaptation communications, and financial reports are transmitted directly to the global stocktake, they will have to be further synthesized to make a global assessment. Alternatively, Parties could decide that those inputs will be aggregated by an assigned body and those synthesis reports transmitted to the global stocktake as inputs. Parties have yet to articulate these roles and responsibilities.⁸¹

The global stocktake could also potentially link to other processes not explicitly mentioned by the Paris Agreement. For example, Parties could decide that reports from the Article 15 implementation and compliance mechanism could feed into the global stocktake, informing Parties of gross or systematic non-compliance issues.⁸²

In the latter of these two issues, the SDGs and Paris Agreement processes may simply be far too dissimilar to draw comparable lessons. However, there are other points of comparison that merit some consideration.

Both processes encourage and rely on receiving more and better data over time. In the introduction to the Secretary-General’s 2018 SDGs report, he emphasizes that the ‘availability of quality, accessible, open, timely and disaggregated data is vital for evidence-based decision-making and the full implementation of the 2030 Agenda [...] To meet these data de-

72 *ibid* 15, 18.

73 *ibid* 26-31.

74 Paris Agreement (n 1) preamble.

75 Draft Conclusions Proposed by the Co-Chairs (n 15) 123-124.

76 *ibid* 128, 130.

77 *ibid* 131.

78 *ibid* 127.

79 Paris Agreement (n 1) art 13(5).

80 *ibid* art 13(6).

81 For instance, it is clear that the transparency process will feed into the global stocktake but how that information will be aggregated and who will do it has yet to be determined. Draft Conclusions Proposed by the Co-Chairs (n 15) 123, 125-126.

82 Paris Agreement (n 1) art 15; Draft Conclusions Proposed by the Co-Chairs (n 15) 133.

mands there is an urgent need to strengthen the capacities of national statistical systems.’⁸³ Without robust information, it is difficult to ascertain whether countries are individually or collectively meeting their targets. Both processes also accept that many countries, especially developing countries with less or limited capacity, will struggle with reporting regularly and robustly. They recognize the need to build their capacity to improve their reporting over time.

The Paris Agreement also places a strong emphasis on building domestic capacity for reporting and review and the current negotiations on the modalities, procedures and guidelines for the enhanced transparency framework reiterate the Agreement’s vision of improvement over time.⁸⁴ To help developing countries, the Agreement established the Paris Committee on Capacity-Building to facilitate capacity-building generally⁸⁵ and the Capacity Building Initiative for Transparency, specifically to ‘build institutional and technical capacity’ for developing countries to meet the enhanced transparency requirements and to ‘assist in the improvement of transparency over time’.⁸⁶

Arguably, hosting the HLPF every year, even if at the head of state level every few years, diminishes the political impact of the SDG outcomes, as compared to the global stocktake. The HLPF culminates annually in a public event and UN Secretary-General report. All of the SDGs are not reviewed every year and only those Parties that wish to be reviewed volunteer

to do so. Member States are encouraged but not obliged to take forward lessons from the HLPF and report into their policy planning and monitoring processes.

The outcome of the global stocktake, however, should have significant gravity: it is meant to ‘inform Parties in updating and enhancing, in a nationally determined manner, their actions and support [...], as well as enhancing international cooperation for climate action’.⁸⁷ This event, intended to occur every five years, ought to enhance the ambition of Parties’ next NDCs, which will account for the next five or ten years of their efforts under the climate regime. These NDCs, in turn, will have a substantial impact on domestic litigation and policy, business and corporate planning and decision-making, multilateral partnerships, and global financial flows. Such an event will require a host of resources and political capital that should be spent strategically on a process meant to be a regular and powerful driver to greater global action and support over time.

V. The SDGs/HLPF and Global Stocktake: Complementary versus Distinct Processes

Given the differences between the two processes, can they become complementary? A number of actors have considered this possibility,⁸⁸ recommending the alignment of adaptation under the Paris Agreement and UNFCCC with related SDG indicators, as well as the indicators in the Sendai Framework on Disaster Risk Reduction, a 15-year, voluntary, non-binding agreement to reduce disaster risk and losses in lives, livelihoods and health.⁸⁹ In a recent expert meeting with Parties and in a technical paper, the UNFCCC Secretariat and the Adaptation Committee have explored how to improve coherence between the three frameworks to save money and time, enhance efficiency, and further enable adaptation action.⁹⁰

However, further integration of adaptation plans with the SDGs and the Sendai Framework can entail challenges regarding data, conflicting mandates between lead agencies, opposing policies, lack of standardized definitions, and gaps in monitoring.⁹¹ Moreover, alignment would need to overcome most UNFCCC Parties’ and experts’ lack of familiarity with the SDGs and Sendai Framework processes as well as the tendency toward political entrenchment within climate regimes.

83 ECOSOC (n 21) para 4.

84 Draft Conclusions Proposed by the Co-Chairs (n 15) 55, 58, 68.

85 Decision 1/CP.21 (n 13) para 71.

86 *ibid* para 85(c).

87 Paris Agreement (n 1) art 14(3).

88 China, ‘China’s Input on Talanoa Dialogue’ (UNFCCC Talanoa Dialogue Platform 2 April 2018) 5 <https://unfccc.int/sites/default/files/resource/104_China%C3%A2%E2%82%AC%E2%84%A2s%20inputs%20on%20Talanoa%20Dialogue.pdf> accessed 15 August.

89 The UN Office for Disaster Risk Reduction, ‘Sendai Framework for Disaster Risk Reduction 2015-2030’ (2015) <https://www.unisdr.org/files/43291_sendaiframeworkfordren.pdf> accessed 15 August.

90 UNFCCC Secretariat, ‘Opportunities and Options for Integrating Climate Change Adaptation with the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction 2015-2030’ (2017) <https://unfccc.int/sites/default/files/resource/techpaper_adaptation.pdf>; Adam Fishman, ‘UNFCCC Expert Meeting Compares National Adaptation Goals to SDGs, Sendai Framework’ (International Institute for Sustainable Development/SDG Knowledge Hub 7 August 2018) <<http://sdg.iisd.org/news/unfccc-expert-meeting-compares-national-adaptation-goals-to-sdgs-sendai-framework/>> accessed 15 August.

91 Fishman (n 64).

Both the SDGs and global stocktake processes will continually evolve as countries improve their reporting, incorporate more robust data, and tweak processes and outputs to make them fit for purpose: obtaining the information necessary to determine whether countries are making actual and effective progress towards global goals. Both processes emphasize the need for better governance and information management systems, which call for better intergovernmental coordination, the mainstreaming of climate change action and sustainable development, and the reframing of priorities of 'non-climate' ministries and departments to fall in line with or complement climate change laws and policies. Parties could begin to look to the long-term integration of aspects of both regimes to enhance coherence and reduce redundancies over time.

VI. Conclusion

The Paris Agreement's global stocktake is a unique multilateral review process, incorporating increasingly regular and robust individual country reports and internationally vetted scientific data to make an assessment of global progress towards the goals of the Agreement. It is a crucial feature of the facilitative accountability framework underpinning the careful balance between top-down obligations and bottom-up national determination that sets the Agreement apart from other conventionally punitive international accords. In taking stock of collective action and progress, and sharing challenges, lessons learned, and successes, it further lays the foundation for greater ambition, collaboration, and improvement over time.

At COP 24, Parties will need to narrow the broad outlines of how they currently envision the global

stocktake down to specifics. Cycles need to be defined and ways to aggregate the vast amounts of information must be determined. Although the Talanoa Dialogue has yet to conclude and elements of the SDG process are unique in their own right, Parties can begin to draw on their parallels and any early lessons they offer as they consider now what key features to include in the modalities, rules, and guidelines to be decided at the December 2018 climate conference in Katowice, Poland.

All need not be decided in one go. Parties can and likely should further evolve and fine-tune the process in the future. Given that the Paris Agreement asks governments to endeavour to continuously improve over time, negotiations on the global stocktake are unlikely to be finished in their entirety in Katowice. The Bonn informal notes indicate that Parties are considering how and when they want to revisit modalities of the stocktake, such as refining its procedural and logistical elements on the basis of experience and reviewing and updating the list of inputs to the stocktake, as appropriate, two years prior to the next global stocktake.⁹² Like other reviews in the UNFCCC, Parties can decide to dedicate regular moments to revisit and update key aspects of the mechanism, taking into account, for instance, experience gained and the latest science.

The global stocktake is a key piece of the foundation for the Paris framework. The modalities decided in Katowice this year will lay the groundwork for a process that can carry forward the current political momentum and contribute to defining the legacy of the Paris Agreement, ultimately giving it the robustness, ambition, and durability that Parties envisioned in Paris.

92 Draft Conclusions Proposed by the Co-Chairs (n 15) 124 and 130.

Compliance in Transition: Facilitative Compliance Finding its Place in the Paris Climate Regime

Meinhard Doelle*

This contribution assesses the state of play in the compliance negotiations under Article 15 of the Paris Agreement. The assessment is carried out based on the negotiating text as it stood at the conclusion of the negotiations in Bonn in May, 2018. The article concludes that there is still every opportunity to design an effective compliance system that is well integrated into the overall Paris Climate Regime, but that without clarity on other key elements, such as transparency and the global stocktake, it will be difficult to ensure that the compliance system plays a constructive role in the overall effort to facilitate the implementation and promote compliance with individual and collective commitments and obligations under the Paris Agreement.

I. Introduction

In the transition from the Kyoto Protocol to the Paris Agreement, some Parties went to great lengths to distance themselves from the architecture and institutions of the Kyoto Protocol.¹ One of the main elements of this architecture was the Kyoto compliance system, which contained features that departed from multilateral environmental agreements (MEAs) existing at the time. Notably, the system included an enforcement branch that applied automatic consequences in case of non-compliance with key obligations of developed country Parties. It is therefore not surprising to see a focus on facilitation in Article 15 of the Paris Agreement and specific direction that the compliance system is to be non-adversarial and non-punitive.²

The differences between the Kyoto compliance system and that to be developed under the Paris

Agreement are, of course, also driven by substantive differences between the two agreements. Most notable among these differences is that the Paris Agreement establishes a much broader range of commitments and obligations covering mitigation, adaptation, funding, technology access, education, capacity building, and loss and damage. The commitments, furthermore, have been made by a much broader range of Parties, including all developing countries, in particular the least developed countries (LDCs) and small island developing states (SIDS). Many of the commitments are self-determined in the form of nationally determined contributions (NDCs) to be updated by parties every five years.³

While there are many important differences, some of the core challenges of ensuring compliance are, on closer examination, remarkably similar to the Kyoto Protocol. Both agreements include a range of commitments from voluntary to binding. Both include

DOI: 10.21552/cclr/2018/3/9

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1 Jane Bulmer, Meinhard Doelle and Daniel Klein, 'Negotiating History of the Paris Agreement' in Daniel Klein and others (eds),

The Paris Climate Agreement: Analysis and Commentary (Oxford University Press 2017).

2 For a more detailed analysis of compliance in the context of climate change generally and the Kyoto compliance system in particular, see Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Change Regime* (Cambridge University Press 2012); Alexander Zahar, *International Climate Change Law and State Compliance* (Routledge 2014).

3 Meinhard Doelle, 'Assessment of Strength and Weaknesses' in Daniel Klein and others (eds), *The Paris Climate Agreement: Analysis and Commentary* (Oxford University Press 2017). Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani (eds), *International Climate Change Law* (Oxford University Press 2017).

provisions for market mechanisms, which will be dependent on compliance to be effective. Both include a range of reporting obligations that are fundamental to the functioning of the regime. These parallels suggest that Parties would be well advised to draw on the compliance experience under the Kyoto Protocol in negotiating the design of the Paris compliance system.⁴

This contribution assesses the state of play in the negotiations under Article 15.⁵ Of course, these negotiations are taking place in the context of the provisions of Article 15 itself as well as paragraphs 103 and 104 of Decision 1/CP.21.⁶ Before delving into the current state of the negotiations, it is helpful to identify the key relevant elements of the agreement parties reached in Paris.

The overall purpose of the compliance process under Article 15 is to facilitate the implementation and promote compliance with the provisions of the Paris Agreement. As has been pointed out by others, it is important to highlight that Article 15 refers to 'the provisions', not just some provisions, and not just obligations.⁷ It seems clear, therefore, that the mandate of the compliance committee should be broad in scope, include individual and collective commitments, and include binding obligations as well as non-binding commitments.⁸

Another set of provisions in Article 15 clarifies the overall approach to be taken in the design of the compliance system. They refer to the facilitative, non-adversarial and non-punitive nature of the process, and the principle of transparency. These elements offer important guidance to negotiators on the design of the compliance process and the measures the compliance committee should have at its disposal to facilitate implementation and promote compliance.

A key message in Article 15 relates to the 'respective national capabilities and circumstances of the Parties'.⁹ This reference to the revised principle of common but differentiated responsibilities and respective capabilities in the Paris Agreement signals that the process needs to be sensitive to the capacity challenges of LDCs in particular.¹⁰ Article 15 is clear that with respect to compliance, differentiation based on capabilities and other relevant circumstances is the job of the compliance committee. This suggests that the compliance modalities and procedures should provide flexibility for the committee to apply certain aspects of the compliance system to Parties that have capabilities and circumstances that

may warrant either relaxing process requirements or warrant the application of different measures at the conclusion of the compliance proceedings.¹¹

The agreement reached in Paris offers considerable direction on the process to be designed. Included is the composition of the compliance committee (12 members, two from each of the 5 United Nations regions plus one each from a least developed country and a small island developing state), required areas of expertise, and the importance of gender balance on the committee. The committee is to report annually to the Conference serving as the Meeting of the Parties to the Paris Agreement (CMA). This is the context within which Parties are now negotiating the modalities and procedures for compliance.

A particular source of complexity in the negotiations is that the compliance modalities are being negotiated in parallel with the overall Paris Rulebook.¹² Not only is there uncertainty about the nature of substantive rules on mitigation, emissions trading and finance, but as discussed elsewhere in this special issue, the Paris Agreement contemplates a comprehensive five-year review cycle that consists of Parties reporting on their efforts to implement their NDCs, review of those efforts and reports, a global stocktake

4 The lessons to be drawn from the Kyoto compliance experience have been explored extensively in the literature, see, for example, Brunnée, Doelle and Rajamani (n 2); Zahar (n 2).

5 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740 art 15; UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FC-CC/CP/2015/10/Add.1 (29 January 2016) paras 103-104.

6 This article benefits from the excellent analysis of a previous version of the negotiating text; see Sebastian Oberthür and Eliza Northrop, 'Towards an Effective Mechanism to Facilitate Implementation and Promote Compliance under the Paris Agreement', (2018) 8 *Climate Law* 39.

7 *ibid*; Alexander Zahar, 'A Bottom-Up Compliance Mechanism for the Paris Agreement' (2017) 1 *Chinese Journal of Environmental Law* 69.

8 Many of the key commitments in the Paris Agreement, such as commitments on finance and on efforts to keep global average temperature increases to well below 2 degrees, are collective commitments. Dealing effectively with such collective commitments will be one of the key challenges facing the new compliance system.

9 Paris Agreement (n 5) art 15(2).

10 It is important to recall the difficult and drawn-out negotiations on differentiation in the climate negotiations. It is clear that the agreement reached in Paris, while a breakthrough, has not laid these issues to rest. Views on differentiation still vary greatly among the Parties, resulting in difficult negotiations in many aspects of the Paris Rulebook, including compliance.

11 Oberthür (n 6).

12 Zahar (n 8) suggests that the negotiation of the compliance modalities should be delayed pending the completion of the remainder of the Paris Rulebook.

of progress against the long term goals, and revised NDCs.¹³ Even though the Paris Agreement clearly provides for a compliance system, it seems that some Parties would prefer to subsume the compliance effort under the work of the transparency framework and the global stocktake.

To be effective, the compliance process under Article 15 will have to find its place within the Paris climate regime, both substantively (i.e. its role with respect to mitigation, emissions trading, finance, adaptation, technology, capacity-building, coordination among institutions and connection among commitments) and in relation to the overall institutional structure being developed. The aim must be to complement the bottom-up NDC approach with appropriate top-down elements to help close the significant ambition gaps that currently exist in all key areas of the Agreement. A key contribution of the compliance process will be its relative independence and its resulting opportunity to impartially assess compliance with individual and collective commitments. This will help inform the broader discussion about the effective implementation of the Paris Agreement.

II. Assessment of Key Elements of the Current Text

This overview is based on the state of the negotiations at the end of the negotiating sessions in Bonn in May, 2018. The text developed in Bonn is structured using 12 topics.¹⁴ Key among them are the initiation of proceedings, the scope of the committee's work, institutional arrangement and process, and outcomes and measures to be applied by the committee. In this section, the key issues before the negotiators in each of the 12 areas are briefly identified, along with recommendations forward.

13 See Jennifer Huang, 'What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals?' (2018) 12 CCLR 3.

14 UNFCCC, 'Draft Elements of APA Agenda Item 7: Modalities and Procedures for the Effective Operation of the Committee to Facilitate Implementation and Promote Compliance Referred to in Article 15.2 of the Paris Agreement' (8 May 2018) <https://unfccc.int/sites/default/files/resource/APA%207_Informal%20Note_8May2018_final%20for%20posting.pdf> accessed 25 August 2018.

15 *ibid* pt 3(A), 3.

16 *ibid* pt 3(B), 4.

1. Purpose, Principles and Nature¹⁵

The current negotiating text contains a broad range of proposals on the purposes and principles to be included in the modalities and procedures for Article 15 and the articulation of the nature of the compliance procedures to be established. Much of what is proposed would seek to either clarify or re-negotiate key elements of Article 15, including its reference to the facilitative, non-adversarial and non-punitive nature of the compliance procedures, and the need for the compliance committee to consider the capabilities and circumstances of Parties that are subject to the compliance procedures. There is clearly disagreement among Parties about the need for these purposes, principles, and related elaborations.

All of the issues raised here are reflected again in the operative provisions of the proposed compliance procedures. Their ultimate treatment will depend on how the underlying issues below are resolved. Once resolved, it is unclear whether their elaborations here will serve a useful purpose. That is not to say that there may not be uncontroversial and helpful principles that emerge once there is agreement on the substantive provisions. General principles of good process, such as transparency, fairness, efficiency and accountability come to mind, and are useful to highlight for purposes of guiding the overall implementation of the compliance procedures. The restatement of principles in Article 15, though not necessary, might also help to remind Parties of the context within which these rules of procedures will operate.

2. Functions¹⁶

This section has become a battle ground over the meaning of the phrase 'facilitate implementation and promote compliance' in Article 15(1). The key area of disagreement is whether this language signals two separate and distinct functions, or whether it is an articulation of one broad mandate. Those that are advocating for two separate functions appear to disagree over the basis for the separation of functions. Some see this language as an opportunity to separate binding from non-binding commitments. Others view it as an opportunity to push for a separation between developed countries (who would be subject to procedures to promote compliance) and developing countries (who would be subject to procedures to fa-

cilitate implementation). The different views of the role of the language on implementation and compliance, in turn, have implications for the treatment of scope, the institutional structure, and outcomes.

In short, the section on functions actually does not appear to raise important issues independent of the questions of scope, process and outcomes. Once these underlying concerns and differences are resolved through clear and appropriate rules on scope, process, and outcomes, the section should either disappear altogether or simply clarify that the committee will carry out both functions using an integrated institutional structure and process that is sensitive to the differences among parties and the differences among the obligations and commitments that come before it.

Regardless of how the function is ultimately articulated, the key outcomes will be the following:

- Consistent with the language in Article 15, the mandate of the committee should extend to all commitments in the Paris Agreement, not just binding ones.
- The mandate of the committee should extend to all parties, while providing for appropriate flexibility in how developing countries, particularly LDCs and SIDS, are treated in terms of process, information requirements, timelines and outcomes
- The committee should have a broad range of tools at its disposal within the parameters set in the Paris Agreement, while providing clarity that not all tools are appropriate for all circumstances, particularly not all Parties and not all commitments.

3. Institutional Arrangements¹⁷

The section on institutional arrangements includes a long list of issues, most of which are not likely to be controversial or critical for the proper functioning of the committee. A few of the issues do warrant close attention. They are briefly discussed here.

The goal of individual, expert-based membership of the committee with gender balance is clear from the agreement reached in Paris. Parties agreed that membership would be distributed among the five UN regions, with extra members from LDCs and SIDS, following the precedent set with other UNFCCC committees. What is not clear is how these goals will be achieved through the nomination and election process. If Parties are to be encouraged to nom-

inate representatives in accordance with the regional distribution, it will be important to be clear about the qualifications needed. Multiple qualified nominees will be needed from each region. A screening process will be needed to ensure those nominated meet the basic criteria to ensure the election of a slate of members consistent with the multiple objectives Parties have already agreed to.¹⁸

With respect to the related issue of conflict of interest, there are at least two important issues to consider. One is at the point of the election of the committee members. It will be important to have an effective screening process that ensures candidates have the appropriate expertise without any obvious potential bias or conflict of interest. This initial screening should consider potential conflict of interest issues with respect to individual Parties as well as the ability of the potential members to consider systemic issues in an impartial manner. Members who have a conflict with specific Parties but are otherwise suitable would still be eligible to serve on the committee, however would not hear cases involving those Parties.¹⁹ A key consideration for the appointment of the committee will be the ability of all members to deal with systemic issues that may come before the committee.

Of course, without knowing the specific issues that will come before the committee, any conflict of interest screening effort at the point of election of committee members will be imperfect at best. The rules of procedure therefore should provide for a process within the rules of the compliance committee to determine whether a particular member has a conflict in dealing with a particular matter that has come before the committee.

¹⁷ *ibid* pt (3)C, 5.

¹⁸ The screening process carried out by the Secretariat for appointments under the Kyoto Protocol may provide a starting point, but the issues are likely to be more complex. Will legal expertise be as important as it has been for the Kyoto compliance system? What about substantive expertise in mitigation, finance, adaption, technology and capacity-building? If a mix of expertise is desired, how does that fit with regional distribution, gender balance and the nominations and election process?

¹⁹ One source of tension under the Kyoto compliance process has been whether active negotiators should be eligible to serve on the compliance committee. There is no clear answer on this from a conflict of interest perspective for individual compliance issues, as long as members do not get involved in matters involving the Parties they represent, but the issue should be resolved so as to avoid this source of tension under the Paris compliance system. With respect to systemic or collective compliance issues, it is more difficult to see how perceptions of conflict of interest can be avoided.

Another issue raised under the heading of institutional arrangements is the need for and role of a bureau, presumably a subcommittee of the compliance committee to fulfill a narrow set of specific functions. The main function of the bureau under the Kyoto Protocol was to decide which branch of the Kyoto compliance system should deal with a matter brought before the committee. Assuming that the committee will not consist of two branches, but rather will serve as one committee, the bureau would not serve this purpose. A bureau consisting of the chair and vice chair could still potentially play a useful screening role to review referrals to the committee to make sure they raise legitimate issues and that there is an adequate information base to proceed or to screen members for conflict of interest. However, Parties may be reluctant to leave such decisions to two members of the committee and may prefer having these decisions made by the full committee. In that case, the bureau may not be necessary at all.

The frequency and nature of meetings should not be controversial. However, the current text provides for electronic meetings. This is a sensible suggestion that can improve the efficiency of the compliance process. Such meetings under the Kyoto compliance system have, however, raised transparency and public access concerns. It will be important to clarify that in case meetings to deliberate and possibly make decisions take place by electronic means, the public's right of access to the proceedings will be the same as if the meeting had taken place in person. In other words, if the in-person meeting had been open to the public, the electronic exchange should also be made public. Nothing short of this would be consistent with the commitment to transparency Parties made in Article 15(2) of the Paris Agreement.²⁰

Regarding quorum and decision making, a key issue will be what level of agreement is needed for committee decisions. The committee will be well-served to strive to make decisions by consensus as much as possible, and it will be helpful to have a commitment to make all reasonable efforts to reach consensus clearly set out in the rules of procedure. The more difficult question is what level of agreement short of

consensus should be enough for decisions where consensus is not possible. A reasonable perspective would be to conclude that a committee of individual experts should be able to reach a high level of agreement and that voting with a three-fourths majority should be appropriate.²¹ The risk of such an approach is that it could hamstring the committee on difficult issues. Differentiation between decisions involving binding obligations of individual Parties and other decisions might be a way to overcome disagreement on this point. On balance, a simple majority with clear preference for consensus may suffice, as this would minimise the risk of the committee being paralyzed by internal disagreement, while still pushing for consensus-based decision making.

There has been an ongoing debate within the negotiations about the level of detail that can and should be provided in the rules to be finalised at the 24th Conference of the Parties (COP 24) in Katowice in December 2018. It seems unrealistic and unnecessary to develop detailed rules between now and November. The best solution under the circumstances might be to only resolve issues needed to give Parties comfort that the process will be efficient, effective and fair, then mandate the committee, once established, to work out the details. A key question under this scenario will be whether the rules developed by the committee have to be approved by the CMA. Ultimately, this will depend on the level of detail negotiators are able to achieve by November, but it seems reasonable, unless the direction to the committee is sufficiently clear, to require that the final rules of procedure have to be approved by the CMA. One concern with such a requirement, if it also applies to future amendments to the rules, is that the committee may be reluctant to adjust the rules, even if those adjustments would significantly enhance the process. One option might be to require the CMA to approve the initial rules developed by the committee, but to allow for further adjustments to uncontroversial aspects to be made without CMA approval.

4. Scope²²

The scope of the mandate of the committee is undoubtedly one of the most contentious issues in the negotiations. The discussion is linked to the issues raised under the functions of the committee, particularly whether its role in facilitating implementation

20 Meinhard Doelle, 'Experience with the Facilitative and Enforcement Branches of the Kyoto Compliance System' in Brunnée, Doelle and Rajamani (n 2).

21 Oberthür (n 6).

22 UNFCCC (n 16) pt 3(D), 8.

is separate and distinct from its role in promoting compliance. Some Parties are advocating for a focus on individual binding obligations,²³ while others are taking a broader view more in line with the wording of Article 15.²⁴ Whether the committee should focus on specifically identified commitments or have a general mandate to facilitate the implementation and promote the compliance of all provisions of the Paris Agreement is a related issue that remains unresolved in spite of reasonably clear language in Article 15.²⁵ Similar differences exist over the extent to which the committee should look beyond individual instances of involving individual Parties to consider a range of systemic issues and collective commitments and obligations. There is some suggestion in the current text of differentiation on scope depending on whether a matter comes before the committee as a result of a self-referral, a referral by another Party, or a non-Party referral (such as a report generated under Article 13 or on the initiative of the committee itself).

On balance, it would appear that there is value in considering different streams for the work of the committee, however not, as suggested by some Parties, based on distinctions between developed and developing Parties, based on binding and non-binding commitments, or based on the trigger. Rather, the distinction worthy of separate streams would be matters of implementation and compliance involving individual Parties versus collective and systemic issues. Distinctions between different Parties or commitments can be effectively dealt with through different outcomes and measures, and perhaps some differences in timelines and information requirements, without the need for different streams.

Differences between matters involving individual Parties versus collective and systemic issues are much more fundamental and may indeed warrant developing different streams.²⁶ For example, all Parties will want to have the opportunity to have input into the consideration of collective or systemic issues, whereas few Parties will want to engage in a matter involving an individual Party. Including non-state actors in the process should be less controversial for collective or systemic issues than for matters involving individual Parties. Triggering and timing issues will be quite different, especially if the committee's work is to be effectively coordinated with reviews under Article 13 and the global stocktake under Article 14.

As a general principle, the scope of the committee's mandate, to be effective, should be comprehensive so as to allow the committee flexibility in deciding which issues are most important to its mandate of facilitating implementation and promoting compliance. Limits on the scope of the committee's mandate should be driven primarily by the desire to avoid overlap with other processes under the Paris Agreement, particularly the review of Parties' efforts under Article 13, and the global stocktake under Article 14.

5. Initiation of Consideration²⁷

How matters can come before the committee has proven to be among the most difficult and controversial issues before negotiators. The one uncontroversial trigger is the self-trigger, which allows a Party to bring itself before the committee seeking help with a particular issue of implementation or compliance. Of course, experience with other MEAs has shown that this is not enough to bring important matters of compliance and implementation before a compliance committee. Similarly, the Party trigger, whereby one Party can bring another Party before the committee, has shown at times to be a valuable trigger, but one likely to play a limited role.²⁸ Allowing a group of Parties to trigger a review of a Party could offer a modest improvement to the Party trigger. Similarly, allowing the CMA to initiate proceedings may be appropriate, but it is not on its own an adequate trigger for proceedings under Article 15.

Ultimately, the effectiveness of the compliance process will depend on effective non-Party triggers in addition to 'self' and 'Party' triggers. Non-Party triggers can include triggers linked to other processes

23 Such as Paris Agreement (n 5) arts 4(2), 4(8), 4(9), 4(13), 4(15), 6(2), 9(5), 9(7), 13(7) and 13(9).

24 Which would include collective commitments listed below as well as non-binding individual commitments such as those contained in *ibid* arts 3, 4(3), 4(19), 5(1), and 13(10).

25 Oberthür (n 6).

26 See eg, Paris Agreement (n 5) arts 2, 4(1), 4(4), 4(5), 7(7), 7(13), 9(1), 9(3), 9(4), 10(6), 11(3), 11(4), 12, 13(14), and 13(15) for collective commitments.

27 UNFCCC (n 16) pt 3(E), 9.

28 Karen N Scott 'Non-Compliance Procedures and Dispute Resolution Mechanisms' in Duncan French, Mathew Saul and Nigel D White eds *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010) 242 (concluding that the majority of submissions are from the treaty secretariat or compliance body).

under the Paris Agreement, such as the review of Parties' performance under Article 13, triggering by the committee on its own, in response to petitions from non-Party stakeholders, or based on specific reports or information generated under the Paris Agreement. The details of an effective non-Party trigger will ultimately depend on the nature of other processes under the Paris Agreement, such as the review process under Article 13, but the goal has to be to develop a non-Party trigger that ensures the committee has the opportunity to explore all important issues of implementation and compliance. This will likely require an opportunity in appropriate circumstances for the committee to initiate proceedings on its own.

Attempts to differentiate triggers based on the nature of the commitment or the Party involved would run the risk of undermining the effectiveness of the compliance process. However, some accommodation of Parties concerned that the committee needs to be directed further on the importance of differential treatment might be possible without undermining the integrity of the compliance process. For example, the Party trigger, along with appropriate non-Party triggers could apply to binding obligations, whereas the self-trigger in combination with appropriate non-Party triggers could be established for all other issues of compliance or implementation.

Non-Party triggers, either by the committee on its own or based on information from the Article 13 review process or some other specified body or report could potentially be set up in a more nuanced way, so that specific triggers are designed for specific individual or collective issues of compliance or implementation.²⁹ Examples of issues of compliance and implementation to consider for specific non-Party triggers include a Party's failure to meet the commitments set out in its NDC, the collective failure of developed countries to meet their funding commitments to developing countries, the failure to balance adaptation and mitigation funding, the failure of certain key technologies to make a breakthrough in a particular region, such as Africa, or the failure of the Parties collectively to make adequate progress toward the long term goals of the Paris Agreement.

29 Doelle (n 22), noting that the Expert Review Team trigger under the Kyoto compliance system was critical to the operation of the enforcement branch.

30 UNFCCC (n 16) pt 3(F), 10.

31 *ibid* pt 3(G), 12.

6. Process³⁰

The negotiating text currently only has relatively few issues listed under process. This is in part because a number of process issues are considered under function, institutional arrangements and scope. A key issue before negotiators in the section is whether to grant the committee discretion to set its own process, and if so, how and how far to bound the committee's discretion. The issue of differentiation among Parties has been raised as well. This is a place where reasonable accommodation of LDCs and SIDS with respect to timing and information requirements seems appropriate and possible without undermining the effectiveness of the committee.

Proposals to require the consent of a Party to the process applied to it must be rejected, as should be the suggestion by some that the output and measures should be subject to the approval of the Party being investigated. Both suggestions would clearly undermine the integrity and effectiveness of the compliance process. A proposal to include an opportunity of a Party being investigated to comment on a draft report seems more reasonable and could likely be accommodated without undermining the compliance process, as long as comments and changes made in response to the draft report are open to public scrutiny.

It will be important to give careful thought to designing a process that offers due process to parties and one that is transparent and accountable. Among the many issues that require attention is the importance of Parties responding to requests for information and otherwise engaging constructively, responsively and transparently in the process.

7. Measures and Outputs³¹

The current text includes a broad range of measures and outputs that could be at the disposal of the committee. The measures being contemplated are grouped into five categories. For each category, it is helpful to consider whether the measures are appropriate for both individual and systemic streams, whether the measures are appropriate for binding and non-binding commitments, and whether they are appropriate for all Parties including LDCs and SIDS.

The first category of measures focusses of information sharing and lessons learned, both for the Par-

ty before the committee and other Parties. The information shared would include conclusions about challenges that contributed to the issue before the committee and recommendations on how to address them. These possible outcomes would appear appropriate to both individual and systemic streams, to binding and non-binding commitments, and to all Parties including LDCs and SIDS.

The second category of measures deals with the consequences for the Party being investigated. Key among the consequences contemplated in the current text are an action plan to address the issues raised, and the possible loss of certain privileges, such as access to markets under Article 6. There is currently no agreement on whether the content of the action plan is under the complete control of the Party or whether the committee can direct its content. Interestingly, there is no reference in the current text to any compensatory measures, suggesting Parties are not drawing any distinction between 'punitive' and 'compensatory' measures. For example, in case of double counting of credits under Article 6, one might have interpreted a consequence that required a Party to purchase additional credits to make up for the double counting as a 'non-punitive' but 'compensatory' measure.

The measures considered under this category are most appropriate for issues involving binding obligations of individual Parties. Consideration could be given to excluding the application of some of these measures to LDCs and SIDS, however, the non-punitive, non-compensatory nature of the measures suggest that this may not be necessary for most. One exception may be the eligibility to trade under Article 6.

The third category of measures is about the support to be offered to the Party being investigated. The support contemplated includes the sharing of information advice, capacity-building, access to technology and finance. The key outstanding issue is whether the role of the committee is merely to point out where such support is available, or whether a Party that has gone through the compliance committee may have preferential access to some or all of these sources of support. A key concern is that preferential access will encourage self-triggering even where it is not warranted. One way to limit the scope for abuse might be to offer preferential access to assistance only to LDCs and SIDS. Without preferential access, there is little reason to distinguish between systemic and in-

dividual, between binding and non-binding, or between categories of Parties in making decisions about these measures.

The fourth category is about the conclusions reached by the committee about the state of compliance or implementation. Measures contemplated include early warnings, statements of concern, factual findings on issues investigated, and findings of non-compliance. Many of these conclusions are most appropriate for cases involving individual Parties failing to comply with binding obligations. Some could also be applied to collective binding obligations. As with other measures, there are opportunities to treat LDCs and SIDS differently, though the non-punitive nature of the measures may make this unnecessary. Rather, the differentiation can be expressed in a more nuanced manner through the tone, and by offering context for the findings made.

The fifth and final category is about post-decision follow-up by the committee. The text currently offers no details on the process our outcomes of follow up. One specific opportunity to enhance follow-up is to provide a clear mandate to the committee to oversee the implementation of compliance action plans filed in response to findings of non-compliance. This would enable the committee to follow the response to a compliance issue until it is resolved. The addition of an effective follow-up stage to the process has the potential to significantly enhance the effectiveness of the overall compliance effort. It can only be hoped that this element will be retained and elaborated upon.

8. Identification of Systemic Issues³²

The negotiating text uses the term systemic issues to refer to issues of compliance and implementation that go beyond the consideration of a specific issue involving a specific Party. As a result, there is potential for systemic issues to include a range of compliance and implementation issues. Systemic issues therefore could include the following among others:

- Collective commitments and obligations of all or a large number of Parties, such as the commitment to pursue the various elements of the long-term goal, and various commitments by developed

³² *ibid* pt 3(H), 13.

countries to assist developing countries in their efforts to achieve their NDCs.

- Repetitive or other broader issues involving one or more Parties, such as the failure of a certain policy or set of policies to achieve the anticipated emission reductions.
- Patterns in the failure of certain technologies to take hold in certain countries and regions.
- Different levels of ambition in various regions of the world leading to an unequitable distribution of the global effort to reduce greenhouse gas emissions.

It is not clear from the negotiating text whether negotiators have turned their minds to the full range of possibilities with respect to systemic issues. A key issue occupying negotiators appears to be whether to limit systemic issues to issues that are of a general nature, or whether to include issues that one or a few Parties encounter repeatedly. Another key question is whether the exploration of systemic issues can only be initiated by the CMA or whether the committee can initiate such an exploration on its own, on request by a Party or group of parties, or based on specified information such as information provided by the Secretariat or contained in specified reports. Finally, the question of the process and output from an exploration of systemic issues is unresolved. Bounded discretion on scope and process would seem appropriate, and key outcomes would be conclusions and recommendations regarding the issues explored, and a clear link to the global stocktake. In other words, it should be made clear that the exploration of systemic issues by the compliance committee will inform the global stocktake.

It is unclear how broad the mandate of the committee will be with respect to these systemic issues. The choices may in part be influenced by whether some of these issues are clearly and adequately addressed in other forums, such as the global stocktake under Article 14. At the same time, the decision on the scope of systemic issues will have significant implications for the resources and support the committee will need to be effective. Some of these issues, such as progress toward the long-term goals, will require close coordination with the Intergovernmental

Panel on Climate Change. Others will require expertise in policy design and review or in the dissemination, distribution and deployment of technologies.

9. Sources of Information³³

Many of the sources of information identified in the draft text (such as registries under the Paris Agreement, information from the transparency framework, and documents filed by Parties) would appear reasonable and uncontroversial. It is important to note, however, that any attempt to restrict the information available to the committee will risk undermining the work of the committee. The general operating principle should be that the committee will have access to any information generated under the Paris Agreement that is relevant to the issues before it, including information generated under Articles 13 and 14, and under any of the substantive provisions of the Paris Agreement including ones dealing with mitigation, adaptation, technology, finance and emissions trading. Regarding confidential information, this risks undermining transparency of the work of the committee, so the use of confidential information should be minimised, and the burden should be clearly on the Party seeking to submit confidential information to demonstrate both that it needs to be treated confidentially and that it is relevant to the issue before the committee.

10. Relationship with CMA³⁴

A key issue in the relationship between the committee and the CMA appears to be whether and how the committee will report to the CMA on individual cases, including on incidents or non-compliance, and on systemic issues. Another outstanding issue in the negotiations is what the CMA should do in response to any report from the committee, in particular whether it can or should take note of reports on individual cases of non-compliance.

A key element of the relationship between the committee and the CMA will be the balance between accountability of the committee to ensure it operates within its given mandate, and the independence of the committee, particularly from political interference in its findings. Beyond this, the relationship should be shaped to maximise the contribution of

³³ *ibid* pt 3(I), 14.

³⁴ *ibid* pt 3(I), 14.

the work of the compliance committee to the review cycles, the global stocktake, and the progression of Parties' NDCs in the common pursuit of the long-term goals of the Paris Agreement.

11. Review of the Modalities and Procedures³⁵

The central issue under this heading is whether the review of modalities and procedures is carried out by the committee or the CMA, how the review is triggered, and how often it is required. It is unlikely that the CMA will have the expertise to carry out an effective review and recommend adjustments. A regular review to be carried out by the committee should therefore be preferred. Any changes to the modalities and procedures that go beyond or counter to the existing mandate of the committee should require the approval of the CMA.

12. Secretariat³⁶

The scope of the committee's mandate will be quite broad, much broader than the compliance committee under the Kyoto Protocol. The committee will have to deal with over 190 individual parties as well as collective and systemic issues potentially covering a broad range of subject matters. Having adequate and effective secretariat support will be critical for its work.

III. Overall Assessment and Reflections

There is much to be resolved in developing an effective, efficient and fair compliance process under Article 15. Key among them are effective triggers for the compliance process, an adequately broad mandate to be able to effectively facilitate implementation and promote compliance with all important commitment in the Paris Agreement whether binding or not and whether made by a developed or a developing country Party. The inclusion of 'implementation and compliance' and the language of 'the provisions' in Article 15(1) clearly enables the process to deal with all important commitments. Any differentiation between binding and non-binding and differentiation among parties should focus on applying ap-

propriate measures in the circumstances. This can be assured through an appropriate combination of general direction to the committee and appropriate discretion. A fair and effective process will depend on the full implementation of the commitment to transparency and on procedural fairness to any Party being investigated.

It will be important to keep the focus of the committee on technical issues and to avoid having it dragged into political issues and equity judgement calls. This seems particularly important and tricky when it comes to the assessment of systemic issues. The committee will be well advised to stick to assessing whether the collective goals are on track and to technical assessments of the causes, without being seen to point fingers at any particular Party or group of Parties unless they have clearly failed to meet their individual commitments. This means the focus should be on commitments that allow for a technical assessment of compliance or implementation, rather than political consideration or judgements. The committee has the potential to make an important contribution to progress on collective commitments, particularly those that involve all Parties or a clearly identified group of Parties, as this can be assessed without getting to any assessment of who within the group of Parties needs to do more. Having said this, to ensure the committee has the full opportunity to pursue important systemic issues as they arise, the triggers for systemic issues should include the CMA, the Article 13 outcomes, and the committee based on its own assessment of reports generated under the Paris Agreement.

It will be important to properly integrate the work of the committee with Article 13 and 14. Not much can be said about the details of how to ensure this is done until there is more clarity on the review process under Article 13 and the global stocktake under Article 14. However, it is clear that the compliance committee can benefit greatly from the work proposed under Article 13, and its conclusions and recommendations have the potential to be important for the global stocktake.

For binding commitments, it will be important for the committee to make a finding of compliance or non-compliance, and to apply other appropriate con-

³⁵ *ibid* pt 3(K), 15.

³⁶ *ibid* pt 3(L), 15.

sequences including a compliance action plan and other non-punitive measures. It would be helpful for negotiators to recognise in this regard that compensatory measures are different from punitive measures, and that for markets under Article 6 to function, it may be important to include compensatory measures in the toolbox of the compliance committee. Special access to support should be limited to LD-Cs and SIDS.

IV. Conclusion

In conclusion, it is too early to say whether the compliance system is finding its place among the many institutions and processes under the Paris regime.

There are still many issues unresolved within the compliance negotiations, and many more issues to be worked out on other key aspects of the Paris Rulebook. Unless there is significant progress in other areas well before COP 24, negotiators would be well advised to develop the modalities and procedures for compliance at a high level, and to leave much of the detail for the compliance committee to work out after there is more clarity on how other aspects of the Paris Agreement, including Articles 6, 13 and 14, will be implemented. As a result, COP 24 will be an important milestone in the development of the Paris compliance system, but it is unlikely to mark the end, as much of the detail will inevitably have to be finalised later, either by the CMA or by the compliance committee once it is established.

Trying to Eat an Elephant (Again): Opportunities and Challenges in International Cooperative Approaches of the Paris Agreement

Rishikesh Ram Bhandary*

This article discusses the key design features of the international cooperative approaches in the Paris Agreement. The primary tension that animates the design elements of Article 6 is the need to build on the diversity of national approaches to climate change policy while ensuring environmental integrity, facilitation of implementation, and contribution to overall ambition. If designed carefully, Article 6 provisions can drive cost-effective mitigation, expand the scope of regulated emissions, and breathe new life into reducing emissions from deforestation, forest degradation, and the conservation and enhancement of carbon stock (REDD+). As countries already have some experience with the Kyoto Protocol's market mechanisms, various voluntary carbon offset programs, and internationally supported mitigation actions, countries have an opportunity to incorporate the learning into the implementation modalities of the Paris Agreement so that the international cooperative approaches can ensure environmental integrity, increase global ambition, and serve as a driver for implementation.

I. Introduction

The Paris Agreement has a set of tools to encourage countries to meet their commitments and increase ambition. Provisions in Article 6 refer to international cooperative approaches and include both market and non-market approaches. These instruments bear strong resemblances to the carbon offset and trading provisions of the Kyoto Protocol. This article focuses on two elements of the Article 6 package: Article 6.2 – internationally transferred mitigation outcomes – and Article 6.4 – the mechanism to promote mitigation of greenhouse gases and further sustainable development referred to in Article 6.4.

Article 6.2 displays the overriding logic of the Paris Agreement – a bottom up process whereby those countries – or entities – wishing to participate in internationally transferred mitigation outcomes can do so. This bottom-up construction marks a major departure from what the Kyoto Protocol anticipated in its emissions trading system whereby trading would happen only amongst those that have binding, economy-wide emissions reductions commitments (QELROs). Furthermore, another key distinction between Paris Agreement Article 6.2 and Kyoto Protocol Arti-

cle 17, on international emissions trading, is the degree of centralized governance for each mechanism. Kyoto Protocol rules were highly institutionalized in their level of specificity, obligation, and delegation while Article 6.2 has a strong bottom-up flavor with parties continuing to debate the extent of centralized guidance that is necessary.

Under the Kyoto Protocol, the Clean Development Mechanism offered an opportunity for industrialized countries to obtain compliance-grade emissions credits (Certified Emissions Reductions) at a possibly lower cost than what the same mitigation amount would have cost in industrialized countries. For developing countries, the inflow of investment, technology and contributions to sustainable development was a welcome win. Given the universal nature of the Paris Agreement where a bifurcation in the form of the Kyoto Protocol does not exist, the scope of Article 6.4 is much broader. Any country can be the host of abate-

DOI: 10.21552/cclr/2018/3/10

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ment activities under Article 6 and any country or entity can use these outcomes towards its commitments.

The narrative around Article 6 also marks a shift from the compliance and cost-effectiveness frames of the Kyoto Protocol's flexibility mechanisms towards higher ambition. For example, Article 6.1 notes that parties may wish to use cooperative approaches 'to allow for higher ambition' and Article 6.4 (d) stipulates that the mechanism is to 'deliver an overall mitigation in global emissions'.¹ Unlike the Clean Development Mechanism which was expected to help Annex 1 parties in complying with their commitments, Article 6 offers an avenue to increase the aggregate global effort in reducing emissions. Therefore, the purpose of Article 6.4 is not simply to offset emissions but to obtain an actual deviation in global emissions. It is important to note that cost-effectiveness and ambition are naturally intricately linked.² The availability of low cost mitigation options may create grounds for stronger climate action. The key point is that Article 6 stresses higher ambition, which low-cost mitigation options may help to facilitate.

On terminology, Article 6.2 of the Paris Agreement refers to the use of internationally transferred mitigation outcomes (ITMOs) towards nationally determined contributions. These mitigation outcomes are not exclusively emissions reductions and removals. As there is no agreed definition of ITMOs, parties have found the room to debate what the mitigation outcomes entail. While many parties leave open how the mitigation outcomes may be generated, a number of them call for the expression of those units in CO₂

equivalents. For example, see submissions by Japan³ and Norway.⁴ The linkage of emissions trading regimes would simply be one example of the range of actions that would fall under Article 6.2. This article refers to the mechanism established by the Paris Agreement in Article 6.4 as the Article 6 Mechanism (A6M).⁵ The Conference of the Meeting of the Parties to the Paris Agreement, CMA, refers to the supreme body of the Paris Agreement. 'Parties' refers to parties to the Paris Agreement. The Paris Rulebook negotiations refers to the Paris Agreement Work Program (PAWP) designed to operationalize the Paris Agreement, which is expected to be completed by 2018.

This article highlights the key issues that parties have discussed in the negotiations on Article 6 in the context of the PAWP and complements them with insights from the academic literature which is largely based on the experience with the Kyoto Protocol's flexibility mechanisms. Elaboration of Article 6 is one element of a larger work program parties have undertaken to advance the implementation of the Paris Agreement. At COP21, parties delegated the responsibility to elaborate guidance for Article 6.2 and rules, modalities and procedures for Article 6.4 to the Subsidiary Body for Scientific and Technological Advice (SBSTA) for consideration and adoption by the CMA at its first session (paragraphs 37-38 of 1/CP.21).⁶ Parties adopted the PAWP at CMA1 in Marrakech with the intention of concluding its work by the third session of the CMA (1-3) in 2018.⁷

The next section (Section 2) discusses key issues for internationally transferred mitigation outcomes, followed by a section on the A6M (Section 3). Section 4 discusses cross-cutting issues including inter-linkages between Article 6 and other parts of the Paris Agreement, including the debate on the eligibility of reducing emissions from deforestation and forest degradation including carbon stock enhancement, sustainable management of forests, and conservation (REDD+) under Article 6 provisions and linkages with the International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

II. Article 6.2: Internationally Transferred Mitigation Outcomes

The scope of Article 6.2 includes the emerging patchwork of emissions trading regimes that have been

1 UNFCCC, 'The Paris Agreement' <http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf> accessed 1 August 2018.

2 For example, Kyoto Protocol Art 12 (2).

3 Japan, 'Japan's Submission on SBSTA Item 10(a): Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement' <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/579_344_131516859040704385-Japan_Submission_6_2_20171002.pdf> accessed 1 August 2018.

4 Norway, 'Submission to SBSTA from Norway on Article 6 of the Paris Agreement' <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/854_345_131538265003351574-Article6_Norway.docx.pdf> accessed 1 August 2018.

5 Given the lack of agreement on the name of the mechanism referred to in Art 6.4 of the Paris Agreement at the time of writing, I use the neutral term A6M.

6 UNFCCC, 'Decision 1/CP.21, Adoption of the Paris Agreement' <<https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>> accessed 1 August 2018.

7 UNFCCC, 'Decision 1/CMA.1 Matters Relating to the Implementation of the Paris Agreement' <<https://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>> accessed 1 August 2018.

launched in various jurisdictions. Article 6.2 provides a framework to recognize such cooperation and fosters a direct link with the Paris Agreement infrastructure, particularly on accounting, reporting, and objectives such as sustainable development and environmental integrity. Parties diverge on the extent to which the CMA needs to provide guidance under Article 6.2. For example, Article 6.2 could provide guidance on how to report ITMOs and allow for a periodic assessment of their use through various avenues such as technical expert reviews and the global stocktake. Article 6.2 uses the generic term of mitigation outcomes to include the vast range of potential forms of cooperation between parties and their resulting outcomes. Parties diverge on who defines what an ITMO is. Options include definition by CMA, an Article 6.2 body or by the participating parties themselves. In principle, as linkages can work across other emissions abatement policies such as carbon tax regimes or non-carbon policies, for example renewable energy capacity targets, the range of units is large.⁸ Similarly, they disagree about the scope of the guidance. Some parties would prefer the guidance cover the entire lifecycle of ITMOs – creation, transfer, acquisition, and use – while others prefer limiting it only to the use of ITMOs towards NDCs. Furthermore, parties have debated the basis for corresponding adjustments. The bases identified in the text include budget-based, emissions-based, buffer-registry-based, and emissions reductions-based.⁹

Article 6.2 represents both a concession in the Paris Agreement that parties cooperate to mitigate greenhouse gas emissions outside the UNFCCC process and an acceptance of the regime's role in steering such approaches. The debate on the extent of CMA guidance that is needed for Article 6.2 is a disagreement on how strong the glue should be to knit these cooperative approaches together. Discussions in the negotiations have focused on two particular roles of Article 6.2: accounting guidance, and overall governance. Accounting is bottom-up for Article 6.2 as parties are asked to engage in robust accounting that is 'consistent with' guidance that is supplied by the CMA.

Guidance on robust accounting, in the context of NDCs, will also be made operational under Article 13 (transparency framework). In this regard, parties have debated the appropriate vehicle for reporting ITMOs and views remain diverged on whether par-

ties should use the modalities, procedures and guidelines under Article 13 or ones specific to Article 6.2. How parties are using Article 6.2 provisions to 'promote sustainable development and ensure environmental integrity and transparency, including in governance' however requires guidance to make these terms operational. Parties disagree on allowing parties to judge for themselves whether the ITMOs satisfy environmental integrity and sustainable development criteria, that they define on their own, and on the nature of the review process that would examine conformity with Article 6.2 guidance. Total silence from the CMA on these issues however may lead to situations where the negative impacts of ITMOs are so obvious that they necessitate a response. For example, ITMOs may create perverse incentives to increase the production of certain gases, as experience with HFCs under the CDM shows. Without adequately specified guidance on how the CMA will respond to such cases, the CMA's actions may seem arbitrary. As a result, some have argued for detailed guidance to foster predictability and confidence in Article 6.2-based actions.

Different jurisdictions moving at different speeds will entail price arbitrage opportunities. The danger with this, of course, is that while some jurisdictions tighten their caps stringently, others may lack the incentives and the political will to do so. Weaker caps will mean more opportunities to sell the cheaper credits to jurisdictions with tighter caps. Such situations invite a regulatory role for the CMA, however, those who advocate for a strong role for the CMA rarely go to the logical extreme and argue for an international regulatory body or an international carbon bank that could help cope with regulatory and liquidity problems that they fear.

III. Article 6.4

The mechanism established in Article 6.4 (A6M) is the Paris Agreement's response to the Clean Devel-

8 Gilbert E Metcalf and David Weisbach, 'Linking Policies When Tastes Differ: Global Climate Policy in a Heterogeneous World' (2012) 6 *Review of Environmental Economics and Policy* 110.

9 UNFCCC, 'Paris Agreement Work Program Compilation Text' <https://unfccc.int/sites/default/files/resource/Latest%20PAWP%20documents_9Sep.pdf> accessed 1 August 2018.

opment Mechanism and Joint Implementation of the Kyoto Protocol. Similar to the CDM and JI, the A6M's purpose is to incentivize mitigation of greenhouse gas emissions in a manner that supports sustainable development. Acquiring parties can use the emissions reductions generated through the implementation A6M activities towards their nationally determined contributions. Article 6.4 demands a stronger role from the CMA as the A6M is established under its auspices and bears the mandate to appoint a supervisory body. Unlike authorization by participating parties, Article 6.4 requires the engagement of this supervisory body in A6M related actions.

The scope of the mechanism is to promote the mitigation of greenhouse gas emissions as well as sustainable development.¹⁰ Such a firm link between greenhouse gas emissions reductions and sustainable development was also prevalent in the CDM and JI.¹¹ Yet, the record of CDM in promoting sustainable development and technology transfer is modest.¹² Furthermore, given that countries decided for themselves whether CDM activities contributed to sustainable development or not, systematic analysis of the impact of CDM projects and programs on sustainable development difficult. In the context of Article 6.4, a number of countries have continued to argue that sustainable development is a national pre-

rogative and any multilateral guidance on this should be minimal. Partly in reaction to such proposals of complete national determination, others have pointed to the multilaterally negotiated Sustainable Development Goals as offering a framework to examine the impacts of A6M activities. Arguably, a framing of A6M around the SDGs would also make the mechanism appealing to a broader set of actors. For example, a biodiversity frame or a poverty alleviation frame may be far more attractive to some than a carbon-centric one. While such calls for coherence may be most feasible at operational levels, such as project design, the SDGs and the Paris Agreement are distinct processes that pose different reporting obligations on parties. Similarly, the potential impact of A6M projects and programs on social and environmental dimensions has provided an entry point for those seeking to operationalize human rights in the context of the Paris Agreement.

Experience with the Clean Development Mechanism has underscored the importance of capacity building to enable the participation of countries. Similarly, another learning is the need to take into account diverse methodologies that take into account different contexts.¹³ The distribution of CDM projects has been skewed towards major emitters like China and India. While such a distribution is not surprising given the sheer availability opportunities for emissions reductions and the manner in which those governments facilitated CDM projects, geographic balance adds legitimacy and fosters long-term robustness of Article 6.4.

One of the most controversial issues in the negotiations of Article 6.4 has been the applicability of corresponding adjustments. While the text of the decision adopting the Paris Agreement in paragraph 37 mentions corresponding adjustment in the context of avoiding double counting transfers under Article 6.2, some parties have taken the lack of explicit mention of corresponding adjustments in Article 6.4 to imply that corresponding adjustments are not relevant for Article 6.4. The debate between parties mostly relates to *when* corresponding adjustments would take place rather than *if*. Brazil disputes the applicability of corresponding adjustments at the initial transfer of units from the A6M issuance registry to the national account and calls for corresponding adjustments to apply only when the acquiring party transfers the unit to a third party.¹⁴ In the latter case, Article 6.2 guidance would apply. Brazil's legal argu-

10 Art 6.4 notes that the mechanism will 'contribute to the mitigation of greenhouse gas emissions and support sustainable development' (emphasis author's).

11 Jørgen Fenhann and Frederik Staun, 'An Analysis of Key Issues in the Clean Development Mechanism Based on the UNEP Risoe Clean Development Mechanism Pipeline' (2010) 1 Carbon Management 65; Karen Holm Olsen and Jørgen Fenhann, 'Sustainable Development Benefits of Clean Development Mechanism Projects: A New Methodology for Sustainability Assessment Based on Text Analysis of the Project Design Documents Submitted for Validation' (2008) 36 Energy Policy 2773.

12 Stephen Seres, Erik Haites and Kevin Murphy, 'Analysis of Technology Transfer in CDM Projects: An Update' (2009) 37 Energy Policy 4919; Randall Spalding-Fecher and others, 'Assessing the Impact of the Clean Development Mechanism' (CDM Policy Dialogue 2012) A Report Commissioned by the High-Level Panel on the CDM Policy Dialogue; A Dechezleprêtre, M Glachant and Y Meniere, 'Technology Transfer by CDM Projects: A Comparison of Brazil, China, India and Mexico' (2009) 37 Energy Policy 703.

13 Govinda R Timilsina and others, 'Clean Development Mechanism Potential and Challenges in Sub-Saharan Africa' (2010) 15 Mitigation and Adaptation Strategies for Global Change 93.

14 Brazil, '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' <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/73_345_131520606207054109-BRAZIL%20-%20Article%206.4%20FINAL.pdf> accessed 1 August 2018.

ment is that Article 6.4 (c) allows host parties to benefit from mitigation activities as well and that a corresponding adjustment would nullify the benefits if not outright penalize their participation.¹⁵ Under this model, as corresponding adjustments would not apply when non-party stakeholders acquire units issued by the governing body of the A6M, it substantially incentivizes their participation in the A6M. While not all parties agree with this interpretation, they have extensively discussed this proposal in the negotiations.

Also akin to the Kyoto Protocol, the Paris Agreement makes a provision for a share of proceeds from the A6M to be used to support adaptation in countries that are ‘particularly vulnerable’ to the impacts of climate change. While the Kyoto Protocol’s proceeds were designated to the Adaptation Fund, the Paris Agreement does not specify the destination of the proceeds. Some parties have also argued that a share of proceeds should be levied to Article 6.2 transactions as well.¹⁶ The question of who will manage the share of proceeds arrives at a time when countries have been debating the modalities for the Green Climate Fund’s replenishment. As parties have decided that the Adaptation Fund may serve the Paris Agreement as well, it is also a contender. While there are concerns about the volatility of transactions, a revenue stream generated by the share of proceeds is attractive because it does not come with the conventional programming restrictions that grant or loan contributions to climate funds come with.

How parties make operational the concept of overall mitigation is also another salient issue. The supervisory body of the A6M has a responsibility to ‘deliver an overall mitigation in global emissions’ (Paragraph 4(d) Article 6). This formulation is a negotiated compromise between those parties that wanted the mechanism to ‘enhance’ mitigation and others who simply wanted the A6M to help meet existing NDC goals. Proposals to foster overall mitigation range from discounting or canceling a fraction of emissions reductions generated to the application of conservative baselines.

As most developing countries do not have economy wide targets, additionality has to be made operational in the context of sectors covered and uncovered by their NDCs. Paragraph 38(d) of 1/CP.21 notes ‘reductions in emissions that are additional to any that would otherwise occur.’¹⁷ Such a characteriza-

tion of additionality is straightforward for uncapped sectors and conditional targets. For countries that do not have economy wide emissions targets, an important consideration is how A6M will affect the incentives to eventually broaden the scope of their NDCs (as Article 4.4 encourages parties to do so) instead of creating perverse incentives that would inhibit expansion.

As parties bring to life the A6M, they also have the task of how to handle CDM and JI in the Paris era. They need to address the pipeline that already exists under the CDM and JI and activities that will continue to generate emissions reductions beyond 2020. The positions of parties range from a wholesale transfer of CDM/JI pipeline and projects under execution over to the Article 6 while others want to screen the projects to ensure that they fit the Article 6 criteria for eligibility. The overarching debate has been around ensuring environmental integrity of the Article 6 mechanism while at the same time being able to communicate positive signals to the investors about the desire to engage with them.

IV. Strategic issues

The elements of Article 6 have natural interlinkages with other elements of the Paris Agreement. The risk that negotiators face is an evolution of the Article 6 elements in a direction that is decoupled from the rest of the Paris Agreement infrastructure. For example, without adequate and conscious efforts to link Article 6.2 with other parts of the Paris Agreement, ranging from the global stocktake to NDC guidance and accounting issues, ITMOs may have little bearing on the overall performance of the Paris regime. At the same time, the presence of these interlinkages also means that Article 6 can serve as a motor that helps to propel the Paris Agreement forward. Figure

15 Apart from the legal argument, Brazil has also made technical and environmental arguments. Please see Brazil’s submissions for details <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/73_345_131520606207054109-BRAZIL%20-%20Article%206.4%20FINAL.pdf> accessed 1 August 2018.

16 AOSIS, ‘Submission to the Articles 6.2 and 6.4 of the Paris Agreement by the Republic of Maldives on Behalf of the Alliance of Small Island States’ <http://aosis.org/wp-content/uploads/2017/05/AOSIS_Submission_Art-6-2-and-6-4-of-PA.27.04.2017.FINAL_.pdf> accessed 1 August 2018.

17 UNFCCC, ‘Decision 1/CP.21, Adoption of the Paris Agreement’ (n 6).

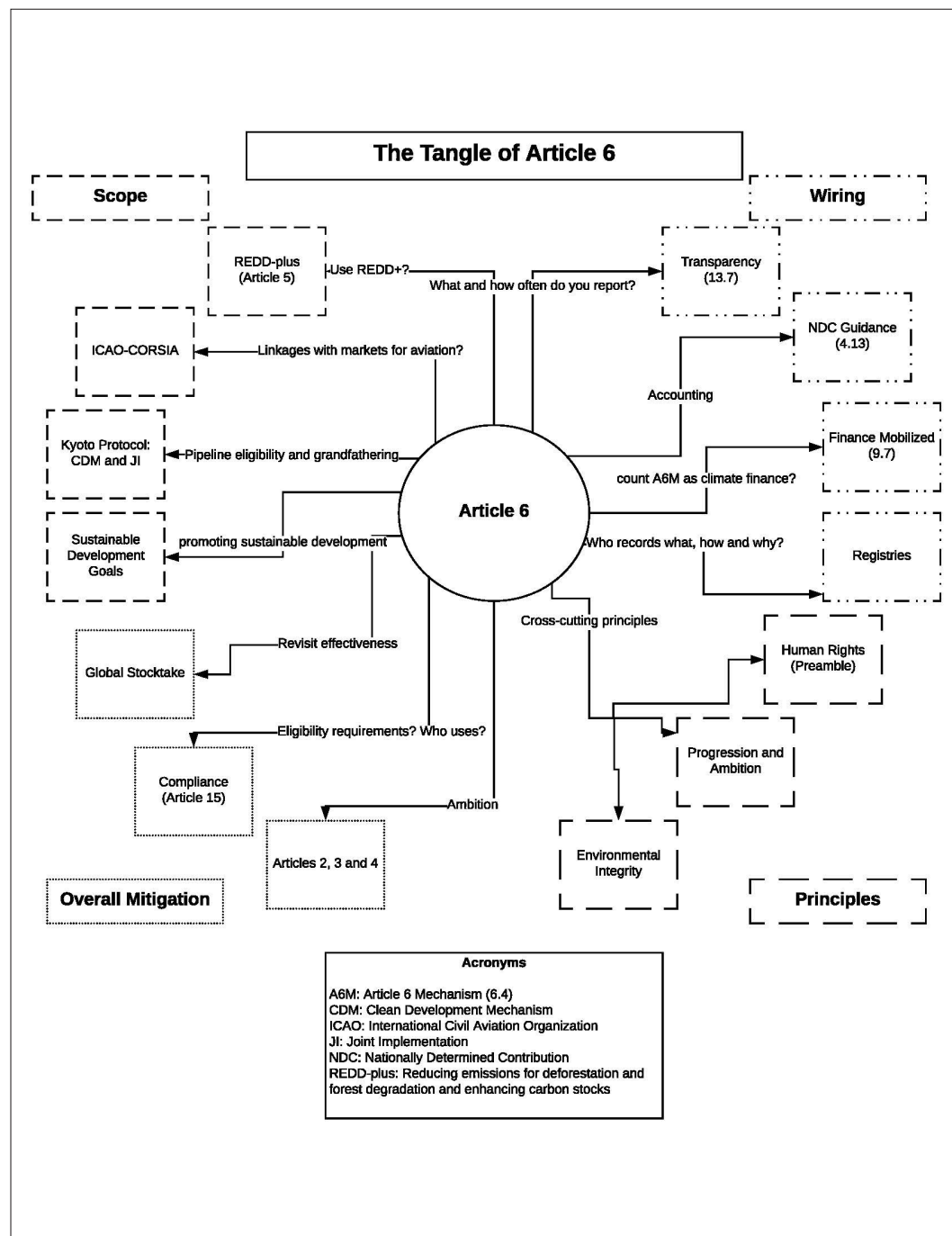


Figure 1: Article 6 and its interlinkages.

1 maps out some these linkages but it is not meant to be comprehensive.

The feedback between Article 6 and the rest of the Paris Agreement can work in at least three salient

ways. First, Article 6 provisions can provide incentives for parties to improve the quality of information they submit as higher quality information will have lower uncertainty bands, thereby creating the

opportunity for more payments for the same emissions reductions. Discussions on the transparency framework have remained stuck on how to operationalize differentiation for different sets of countries, however incentives for better quality information would offer a resolution. Ultimately, the climate regime will need the most accurate data available from all countries. Second, Article 6.4 can be an important hook for non-state action. UNFCCC's engagement with non-state actors can expand from registering commitments to undertaking commitments that can be verified under UNFCCC parameters. Third, Article 6 provides an opportunity for the UNFCCC to bring coherence to the bilateral and plurilateral forms of cooperation that exist and, as discussed below, sectors such as aviation.

V. REDD - One Major Opportunity

A key point of contention amongst parties has been on the eligibility of reduced emissions from deforestation and forest degradation and carbon stock enhancement (REDD+) under Article 6 provisions. Brazil, the most ardent opponent of the eligibility of REDD+ activities under Article 6, has long maintained a position that opposes viewing REDD+ through the prism of project-level interventions and carbon markets. Brazil has argued that REDD+ financing has already been resolved under the Warsaw Framework, where REDD+ is implemented at the national level and subnational interventions are only 'interim' measures.¹⁸ Brazil believes discussing REDD+ in the context of Article 6 would invite a wholesale re-litigation of the debate about the most appropriate scale of intervention for REDD+. Proponents of REDD+ activities under Article 6, however, do not view Article 6 as precluding any sector. Indeed, the language contained in Articles 6.2 and 6.4 is inclusive of all relevant sectors. If REDD+ credits are to be counted as ITMOs, they would also be subject to the same criteria.¹⁹ The challenge for negotiators, therefore, lies in investigating the existing Warsaw Framework on REDD+ and ensuring that it adequately addresses the four elements (promote sustainable development, ensure environmental integrity and transparency, and robust accounting) that Article 6.2 singles out.

Furthermore, the UNFCCC also has in its hands an opportunity to improve coherence with ICAO's

efforts to reduce aviation-related emissions. ICAO has resolved to pursue to a carbon neutral growth path by holding emissions to 2020 levels, and it expects to use a collection of market-based and non-market based measures to achieve this goal. ICAO established the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to implement this goal. ICAO Assembly Resolution A39-3 (paragraph 20) has asked the ICAO Council to take into account developments under Paris Agreement Article 6.²⁰ Similarly, paragraph 21 of A39-3 notes that emissions units generated via UNFCCC mechanisms, including the Paris Agreement, are permissible under CORSIA provided that they conform with the technical criteria set.²¹ From this language it is clear that a broad range of emissions reductions achieved under the parameters of Article 6 would be eligible for use. If parties decide to explicitly bar REDD+ under Article 6, it is still likely that emissions reductions achieved via REDD programs and funds such as the Forest Carbon Partnership Facility, Forest Investment Program, and UN REDD would be eligible for ICAO-related commitments. To ensure completeness of emissions reporting, the transparency framework of the UNFCCC can require parties to report on such transactions irrespective of the exact means by which they address REDD-Article 6 linkages.

With ICAO's invitation, negotiators have two related opportunities. They can take the step forward to improve coherence with ICAO, a body that is regulating emissions using, in part, UNFCCC regulated sectors. Further, even the most ardent opponents of allowing REDD+ activities under Article 6 may find that it is far more practical to retain the governance of the financial aspects of REDD+ under UNFCCC auspices rather than the numerous non-UNFCCC ini-

18 Brazil, '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' <http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/525_270_131198656711178821-BRAZIL%20-%20Article%206.4%20final.pdf> accessed 5 August 2018.

19 Art 6.2 notes the need for ITMOs to 'promote sustainable development and ensure environmental integrity and transparency, including in governance' and be undertaken with 'robust accounting ... consistent with guidance' adopted by the CMA.

20 ICAO, 'Resolution A39-3' <https://www.icao.int/environmental-protection/Documents/Resolution_A39_3.pdf> accessed 5 August 2018.

21 *ibid.*

tiatives that are implementing REDD+ programs and projects on their own.

V. Conclusion

Negotiators have an opportunity to learn from the experience of the flexibility mechanisms under the Kyoto Protocol and numerous initiatives outside of the UNFCCC process ranging from national emissions trading programs, their links with other jurisdictions, performance based payments for REDD+, joint crediting mechanisms and more. Based on the discussions above, there are three central concerns that animate the negotiations: the level of international oversight that parties want especially given the bottom-up features of the Paris Agreement; ensuring environmental integrity while accommodating the diversity of national efforts; and ensuring that Arti-

cle 6 drives forward ambition in a manner that facilitates both host and acquiring parties to meet their NDC obligations.

In the Paris Rulebook negotiations, discussions on Article 6 have been contentious. A number of parties have pushed for balanced progress across all three elements of Article 6. This political push brushes against the different levels of conceptual maturity of the three elements and the extent of engagement needed by the CMA. Similarly, many developing countries also view Article 6 as a major bargaining chip that they can use in the negotiations with industrialized countries and groups such as the EU. Progress on Article 6, therefore, will be linked to how other parts of the Paris Rulebook talks move forward. Negotiators will have to choose the appropriate level of specificity in the decisions they adopt, knowing well that they will have opportunities to fine tune rules as they move forward.

Climate Finance: Too Much on Detail, Too Little on the Big Picture?

Ralph Bodle and Vicky Noens*

At the climate conference in Katowice, Poland, in December 2018 (COP 24), Parties to the Paris Agreement intend to adopt a comprehensive set of decisions that provide details on its implementation, based on the so-called Paris Agreement Work Programme (PAWP). We outline some of the many finance issues to be addressed COP 24 and look more in-depth at two particular issues: the overarching goal regarding finance flows in Article 2(1)(c); and transparency of support. Article 2(1)(c) is a major innovation because it establishes addressing financial flows as one of the three goals of the Paris Agreement. At the same time it is an essential means to achieve the mitigation and adaptation goals. Article 2(1)(c) has a transformational objective with huge potential implications in the real world. Despite its overarching importance, the current negotiations do not address Article 2(1)(c) in the holistic manner it requires. Transparency of support relates to the delivery of information and data on financial and other support within the UNFCCC. The Paris Agreement requires Parties to 'build on and enhance' the existing transparency arrangements. The current negotiations are focused mainly on the financial support provided by developed countries, with less time dedicated towards support received and other parts of the bigger picture. If it was more balanced and addressed all aspects of transparency of support, the real-world impact of the transparency framework could be considerable.

I. Introduction

Climate finance has always been an important issue in the climate regime as an enabler for climate action and way to increase the level of ambition for mitigation and adaptation.¹

Similar to other topics, climate finance has evolved from when the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 to the Paris Agreement in 2015. The general obligations in the UNFCCC on developed countries

to provide financial and other support to developing countries were specified, for instance regarding scale, sources, balance, prioritization, reporting and institutions.² Finance also played an important part in negotiating the Paris Agreement in terms of building on the UNFCCC and capturing this evolution, but also in terms of fitting finance into the Paris architecture and providing new impulses for the future regime. The so-called Paris Agreement Work Programme (PAWP) outlined in Decision 1/CP.21 therefore contains numerous mandates regarding finance.

DOI: 10.21552/cclr/2018/3/11

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1 Without prejudice to the discussion on definitions and terminology, we use the term 'climate finance' in a broad sense, including public, private and other finance. The UNFCCC website states that '[c]limate finance refers to local, national or transnational financing — drawn from public, private and alternative sources of

financing — that seeks to support mitigation and adaptation actions that will address climate change', see <<https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance>> accessed 20 September 2018.

2 For details on the negotiating history see Jorge Castelumendi and Inka Gnitke, 'Climate Finance (Article 9)' in Daniel Klein and others (eds), *The Paris Agreement on Climate Change: Analysis and Commentary* (Oxford University Press, 2017) 239, 240-242. See also the overviews on: <<https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance>>; <<https://unfccc.int/topics/climate-finance/the-big-picture/climate-finance-in-the-negotiations>>; and <<https://unfccc.int/climatefinance/home>> accessed 20 September 2018.

In this article we first outline some of the main finance issues to be addressed at the 24th Conference of the Parties (COP 24) in Katowice in December 2018, before looking more in-depth at two particular issues: The overarching goal regarding finance flows in Article 2(1)(c)³ and transparency of support. The former is new and under-discussed, while the latter is long-established and over-discussed. The article concludes with a tentative perspective on potential outcomes at COP 24.

II. Finance Issues for COP 24

The main finance issues at stake at COP 24 do not all stem directly from the Paris Agreement,⁴ but also from the accompanying 'Paris Decision' (1/CP.21), which also addresses issues that were not included in the legal treaty text, and which contains a work programme for elaborating details and modalities.⁵

While the Paris Agreement does not contain quantified obligations regarding financial support, the Paris Decision extends the existing developed coun-

tries' collective goal of mobilising USD 100 billion per year until 2025 and decides that the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA) shall set a new quantified goal 'prior to 2025'.⁶ The decision does not specify any process, who the new goal should apply to, or other particulars. Following demands by developing countries, parties are currently discussing under the agenda item 8 on 'other matters' of the Ad Hoc Working Group on the Paris Agreement (APA) mainly when consideration of setting the new goal should begin, under which body, whether there should be some form of formal process that leads to the CMA setting the goal, and whether these questions should be addressed at COP 24.⁷

Another hot topic is information on climate finance. Information is provided *ex post* through the transparency framework, which we discuss in more detail in Section IV. In addition, under Article 9(5) developed country Parties have to biennially provide *ex ante* information. This new obligation⁸ is related to the predictability of financial support and includes, as available, projected levels of public financial resources to be provided to developing country parties. Working on guidance towards a decision at COP 24 has been highly contentious, because the mandate⁹ stipulates 'a process to identify the information to be provided' and Parties have different views on whether this only includes *which* information is to be provided or also modalities regarding *how* it is to be provided.

Institutional issues at COP 24 related to finance mainly concern making existing institutions and mechanisms¹⁰ function under the Paris Agreement. This is not just legal nitty-gritty, but has political and wider implications. In particular, COP 24 is to decide on how the Adaptation Fund, which is under the Kyoto Protocol, is to serve the Paris Agreement.¹¹ The Adaptation Fund has particular features and there are different views regarding to what extent these should be maintained when it serves the Paris Agreement. They include, for instance, the current and future sources of funding, whether the Adaptation Fund should serve the Paris Agreement exclusively or in addition to the Kyoto Protocol, its governance structure with a structural majority of developing countries, and even its operating procedures. More generally, COP 24 should address the procedure for providing guidance to institutions that now serve two agreements, notably the UNFCCC and the Paris

3 Articles without further specification refer to the Paris Agreement. For ease of reference, in this article 'countries' and 'states' should be read as including the European Union, unless otherwise stated.

4 Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740.

5 UNFCCC 'Decision 1/CP.21, Adoption of the Paris Agreement' UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016). For the legal structure of the Paris outcome see Ralph Bodle and Sebastian Oberthür, 'Legal Form of the Paris Agreement and Nature of Obligations' in Klein and others (n 2) 91, 91–92.

6 Decision 1/CP.21 (n 5) para 53. On the specific legal wording used for the finance provisions see Sebastian Oberthür and Ralph Bodle, 'Legal Form and Nature of the Paris Outcome' (2016) 6 Clim L 40, 54.

7 See UNFCCC 'Informal notes prepared under their own responsibility by the co-facilitators of agenda items 3–8 of the Ad Hoc Working Group on the Paris Agreement' FC-CC/APA/2018/L.2/Add.1 (10 May 2018), 162.

8 Paris Agreement (n 4) art 9(5) builds on the periodic submissions on the 'strategies and approaches' for scaling up climate finance which were based on UNFCCC 'Decision 1/CP.18, Agreed Outcome Pursuant to the Bali Action Plan' UN Doc FC-CC/CP/2012/8/Add.1 (28 February 2013) para 67; and 'Decision 3/CP.19, Long-term Climate Finance' UN Doc FC-CC/CP/2013/10/Add.1 (31 January 2014) para 12.

9 Decision 1/CP.21 (n 5) para 55.

10 See eg Decision 1/CP.21 (n 5) para 58, 59, 63.

11 *ibid* para 59; UNFCCC 'Decision 1/CP.22, Preparations for the Entry Into Force of the Paris Agreement and the First Session of the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement' UN Doc FCCC/CP/2016/10/Add.1 (31 January 2017) para 14; UNFCCC 'Decision 1/CMP.13, Report of the Adaptation Fund Board' UN Doc FCCC/KP/CMP/2017/7/Add.1 (8 February 2018) paras 12–14; Ralph Czarnecki and Kaveh Guilanpour, 'The Adaptation Fund after Poznan' (2009) 3 CCLR 79.

Agreement. This refers in particular to guidance to the operating entities of the financial mechanism, i.e. the Global Environment Facility (GEF) and the Green Climate Fund. Some of the finance issues at COP 24 will be addressed under regular agenda items rather than the APA.

Political issues related to climate finance that play in the background to COP 24 include, for example, progress towards the USD 100 billion goal; the conclusion of the GEF-7 replenishment round in 2018, and the situation regarding funding decisions by the Green Climate Fund and its approaching first formal replenishment. There are also special mandated events at COP 24 such as the biennial high level ministerial on climate finance.

III. Article 2(1)(c): New and ‘Under-Discussed’, Not in PAWP

1. Context

Article 2(1)(c) states that the aim of the Paris Agreement includes ‘making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development’.¹² It stands next to mitigation and the temperature goals in Article 2.1(a) and adaptation in Article 2.1(b).

Article 3 defines the whole of Article 2 as the purpose of the Paris Agreement and requires ambitious and progressive efforts of all parties over time towards that purpose, including Article 2(1)(c). Article 3 legally links that purpose with specific obligations in other articles.¹³ For instance, the financial provisions in Article 9 are linked, by Article 3, to the overarching purpose in Article 2(1)(c) to transform finance flows.¹⁴

2. Importance

In the Paris negotiations, there was a broad common understanding that finance is an enabler for action and that the global mitigation and adaptation efforts require major shifts in financial flows and private investments. In this sense Article 2(1)(c) is a major innovation because it includes this role of financial flows generally in the purpose of the Paris Agreement, alongside the long-term goals on mitigation and adaptation.¹⁵ It is a goal of the Paris Agreement

in its own right, while at the same time it is an essential means to achieve the mitigation and adaptation goals.

Article 2(1)(c) recognises that public finance alone will not be sufficient for achieving the Paris Agreement's mitigation and adaptation purposes. It does not only refer to public financial support from individual countries or groupings to other countries or groupings. Its scope includes but goes beyond this narrow concept of climate finance and means of implementation.

Article 2(1)(c) is the only textual hook in the Paris Agreement for addressing the bigger picture of general finance and investment flows with other parties under the Paris Agreement, including addressing public and private investment decisions that counteract the objective of the agreement such as high carbon or fossil fuel investments. Notably it includes addressing the *conditions* which make finance flows go towards mitigation and adaptation. In this sense Article 2(1)(c) is linked to ambition and in the interest of all Parties, even if not all Parties share exactly the same vision and priorities.

3. Is It Under-Discussed?

Despite its importance, Article 2(1)(c) can be regarded as under-discussed in the climate negotiations: The Paris Agreement itself does not address specific issues or actions that could help mobilise or redirect financial flows. Proposals to mention improving the conditions for investments in low-carbon development and climate resilience, or more specifically issues such as fossil fuel subsidies, carbon pricing, mainstreaming, were not included in the final text or only play a marginal role, for example in the Paris Decision. For instance, there is one weakly worded reference to the importance of carbon pricing in the Paris Decision's chapter on non-Party stakeholders.¹⁶ There is also an indirect link in the invitation to United Nations agencies and financial institutions at all levels

¹² Paris Agreement (n 4) art 2(1)(c).

¹³ Bodle and Oberthür (n 5) 96.

¹⁴ *ibid* 96, 100.

¹⁵ Ralph Bodle, Lena Donat and Matthias Duwe ‘The Paris Agreement: Analysis, Assessment and Outlook’ (2016) 10 CCLR 5, 7.

¹⁶ *ibid* 7, 16.

to provide information on how they incorporate climate-proofing and climate resilience measures.¹⁷

For virtually all of its core obligations, the Paris Agreement and the Paris Decision contain mandates for elaborating details and guidance on implementation.¹⁸ However, there is no mandate specifically on Article 2(1)(c) and it is not directly addressed in the PAWP.¹⁹

The global stocktake in Article 14 is the notable exception. Its requirement to periodically assess the collective progress towards achieving the purpose of the Paris Agreement includes Article 2(1)(c), which is part of the purpose by virtue of the explicit reference in Article 3. Based on the previous negotiations and informal notes, in August 2018 the APA co-chairs' published 'tools' that could become the draft decision text for the COP 24 outcome.²⁰ The tool regarding the global stocktake²¹ contains some options that would include Article 2(1)(c): A process option for conducting the global stocktake includes establishing three workstreams, each assessing one of the long-term goals of the Paris Agreement as stated in Articles 2(1)(a-c);²² for the so-called technical phase of the global stocktake, there are options to conduct a technical assessment of collective progress towards achieving the purpose of the Paris Agreement as stated in Article 2(1)(a-c);²³ sources of input relevant specifically on Article 2(1)(c).²⁴ The tools were further developed during the negotiating session in Bangkok.²⁵

Apart from this, Article 2(1)(c) has so far played no or but a very small role in the PAWP. For instance, the co-chairs' tool on nationally determined contributions (NDCs) includes 'policies to attract finance

flows from other resources and the causality between public interventions and mobilized investments', but only for developed country Parties, whereas other countries are only encouraged to provide such information voluntarily.²⁶ In addition, the Standing Committee on Finance has picked up on the Paris Agreement and provides information related to Article 2(1)(c) in its Biennial Assessment.²⁷

4. Challenges and Implications

To put it in simple terms: There is currently no home under the Paris Agreement for Parties to discuss what they could do to achieve one of its three overarching goals - Article 2(1)(c). One of the main challenges for addressing Article 2(1)(c) in the climate negotiations and the package that is to be adopted at COP 24 is the lack of a formal dedicated mandate. There are not many hooks in the Paris Agreement Work Programme for Article 2(1)(c) and at present there is no dedicated agenda item or other home for addressing it in the climate regime. The global stocktake is the exception, as it has to include progress towards all elements of Article 2, including Article 2(1)(c).²⁸ Of course, Parties are free to table and address it in the absence of such a mandate, but it requires a different kind of political effort from following the work programme already agreed.

One of the political challenges in anchoring Article 2(1)(c) more specifically in the climate negotiations appears to be that Parties are unsure about what addressing it would mean for them individually and

17 Decision 1/CP.21 (n 5) para 43.

18 Bodle and Oberthür (n 5) 96.

19 Gastelumendi and Gnittke (n 2) 249, note the potential of the Paris Decision including enabling environments in the 2016 facilitative dialogue, but it does not seem to have started a constructive debate.

20 See, <<https://unfccc.int/documents>>.

21 UNFCCC 'Additional tool under item 6 of the agenda. Matters relating to the global stocktake referred to in Article 14 of the Paris Agreement: (a) identification of the sources of input for the global stocktake; and (b) development of the modalities of the global stocktake', APA1.6.Informal.1.Add.4 (2 August 2018). See also Jennifer Huang, 'What Can the Paris Agreement's Global Stocktake Learn from the Sustainable Development Goals?' (2018) 12 CCLR.

22 UNFCCC (n 21) Annex, para 5, sub-options 2.1-2.3.

23 *ibid* Annex, para 38, option 2.

24 *ibid* Annex, paras 62(h) and 63(c).

25 Regarding the global stocktake, see for instance UNFCCC, 'Revised additional tool under item 6 of the agenda Matters relating to the global stocktake referred to in Article 14 of the Paris Agreement: (a) identification of the sources of input for the global stocktake; and (b) development of the modalities of the global stocktake' (6 September 2018) (on file with the authors) paras 5, 62(h), 63(c).

26 UNFCCC 'Additional tool under item 3 of the agenda. Further guidance in relation to the mitigation section of decision 1/CP.21 on: (a) features of nationally determined contributions, as specified in paragraph 26; (b) information to facilitate clarity, transparency and understanding of nationally determined contributions, as specified in paragraph 28; and (c) accounting for Parties' nationally determined contributions, as specified in paragraph 31', APA1.6.Informal.1.Add.1 (6 August 2018) in the section on 'information to facilitate clarity, transparency and understanding' of NDCs, p. 17 line 435.

27 See the overview at <<https://unfccc.int/topics/climate-finance/resources/biennial-assessment-of-climate-finance>> accessed 20 September 2018.

28 Bodle and Oberthür (n 5) 96.

generally. Parties could be concerned that it could entail obligations on individual Parties to take specific courses of action. However, while Article 3 requires Parties to make ambitious efforts also towards the goal in Article 2(1)(c), there is no indication of a prescriptive ‘one size fits all’ approach. The range of possible efforts that Parties could make include a myriad of policies and actions that can contribute to the big picture outlined by Article 2(1)(c).²⁹ For instance, the 2018 Forum of the Standing Committee on Finance discussed successes and challenges in reducing financial risks and leveraging public and private investments in developing countries, and the gaps and best practices in policies that enable private investments in mitigation and adaptation projects and programmes.³⁰ In addition, Article 2 as a whole is framed in the context of poverty reduction, sustainable development, equity and differentiation expressed as the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.³¹ This dynamic character of Article 2(1)(c) allows developing countries to address finance flows so as to support sustainable development and their poverty reduction priorities.³²

There could also be concerns that discussing Article 2(1)(c) and finance flows more generally could eventually mean less support to developing countries, or developed countries backtracking on their financial commitments. The challenge is to build trust that efforts regarding Article 2(1)(c) are not about shifting the burden from providers and mobilisers of climate finance to the recipient countries, but in the interest of making climate finance more efficient and impactful.³³

It should also be noted that many other actors, forums and decision-making processes than those of the UNFCCC need to be involved in working towards the goal in Article 2(1)(c), such as legislators, policy makers, financial institutions and not least those actors whose investments should be realigned and guided. For Parties, action under Article 2(1)(c) is mainly about *setting policies* in this regard. For instance, the European Commission has adopted a Sustainable Finance Action Plan and submitted legislative proposals.³⁴ Different policies will be suitable for different Parties. One of the challenges is to define the appropriate role for Parties in the climate negotiations in relation to those actors and processes ‘outside’, and to allow for a useful exchange between the two.

There are several options for the climate regime to provide a ‘home’ for addressing Article 2(1)(c). A new specific agenda item is an obvious one, but it might be difficult to obtain the required consensus at this stage. The process for the global stocktake is another option, but it remains to be seen whether Parties will establish a work stream dedicated to Article 2(1)(c) and what its mandate would be. Since the global stocktake is about assessing collective progress, its remit might not adequately cover individual efforts. The transparency framework could include information related to Article 2(1)(c), which would be useful. But the individual reporting system is not ideal for discussing and developing best practices for parties. The Standing Committee on Finance can provide and organise useful assessments, expert input and exchanges, but its workload is already high, and in any event it cannot provide the political space and potential decision-making by Parties.

This leaves the option of addressing Article 2(1)(c) under existing agenda items and mandates. Potential candidates would be items that have a wider perspective than public finance from developing to developed countries. For instance, the current COP agenda item on ‘long-term finance’ addresses the USD 100 billion commitment, which includes public, private and other sources of finance and finance provided as well as ‘mobilised’. It includes mandated events such as biennial high-level ministerial dialogues on climate finance (with the next one to be held during COP 24) and regular in-session workshops.³⁵ In a similar vein, Article 2(1)(c) could be included if Parties were to discuss this bigger picture of climate finance

29 Cf the guiding questions in the co-chairs’ tool regarding the global stocktake in UNFCCC (n 21) paras 8–13.

30 See ‘SCF Forum’ (Session 2) <<https://unfccc.int/topics/climate-finance/events-meetings/scf-forum/2018-forum-of-the-standing-committee-on-finance>> accessed 20 September 2018.

31 Paris Agreement (n 4) arts 2(1), first sentence, and 2(2).

32 Gastelumendi and Gnittke (n 2) 248.

33 As argued with regard to ‘enabling environments’ in *ibid* 249.

34 Commission (EU), ‘Action Plan: Financing Sustainable Growth’ (Communication) COM(2018) 97 final (8 March 2018). For an overview of legislative proposals see <<https://ec.europa.eu/info/publications/180524-proposal-sustainable-finance>> accessed 20 September 2018. See also the European Parliament Resolution of 29 May 2018 on sustainable finance (2018/2007(INI)).

35 See Decision 3/CP.19 (n 8) and UNFCCC ‘Decision 5/CP.20 Long-term Climate Finance’ UN Doc FCCC/CP/2014/10/Add.2 (2 February 2015); See also <<https://unfccc.int/topics/climate-finance/workstreams/long-term-climate-finance>> accessed 20 September 2018.

under the Paris Agreement in the future. In any event, it would be a missed opportunity if a home for further work on Article 2(1)(c) was not established in some way at COP 24.

5. Real-World Impacts

Article 2(1)(c) has a transformational objective with huge potential implications in the real world. It is also essential for bringing mitigation and adaptation goals within reach in the long run.

Legally speaking, the Paris Agreement addresses states, not the private and other actors that also decide and influence where finance flows go. In this sense, the real-world impact of addressing Article 2(1)(c) in the climate negotiations is indirect, i.e. through the Parties that in turn address these actors. However, the domestic actions of states are crucial in creating and maintaining the conditions that spurn and attract climate-friendly investments and make finance flows, both domestic and international, go towards low greenhouse gas emissions and climate-resilient development.³⁶ A home for Article 2(1)(c) in the climate regime could be an opportunity and encouragement for Parties to define and showcase their efforts. However, as mentioned above, Article 2(1)(c) does not mean that the same domestic actions are suitable for all Parties.

Although the climate negotiations are only a small part of the big picture of financial flows, addressing Article 2(1)(c) has the potential to send a signal to relevant actors, including the private sector, to re-assess and redirect investments. Such policy 'signals' from the climate regime may be weak in legal and normative terms, but they can well influence investment strategies and have significant real-world impacts. A home for addressing Article 2(1)(c) in the climate negotiations could also be an opportunity to bring the views and expertise of other relevant actors *into* the

climate regime – an approach that has increasingly been used in the climate regime and under the Paris Agreement.

IV. Transparency of Support: Old and Over-Discussed

1. Context

Transparency of support relates to the delivery of information and data on support within the UNFCCC. To fully understand the importance of transparency of support in the implementation of the Paris Agreement it is important to first have a clear understanding of the different layers of this concept and how these are being tackled in the current negotiations.

The term 'support' as used in the climate regime does not only include financial support, but also technology development and transfer, and capacity-building support to developing country Parties.³⁷ Although the focus within the current negotiations is mainly on transparency of *financial* support, a full consideration of all three forms of support and their close interconnection is required to strengthen transparency of support under the Paris Agreement.

There already is an extensive set of transparency obligations and guidelines under the UNFCCC. The Paris Agreement requires Parties to 'build on and enhance' the existing transparency arrangements.³⁸ The overall purpose of the enhanced transparency framework for action and support is to build mutual trust and confidence and to promote effective implementation.³⁹ While the provisions on transparency are obligations in their own right, they also add teeth to the prescriptiveness of the overall regime.⁴⁰ The purpose specifically of transparency *of support* is to provide clarity on support provided and received by relevant individual Parties in the context of climate change actions and to provide, to the extent possible, a full overview of aggregate financial support provided, to inform the global stocktake.⁴¹ In the current negotiations, the focus is on the development of the modalities, procedures and guidelines of these reports, as they are the basis of information for clarity, trust and effective implementation. Further time and efforts are however required to ensure that the framework goes beyond these reports, into an aggregate overview, analyses of other sources of data, reviews, consideration of progress and the delivery of sources

36 These have also been discussed under the label of 'enabling environments'; see Gastelumendi and Gnittke (n 2) 250.

37 Paris Agreement (n 4) arts 9, 10, 11, 13(9) and 13(10).

38 *ibid* art 13(3).

39 Paris Agreement (n 4) art 13(1). See also Christopher Campbell-Durufflé, 'Rain or Sunshine in Katowice? Transparency in the Paris Agreement Rulebook' (2018) 12 CCLR.

40 Bodle and Oberthür (n 5) 103.

41 Paris Agreement (n 4) art 13(6).

of input to the global stocktake, in order to fully fulfil its purpose.

In contrast to transparency of *action*, different Parties have different reporting requirements on transparency of support. Developed country Parties shall, and other Parties that provide support should, provide information on support provided to developing country Parties,⁴² while developing country Parties should provide information on support needed and received.⁴³ COP 24 is expected to adopt common modalities, procedures and guidelines, building on experience from the transparency arrangements under the Convention and taking into account Parties' different capacities.⁴⁴ Under Article 9(7), it is further stipulated that developed country Parties shall provide information on support for developing country Parties provided and mobilised through public interventions in accordance with these modalities, procedures and guidelines, while other Parties are encouraged to do so.⁴⁵

These provisions explain why the current focus in the negotiations is on the modalities of financial support provided and mobilised through public interventions by developed country Parties: The experience to build on is more substantial with guidelines and common tabular formats, these countries have more capacities and there is a specific agenda item under the PAWP. That said, support needed and received by developing country Parties is also an important cornerstone of the enhanced transparency framework.

The information on support provided shall undergo a technical expert review and each Party shall participate in a facilitative, multilateral consideration of progress (FMCP) with respects to efforts on financial support.⁴⁶ While the review will mainly assess if the information provided by countries is in line with the modalities, procedures and guidelines, and perhaps identify areas for improvement, the role of the FMCP regarding transparency of support is hardly being discussed in the current negotiations.

Besides these direct references related to transparency of support within the Paris Agreement, there are other provisions relevant to ensure an 'enhanced' transparency framework under the Paris Agreement. These linkages are identified in the informal note capturing the draft elements for modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement.⁴⁷ There are provisions that could be linked to transparency of support within the tech-

nology framework, the adaptation communication, the global stocktake, the committee to facilitate implementation and promote compliance, and information to be provided by Parties in accordance with Article 9(5) of the Paris Agreement.⁴⁸ However, there is no consensus among Parties if all and to what extent these provisions are linked to transparency of support.

2. Importance

The purpose of transparency of support is to provide clarity on support, enhance trust and confidence, and to promote implementation. In this section we identify steps on how the current negotiations predominantly on modalities can ensure that the enhanced transparency framework delivers on its purpose.

Getting clarity on support requires, first of all, identification of *why* the information is being collected, as this influences *how* the information is collected. The Paris Agreement provides a general description relating it to support provided and received in the context of climate change actions under Articles 4, 7, 9, 10 and 11.⁴⁹ Considering Article 9, developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention;⁵⁰ and, as part of a global effort, should continue to take the lead in mobilising climate finance from a wide variety of sources, instruments and channels, through a variety of actions, and taking into account the needs and priorities of developing country Parties.⁵¹ Deci-

42 *ibid* art 13(9).

43 *ibid* art 13(10).

44 *ibid* art 13(1), (4) and (13).

45 *ibid* art 9(7).

46 *ibid* art 13(11-12).

47 UNFCCC, 'Informal note by the co-facilitators (version 9 May 2018) – Draft elements for APA agenda item 5 – Modalities, procedures and guidelines for the transparency framework for action and support referred to in Art 13 of the Paris Agreement' (9 May 2018) <https://unfccc.int/sites/default/files/resource/APA1-5_IN_i5_final.pdf?download> accessed 20 September 2018.

48 Yamide Dagnet and others, 'Mapping the Linkages between the Transparency Framework and Other Provisions of the Paris Agreement' (World Resources Institute 2017).

49 Paris Agreement (n 4) art 13(6).

50 *ibid* art 9(1).

51 *ibid* art 9(3).

sion 1/CP.21 further stipulates that, in accordance with Article 9(3), developed countries intend to continue their existing collective mobilisation goal through 2025 in the context of meaningful mitigation actions and transparency on implementation and that prior to 2025 the CMA shall set a new collective quantified goal from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries.⁵²

Therefore, a first step towards clarity on support is to ensure that the information collected provides the data that is necessary to follow-up on these provisions in a transparent manner. It is clear that the reports of the individual Parties alone only provide a partial response to these provisions. The complexity of the climate finance landscape requires further analyses and the inclusion of other sources of data. These could be captured in the full overview of aggregate financial support provided, preferably as part of the Standing Committee on Finance's biennial assessment and overview of climate financial flows to avoid duplication of reports. The second step is, therefore, to allow for analysing the data as it is relevant for different purposes.

The trust-building exercise might be more difficult to achieve as Parties have different views on the goals set in the Paris Agreement. It is therefore difficult to expect that the transparency framework will deliver the information according to the different interpretations in a clear-cut manner. It is challenging to attain trust through transparency of support if there is no common view on the objectives to begin

with. This can be illustrated by the collective commitment goal of developed countries to jointly mobilise USD 100 billion by 2020, in the context of meaningful mitigation and transparency of implementation. The Organisation for Economic Cooperation and Development (OECD) and Climate Policy Initiative report and the subsequent response by the Indian Ministry of Finance on this report gives a good example of the range of interpretations of what counts towards the goal: USD 57 billion versus USD 2.2 billion on average for 2013-2014.⁵³ The divergent views on this goal and other elements, such as a definition on climate finance, might be too strong to overcome and negotiations should focus on different, more innovative ways to enhance trust. One way could be to define the data to be provided sufficiently broadly to accommodate all views.

Last but not least, transparency of support should promote implementation. In addition to clarity on support and trust, this should also be embedded in the development of the relevant modalities. These modalities should provide the basis of information to have knowledge about support and how it is being delivered and used. How effective is the support provided and mobilised? What is the impact of the support received? If the transparency framework is able to respond to these questions, the use and usefulness of the framework will be very significantly enhanced compared to the current system, which makes such assessments difficult.

3. Is It Over-Discussed?

There are several reasons why transparency of support can be considered as being over-discussed within the UNFCCC negotiations. First for historical reasons, as the development of guidelines, modalities and reporting formats has been a long-standing issue on the UNFCCC agenda since COP 16 in Cancún (2010). On the basis of the Copenhagen Accord⁵⁴ and the Cancun Agreements⁵⁵, COP 17 (Durban) agreed on the guidelines for the current Biennial Reports (developed countries) and Biennial Update Reports (developing countries).⁵⁶ The following year, the common tabular format for reporting by developed countries was approved, which was improved at COP 21 in Paris with regard to methodologies for the reporting of financial information by Parties included in Annex I to the Convention.⁵⁷

52 Decision 1/CP.21 (n 5) para 53.

53 Romain Weikmans J Timmons Roberts, 'The International Climate Finance Accounting Muddle: Is There Hope on the Horizon?' (2017 fc) Climate and Development.

54 UNFCCC 'Decision 1/CP.15, Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' UN Doc FCCC/CP/2009/11/Add.1 (30 March 2010).

55 UNFCCC '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' UN Doc FCCC/CP/2010/7/Add.1 (15 March 2011).

56 UNFCCC 'Decision 2/CP.17, Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' UN Doc FCCC/CP/2011/9/Add.1 (15 March 2012).

57 UNFCCC 'Decision 19/CP.18, Common Tabular Format for "UNFCCC Biennial Reporting Guidelines for Developed Country Parties"' UN Doc FCCC/CP/2012/8/Add.3 (28 February 2013); UNFCCC 'Decision 9/CP.21, Methodologies for the Reporting of Financial Information by Parties Included in Annex I to the Convention' UN Doc FCCC/CP/2015/10/Add.2 (29 January 2016).

Second, the Paris Agreement Work Programme, as mentioned above, includes several agenda items related to transparency of support. The discussion mainly takes place under the APA agenda item on the development of the modalities, procedures and guidelines of the enhanced transparency framework referred to in Article 13 of the Paris Agreement and under the agenda item of the Subsidiary Body on Scientific and Technological Advice (SBSTA) on modalities for the accounting of financial resources provided and mobilised through public interventions, in accordance with Article 9(7) of the Paris Agreement. To come to an efficient and coherent transparency framework, it is necessary to also consider the linkages, and to avoid the risk of developing reporting requirements which are not in line with the modalities under the transparency framework.⁵⁸

A third reason is the technical complexity of transparency of support due to the wide variety of types, sources and channels of support as well as methodological and definitional challenges of reporting this support. This complexity has led to research by other institutions, such as the OECD and efforts by other players to overcome some of the challenges, such as the Common Principles for Tracking Climate Finance by the multilateral development finance institutions.⁵⁹ The development of modalities should understand and acknowledge the complexity by building on the expertise from outside the UNFCCC to capture the most recent developments since the agreement on the guidelines for the biennial reports for developed countries and biennial update reports for developing countries.⁶⁰

Finally, the political importance of the issue has increased over the years. Although this has not per se led to a further increase of discussion time, it has led to more intensity within the current negotiations. The abovementioned OECD and Climate Policy Initiative report,⁶¹ commissioned by the Peruvian and French COP Presidencies, can be identified as one of the turning points in these discussions as it exposed the divergent views by countries on what counts towards the USD 100 billion goal and showed the importance of having clarity on the methodologies beyond the number(s).⁶²

While this shows that transparency of support is an important, long-standing issue in the UNFCCC negotiations, it also shows that there is an imbalanced approach towards its different layers. The focus is almost solely on the financial support provided by de-

veloped countries, with less time dedicated towards the overall picture, the linkages with other items and bodies under and outside the Convention, support needed and received by developing countries and the two other forms of support, technology development and transfer and capacity-building.

4. Challenges and Implications

Political challenges relate first of all to the lack of an agreed understanding on definitions and crucial concepts, such as climate finance and what counts towards the USD 100 billion goal. But political challenges also relate to the pursuit of a balanced progress between the different elements of the PAWP. In relation to transparency of support, there is already an imbalance due to the strong emphasis on support provided by developed country Parties, but it goes further as many Parties keep a close eye on a balanced outcome between transparency of action and of support. If this led Parties to make progress on both aspects of the transparency framework, it could achieve a sum bigger than its parts. If not, there is a risk of agreeing on the lowest common denominator. An open dialogue and exchange of views and information to take account of progress across different tracks is key to the overall success of the negotiations, even if progress is uneven.⁶³

Technical challenges relate to the current methodological shortcomings, which require room for error and further improvements. The methodologies are still evolving, especially on support needed and received and mobilised by public interventions. Capturing the progress made since the adoption of the current biennial report and biennial update report guidelines at COP 17 would already be a major step forward in the transparency framework under the Paris Agreement. On the other hand, it also entails a

58 Dagnet and others (n 45).

59 The World Bank, 'Developing Common Principles for Tracking Climate Finance' <<http://www.worldbank.org/en/news/feature/2015/04/03/common-principles-for-tracking-climate-finance>> accessed 20 September 2018.

60 Decision 2/CP.17 (n 57).

61 OECD, 'Climate Finance in 2013-14 and the USD 100 Billion Goal: A Report by the OECD in Collaboration with Climate Policy Initiative' (OECD Publishing 2015).

62 Weikmans and Roberts (n 50).

63 Dagnet and others (n 45).

risk if it locks in certain methodologies that are currently being used as the best alternative to nothing, but have little added value in the longer run, such as the use of the OECD's 'Rio Markers' to quantify financial information and the reporting on core/general contributions to capture contributions through multilateral channels.

5. Real-World Impacts

If full consideration is given to the different layers of transparency of support, including its interlinkages with other items, if the modalities on transparency of support are balanced between the different forms of support, if the provisions on transparency of support are developed in a way that ensures its purpose, and if the challenges are overcome in an innovative manner, then the real-world impact of the transparency framework could be considerable. It would allow for the identification of trends on climate support, a sense of where we stand in supporting climate action of developing countries and in mobilizing climate finance, if we are on a pathway towards the quantitative goals by 2020 and by 2025, and how to provide support more effectively to raise ambition.

V. Conclusions

Both of the particular finance issues addressed in this contribution, Article 2(1)(c) and transparency of sup-

port, have a double function: Article 2(1)(c) is a goal of the Paris Agreement in its own right, while at the same time it is an essential means to achieve the other two mitigation and adaptation goals. The provisions on transparency and accountability have a double function as obligations in their own right, as well as supporting the prescriptiveness of the overall regime.

In view of the ongoing negotiations, conclusions regarding COP 24 are tentative: Article 2(1)(c) can be regarded as under-discussed, because despite its overarching importance it currently has no adequate home in the climate negotiations for Parties to discuss and address it holistically. It would be a missed opportunity if a home for further work on Article 2(1)(c) was not found at COP 24. A new agenda item seems unlikely. One option is a dedicated work stream under the global stocktake, provided it has an adequate mandate. Article 2(1)(c) could also be included in existing agenda items and mandates such as the current COP agenda item on 'long-term finance'. In a similar vein, Article 2(1)(c) could be included if Parties were to discuss this bigger picture of climate finance under the Paris Agreement in the future.

With regard to transparency of support, a potential way forward to COP 24 would be to finalise the modalities of the transparency framework. Moreover, a master plan on transparency of support should be agreed to identify further steps after COP 24 by capturing progress made so far at COP 24 and CMA 1, as well as a work plan for the remaining issues.

Operationalizing Cooperative Approaches Under the Paris Agreement by Valuing Mitigation Outcomes

Justin D Macinante*

The Paris Agreement recognises the heterogeneity of approaches being implemented across jurisdictions and that parties may voluntarily engage in cooperative approaches involving use of internationally transferred mitigation outcomes towards their nationally determined contributions. Many of these diverse approaches involve putting a price on carbon, usually through emissions trading schemes or carbon taxes. Engaging the private sector at scale will be crucial for these carbon pricing mechanisms to operate efficiently in bringing about behavioural changes that will accelerate mitigation of greenhouse gas emissions and generate greater investment in climate change solutions. This will only happen on the scale necessary if there are clear, well-designed and properly functioning markets for the international transfer of mitigation outcomes and for trading carbon assets more generally. Achieving this mandates the development and implementation of processes to value mitigation outcomes, that is, to assess their mitigation value, and corresponding institutional arrangements to oversee such assessment processes. Mitigation value assessments will facilitate fungibility, enabling trading of these carbon assets across jurisdictions. This paper begins with a look at how the inter-governmental negotiations are addressing this need, and analyses how the literature has approached the subject, before setting out proposals aimed at stimulating debate on what these processes and institutional arrangements might appropriately include.

I. Introduction

The Kyoto Protocol took about seven years to operationalize and about another seven to reach the end of the underwhelming first commitment period. The European Union and Switzerland have taken seven years to reach agreement on linking their respective emission trading schemes.¹

The proceedings of the 48th meeting of the Subsidiary Body for Scientific and Technical Advice (SBSTA48) in Bonn in May 2018, where guidance on Cooperative Approaches referred to in Article 6.2 of the Paris Agreement was to be discussed, suggest seven years would appear to be a wildly optimistic expectation for operationalization of this provision. An inordinate amount of time seemed to be spent discussing the meeting process and how it should proceed, judging from both the SBSTA conclusions² and the dearth of clear positions and lack of progress in the course of discussions. This was evident in a revised informal note, containing draft elements of the

guidance, offered by the co-chairs as a work in progress, not representing consensus, but to support Parties in the negotiations.³

It was resolved to reconvene SBSTA48 in Thailand in September 2018. Paragraph 36 of the Decisions

DOI: 10.21552/cclr/2018/3/12

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1 EU Commission, 'EU and Switzerland sign agreement to link emissions trading systems' (23 November 2017) <https://ec.europa.eu/clima/news/eu-and-switzerland-sign-agreement-link-emissions-trading-systems_en> accessed 31 August 2018.

2 International Institute for Sustainable Development, 'Earth Negotiations Bulletin - Summary of Bonn Climate Change Conference' (2018) 12, 726.

3 SBSTA 48, 'Agenda item 12(a) Revised informal note containing draft elements of the guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement' (10 May 2018) <https://unfccc.int/sites/default/files/resource/SBSTA%2048_IN_12a%20Art%206%20para%202.pdf> accessed 15 May 2018.

adopted by the Conference of the Parties in Paris⁴ requests the SBSTA develop and recommend this guidance for adoption by the Conference of Parties serving as the meeting of the Parties to the Paris Agreement at its first session (COP24/CMA1), that is, by December 2018. It seems unlikely that the SBSTA will be able to provide a sufficient level of detail by CMA1 in response to that request. The question is by when such guidance might be ready?

At SBSTA47, to facilitate deliberations at SBSTA48, the Chair had been requested to prepare an informal document containing the elements of guidance on cooperative approaches, based on prior submissions by Parties (over the preceding four negotiating sessions).⁵ Section VI of the revised informal note offered by the co-chairs during SBSTA48⁶ addresses internationally transferred mitigation outcomes (ITMOs). Sub-section A deals with ITMOs that can be used towards NDCs, with paragraph headings covering who has responsibility for determining which ones can be so used; measurement; form; and scope. Sub-section B covers ITMO characteristics and sub-section C covers 'other ITMOs'. But there isn't much flesh on these bones.

In relation to measurement, for instance, the list of potential options in the note includes that an ITMO might be (a) equal to one metric tonne of carbon dioxide equivalent (CO₂-e); (b) measured in a metric

other than tonnes CO₂-e; (c) measured in both; or (d) greenhouse gases (GHGs) and non-GHGs. It provides also that an ITMO might be calculated (a) in accordance with methodologies and common metrics assessed by the IPCC and adopted by the COP/CMA; or (b) using global warming potentials assessed/recommended by the IPCC and adopted by the COP/CMA; or (c) determined by the Parties implementing the cooperative approach.⁷ These elements, reflecting viewpoints put to the co-chairs by Parties, give the appearance of simply passing the onus to others; at the same time, the apparent brevity of consideration given to this aspect is disquieting. Absence of any mention of ITMO 'mitigation value' seems to be an oversight, or worse, a deliberate skirting around what is a difficult, but fundamental issue. It even leaves open a continuation of Kyoto Protocol thinking that by defining units to be of a certain value, they will be that value.

There is no doubt that a physical tonne of carbon dioxide equivalent greenhouse gas (CO₂-e) emitted in one part of the globe will be the same as one emitted somewhere else on the globe. Similarly, a physical tonne of CO₂-e mitigated in one part of the globe will be the same as one mitigated somewhere else on the globe. However, an action to bring about that mitigation outcome in one part of the globe will not necessarily be the same, nor achieve the same outcome, as an action in another part of the globe: simply defining a unit of mitigation outcome from both actions as being equal in measured value (that is, for instance, both being equal to one metric tonne CO₂-e) does not change this fact. The Paris Agreement recognises this heterogeneity of mitigation outcomes.

Engaging the private sector at scale is crucial if carbon pricing mechanisms, which appear to be the mitigation action of choice for an increasing number of jurisdictions,⁸ are to operate efficiently in bringing about behavioural changes that will accelerate mitigation of GHG emissions and generate greater investment in climate change solutions. This will only happen on the scale necessary if there are clear, well-designed and properly functioning markets for the international transfers of mitigation outcomes and for trading carbon assets generally. For these markets to exist, a common metric is necessary to enable comparability of these heterogeneous mitigation outcomes and fungibility across jurisdictions.⁹

It should go without saying that, while these markets – if well-designed – should operate with as little

4 United Nations, 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015' (29 January 2016) FCCC/CP/2015/10/Add.1.

5 SBSTA.48.Informal.2, 'Informal document containing the draft elements of guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement, Informal document by the chair', Para 2, Mandate (16 March 2018)

6 (n 3).

7 *ibid* 6.

8 The World Bank has reported, for instance, that approximately one hundred Parties to the Paris Agreement, accounting for 58% of global GHG emissions, have indicated they are planning or considering use of carbon pricing. These include three of the world's largest emitters, in China, India and Brazil. See, World Bank Group, 'State and Trends of Carbon Pricing 2016' (2016) 22.

9 Jurisdiction for these purposes would normally conform with the usual (English) language sense of the term, that is a geographical unit in the form of a 'state', and the assumption is that any ETS or other pricing mechanism is based on a legislative-administrative framework. A jurisdiction, though, could be, for instance, a state/province/region within a (quasi-) federal system, just as much as a unitary or federal (national) state. Depending on the nature of the ETS or pricing mechanism there may be other possible variations, e.g., one established by a (large) metropolitan unit, or one in which a coalition of sovereign states has its own fully integrated (and thus 'internal') ETS (as presently within the EU).

intervention as possible to maximise their efficiency and effectiveness, that needs to happen within an equally well-designed boundary framework of climate change rules. Processes to value mitigation outcomes, that is, to assess the mitigation value of mitigation actions not just by Paris Agreement parties, but by regional, sub-national and even municipal jurisdictions,¹⁰ and the institutional arrangements to oversee those processes, will be fundamental to both well-designed markets and well-designed climate change rules.

This paper analyses what might be included in those processes and commensurate institutional arrangements, with a view to stimulating a deeper, constructive debate on guidance on cooperative approaches under Article 6.2. It begins in Section II by considering what mitigation value is and suggesting an approach as to how mitigation value might be assessed, as a way of stimulating debate on this important subject. Section III reviews academic literature on the subject of comparative evaluations in the context of climate change policy and some specific approaches that are developing, or could be adapted into, methodologies for determining the value of mitigation outcomes. Section IV looks at institutional arrangements, as well as outlining possible options for such institutions in future climate policy architecture. The paper concludes by considering how such an approach to operationalising cooperative approaches under Article 6 might be taken forward, given the increasingly pressing need for effective mitigation action.

II. Mitigation Value and Mitigation Value Assessment

Consider a transaction in which an entity authorised by Jurisdiction 1 transfers a mitigation outcome to an entity in Jurisdiction 2. The mitigation outcome is a unit (a carbon unit or 'CU') from Jurisdiction 1's emission trading scheme (ETS₁) and is going to Jurisdiction 2's emission trading scheme (ETS₂). The unit, CU₁, has an entitlement in ETS₁ of one tonne CO₂-e, that is, it entitles the holder to surrender it in ETS₁ in order to acquit a compliance obligation under that scheme in respect of the emission (by the holder) of one tonne CO₂-e.

The transfer raises a number of questions, but to consider just two: what is the 'value' of CU₁ (whether

in ETS₁ or ETS₂) and is it the same as the entitlement (that is, one tonne CO₂-e)?

Since the purpose of the ETS is to mitigate emissions, it would seem reasonable to consider the value to be the 'mitigation value' of the unit. While there is no widely accepted formal definition for such at present, mitigation value (MV) might be described here in terms of the physical amount of reduced or avoided GHG emission to, or GHG sequestered from, the atmosphere, which can be attributed to a particular tradable unit (mitigation outcome) under, or derived from, a GHG mitigation scheme (mitigation action). Thus, in the transaction considered here, the value of CU₁ will be MV₁; but what is MV₁?

The answer proposed by this paper, for discussion, is that MV₁ (or, for that matter, the value of any allowance unit issued in any ETS), in the first instance, will be equal to the area between the business-as-usual (BAU) emission curve and the ETS-achieved emissions curve, divided by the number of CUs issued in the ETS, in the relevant time period (e.g., per annum).¹¹ The value CUs represent is not the area under the emission reduction curve, which rather represents the amount of emissions *permitted* under the scheme's cap, that is, CUs available for the domestic accounting purpose of reconciliation against actual emissions under that ETS; whereas, on the other hand, the mitigation value of those CUs is the area between that curve and the business-as-usual (BAU) curve above it: in other words, the difference in emissions with and without the scheme. This represents the amount of emissions *reduced* by the ETS in the relevant time period, if entities under that scheme have complied.¹²

All the same, to arrive at an accurate MV, this primary amount of value needs to be adjusted to take account of:¹³

- 10 Although for the purposes of the discussion in this paper, consideration of mitigation value and its assessment is couched in terms of transfers between Paris Agreement parties.
- 11 The marginal impact of the ETS, rather than this 'averaged' value, may also be an appropriate starting point: this paper does not offer a definitive view, but rather raises this as a question for debate.
- 12 See also Justin D Macinante, 'From Homogeneity to Heterogeneity and the Fundamental Question – What Is Being Traded?' (2017) Edinburgh School of Law Research Paper No 2017/15.
- 13 These factors are set out in the World Bank's Networked Carbon Markets initiative, see, The World Bank, 'Brief: Networked Carbon Markets' (2017) <<http://www.worldbank.org/en/topic/climatechange/brief/globally-networked-carbon-markets>> accessed 31 August 2018.

- (i) risks relating to the characteristics of that particular scheme (for example, the reliability of the monitoring, reporting and verification (MRV) undertaken); and
- (ii) risks relating to the characteristics of the jurisdiction's overall suite of mitigation policies (for example, overall coverage, gaps in emissions covered, overlaps and leakage across the suite of measures).

In the context of overall climate change policy, the primary value might be adjusted also to take account of the characteristics of the jurisdiction's contribution to addressing global climate change (for instance, the ambition demonstrated by its NDC). Adjustment along these lines would involve broader, more political than purely physical, considerations.

Returning to the example transaction, if, in ETS₁, the entitlement nominal value of one tonne CO₂-e for CU₁ is based on the area under the ETS-achieved emissions curve, then it is likely that MV₁ will be less than one tonne CO₂-e.¹⁴ How much less will depend:

- firstly, on the relative size of (a) the area between the BAU curve and ETS-achieved emissions curve, to (b) the area under the ETS-achieved emissions curve, and
- secondly, on adjustments for the risks mentioned above.

Thus, the MV of a unit from an ETS (mitigation action) is not the same as the emission entitlement of that unit (e.g., nominally one tonne CO₂-e) in the ETS. Does this matter if the unit becomes an ITMO? Absolutely. Again, in the example: will CU₁ still have MV₁ when it moves to ETS₂? Yes, since the MV is the physical mitigation attributable to that particular unit. A further question, however, is whether CU₁ will

still be CU₁ when it is transferred or traded? When CU₁ moves into ETS₂, it may be administratively more feasible and simpler for it to be converted into the domestic equivalent, that is, a CU₂. However, CU₂s are likely to have a different MV to CU₁s because:

- both the BAU emissions curve and the ETS-achieved emissions curve in ETS₂ will differ from that in ETS₁; and
- the risks mentioned above will be different, hence so will be the adjustments to CU₂s.

At present, differences in design, implementation and standards detract from the effectiveness of the diverse and heterogeneous carbon pricing mechanisms in various jurisdictions. While this reflects local preferences, it means the market will remain fragmented until there is a mechanism to convert, enabling comparability and thus fungibility of the units across schemes. Determining the MV of the units provides such a mechanism.

Reports of the negotiations concerning guidance on cooperative approaches referred to in Article 6.2, Paris Agreement,¹⁵ indicate discussions have touched on issues that might be relevant to mitigation value, such as:

- in relation to environmental integrity, the quality of units;
- in relation to governance oversight arrangements, third party technical review of the environmental integrity of ITMOs created/approval of ITMOs;
- in relation to governance role of the secretariat, reporting on overall mitigation of global emissions delivered through cancellation/discounting;¹⁶
- in relation to reporting on use of ITMOs, information including characteristics of units, originating programmes, source of ITMOs, vintage/time periods of ITMOs.¹⁷

It is noted also that there has been consensus in the negotiations on the need for common accounting standards and transaction procedures, and for quantifying ITMOs (with the possibility of tonnes CO₂-e as a standard unit mentioned).¹⁸ While it is hoped these points will crystallise as elements of a coherent set of guidance measures, or at least principles, that embody the concept of mitigation value of outcomes by COP24, on present indications that seems unlikely.

¹⁴ That is, of course, unless the ETS has resulted in more than halving of emissions, which is probably unlikely in most instances.

¹⁵ SBSTA, 'Informal note by the co-chairs, Third iteration, 12 November 2017, Subsidiary Body for Scientific and technological Advice, Forty-Seventh meeting' (November 2017) <http://unfccc.int/files/meetings/bonn_nov_2017/in-session/application/pdf/sbsta47_11a_third_informal_note_.pdf> accessed 27 August 18.

¹⁶ This would be difficult to do unless the mitigation value of units cancelled is known.

¹⁷ Interestingly also, that in relation to infrastructure, both 'blockchain' and 'a centrally accessible distributed ledger' have been mentioned.

¹⁸ World Bank Group, 'State and Trends of Carbon Pricing 2017' (2017) Annex III.

III. Comparative Evaluations in the Context of Climate Change Policy

Given its significance to the outcome of the negotiations, it is surprising how little discussion there has been of mitigation value, or the valuing of emission trading scheme units, in the literature. One reason for this might be the fact that, to date, the majority of studies on trading between schemes seem to have focused on full bilateral linking under which the units are homogenised so as to fully fungible in all participating systems.¹⁹ Another possible explanation might be the historical fact of the homogeneous approach taken prior to the Paris Agreement, that is, under the Kyoto Protocol, where the value of all traded units was simply defined as being equal to one tonne CO₂-e. Moreover, the literature has focused on trying to define what the units are in a legal sense (for example, property right, commodity and so on) and what they entitle the holder to do, rather than on what their value might be.²⁰

All the same, there is analysis of MV in the literature, most conspicuously by Joseph Aldy and colleagues.²¹ In anticipation of outcomes under the Paris Agreement, Aldy²² noted that assessments of mitigation value could play an important role in linking between countries with disparate mitigation policies. These MV assessments, it was speculated, could inform the linking agreement through exchange rates which, if transparent, could be used to incentivise higher ambition on the part of more poorly performing jurisdictions.²³

More recently, in discussing the World Bank Networked Carbon Markets (NCM) initiative (a fundamental tenet of which is an independent assessment framework for determining the climate change mitigation value of actions), another commentator, Michael Mehling, observes that while a move from a regime based on compatibility of systems and equivalence of traded units, to one that seeks to quantify and compare mitigation effort, offers interesting perspectives, it will also give rise to political controversy and raise similar challenges to those experienced in negotiations to date.²⁴ While it is inevitable perhaps that any proposed change to the status quo meets resistance, it could be observed in response firstly, that many of the challenges experienced in negotiations to date have not yet gone away and change such as that proposed might be just what is needed to cut the Gordian Knot that these challenges contin-

ue to pose. Secondly, it is observed also that the Paris Agreement has already begun the move away from a regime based on compatibility of systems and equivalence of traded units. Thus, the Paris Agreement parties, themselves, have initiated the process. It is just that the detail of that shift is taking a long time – perhaps too long – to tease out into properly workable operational measures.

But to consider Mehling's point further, it could be said that the MV approach simply shifts the political barriers from agreeing, for example, system harmonisation under a linking or similar arrangement, to agreeing a platform that quantifies and rates respective jurisdictions' efforts (or, at least, the outcomes of those efforts). Two lines of argument are proffered in response.

First, in the context of heterogeneous mitigation efforts recognised by the Paris Agreement, the application of analytical tools and corresponding means for data gathering, is crucial 'for assessing the country-level, comparative, and aggregate impacts of those efforts.'²⁵ These tools and associated data rely

19 Aki Kachi et al, 'Linking Emissions Trading Systems: A Summary of Current Research' (January 2015) International Carbon Action Partnership Report, 11.

20 (n 12).

21 Joseph E Aldy, 'Designing a Bretton Woods Institution to Address Climate Change' (2012) HKS Faculty Research Working Paper Series RWP12-017; Joseph E Aldy, 'The crucial role of policy surveillance in international climate policy' (2014) 126 *Climate Change* 3 – 4, 279 – 292; Joseph E Aldy and William A Pizer, 'Comparing emission mitigation pledges: Metrics and institutions' in Scott Barrett, Carlo Carraro, and Jaime de Melo (eds) *Towards a Workable and Effective Climate Regime* (VoxEU.org Books, 2015) 167-181; Joseph E Aldy, 'Evaluating Mitigation Effort: Tools and Institutions for Assessing Nationally Determined Contributions' (2015) Discussion Paper: Harvard Project on Climate Agreements <<http://pubdocs.worldbank.org/en/736371454449389076/pdf/Evaluating-Mitigation-Effort-Nov-2015.pdf>> accessed 27 February 2018; Joseph E Aldy and William A Pizer, 'Alternative Metrics for Comparing Domestic Climate Change Mitigation Efforts and the Emerging International Climate Policy Architecture' (2016) 10 *Review of Environmental Economics and Policy* 1; Joseph E Aldy, William A Pizer & Keigo Akimoto 'Comparing emissions mitigation efforts across countries' (2017) 17 *Climate Policy* 4, 501-515.

22 Joseph E Aldy, 'Evaluating Mitigation Effort: Tools and Institutions for Assessing Nationally Determined Contributions' (2015) Discussion Paper: Harvard Project on Climate Agreements <<http://pubdocs.worldbank.org/en/736371454449389076/pdf/Evaluating-Mitigation-Effort-Nov-2015.pdf>> accessed 27 February 2018

23 As to exchange rates, see also: Lazarus et al, 'Options and Issues for Restricted Linking of Emissions Trading Systems', (ICAP, September 2015) <https://icapcarbonaction.com/en/?option=com_attach&task=download&id=279> accessed 6 September 2016.

24 Michael Mehling, 'Legal Frameworks for Linking National Emissions Trading Schemes', in Carlarne, Gray and Tarasofsky (eds), *Oxford Handbook of International Climate Change Law*, (OUP, 2016) 276.

25 (n 22) 13.

on transparency and effective review mechanisms, to give credibility to commitments, the idea of transparency and policy surveillance of countries in the context of multilateral regimes, not being something new.²⁶ A number of transparency models from other multilateral regimes can be cited, including the International Monetary Fund (IMF) annual country-level economic surveillance; the Organisation for Economic Cooperation and Development (OECD) peer reviews of member states' economic policies every one or two years; and the World Trade Organisation (WTO) regular reviews of members' trade policies. The conclusion is that the international community can draw on an array of transparency and policy surveillance models.²⁷

Further, Aldy draws on economic game theory, international relations and legal academic literature to support the conclusion that policy transparency and surveillance can generate better outcomes in climate change negotiations, whether that be through legitimising a participant country's domestic policies, limiting the capacity for free-riding, or reducing overall costs of information gathering and so levelling the playing field.²⁸ While the context being considered in this paper differs, in that it is not climate change negotiations per se, but rather the mechanism that might be applied to give effect to the outcome of those negotiations, namely the market in which mitigation outcomes are traded, Aldy's arguments apply equally to the assessment of MV as part of a better design for effecting transfers of mitigation outcomes.

To this, one can add the fact that countries undergo sovereign credit rating assessments in order to borrow. For example, Standard & Poor's sovereign issuer credit ratings, pertaining to a sovereign's abili-

ty and willingness to service financial obligations to commercial creditors, encompasses a framework including (amongst other factors) policymaking; income levels, GDP per capita, tax and funding bases; currency in international transactions, external liquidity, residents' assets and liabilities relative to rest of the world; sustainability of debt burden; and exchange rate regime and monetary policy credibility.²⁹ Countries' sensitivities to disclosure of these sorts of statistics seem to recede when the objective at stake is access to international debt markets. Why should there be a difference when it comes to accessing an international carbon market, for which there may be similar financial, trade and policy benefits (to those mentioned by Aldy above)?³⁰

The second line of argument is that many, if not most, of the sources of potential political controversy can be addressed through careful regime design. For instance, consider the conceptual model for networking carbon markets on a distributed ledger architecture, proposed by the author in an earlier paper.³¹ It is postulated that elements of that model, were such a regime to be given effect, ameliorate the causes of potential political controversy, for instance:

- by ensuring the independence of the process to quantify and compare mitigation effort and that the entity or entities carrying out that assessment comprise relevantly qualified, independent, impartial experts;
- by applying generic criteria to assessments uniformly across all jurisdictions in that process, such that all jurisdictions are subject to equivalent treatment under the process;
- ensuring that the process and outcome are open and transparent and that outcomes are communicated appropriately as market sensitive information; and
- affording all jurisdictions the flexibility to engage with, or leave, the process relatively easily and on the same basis - in the event that, as an information tool, the assessment is part of an agreed governance framework (as opposed to being purely private sector driven).³²

Aldy argues that transparency and policy surveillance in international relations are not only beneficial, but accepted already in a number of contexts. Aldy also considers principles for developing effective metrics for mitigation effort and what those metrics might be.³³ The following sub-section of this pa-

26 *ibid.*

27 *ibid.* 34.

28 Joseph E Aldy, 'Designing a Bretton Woods Institution to Address Climate Change' (2012) HKS Faculty Research Working Paper Series RWP12-017

29 S&P Global Ratings, 'Sovereign Rating Methodology' (2017) <<https://www.spratings.com/documents/20184/4432051/Sovereign+Rating+Methodology/5f8c852c-108d-46d2-add1-4c20c3304725>> accessed 1 March 2018.

30 Additionally, under one model proposed, countries might even do so on their own terms. See, Justin D Macinante, 'A Conceptual Model for Networking of Carbon Markets on Distributed Ledger Technology Architecture' (2017) 3 CCLR, 243-260.

31 *ibid.*

32 *ibid.*

33 (n 21).

per now reviews those and some other specific approaches that are developing, or could be adapted into, methodologies for determining the MV of mitigation outcomes.

1. Methodologies

Mitigation outcomes will be measurable and, notwithstanding some being absolute while others are relative, or intensity-based as opposed to emission-based, it is presumed that all measured outcomes will be capable of being converted into the same empirical metric, such as tonnes of CO₂-e, per unit, per period of time (e.g., say, per annum). As noted above, to enable comparability, adjustments need to be made to these measured amounts to take account of differences in the contexts in which the outcomes are achieved. The adjustments might be based on generic parameters relating to:

- the mitigation action itself (such as concerning risk factors associated with the action, its monitoring, measurement, reporting, or verification);
- the suite of actions of which it forms part in the particular jurisdiction where it is carried out (for example, the overall percentage of jurisdictional emissions covered);
- the jurisdiction itself (for instance, economic size, production, economic structure, level of emissions, financing considerations, level of ambition, capacity).³⁴

These parameters illustrate an approach to determining MV. The measured value or outcome, so adjusted, would be the MV of the unit of ‘carbon asset’ produced by the mitigation action considered. Similar assessment methodologies or processes include the NCM’s Mitigation Action Assessment Protocol (MAAP) trialled by the World Bank’s Partnership for Market Readiness, the Climate Transparency approach, and the more academic approach to deriving suitable metrics taken by Aldy and colleagues.

a. World Bank NCM Initiative: MAAP

The MAAP³⁵ differs from the context of transfers between ETSs described above, in that to date it has focused on the MV of project-generated credits. ‘In the long run, the MAAP is intended to contribute to achieving the goal of an independent and interna-

tionally accepted system for comparing carbon assets and eventually, trade and exchangeability of carbon credits.’³⁶ Nevertheless, the approach and to some degree, the metrics and methodology, could be applicable not just to carbon credits, but also to other types of mitigation actions.

The MAAP is continuing to evolve, currently consisting of four independent risk modules, the first three of which relate to environmental (carbon) integrity, while the fourth covers developmental benefits. To these a fifth module, relating to international transfer readiness under Article 6.2 of the Paris Agreement, is added. The first three modules are: mitigation action program; mitigation action management entity; and investment environment. Each module is comprised of assessment areas for which there are key indicators. So, for instance, the mitigation action program module has assessment areas: definition & scope; objective & targets; planning; roles, responsibilities and authorities; barriers; emissions reduction from intervention; and monitoring and reporting. Each assessment area is weighted according to its relevance and the key indicators in each are also weighted according to the level of confidence for that indicator.³⁷

While the first module (mitigation action program) includes ‘emission reductions from interventions’ as one of the seven assessment areas, with seven of the thirty-two indicators, its relative weight in the scoring is only 20%, suggesting emphasis on overall design, governance and planning, rather than on physical mitigation measured. For example, definition and scope (14%) and objectives and targets (20%) have a higher overall weighting than emission reductions (20%) and monitoring and reporting (10%).³⁸ This emphasis may reflect the short-term ob-

34 This third adjustment factor, for instance, *inter alia*, would take account of the elements in Arts 2.2 and 4.3 Paris Agreement, namely common but differentiated responsibilities, respective capabilities, and different national circumstances.

35 World Bank Partnership for Market Readiness, ‘Mitigation Action Assessment Protocol’ (April 2016) 110153-WP-P161139-PUBLIC-MAAPMay <<http://www.worldbank.org/en/topic/climatechange/brief/globally-networked-carbon-markets>> accessed 27 February 2018.

36 *ibid* 10.

37 *ibid* 19-22, an illustrative table of indicators and weightings is set out. Modules are also set out in Annex 1.

38 They also have nine indicators as opposed to ten, suggesting the average level of confidence in the indicators for the latter two would be 10% less, although it is noted that these are all just illustrative.

jectives of MAAP to help jurisdictions at the program level to systematically self-evaluate their mitigation actions and demonstrate the results. Hence, guidance on design and implementation, and prioritisation of actions in climate change strategic planning are to the fore.

The recently added fifth module assesses sector/jurisdictional readiness to engage in Article 6.2. As presently conceived, it covers four equally weighted assessment areas, being: double counting; environmental integrity; alignment of mitigation outcomes with NDC; and transparency. Each of these has a number of key indicators, which again are allocated different weightings. One issue that will need to be guarded against in relation to these is the risk of overlap, given the conceptual closeness of the assessment areas.

The MAAP modular scoring approach can be contrasted with that of a second initiative, also supported by the World Bank, promoted by Climate Transparency.

b. Climate Transparency

By focusing on projects, MAAP might be considered to be the micro-level, while the approach taken by Climate Transparency is at the opposite, macro-level end of the spectrum. Climate Transparency prepares the annual 'Brown to Green' report examining G20 countries' transition to a low-carbon economy, which collates a range of indicators including emissions and emission trends, climate policy performance, indicators on how countries are financing the transition, and indicators relating to how they are decarbonising.³⁹

The indicators are garnered from a number of sources including the World Bank, International Energy Agency (IEA), Organisation for Economic Co-operation and Development (OECD), various United Nations agencies, non-governmental organisations

such as Germanwatch, Climate Action Tracker and private sector sources. It is interesting that Climate Transparency is a partnership with organisations from Argentina, Brazil, China, France, Germany, India, Indonesia, Mexico, South Africa and UK. The report is put together by the partnership with the intention of achieving a wider perspective and therefore hopefully deriving a broader legitimacy.⁴⁰

The Brown to Green reports rank G20 countries in relation to the individual indicators and provide overviews individually for each country. While these individual indicators allow comparison on a disaggregated basis, the overviews are descriptive and the reports do not aggregate the indicators to give a single overall figure. At present, Climate Transparency deliberately abstains from aggregating the indicators so as to provide comparable information to governments. An index, created from aggregating indicators (as, for example, is done by Germanwatch, one of the Climate Transparency partners) has a better media communication appeal but does not necessarily promote meaningful interaction with governments.⁴¹

Thus, while the individual Climate Transparency indicators may provide valuable input to an MV assessment methodology, the reports overall do not promote a methodological approach for such. Both the MAAP and Climate Transparency approaches include indicators that might be applicable and feed into a methodology to assess MV, yet neither approach individually, as it currently stands, could provide MV assessment.

c. Aldy and Colleagues

As noted earlier, Aldy and his colleagues have considered principles for developing effective metrics for mitigation effort. In looking at metrics for comparing emission mitigation pledges, Aldy and Pizer⁴² identify three principles to help inform the selection as comprehensiveness; measurability and replicability; and universality. The metrics they consider fall into three categories:

- emissions and other physical measures (that have direct relevance to the environment);
- prices on carbon and energy taxes (reflecting policies to reduce emissions); and
- costs (that measure the useful economic resources diverted away from consumption and towards abatement).

39 See, Climate Transparency, 'Brown to Green: The G20 Transition to a Low-Carbon Economy' (2017) <<https://germanwatch.org/sites/germanwatch.org/files/publication/18761.pdf>> accessed 12 August 2018.

40 Author's private communication with Climate Transparency, 1 June 2018.

41 *ibid.*

42 Joseph E Aldy and William A Pizer, 'Comparing emission mitigation pledges: Metrics and institutions' in Scott Barrett, Carlo Carraro, and Jaime de Melo (eds) *Towards a Workable and Effective Climate Regime* (VoxEU.org Books, 2015) 167-181.

These authors note that, in practice, there will be trade-offs in the degree to which any particular metric satisfies the principles.⁴³ For instance, emission levels, usually expressed relative to a baseline year, were applied under the Kyoto Protocol. Apart from issues over what baseline year might be set, emissions do not necessarily reflect effort, as evidenced by the issues over hot air from economies in transition. Emission intensity is also problematic, in that it can be influenced by changes both in economic development and technology uptake. It is noted that observed emissions might be compared to an analysis of what emissions would have been without mitigation policies, in effect, a retrospective forecast, to give a comprehensive metric.⁴⁴ Carbon prices, energy taxes and economic costs similarly, all have drawbacks. As such, a portfolio of metrics along the lines of the suite of economic statistics used to describe the health of the macroeconomy is recommended.⁴⁵

These principles and metrics are analysed further in a second paper looking at alternative metrics for comparing mitigation effort.⁴⁶ The analysis reveals that metrics such as total emissions and explicit emission prices are easy to observe and measure, but may be removed from key concepts of effort and underlying policy implementation. Metrics that more closely reflect effort, such as emission reductions, implicit prices and costs, are harder to observe and measure, introducing subjectivity and possibly inconsistency. Metrics can be constructed or benchmarked in a variety of ways that may or may not adjust for endowments, historical behaviour or future growth. The authors conclude that more appropriate relative comparisons could be achieved by grouping countries with peers.⁴⁷

Aldy develops this further in terms of the need for evaluation and assessment tools generated by the significant heterogeneity of approaches apparent in the Paris Agreement pledge and review paradigm.⁴⁸ The key point is the need for economic modelling tools and sophisticated analysis, to inform decision making, not least to account for competitiveness issues for business stakeholders, as well as underscoring the fairness for countries of multilateral arrangements. Assessment and comparison of mitigation effort can also highlight similarities or differences in expected marginal abatement costs, leading to great potential efficiencies.⁴⁹

A template framework of metrics of efforts and comparison of countries is presented in a more re-

cent paper.⁵⁰ Building on the earlier work, the intention is to provide a common data and analytic framework that can measure mitigation efforts and facilitate like-for-like comparisons. The metrics are again in terms of: (i) emissions corresponding to physical outcome measures; (ii) prices on carbon and energy reflecting market signals designed through mitigation policies; and (iii) cost metrics including measures of economic resources diverted away from current consumption.

Viewed alone, none of the metrics does well in terms of the principles (comprehensiveness; measurability and replicability; and universality) against which they are evaluated. Hence a suite of metrics is proposed to compare effort and a template framework presented.⁵¹ Approaches for determining or benchmarking whether country efforts are 'fair' or 'satisfactory' are considered, such as, their ranking against each quantitative metric (this is similar to the Climate Transparency approach, but would not indicate whether or not an effort was satisfactory or fair), or arranging countries into peer groups for relative comparisons (would identify laggards), or establishing absolute benchmarks (for example, as negotiated under the Kyoto Protocol, but unlikely under pledge and review).

Yet, these authors admit, any attempt to carry out such an exercise would need to account for issues such as population growth, wealth, fossil fuel resources, as well as judgments about past actions and the weight to be placed on new efforts. They conclude that despite the increasing relevance of metrics and

43 *ibid.*

44 This is, in effect, what is being described in Section II of this paper as the primary mitigation value, to which the adjustments based on risk need to be made.

45 (n 42).

46 Joseph E Aldy and William A Pizer, 'Alternative Metrics for Comparing Domestic Climate Change Mitigation Efforts and the Emerging International Climate Policy Architecture' (2016) 10 *Review of Environmental Economics and Policy* 1.

47 *ibid* 27.

48 Joseph E Aldy, 'Evaluating Mitigation Effort: Tools and Institutions for Assessing Nationally Determined Contributions' (2015) Discussion Paper: Harvard Project on Climate Agreements <<http://pubdocs.worldbank.org/en/736371454449389076/pdf/Evaluating-Mitigation-Effort-Nov-2015.pdf>> accessed 27 February 2018.

49 *ibid.*

50 Aldy, Joseph E., William A. Pizer and Keigo Akimoto (2017) Comparing emission mitigation efforts across countries, *Climate Policy*, 17:4, 501-515.

51 *ibid* Table 1.

analytical tools to compare mitigation actions across countries, it is unlikely that multilateral negotiations will reach a consensus on this in the near term such that, in the meantime, independent researchers and expert analysts will need to fill the gap.

d. Other Approaches and Developments

i. Standards Platforms, e.g., Gold Standard and Others

While standards considered in this subsection apply to project generated credits, rather than allowances under ETSs, they illustrate another approach that has been taken to the question of valuing mitigation actions. Under the Kyoto Protocol modalities and procedures for the clean development mechanism, a certified emission reduction (CER) is defined to be 'a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (Modalities for the accounting of assigned amounts) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.'⁵² Consequently, for a CDM project, the CDMEB will either issue CERs each of that value, or not issue them, depending on its assessment of the project. Thus it is a binary process, with no scope for levels of mitigation value.

Consequently, standards platforms such as the Gold Standard (GS), Voluntary Carbon Standard (VCS) and others,⁵³ which apply to project-generat-

ed credits but operate mostly in the voluntary market,⁵⁴ also work on the basis that the credits they certify are of a value of one tonne CO₂-e. This is in spite of the fact that, not only can the projects themselves vary considerably in terms of factors such as the source of reductions, methodology, process, monitoring, reporting and verification, but the standards applied differ in terms of accounting, monitoring, verification and certification, and review. For instance, a WWF report identified differences in standards reviewed for additionality tests, third party verification requirements, separation of verification and approval process, whether the standard had a registry, accepted project types, whether project types with a high chance of adverse impacts were excluded, and whether account was taken of potential co-benefits.⁵⁵ The credits certified under the different standards range in price from GS CERs that can trade at a premium to CERs, down to credits for as little as EUR 1, although being the voluntary market, different factors affect demand than in the case of the compliance market.⁵⁶ Nonetheless, it seems incongruous that in spite of the differences, purchasers who buy these credits will be offsetting them against their emissions all on the basis that they equal one tonne CO₂-e.

The impact of MV assessment applied to project-generated credits is potentially twofold (at least) for these standards: first, just as for allowances from heterogeneous schemes, it will facilitate fungibility of the credits; and secondly, it will shine a bright light on the standards themselves, exposing them to closer scrutiny which will benefit the more rigorous, but perhaps cause difficulties for those that are less so.

e. Market Purchasers, e.g., Klik Foundation in Switzerland

Organisations may be active in the carbon markets for a variety of reasons. For instance, the Foundation for Climate Protection and Carbon Offset (KliK) is a sector-wide carbon offset grouping for fossil motor fuels, under Swiss CO₂ law.⁵⁷ In Switzerland, mineral oil companies responsible for releasing fossil motor fuels for consumption must offset part of the emissions resulting from use of these fuels, which the KliK Foundation does on their behalf.⁵⁸ While the Swiss law is under revision (in the context of the anticipated guidance on Article 6), draft proposals include that the KliK Foundation should look to the in-

52 Report of the Conference of the Parties on its Seventh Session, held at Marrakesh from 29 October to 10 November 2001, FCCC/CP/2001/13/Add.2 21 January 2002, Decision 17/CP.7, 26.

53 Seven such standards were reviewed in 2008 by WWF: Anja Kollmuss, Helge Zink, Clifford Polycarp (WWF Germany), 'Making Sense of the Voluntary Carbon Market A Comparison of Carbon Offset Standards (2008) <http://www.globalcarbonproject.org/global/pdf/WWF_2008_A%20comparison%20of%20C%20offset%20Standards.pdf> accessed 3 June 2018.

54 This is the market in which businesses, individuals and other entities that are not subject to any legal requirements to do so, nevertheless voluntarily purchase and cancel credits so as to offset their carbon emissions. Some GS CERs have been used for compliance.

55 (n 53) 88-93.

56 It is noted also that these VERs are sold in different voluntary markets to a variety of different purchasers, whose motivations may also vary as to what factors are important.

57 KLIK, 'Kompensation im Ausland nach den Regeln des Pariser Übereinkommens' <<https://www.international.klik.ch/en/Regulatory-framework.214.html>> accessed 4 June 2018.

58 *ibid.*

ternational market for reductions (presumably mitigation outcomes) that will help Switzerland meet its NDC. How these mitigation outcomes are valued is thus of critical importance. Future market participants such as KliK Foundation will need to consider the criteria they apply in making such purchases, in the absence of a recognised system for MV assessment.

f. Further Possibilities

There are many potential variations on the methodological approach to MV canvassed in this paper. For instance, one might involve combining the MAAP and Climate Transparency indicators.⁵⁹ Another illustrative approach is one that anchors mitigation value to the policy objective of the UNFCCC by valuing the ambition expressed by Parties to the Paris Agreement through their NDCs: by starting from the level at which global emissions must be capped to enable temperature increase to be limited to 1.5°C, a comparison can be made with the aggregate commitments of Parties as expressed through their NDCs. Consideration of whether the collective ambition of the NDCs is consistent with the 1.5°C limit, of what individual Parties' fair burden sharing contributions might be, and of whether those Parties will actually comply with their committed levels of emissions, can provide a mitigation value.⁶⁰ This MV might be operationalized through a discount factor in terms of the global temperature goal for carbon asset units and an exchange rate based on the relative ambition of the transaction participants. The discount factor and exchange rate would be applied to exported units, which would need to be 'budget compliant'.⁶¹ This approach also invites exploration of the extensive literature on methodologies for determining equitable distribution of mitigation targets, which while relevant to consideration of the third of the risk factors mentioned earlier (also at (c) in the following, concluding section), are not considered in this paper.⁶²

2. Conclusion on Methodologies

In terms of an emissions trading scheme (ETS), as illustrated in Section II, the starting point for MV assessment is the difference in emissions with and without the scheme: that is, the projected or observed

emissions under the ETS (depending on design) compared to an analysis of what emissions would have been without the ETS, in effect, a retrospective forecast. This represents the (projected) amount of emissions *reduced* by the ETS in the relevant time period, if entities under that scheme have complied.⁶³

While Aldy describes such an approach as 'a comprehensive metric', to more accurately reflect what can be described as the value of the measured outcome, adjustments need to be made to that amount to take account of differences in the contexts in which the outcomes are achieved. To recap, adjustments proposed might be based on parameters relating to:

- a) the mitigation action itself (such as concerning risk factors associated with the action, its monitoring, measurement, reporting, or verification, reliability of the BAU forecast);
- b) the suite of actions of which it forms part in the particular jurisdiction where it is carried out (for example, the overall percentage of jurisdictional emissions covered);
- c) the jurisdiction itself (for instance, economic size, production, economic structure, level of emissions, financing considerations, level of ambition, capacity).

The first of these categories can be seen to parallel the MAAP approach, while the second and third are similar to Climate Transparency, the MAAP fifth module and the metrics identified by Aldy and his colleagues, whose principles for selecting appropriate metrics also provide guidance.

Yet, as these commentators identify also, despite the increasing relevance of metrics and analytical tools to compare mitigation actions across countries, it is unlikely that multilateral negotiations will reach

59 The author understands that research on such an approach may be presently under consideration by the World Bank.

60 Johannes Heister, 'Mitigation Value to Enable International Linkage of Domestic Programs' (Networked Carbon Markets initiative strategy workshop, Cologne, 28 May 2016)

61 Justin Macinante, 'Networking Carbon Markets: Key Elements of the Process' (2016) 18 <<https://openknowledge.worldbank.org/handle/10986/25750>> accessed 21 August 2017.

62 For a recent analysis, in context of the fairness of Australia's NDC target, see, Merzian et al, 'Advance Australia's fair share, Assessing the fairness of emissions targets' (12 June 2018) The Australia Institute, 22 <http://www.tai.org.au/sites/default/files/P507%20Advance%20Australias%20Fair%20Share%20FINAL_0.PDF> accessed 12 June 2018.

63 As noted earlier, the marginal effect may be a more appropriate starting point.

a consensus on this soon. The recent SBSTA48 negotiations appear to bear out this expectation. As such, the field remains open for independent researchers and expert analysts to fill the gap in devising a methodology or methodologies for assessing MV, enabling fungibility of units from different mitigation actions and thereby facilitating transfers of the outcomes of those actions. In short, there is an opportunity for the private sector to step in and fill the current void.

IV. Institutional Arrangements for Overseeing Mitigation Value Assessment

Notwithstanding the conclusion of the preceding section, there will be a need for institutional arrangements to oversee any process for assessing mitigation value that may gain acceptance. While there may be others, by way of illustration, two alternative possibilities for how institutional arrangements might develop canvassed by this paper are:

- firstly, by a public, intergovernmental institution, possibly along the lines of the Clean Development Mechanism Executive Board (CDMEB) model;
- secondly, by private sector entities, under a model similar to that which operates for credit reference/rating agencies (CRAs), subject to a regulatory model such as that administered by the European Securities and Markets Authority (ESMA).

1. Public, Intergovernmental Institution Model

The public, intergovernmental institution model is perhaps more problematic, in terms of fostering re-

engagement in the market by the private financial sector, given aspects of the CDMEB experience.⁶⁴ Issues raised in relation to CDMEB operations have included a lack of transparency (in spite of provisions in its rules for public disclosure), lack of clarity and predictability in decision-making, and the absence of decision review or appeal rights. Its nature as a body made up of regional negotiating group nominees, rather than a panel of independently assessed, expert appointees, has been flagged as well.⁶⁵ Further, the CDM process has been lengthy and cumbersome.⁶⁶ The complexity of the CDMEB's role, including as *de facto* gatekeeper over the flow of projects to the market has been problematic. The lesson from this for the MV process is that any structure needs to separate the function of regulating providers of MV, from the actual provision of MV, which should just be market information, available openly to, and independently of, market operation.

Another perspective is that taken by Aldy,⁶⁷ who in 2012 proposed the design of a Bretton Woods Climate institution, to enhance public knowledge about nations' commitments, policies and outcomes. Such an institution would have three primary functions: to implement a system of national and global policy surveillance; to promote best practice policies; and to provide a means to channel financing for investments in climate change risk mitigation activities in developing countries.⁶⁸ The experiences of other international policy regimes are drawn upon to provide lessons that might inform the design of such a body, for instance, reports compiled after International Monetary Fund (IMF) country visits, which form the basis for peer review by the Executive Board of country directors, and ultimately are published so as to enable stakeholder engagement. Similarly, Aldy mentions Organisation for Economic Co-operation and Development (OECD) economic surveys, which also have a focus on peer review.

In synthesising the other regimes reviewed, Aldy notes that: first, the other regimes rely on both expert review and peer review, whereas the climate regime only has expert review; secondly, the expert reviews under other regimes are undertaken by career staff of their respective institutions, while the climate regime typically relies in an ad hoc fashion on government-sponsored experts; thirdly, there is a distinction under the climate regime between industrialised and other states (although this is changing under the Paris Agreement); and fourthly, standards

64 For the a view on the dependence of this market on investor confidence see, Charlotte Streck and Jolene Lin 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) 19 European Journal of International Law 2, 420.

65 *ibid*; Ilona Millar, Martijn Wilder, 'Enhanced Governance and Dispute Resolution for the CDM' (2009) CCLR 45 (2009). Recommendations for how the issues can be rectified are noted, as are the alternative models raised by these authors.

66 (n 64).

67 Joseph E Aldy, 'Designing a Bretton Woods Institution to Address Climate Change' (2012) HKS Faculty Research Working Paper Series RWP12-017.

68 *ibid* 13 et seq.

and reporting templates improve transparency of reporting and review, enhancing surveillance effectiveness.⁶⁹

These points of distinction between the climate and other regimes and the lessons identified by Aldy are important. However, they are observed in a context that differs from that in which the MV assessment will be most relevant, namely the operationalization of Article 6 Paris Agreement through transfers of mitigation outcomes: trading carbon assets between heterogeneous schemes. In this context, additional considerations need to be taken into account, for instance, the confidence of the market in the accuracy and reliability of the MV assessment process; and the capacity of that process to adjust to or account for the dynamic nature of the information on which it is based, or the possibility of the need to rectify inaccurate assessments. These considerations raise the question of how flexible a public, intergovernmental institution might need to be, and whether such a model could achieve the level of flexibility and reliability that might be required to meet the demands of an efficiently operating market.

2. Regulated Private Sector Model

The second approach would entail private sector (CRA-type) entities being accredited to assess and determine MVs, based on approved methodologies, subject to authorisation and supervision along the lines of the ESMA regulatory model for CRAs. The outcomes would be publicly available market information. Detailed consideration has been given to this approach in an earlier World Bank paper,⁷⁰ the relevant sections of which are transposed and adapted in an Annex available online.⁷¹

Reasons why this approach might be favoured over the public, intergovernmental institution model include, first, its greater flexibility. As noted above, the nature of the information taken into account for the purpose of assessing MV in the case of any jurisdiction will not be static. It will be constantly changing, with new information that comes to hand needing to be factored into calculations. Some such updated information may be less immediately critical to assessments, while other revisions may necessitate changes on a more dynamic basis. With multiple private sector institutions, rather than a single public one, employing more assessors making the as-

sessments, it is conceivable that better accounts might be taken of these informational change requirements.

Second, by having a greater number of entities providing MV assessments there would be scope for greater statistical reliability in the process. More entities providing MV assessments would open the way for statistical analysis to identify and exclude outliers, thereby reducing the potential impact significance of unavoidable value judgments and subjective criteria that inevitably will be implicit in any methodology.

Third, the regulated private sector model proposed here is one with which the private financial sector will be more familiar, based on the parallels with the CRA process. Thus, the hope would be that such familiarity would translate into readier acceptance of the process.

As to whether, or how, the necessary consensus amongst Parties might be secured in order that a governance framework for accreditation might be established, that remains an unanswered question at this point in time. Nevertheless, it remains open for the private sector to grasp the initiative and introduce MV assessment services.

V. Conclusion

Emissions level growth is increasing and without additional efforts will persist, driving global mean temperatures to unmanageable levels.⁷² To achieve the climate change policy objective of limiting the increase to less than 2°C, there is a limited budget for cumulative global GHG emissions: at the current rate of emissions, that budget will be exceeded in less than twenty years.⁷³

Efforts to bring about the additional mitigation are expanding across jurisdictions globally, often involv-

⁶⁹ *ibid.*

⁷⁰ (n 61).

⁷¹ Justin Macinante, 'Operationalizing Cooperative Approaches Under the Paris Agreement by Valuing Mitigation Outcomes' (2018) Available at SSRN <<http://ssrn.com/abstract=3211454>>.

⁷² IPCC, 2014: Summary for Policymakers. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom, 6.

⁷³ (n 62) 22.

ing mechanisms to put a price on carbon. These measures, while reflecting local circumstances, are diverse and fragmented. To be successful in bringing about behavioural changes to increase mitigation of GHG emissions, they need to engage the private sector at scale. To do so, there need to be well-designed, properly functioning markets for the international transfer of mitigation outcomes between these diverse jurisdictional schemes. Assessment of mitigation value provides the means to enable comparability between, and fungibility of units across, those schemes so that the desired scale might be achievable.

Private sector entities, researchers and analysts should be encouraged to step in and fill the void that exists in terms of methodologies for assessing mitigation value. Concurrently, consideration should be

given at the intergovernmental level to appropriate institutional arrangements that might be put in place to guide, manage and oversee such methodological processes.

At the same time as the inconclusive SBSTA48 negotiations in Bonn were closed, it was reported that the Trump Administration was ending funding for NASA's monitoring system for greenhouse gases.⁷⁴ The loss would jeopardise the ability to measure national emission cuts, it was reported, weakening the chances of developing a robust and transparent emission monitoring system.

In these unfortunate circumstances, surely it is important for the piloting of models that offer the potential for effectively operationalizing the Paris Agreement to commence without delay, rather than waiting for interminable negotiations to resolve every process-issue dispute. In the meantime, GHG emissions are continuing to rise, to a certain extent unmeasured and unmonitored, and the manifestations of a changing climate continue to become ever more obvious, more frequent and more damaging.

74 BBC, 'Trump White House axes Nasa research into greenhouse gas cuts' (*BBC News Online*, 10 May 2018) <<https://www.bbc.com/news/world-us-canada-44067797>> accessed 12 August 2018.

Current Developments in Carbon & Climate Law

European Union

*Leonardo Massai and Claire-Marie Beyet**

I. Climate Finance

On 12 February 2018 the European Commission adopted the Implementing Decision (EU) 2018/210 on the adoption of the LIFE multiannual work programme (MAWP) for the period 2018-2020. The MAWP's budget for nature conservation and biodiversity is set to increase by 10% for the period of 2018-2020.

On 1 June 2018 the European Parliament and the Council adopted Proposal COM(2018)385, establishing a program for the environment and climate action (LIFE) and repealing Regulation (EU) No 1293/2013. The Commission is proposing to increase funding by almost 60% for LIFE, the EU program for the environment and climate action, with a budget of €5.45 billion between 2021 and 2027. The program is intended to act as an instrument to initiate or increase actions on sustainable production, distribution and consumption practice.

II. EU-ETS

On 14 March 2018 the European Parliament and the Council adopted Directive (EU) 2018/410 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments as well as Decision (EU) 2015/1814 on the market stability reserve. Pursuant to Article 191 TFEU, combating climate change is an explicit objective of EU environmental policy. Directive 2018/410 is amending the rules of the EU ETS Directive for the period 2021-2030. It defines a reformed system, accompanied by an instrument for market stability ('the market stability reserve') and a linear reduction factor of 2.2% in the quantity of allowances issued each year across the EU (compared to 1.74% in the previous period).

III. Greenhouse Gas Emissions

On 27 May 2018 the European Environment Agency (EEA) published the Annual European Union GHG inventory 1990-2016 and inventory report 2018 indicating a 0.4 % decrease in the total EU GHG emissions in 2016, compared with 2015. The decrease in EU GHG emissions since 1990 is due to the implementation of several climate measures, economic factors, and a significant reduction in the energy sector, in particular by increasing the use of renewable resources.

IV. LULUCF

On 30 May 2018 the European Parliament and the Council adopted Regulation (EU) 2018/841 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU. On the same day Regulation (EU) 2018/842 of the European Parliament and of the Council on binding annual greenhouse gas emission reduction by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 was also adopted.

Regulation 2018/841 requests the Member States to ensure that emissions from land use, land use change, and forestry are compensated by an equivalent removal of CO₂ from the atmosphere between 2021 and 2030. This has been called the 'non-debit rule' and will be an important part of the EU climate

DOI: 10.21552/cclr/2018/3/13

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framework. The regulation sets out the commitments of Member States for the land use, land use change and forestry ('LULUCF') sector that contribute to achieving the objectives of the Paris Agreement and meeting the greenhouse gas emission reduction target of the Union for the period from 2021 to 2030. This regulation also lays down the rules for the accounting of emissions and removals from LULUCF. The accounting system included in the regulation is a step forward compared to what had already been set up by Decision No 529/2013 EU and the Kyoto Protocol.

Regulation 2018/842 is based on the proposal for an 'Effort sharing regulation' and lays down obligations of Member States with respect to their minimum contributions for the period from 2021 to 2030 to fulfilling the Union's target of reducing its greenhouse gas emissions by 30 % below 2005 levels in 2030. Sectors covered by the regulation include energy, industrial processes, product use, agriculture and waste. The regulation also lays down rules on determining annual emission allocations and for the evaluation of Member States' progress towards meeting their minimum contributions. The Commission will be able to adopt implementing acts, and in case of non-compliance, request a corrective action plan, and some additional measures if necessary.

V. Energy Union

On 20 June 2018 the European Parliament, Council and European Commission reached a political agreement on the governance of the Energy Union. This common agreement aims to enable every Europeans

to access secure, affordable and climate-friendly energy, to provide a fair opportunity for consumers, and to define the EU's strategy long-term greenhouse gas reduction. This agreement is aimed at establishing a clear and transparent regulatory framework for the dialogue with civil society in Energy Union matters, in order to enhance regional cooperation, and calls for each Member State to prepare a national energy and climate plan for the period 2021 to 2030. Moreover, the agreement ensures the follow-up of the review of the progress made at Member State level to the collective achievement of the binding EU renewables target, the EU energy efficiency target and the 15% interconnection target, in order to enhance the ambition set up in the Paris Climate agreement.

VI. Transport

On 28 June 2018 the European Parliament and the Council adopted Regulation (EU) 2018/956 on the monitoring and reporting of CO₂ emissions from and fuel consumption of new heavy-duty vehicles (HDVs). New HDVs registered in the EU will have to be monitored and reported as of next year. The vehicles covered by the regulation are those falling into the categories M1, M2, N1 and N2, with a reference mass that exceeds 2 610 kg, and which are not already regulated by Regulation (EC) No 715/2007, as well as vehicles from categories M3, N3, O3, and O4. The data to be monitored are listed in the Annex I and include CO₂ emissions and fuel consumption. Data must be transferred to the Commission that will have the power to issue an administrative fine in the event data are erroneous or communicated after the deadline.

North America

*Avi Zevin**

I. United States

The Trump Administration's efforts to roll back federal climate regulation have accelerated. The Environmental Protection Agency (EPA) and the Department of Transportation's National Highway Transportation Safety Administration (NHTSA) have released two proposals to repeal or significantly weaken the twin pillars of former-President Obama's strategy to reduce greenhouse gas (GHG) emissions.¹ Their adoption would represent a significant setback for achieving the United States' (US) Paris Climate Agreement commitments.² However, both proposals face additional legal steps before they can be implemented, including public comment and judicial review.

1. Agencies Propose to Roll Back Passenger Vehicle GHG and Fuel Economy Standards and Limit State Authority

In August 2018, EPA and NHTSA released a joint proposal that would roll back GHG emission standards and fuel economy standards for passenger vehicles and light duty trucks (collectively 'light duty vehicles') that had been promulgated during the Obama Administration. The proposal would also constrain the authority of states to develop their own programs to limit vehicle emissions.³

a. Background

In 2012, EPA and NHTSA jointly issued regulations that would limit GHG emissions and increase fuel economy of light duty vehicles from Model Years (MY) 2017-2021.⁴ In the 2012 rulemaking, EPA also promulgated GHG emission standards for MY 2022-2025 light duty vehicles. Because the standards vary by vehicle size, their effect depends on the types of vehicles actually sold. However, EPA found the standards were expected to result in a fleetwide av-

erage GHG emissions rate of 163 grams of CO₂ per mile driven (equivalent to 54.5 miles per gallon) by 2025.⁵ EPA made a commitment to re-examine the practicability of the MY 2022-2025 standards by 2018. Due to limitations in NHTSA's statutory authority, fuel economy standards did not extend through MY 2025; rather, NHTSA identified intended standards for MY 2022-2025 light duty vehicles and made a commitment to evaluate the appropriateness of those standards in 2018.

b. EPA and NHTSA Joint Proposal to Flatline GHG and Fuel Economy Standards

The EPA and NHTSA joint proposal would freeze both GHG and fuel economy standards at the MY 2020 level through MY 2026.⁶ This would result in an expected fleetwide average emission rate for light duty vehicles of 240 grams of CO₂ per mile,⁷ and an increase of up to 931 million metric tons of carbon dioxide equivalent through 2035.⁸ The agencies also took comment on alternative levels of stringency for the GHG emission standards and fuel economy standards, including retention of the current MY 2022-2025 standards.

DOI: 10.21552/cclr/2018/3/14

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1 See, Executive Office of the President, 'The President's Climate Action Plan' (June 2013) <<https://obamawhitehouse.archives.gov/sites/default/files/image/president27sclimateactionplan.pdf>> accessed 30 August 2018.

2 Trevor Houser et al, 'The Biggest Climate Rollback Yet?' (August 2018) <<https://rhg.com/research/the-biggest-climate-rollback-yet/>> accessed 30 August.

3 The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42,986 (proposed 24 August 2018) [hereinafter 'SAFE Rule Proposal'].

4 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed Reg 62,624 (15 October 2012).

5 *ibid* 62, 636.

6 SAFE Rule Proposal, 83 Fed Reg, 42,989.

7 *ibid*.

8 (n 2).

The agencies conducted new analysis in order to provide support for the proposed flatlining of the GHG and fuel economy standards.⁹ The agencies relied on new modelling that found the cost of deploying the technology needed to comply with the current standards would exceed the costs anticipated by the agencies in prior analyses. The agencies also found that fuel savings benefits to consumers would be less than previously anticipated. By using an estimate of climate damages caused by GHG emissions that is limited to domestic, rather than global, costs, the agencies also deemphasized the climate benefits of the current standards. Finally, the agencies emphasised new analyses that purport to show the current standards will increase traffic fatalities. However, these safety conclusions have been subject to significant criticism, including by academic researchers on whom EPA and NHTSA's analyses rely.¹⁰

c. Frustrating State Policies to Limit GHG Emissions

In addition to scaling back the ambition of federal standards, the agencies have proposed to withdraw authority for states to set their own GHG emission standards for new light-duty vehicles and to mandate that a portion of vehicles sold must be zero emission vehicles (ZEV).¹¹ Under Section 209 of the Clean Air Act, California has special authority to set standards

for new motor vehicles that are at least as stringent as federal standards when granted a waiver by EPA.¹² Other states may then adopt California's standards.¹³ In 2013, California was granted a waiver that allowed it to independently establish GHG emission standards for MY 2022-2025 light duty vehicles and to mandate ZEV sales.¹⁴ Thirteen states (and the District of Columbia) independently adopted California's emission standards and nine states adopted California's ZEV mandates.¹⁵

EPA has proposed to withdraw California's waiver on the grounds that the California regulations are preempted by federal fuel economy law and because California did not meet the statutory requirements for granting a waiver under the Clean Air Act. Some experts have called into question whether EPA has legal authority to withdraw a waiver under these circumstances.¹⁶ Whether the Trump Administration is successful in withdrawing California's waiver will significantly influence the extent to which state policy can step into the void of federal climate regulation.

2. EPA Proposes to Replace the Clean Power Plan with a Significantly Less Stringent Alternative

EPA has proposed to withdraw the Obama Administration's signature regulation to limit GHG emissions from the power sector, the Clean Power Plan, and replace it with a less stringent alternative, the Affordable Clean Energy (ACE) rule.¹⁷ Like the Clean Power Plan, the ACE rule would be promulgated under Section 111(d) of the Clean Air Act, and would require states to develop plans to reduce GHG emissions from certain existing fossil fuel-fired power plants based on EPA's evaluation of the best system of emission reduction that has been adequately demonstrated (BSER).¹⁸ However, the ACE rule, if finalized, would be significantly different than the Clean Power Plan in a number of respects.

First, where the Clean Power Plan would have applied to coal and natural gas-fired power plants, the ACE rule is limited to existing coal-fired power plants.

Second, citing legal objections, the ACE rule rejects EPA's determination in the Clean Power Plan that BSER includes reducing power sector emissions by shifting generation from higher-emitting sources

9 See, SAFE Rule Proposal, 83 Fed Reg 43,206-232.

10 Brad Plumer, 'Trump Officials Link Fuel Economy Rules to Deadly Crashes. Experts are Skeptical' (NYTimes.com, 2 August 2018) <<https://www.nytimes.com/2018/08/02/climate/trump-fuel-economy.html>> accessed 30 August 2018.

11 SAFE Rule Proposal, 83 Fed Reg, 43,232.

12 42 USC § 7543.

13 42 USC § 7507.

14 Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's Advanced Clean Car Program, 78 Fed Reg, 2,112 (9 January 2013).

15 Stephen Edelstein, 'Which States Follow California's Emission and Zero-Emission Vehicle Rules' (Greencarreports.com, March 2017) <https://www.greencarreports.com/news/1109217_which-states-follow-californias-emission-and-zero-emission-vehicle-rules> accessed 30 August 2018.

16 Denise A Grab et al, 'No Turning Back: An Analysis of EPA's Authority to Withdraw California's Preemption Waiver Under Section 209 of the Clean Air Act' (Policyintegrity.org, 2018) <http://policyintegrity.org/files/publications/No_Turning_Back.pdf> accessed 30 August 2018.

17 Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 83 Fed Reg 44,746 (31 August 2018) [hereinafter 'ACE Proposal'].

18 42 USC § 7411(d).

such as coal plants to lower-emitting sources such as renewables and natural gas combined cycle plants. Rather, the ACE rule proposes that BSER for coal plants is a list of 'candidate technologies' that can improve the efficiency by which those plants burn coal to produce electricity.

The ACE rule rejects EPA's long-standing approach under Section 111(d) to establish nationally-applicable numeric emission guidelines for regulated sources based on BSER. Rather, under ACE, each state plan would set unit-specific standards of performance in the form of a maximum allowable GHG emission rate, based on those candidate technologies that the state determines are achievable at the plant. Under this approach states, not EPA, determine the overall stringency of the program.

Another area of difference is the compliance flexibility provided to regulated power plants. Whereas the Clean Power Plan encouraged states to rely on averaging and trading among plants within and between states, the ACE rule allows for averaging only among units within an individual plant and not between plants. It is for this reason that EPA's economic analysis shows higher compliance costs for the ACE rule than the Clean Power Plan under a number of scenarios.¹⁹

Finally, the extent to which the ACE rule would result in GHG emission reductions as compared to the Clean Power Plan is uncertain. On the one hand, the falling costs of natural gas and renewable energy mean that power sector decarbonization is already on pace to exceed the level expected under the Clean Power Plan, despite the fact that it was put on hold by the US Supreme Court before it could go into effect.²⁰ Yet the Clean Power Plan may nonetheless have driven substantial additional emission reductions by requiring all states to implement emission reduction plans and not just those states that have already adopted ambitious climate policy.²¹ In contrast, the ACE rule requires only emission *rate* improvements in the form of efficiency improvements. But, increased efficiency can improve the economics of coal plant generation and so can, perversely, result in an increase in total emissions. In addition, EPA has also proposed to relax existing requirements that states make comprehensive upgrades when making efficiency improvements. This has the potential to extend the life of high-emitting coal plants. For these reasons, the ACE rule has the potential to increase overall GHG pollution.²²

II. Canada

Canada is moving forward with climate policy at the federal level but has scaled back its ambition and urgency in order to mitigate provincial opposition.

In April, Canada finalized regulations to reduce methane emissions from the oil and gas sector by 40 to 45 percent from 2012 levels by 2025 in accordance with a 2016 agreement between Prime Minister Trudeau and President Obama.²³ The regulations would set strict limits on venting of methane and impose universal leak detection and repair requirements. However, the final regulations delay compliance requirements by 3 years compared with a May 2017 proposal.

In July 2018, Canada's environment minister announced plans to limit the scope of the Pan-Canadian Approach to Pricing Carbon Pollution. This regulatory 'Benchmark' program, issued in 2016, allows Canadian provinces to implement carbon pricing schemes that meet specified requirements and imposes a backstop carbon tax for those provinces that have not done so by 2018.²⁴ Under the federal plan, regulated entities will face a tax on each tonne of carbon dioxide emitted in excess of a threshold that is set based on industry average emissions. The new proposal would raise that threshold so that emitters—particularly those in the cement, iron and

19 ACE Proposal, 83 Fed Reg, 44,786. Note that EPA's analysis assumes no interstate trading under the Clean Power Plan scenario and so likely understates the cost differential between the ACE rule and the Clean Power Plan; *ibid* 44,783.

20 Denise A Grab & Jack Lienke, 'The Falling Cost of Clean Power Plan Compliance' (2017) (*Policyintegrity.org*, 2018) <http://policyintegrity.org/files/publications/Falling_Cost_of_CPP_Compliance.pdf> accessed 30 August 2018.

21 John Larsen and Whitney Herndon, 'What the Clean power Plan Would Have Done' (*RHG.com*, 9 October 2017) <<https://rhg.com/research/what-the-cpp-would-have-done/>> accessed 30 August 2018.

22 See Julie McNamara, 'Trump Administration's 'Affordable Clean Energy Rule Is Anything But' (*ucsusa.org*, 31 August, 2018) <<https://blog.ucsusa.org/julie-mcnamara/ace-dangerous-clean-power-plan-replacement>> accessed 2 September 2018.

23 Government of Canada, 'Canada's Methane Regulations for the Upstream Oil and Gas Sector' (2018) <<https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/proposed-methane-regulations-additional-information.html>> accessed 30 August 2018.

24 Government of Canada, 'Guidance on the Pan-Canadian Carbon Pollution Pricing Benchmark' (1 January 2018), <<https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/guidance-carbon-pollution-pricing-benchmark.html>> accessed 30 August 2018.

steel, lime, and nitrogen fertilizer industries—would be subject to lower tax liability.²⁵

Notwithstanding these changes, Canadian Prime Minister Justin Trudeau is encountering new and growing provisional opposition to his climate agenda.

In April, Alberta also issued draft regulations to limit methane emissions.²⁶ These require targeted, rather than universal, leak detection and repair, and include less stringent methane venting limits. Alberta has argued that its approach should take precedence over federal regulations, citing authority that allows provinces to regulate methane so long as their policy is 'equivalent' to federal policy. Environmental

organizations have argued that Alberta's regulations do not meet this test.²⁷

In June 2018, Doug Ford was elected as the new Premier of Ontario on a platform that included repealing the province's cap-and-trade program. Days after he was sworn in, Ford announced legislation that would fulfil that campaign promise, and indicated his intent to withdraw Ontario from the joint agreement linking the province's cap-and-trade program with those in Quebec and California.²⁸ Shortly thereafter, the provincial government announced a constitutional challenge against the federal carbon tax backstop that will apply in the absence of provisional carbon pricing policy.²⁹

25 Nick Gamache, 'Liberals Plan to Soften Carbon Tax Plan Over Competitiveness Concerns' (*CBC.com*, 1 August 2018) <<https://www.cbc.ca/news/politics/liberals-carbon-price-lower-1.4769530>> accessed 30 August 2018.

26 Shawn McCarthy, 'Ottawa, Alberta Poised for Conflict Over Methane Regulations' (*TheGlobeandMail.com*, 25 April 2018) <<https://www.theglobeandmail.com/business/article-ottawa-alberta-poised-for-conflict-over-methane-regulations/>> accessed 30 August 2018.

27 Drew Nelson, 'Canada Adopts Historic Methane Rules. Alberta May Undercut Them' (*Edf.org*, 26 April 2018) <<http://blogs.edf.org/energyexchange/2018/04/26/canada-adopts-historic>

-methane-rules-alberta-may-undercut-them/> accessed 30 August 2018.

28 Government of Ontario, 'Premier-Designate Ford Announces an End to Ontario's Cap-and-Trade Carbon Tax' (2018) <<https://news.ontario.ca/opd/en/2018/06/premier-designate-doug-ford-announces-an-end-to-ontarios-cap-and-trade-carbon-tax.html>> accessed 30 August 2018.

29 Paola Loriggio, 'Ontario Launching Constitutional Challenge of Federal Carbon Tax Plan' (*TheGlobeandMail.com*, 2 August 2018) <<https://www.theglobeandmail.com/canada/article-ontario-launching-constitutional-challenge-of-federal-carbon-tax-plan-2/>> accessed 30 August 2018.

New Publications

This section provides an overview of recent literature on legal aspects of carbon trading and other dimensions of climate change regulation. Please send any suggestions for inclusion in this list to the Book Review Editor at van.asselt@lexxion.de.

Books

Gerrard, Michael B., and Tracy Hester (eds.). *Climate Engineering and the Law Regulation and Liability for Solar Radiation Management and Carbon Dioxide Removal*

Published by Cambridge University Press, 2018
360 pp., £81.99 (hardback). ISBN: 978-1-10715-727-9

Jordan, Andrew J., Dave Huitema, Harro van Asselt, and Johanna Forster (eds.). *Governing Climate Change: Polycentricity in Action?*

Published by Cambridge University Press, 2018
390 pp., £110.00 (hardback). ISBN: 978-1-10841-812-6

Klinsky, Sonja, and Jasmina Brankovic. *The Global Climate Regime and Transitional Justice*

Published by Routledge, 2018
196 pp., £115.00 (hardback). ISBN: 978-0-41578-602-7

Lin, Jolene. *Governing Climate Change: Global Cities and Transnational Lawmaking*

Published by Cambridge University Press, 2018
222 pp., £24.99 (paperback). ISBN: 978-1-10844-098-1

Lewis, Bridget. *Environmental Human Rights and Climate Change: Current Status and Future Prospects*

Published by Springer, 2018
250 pp., €124.79 (hardback). ISBN: 978-981-13-1959-4

Lyster, Rosemary, and Robert R.M. Verchik (eds.). *Research Handbook on Climate Disaster Law*

Published by Edward Elgar, 2018
416 pp., £170.00 (hardback). ISBN: 978-1-78643-002-1

Mayer, Benoit. *The International Law on Climate Change*

Published by Cambridge University Press, 2018
332 pp., £29.99 (paperback). ISBN: 978-1-10841-229-2

Moss, Jeremy (ed.). *Climate Change and Justice*
Published by Cambridge University Press, 2018
261 pp., £19.99 (paperback). ISBN: 978-1-10747-469-7

Rabe, Barry G. *Can We Price Carbon?*

Published by The MIT Press, 2018
376 pp., \$30 (paperback). ISBN: 978-0-26253-536-6

Scott, Shirley V., and Charlotte Ku (eds.). *Climate Change and the UN Security Council*

Published by Edward Elgar, 2018
272 pp., £90.00 (hardback). ISBN: 978-1-78536-463-1

Turnheim, Bruno, Paula Kivimaa, and Frans Berkhout (eds.). *Innovating Climate Governance: Moving Beyond Experiments*

Published by Cambridge University Press, 2018
262 pp., £95.00 (hardback). ISBN: 978-1-10841-745-7

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Espa, Ilaria. "Climate, Energy and Trade in EU-China Relations: Synergy of Conflict?", 6 *China-EU Law Journal* (1-2/2018), 57-80.

Hermwille, Lukas. "Making Initiatives Resonate: How Can Non-state Initiatives Advance National Contributions under the UNFCCC?", 18 *International Environmental Agreements: Politics, Law and Economics* (3/2018), pp. 447-466.

Klinsky, Sonja. "An Initial Scoping of Transitional Justice for Global Climate Governance", 18 *Climate Policy* (6/2018), pp. 752-765.

Maguire, Rowena, and Bridget Lewis. "Women, Human Rights and the Global Climate Regime", 9 *Journal of Human Rights and the Environment* (1/2018), pp. 51-67.

Mayer, Benoit. "International Law Obligations Arising in relation to Nationally Determined Contributions", 7 *Transnational Environmental Law* (2/2018), pp. 251-275.

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Yamineva, Yulia, and Kati Kulovesi. "Keeping the Arctic White: The Legal and Governance Landscape for Reducing Short-Lived Climate Pollutants in the Arctic Region", 7 *Transnational Environmental Law* (2/2018), pp. 201-227.

2. General Climate Regulation – Domestic and Regional

Bennett, Michael. "The Role of National Framework Legislation in Implementing Australia's Emission Reduction Commitments under the Paris Agreement", 43 *University of Western Australia Law Review* (1/2018), pp. 240-263.

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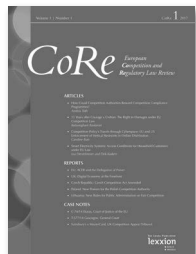
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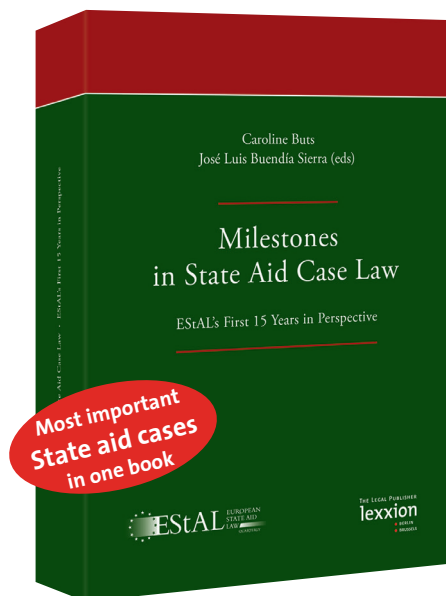
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