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#### **EDITORIAL**



## Beyond ambition: increasing the transparency, coherence and implementability of Nationally Determined Contributions

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#### 1. Introduction

With almost every country submitting their intended Nationally Determined Contribution (NDC) before or shortly after the 2015 Paris Climate Conference, these climate action plans were key to the landmark adoption of the Paris Agreement, and will be central to its implementation (Pauw et al., 2018). Research quickly identified the 'headline numbers' of NDCs: full implementation would reduce mean global warming by 2100 from approximately 3.6°C to 2.7°C above pre-industrial levels (Höhne et al., 2016; Rogelj et al., 2016). Research also showed that if ambition is not increased before 2030, global mean temperature increase can no longer be limited to 1.5°C above pre-industrial levels (UNEP, 2018). The conclusions of the IPCC Special Report *Global Warming of 1.5*°C (IPCC, 2018) underscore the urgency of greater ambition. But ambition alone is not enough: to be able to realize their ambitions, countries also need to enhance the *effectiveness* of the plans and policies underpinning their NDCs. This requires improvements to the transparency, coherence and implementability of NDCs.

Almost all countries have now ratified the Paris Agreement, and many are in the process of updating their NDCs. It is crucial for the success of the Paris Agreement that the updated NDCs build on and learn from the first round of NDCs. This special issue *Making Climate Action More Effective: Lessons Learned from the First Nationally Determined Contributions* provides insights, and aims to stimulate debate, on how to strengthen NDC effectiveness. The eight papers in the special issue cover mitigation, adaptation and means of implementation, and discuss key elements of the Paris Agreement and broader climate policy, including the Enhanced Transparency Framework and the Paris Committee on Capacity Building, as well as considerations of equity and development.

This editorial first presents a short history of NDCs: their origin, relevance and process for updating. It then introduces a simple framework of NDC effectiveness to illustrate each paper's respective contribution in terms of transparency, coherence and implementability, and summarizes key insights of the eight papers. The final section recommends the next steps.

#### 2. A short history of NDCs

Although 'ambition' was technically not on the agenda of the most recent climate negotiations in Madrid in 2019, many countries and observers emphasized the importance of ramping up ambition in the next generation of NDCs. This section outlines the key steps that have led to these climate action plans becoming such a keystone of the international climate policy process.



#### 2.1. The origins of NDCs in Warsaw

One of the long-standing difficulties in the UN climate negotiations has been the differentiation of responsibilities among countries to address climate change. The 1992 United Nations Framework Convention on Climate Change (UNFCCC) made a hard distinction between industrialized (Annex I) countries that 'shall adopt national policies and take corresponding measures on the mitigation of climate change' (Article 4.2) and demonstrate that they are 'taking the lead in combatting climate change' (Article 3.1), and all other (non-Annex I) countries that had no such obligations. This dichotomy underpinned the 1997 Kyoto Protocol, which listed quantified emission limitation or reduction commitments for each Annex I country. The distinction between Annex I and non-Annex I countries became problematic because it could not account for the dynamic diversification that has happened among developing countries since 1992, and which has resulted in diverging contributions to global emissions and economic growth patterns (Deleuil, 2012; Dubash, 2009). Depledge and Yamin (2009) referred to the Annex I/non-Annex I dichotomy as 'dysfunctional' and 'the regime's greatest weakness'.

At the climate negotiations in Durban in 2011 countries decided to launch a process to develop a successor to the Kyoto Protocol that would be 'applicable to all' (decision 1/CP.17, paragraph 2). Indeed, two years later in Warsaw, all countries were invited 'to initiate or intensify domestic preparations for their intended nationally determined contributions' in the context of this process (decision 1/CP.19, paragraphs 2(b)). However, the issue of how to differentiate countries' responsibilities to mitigate climate change was not resolved. It also left open whether the scope of the NDCs should be mitigation only or also include, for example, adaptation and climate finance.

#### 2.2. Lack of guidance in Lima

At the climate negotiations in Lima in 2014, countries such as Canada and the United States stressed that intended NDCs relate to mitigation, whereas countries such as Tuvalu (for the Least Developed Countries, LDCs) and Brazil noted that the scope of intended NDCs should go beyond mitigation. Thailand stated that mitigation and adaptation should be treated equally, and Bolivia and others stressed the importance of including means of implementation (IISD, 2015). The Lima Call for Action that resulted from the negotiations included only succinct and general guidance on NDC formulation, giving countries considerable leeway when developing their intended NDCs (Mbeva & Pauw, 2016).

The limited guidance might explain in part why Switzerland and the European Union submitted their intended NDCs already within three months of the Lima Climate Conference, and why another 157 countries followed before the UN climate negotiations in Paris in December 2015. These included major greenhouse gas (GHG) emitters such as China and the USA, as well as many LDCs and Small Island Developing States (SIDS). However, the limited guidance also caused great diversity in terms of the targets, scopes, contents and time frames of intended NDCs (see Pauw et al., 2016, 2018).

#### 2.3. The NDC model of the Paris Agreement

The NDC model as laid out during the climate negotiations in Paris marks a significant departure from existing policies: NDCs are near-universal, medium-term, country-driven climate action plans under the Paris Agreement, formulated within the context of bounded self-differentiation. They signify 'contributions' instead of the harder 'commitments' traditionally used in international treaties (Rajamani, 2015). The self-differentiation is bounded because it is conducted with the purpose of keeping the increase in global temperature to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels (as per Article 2.1 (a) of the Paris Agreement) so as to prevent dangerous climate change (as per Article 2 of the UNFCCC). In addition, it is bounded by the parameters of 'progression', 'highest possible ambition' and 'common but differentiated responsibilities and respective capabilities, in the light of different national circumstances' (Article 4.3 of the Paris Agreement) in an agreement that is legally binding (Rajamani, 2016; Voigt & Ferreira, 2016). Developed countries 'should continue taking the lead by undertaking economy-wide absolute emission reduction targets', with developing countries being 'encouraged' to move over time towards such targets (Article 4.4, Rajamani,

2016; Voigt & Ferreira, 2016). Countries 'shall' communicate successive NDCs every five years (Article 4.9, Rajamani, 2016; Voigt & Ferreira, 2016).

These five-year cycles are crucial to increasing global ambition to address climate change, together with fiveyearly global stock-takes (see Weikmans et al., 2019, this issue). However, the rapid ratification of the Paris Agreement, combined with ambiguous language in decision 1/CP.21, created confusion about when countries are supposed to update their NDCs. The Paris Agreement had been assumed to come into effect and be implemented from 2020 onwards (decision 1/CP.19, paragraph 4). But due to the swift ratification of 55 countries accounting collectively for at least 55% of global emissions, it entered into force already on 4 November 2016. When a country ratifies the Paris Agreement, its intended NDC automatically becomes its NDC unless the country decides otherwise (decision 1/CP.21, paragraph 22). By December 2019, only 15 countries had chosen otherwise and updated their intended NDC before resubmitting upon ratification (see Pauw et al., 2016).<sup>2</sup> Palestine, Nicaragua and Syria submitted their NDC without first submitting an intended NDC.<sup>3</sup>

Those countries whose intended NDCs contain a time frame up to 2025 are 'requested' to communicate a new NDC in 2020 (decision 1/CP.21, paragraph 23). These include the United States and Uruguay, and their early ratification (3 September and 19 October 2016, respectively) suggests that a new NDC is due by 2020. Those countries with intended NDCs with time frames up to 2030 and beyond, which is the majority of countries, are requested to communicate or update these contributions by 2020, and to do so every five years thereafter (Article 4.9 of the Paris Agreement). 'Communicating' and 'updating' are not clearly defined. The former is interpreted by many countries as submitting a whole new NDC, whereas updating implies less extensive changes to the existing NDC, which could vary from updating the submission date to updating targets, for example, to reflect developments following the submission of the first NDC.

Finally, decision 1/CP.21 states that countries submitting a new NDC 'shall' do so at least 9–12 months before the relevant conference, in order to 'facilitate clarity, transparency and understanding' (paragraph 25). The 2020 climate conference will take place in Glasgow, UK, 9–19 November 2020, suggesting the deadline is 9 February 2020.<sup>4</sup>

#### 2.4. More clarity in Katowice

Countries were divided on the scope of future NDCs, which was one of the reasons why the negotiations on the Paris Agreement's rulebook at the 2018 Katowice Climate Conference were long and difficult. The Katowice Climate Package was eventually agreed with two days' delay (IISD, 2018a, 2018b; Lehr & Schalatek, 2019). It elaborates the brief guidance for NDC formulation concerning the information to facilitate clarity, transparency and understanding. Countries may include, as applicable, quantifiable information on reference points, time frames, scope and coverage (in terms of sectors and gases), planning processes (both NDC preparation and implementation), and assumptions and methodological approaches (including for accounting GHG emissions and removals) (decision 4/CMA.1, paragraphs 6-10). In addition, in line with the guidance provided at the 2014 Lima Climate Conference (decision 1/CP.20, paragraph 14), countries may provide, as applicable, information on how they consider their NDCs to be fair and ambitious in the light of their national circumstances. Finally, countries may indicate how their NDCs contribute towards achieving the objective of the UNFCCC as set out in its Article 2 (to prevent dangerous anthropogenic interference with the climate system), and Article 2.1(a) of the Paris Agreement (to limit global warming to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C). Few countries to date have reflected on the extent to which their NDCs may contribute to limiting warming. Only 13 NDCs claim to be consistent with limiting global temperature rise to 2°C above pre-industrial levels, and only nine NDCs claim to be consistent with limiting the temperature increase to 1.5°C (Pauw et al., 2016).

The requirement on countries to provide information on how they consider their NDCs to be fair and ambitious and how they contribute to Article 2.1(a) offers an important opportunity simultaneously to increase ambition and to address the issue of differentiation of responsibilities. However, criteria for identifying countries' fair shares are not defined, and a major risk is thus that countries will select those criteria that are more lenient towards them (see Winkler et al., 2018).

The Katowice Climate Package furthermore emphasizes that the guidance on 'information necessary for clarity, transparency and understanding is without prejudice to the inclusion of components other than mitigation' and notes that countries 'may provide other information', for example on adaptation, in their NDCs (decision 4/CMA.1, paragraph 8). Finally, it was decided that the consideration of further guidance on features of NDCs will be continued in 2024.

#### 2.5. Common time frames and increasing ambition after Madrid

Countries' NDCs currently include different time frames (see Section 2.3), yet Article 4.10 of the Paris Agreement mandated negotiations on common time frames. In Katowice, countries agreed to apply common time frames for NDCs from 2031 onwards, with the time frames themselves to be decided later (decision 6/CMA.1). A growing list of alternative options for common time frames was discussed at the 2019 climate negotiations in Madrid. These included 5 or 10-year time frames, a choice of either, and a hybrid model. For example, countries could provide a rolling pledge of '5 + 5' years, with firm and indicative targets (Evans & Gabbatiss, 2019). In the end, countries could not reach agreement on common time frames in Madrid; negotiations will continue in Bonn in June 2020.

As mentioned above, NDC ambition was not officially on the agenda in Madrid. Although Chile, which presided over the negotiations, postponed its plans to present an enhanced NDC in Madrid, the country used the conference as an opportunity to encourage countries to update and strengthen their NDCs in 2020 (IISD, 2019).

After a failed attempt to include an encouragement for all countries to enhance their NDC ambitions in the Katowice Climate Package (see IISD, 2018b), the so-called 'ambition texts' became a stumbling block again in the negotiations in Madrid, with a small number of large emerging economies reluctant to call for the strengthening of ambition in 2020. Countries eventually agreed to re-emphasize 'with serious concern' the 'urgent need' to address the significant gap between aggregate mitigation efforts and limiting global average temperature increase to 1.5°C to 2°C above pre-industrial levels. Countries are urged to 'consider' this gap when communicating or updating their NDCs, although no timeline is specified. Some pressure on countries is created by requesting the UN climate change secretariat to prepare a synthesis report on the NDCs ahead of the climate negotiations in Glasgow (decision 1/CMA.2).

In spite of the diversity in time frames adopted in their first NDCs, the Chilean Presidency of the Madrid climate negotiations was able to announce that 103 countries are expected to enhance the ambition of their NDCs by 2020 (COP25 Presidency, 2019). In addition, prior to the Madrid negotiations, the European Union had already said it would update the NDC for its member states in 2020 (Morgan, 2019). The next generation of NDCs will be an important new chapter in the unfolding history of NDC negotiation, formulation and implementation.

#### 3. Increasing effectiveness through transparency, coherence and implementability

This special issue consists of eight papers that were written by 27 experts from 13 countries and published online between April 2019 and January 2020. All papers analyse, to varying degrees, transparency, coherence and/or implementability of NDCs (see the framework in Figure 1) within the context of some of the key aspects of the Paris Agreement, such as the Enhanced Transparency Framework, the Paris Committee on Capacity Building, and means of implementation (Articles 9-11 of the Paris Agreement). Collectively, the papers show that the push for more ambitious NDCs is important and necessary, but an increase in NDC transparency, coherence and implementability is equally critical to reaching the goals of the Paris Agreement. Transparency, coherence and implementability are not elements of ambition per se; instead, these characteristics shape the extent to which NDCs can be achieved irrespective of their level of ambition. In other words, transparency, coherence and implementability determine whether or not NDCs can be achieved effectively. A core finding of this special issue is that both the ambition and the effectiveness of NDCs need to be raised (see Figure 2).

Transparency, in the context of NDCs, means that information is presented in a way that is clear and can be understood and verified. While research could increase transparency and comparability of NDCs once they are

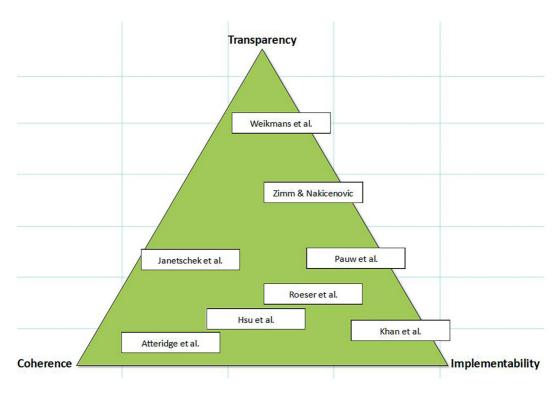


Figure 1. Framework of NDC effectiveness: the papers in this special issue address NDC transparency, coherence and implementability to varying degrees (source: authors).

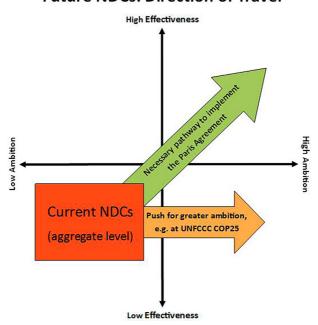
published (Pauw et al., 2018), this is time and resource-intensive. It would be more expedient if NDCs provided information on such key issues as the underlying methodologies and assumptions; base years, sectors and GHGs included; use of offsets; and whether land use, land-use change and forestry activities are included (see Van Asselt et al., 2015). In that sense, the decisions taken in Katowice requiring countries to submit information to facilitate clarity, transparency, and understanding of NDCs is highly relevant for the effectiveness of the NDC process.

Weikmans et al. (2019, this issue) note that it will be difficult to assess and compare progress made by countries towards achieving their NDCs due to heterogeneous, qualitative and conditional NDCs; the variety of indicators that countries will choose to track implementation; and weaknesses in the Paris Agreement's reporting guidelines on climate action and support. Furthermore, they note that the apolitical design of the Enhanced Transparency Framework (ETF) means that it will not lead to political judgments, for example on NDC ambition or achievement. In addition to calling for better and more consistent information reporting requirements, Weikmans et al. (2019, this issue) therefore suggest that civil society organizations, national auditors, researchers and other state and non-state actors will need to access the information generated by the ETF and use it for public shaming (or faming), direct lobbying, legal action and other strategies.

Khan et al. (2019, this issue) conclude that capacity building needs identified in the NDCs fall short of learning from previous efforts. This includes lack of specificity in identifying needs, which would ensure delivery of outcomes that are demand-driven and country-owned. For example, they demonstrate that almost 60% of stated capacity building needs do not specify the sector for which there is a need. Khan et al. (2019, this issue) state that the next round of developing countries' NDCs must be more specific and therefore more transparent about their capacity building needs to enhance NDC implementation.

Policy coherence involves the 'systematic promotion of mutually reinforcing policy action across government departments and agencies creating synergies towards achieving the defined objective' (Jones, 2002, p. 391). The

#### **Future NDCs: Direction of Travel**



**Figure 2.** Increasing effectiveness of NDCs is a key complement to raising NDC ambition in order to meet the aims of the Paris Agreement (source: authors).

preamble of the Paris Agreement mentions the 'intrinsic relationship' of climate change actions, responses and impacts with 'equitable access to sustainable development and eradication of poverty.' This special issue, therefore, considers the coherence of climate policy with development policy. Such coherence or alignment would be more efficient and effective than designing and implementing climate action separately from policies and measures aimed at sustainable development (Klein, Schipper, & Dessai, 2005). Makomere and Mbeva (2018) argue that developing countries aimed to strike a balance in their NDCs between taking adequate climate action and meeting their broader development objectives.

The prospect of effectiveness gains has led countries to integrate or mainstream climate change adaptation into their sectoral planning and decision-making, thus creating coherence between shorter and longer-term policy objectives (Klein et al., 2007). Atteridge et al. (2019, this issue) demonstrate that the priorities defined in the NDCs communicated by SIDS appear limited to a narrow range of sectors that are sensitive to climate impacts. According to them, updated NDCs should also include those sectors that are most emphasized by SIDS' development plans and that determine contextual conditions that can make communities vulnerable in the first place, such as governance and institutions, education, health, and land-use planning. Broadening the way adaptation priorities are identified in updated NDCs would likely create stronger synergies between NDCs and national development plans as well as improve climate resilience outcomes.

Janetscheck et al. (2019, this issue) show that NDCs propose many activities that also contribute to the achievement of the UN's sustainable development goals (SDGs), in particular, energy efficiency (SDG 7), sustainable forest management (SDG 15), sustainable agriculture (SDG 2), sustainable transport systems (SDG 11) and water-use efficiency (SDG 6). They also note that underlining the connection between NDCs and SDGs can strengthen buy-in among various stakeholder groups for more ambitious NDCs, which is in line with the conclusions of Atteridge et al. (2019, this issue).

A certain level of stakeholder buy-in is already evident in existing NDCs, as demonstrated by Hsu et al. (2019, this issue). Links to efforts by cities, regions, businesses or civil society (i.e. non-state actors) can be found mostly in the NDCs of developing countries, and primarily in the context of vulnerability and adaptation policy implementation. Hsu et al. (2019, this issue) suggest that there is scope for countries to broaden the link to

non-state actors in their NDC updates in order to further catalyse additional engagement and alignment. They suggest that dialogue and knowledge exchange between governments and non-state actors could deepen NDC implementation and increase ambition.

Implementability refers to the extent to which a desired policy can be successfully implemented. In terms of NDCs, implementability requires agreed and well-defined roles and responsibilities for implementation (by whom, how, what scope, stakeholder involvement, etc.), as well as public and political acceptability of implementation needs and consequences (costs involved, need for support, equality of process and outcomes).

Roeser et al. (2019, this issue) analyse the conditions under which countries could be expected to develop NDCs that are sufficiently ambitious to put the world on track to fulfilling the Paris Agreement temperature goals. They demonstrate that, in many countries, the preparation of the NDCs positively contributed to national climate policy processes by raising awareness and catalysing institutional change, as well as by improving political buy-in across government and non-government stakeholders. This strengthens the foundation for higher ambition in future NDCs. However, they also note that, for developing nations and emerging economies, in particular, the process of preparing and implementing NDCs presents challenges in terms of political support; financial, human and technical resources; and analytical capabilities. They recommend that more analytical, financial and technical resources be provided to implement the first round of NDCs and support countries in preparing future NDC cycles.

Implementability of NDCs is also strongly dependent on the extent to which contributions are conditional upon receiving support, and whether such support is available. As Pauw et al. (2019a, this issue) demonstrate, most developing countries made their NDCs partly conditional, and support requested by developing countries to implement conditional NDCs far exceeds existing funding pledges. This puts the implementability of these NDCs under pressure. Without support, many conditional pledges are likely to not be implemented.

The issue of conditionality relates to the fairness of countries' planned contributions. Looking at per capita GHG emissions, Zimm and Nakicenovic (2019, this issue) demonstrate that the current NDCs lead to a decrease in inequality (or lower Gini coefficients) across countries compared to 1990. However, if developing countries implemented their conditional NDCs without the requested support, the reduction in GHG emissions inequality will be smaller (Zimm & Nakicenovic, 2019, this issue). From an equity perspective, lack of support could also have a negative effect on the ambition of future NDCs, not only because developing countries might lack the means to be more ambitious but also because they might object to taking on a comparatively large responsibility relative to developed countries.

Pauw et al. (2019a, this issue) argue that differences between existing patterns of financial assistance and those implied by requests under conditional NDCs mean that supporting NDCs may require a significant shift in provider countries' priorities for allocating climate finance. This challenges the implementability of NDCs. The authors recommend that developed countries outline plans to mobilize support in their NDCs in order to reassure developing countries that raising the ambition of NDCs is feasible (for more arguments in favour of this, see Pauw et al., 2019b).

Finally, implementability is critically related to clarity and transparency of NDCs. In the case of NDCs that are conditional on support, Pauw et al (2019a, this issue) also argue that future NDCs should include more detailed and credible cost estimates of potential support needs, as well as more clarity in terms of which actions require what type of support.

#### 4. 2020: a crucial year for climate action

The eight papers in this special issue offer important insights from the first round of NDCs that could inform future updates. At the 2019 Madrid Climate Conference, a broad variety of actors – including the Chilean Presidency, LDCs, SIDS, the European Union, civil society, researchers and some private sector representatives – pushed for greater ambition in the second round of NDCs. However, lack of clarity about what greater ambition entails hampers the preparation of these NDCs. Increasing the mitigation ambition of an NDC ultimately means setting a more stringent GHG emission limitation or reduction target, but there are several ways in which this can be expressed in NDCs. A country could adopt a more stringent type of target (e.g. an economy-wide reduction target rather than a carbon intensity target) or a more ambitious reduction target, but it could also

add a GHG or a sector that was previously not included, exclude market mechanisms where they were previously included, or bring forward an existing mitigation target, among other options. An increase in adaptation ambition could be even more diverse, because adaptation can be planned, implemented, monitored and measured in many different ways across all sectors. For example, a country could expand the reach of its adaptation plans by adding a sector or certain part of the population, or by increasing geographical coverage, but it could also propose new and more ambitious policies and strategies. In addition, a country could adopt quantitative targets for input (e.g. investment) and output (e.g. people at risk) variables and raise those targets over time.

Important as it is, NDC ambition is not the focus of this special issue. The eight papers demonstrate that, to achieve ambition, NDCs must be more transparent and coherent, and countries must consider the implementability of their plans in more detail. Transparency, coherence and implementability collectively shape the effectiveness of NDCs. Effectiveness is a key complement to ambition: an increase in NDC ambition is hardly useful if NDCs cannot be implemented effectively. For example, if the effective implementation of a developing country's NDC depends in part on international support, this country is more likely to increase its ambition if it can expect support to be forthcoming, and if this country's ambition is fair as compared to the ambitions of other countries. As shown in Figure 2, the direction of travel for future NDCs must therefore be one that simultaneously raises ambition and effectiveness.

2020 is a crucial year for NDCs and for the UN climate negotiations as a whole. It is important that as many countries as possible - especially the largest emitters - formulate NDCs that are transparent, coherent and implementable, as well as ambitious. We hope this special issue helps these countries in doing so, and civil society and researchers in monitoring, reporting and reviewing those NDCs.

#### **Notes**

- 1. The EU submitted an NDC for all its 28 member countries.
- 2. These are: Algeria, Argentina, the Bahamas, Belize, Canada, Ecuador, El Salvador, Eritrea, Indonesia, Morocco, Nepal, New Zealand, Pakistan, Sri Lanka and Uruguay.
- 3. The articles in this special issue always refer to the latest document available unless otherwise stated.
- 4. By the time of writing, only the Marshall Islands and Suriname had updated their NDCs.

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#### Disclosure statement

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