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Publication date:
2018

Document Version
Publisher's PDF, also known as Version of record

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Citation (APA):
Taibi, F.-Z., & Konrad, S. (2018). *Pocket Guide to NDCs under the UNFCCC*.

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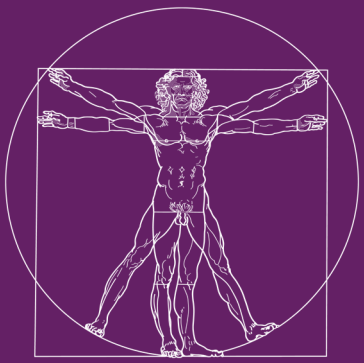
POCKET GUIDE TO NDCs

UNDER THE UNFCCC



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POCKET GUIDE TO NDCs

UNDER THE UNFCCC

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First published June 2018.

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The authors are grateful to Binyam Y. Gebreyes, Ziaul Haque, Selamawit Desta, Miriam Hinostroza, and the NDC Partnership for their helpful comments and suggestions. All errors remain our own.

Designed by DamageControl

This project is supported by the Climate Policy Support Programme of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). It is also supported by SIDA.

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FOREWORD

For over a decade, the European Capacity Building Initiative (ecbi) has adopted a two-pronged strategy to create a more level playing field for developing countries in the UN Framework Convention on Climate Change (UNFCCC): training for new negotiators; and opportunities for senior negotiators from developing countries and Europe to interact, understand each other's positions, and build mutual trust.

The first part of the strategy focuses on providing training and support to new developing country negotiators, particularly from least developed countries. The climate change negotiations are often technical and complex, and difficult for new negotiators to fully grasp even over a period of two or three years. We hold regional training workshops to bring them up to speed on the negotiations. We also organise workshops before the Conference of Parties (COPs) to the UNFCCC, covering topics specific to that COP. To ensure continuity in our capacity building efforts, we offer a few negotiators, particularly women, bursaries to attend the negotiations and represent their country and region/grouping. Finally, we help negotiators build their analytical capacity through our publications, by teaming them up with global experts to author policy briefs and background papers.

This strategy has proven effective over time. "New" negotiators that trained in our early regional and pre-COP workshops have risen not only to become senior negotiators in the process, but also leaders of regional groups and of UNFCCC bodies and committees, and ministers and envoys of their countries. These individuals are still part of our growing alumni, now capacity builders themselves, aiding our efforts

to train and mentor the next generation of negotiators. Their insights from being "new" negotiators themselves have helped us improve our training programmes.

The second ecbi strategy relies on bringing senior negotiators from developing countries and from Europe together, at the annual Oxford Fellowship and Seminar and the Bonn Seminar. These meetings provide an informal space for negotiators to discuss their differences, and try to arrive at compromises. They have played a vital role in resolving some difficult issues in the negotiations.

Following the adoption of the Paris Agreement in 2015, ecbi produced Guides to the Agreement in English and in French. These proved popular with both new and senior negotiators. We therefore decided to develop a series of thematic guides, to provide negotiators with a brief history of the negotiations on the topic; a ready reference to the key decisions that have already been adopted; and a brief analysis of the outstanding issues from a developing country perspective. These Guides are mainly web-based, and updated regularly. Although we have printed copies of the English version of the Guides due to popular demand, the online versions have the advantage of hyperlinks to help you access referred material quickly.

As the threat of climate change grows rather than diminishes, developing countries will need capable negotiators to defend their threatened populations. The Pocket Guides are a small contribution to the armoury of information that they will need to be successful. We hope they will prove useful, and that we will continue to receive your feedback.

Benito Müller,
Director, ecbi
on behalf of the ecbi Advisory and Executive Committees

GLOSSARY

ADP	Ad hoc Working Group on the Durban Platform for Enhanced Action
APA	Ad Hoc Working Group on the Paris Agreement
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
CTU	Clarity, transparency and understanding
GHG	Greenhouse Gases
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
ITMO	Internationally Transferred Mitigation Outcomes
LDCs	Least Developing Countries
NDC	Nationally Determined Contribution
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
SBSTA	Subsidiary Body for Scientific and Technological Advice
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
UNFCCC	UN Framework Convention on Climate Change

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WHAT ARE NATIONALLY DETERMINED CONTRIBUTIONS?

Nationally Determined Contributions, or NDCs, are actions that Parties to the Paris Agreement plan to undertake to address climate change. A Party's "contribution" to address climate change is "nationally determined" according to its national circumstances and priorities. This terminology was adopted to emphasise the "bottom-up" (nationally determined) nature of the contributions that countries make to the global effort to address climate change, as opposed to a "top-down" (globally determined) approach.

The Paris Agreement requires Parties to undertake and communicate their post-2020 climate efforts as NDCs in order to achieve the objective of the agreement of limiting the global temperature increase to well below 2°C while pursing efforts to limit the increase to 1.5°C, and to communicate their first NDCs no later than when the Party formally joins the Paris Agreement (Decision 1/CP.21, paragraph 22). However, if a Party had already submitted an *Intended* Nationally Determined Contributions (INDC) before joining the Paris Agreement, this provision is satisfied, and the Party's INDC automatically becomes its first NDC unless the Party chooses to submit an updated version.

The actions contained in all NDCs represent the collective global effort, which will determine whether the world will achieve the long-term temperature goal of the Paris Agreement. The NDCs are therefore the central element of the Paris Agreement and the main climate change policy framework for Parties to the UNFCCC.

WHAT ARE *INTENDED* NATIONALLY DETERMINED CONTRIBUTIONS?

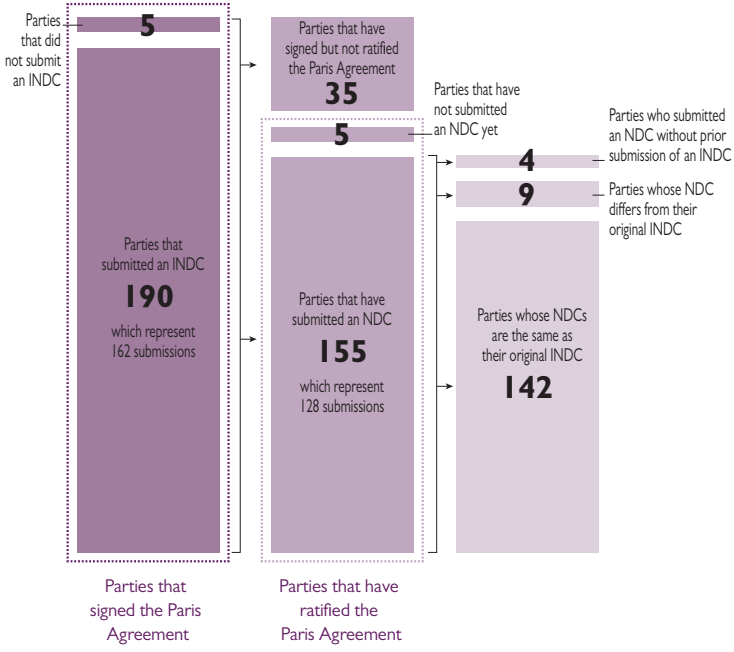
Intended Nationally Determined Contributions, or INDCs, refer to the voluntary climate actions communicated by Parties *before* the Paris Agreement was adopted at the twenty first session of the Conference of Parties (COP21) in 2015, in response to a decision at COP19 in Warsaw, in 2013.

The Warsaw COP decision invited all Parties to "*initiate or intensify domestic preparations for their intended nationally determined contributions […] towards achieving the objective of the Convention as set out in its Article 2[…] in a manner that facilitates the clarity, transparency and understanding of the intended contributions, without prejudice to the legal nature of the contributions*".

Following ratification of the Paris Agreement, the INDCs were automatically converted into NDCs. While Parties could choose to revise or update their INDCs before submitting them as NDCs, only a few countries such as Morocco and Nepal decided to do so.[1] For most countries, the INDC automatically became their first NDC.

Parties did not have a legal obligation to submit an INDC, and a few countries like the Democratic People's Republic of Korea, Panama[2] and the State of Palestine chose not to submit an INDC. Instead, they submitted NDCs after ratifying the Paris Agreement. The acronym (I)NDC is sometimes used as an inclusive term for both INDCs and NDCs. To avoid confusion, this Guide uses NDCs throughout, unless specific reference is made to an INDC before the Paris Agreement came into effect.

Figure 1: Status of NDC submissions as of 1 September 2017



Source: World Bank, Ecofys & Vivid Economics (2017). *State and Trends of Carbon Pricing 2017*. Washington, D.C.

WHAT IS THE HISTORY OF THE NDCs?

The UN Framework Convention on Climate Change (UNFCCC), adopted in 1992, called on Parties to stabilise greenhouse gases (GHGs) in the atmosphere "*…at a level that would prevent dangerous anthropogenic interference with the climate system…*", and "*within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner*". The Convention did not, however, include any specific reduction targets for countries. These were subsequently negotiated for Annex I Parties in the 1997 Kyoto Protocol, with targets ranging from -8% to +10% of Parties' emission levels compared to 1990.[3]

As the first commitment period of the Kyoto Protocol came to an end in 2012, negotiations for a successor instrument began. In these negotiations, some developed countries such as the US (who initially agreed to a 7% reduction compared to 1990 levels but later decided not to ratify the Protocol) opposed what is sometimes (arguably) called a "top-down" determination of targets and pressed instead for *national determination* of climate ambition.[4]

Many developing countries initially opposed taking on reduction targets in the Kyoto Protocol's successor, calling instead for developed countries, with greater responsibility to reduce their emissions and allowing developing countries the "atmospheric space" to develop. They eventually gave in to pressure from developed countries and agreed to take on

"*nationally appropriate mitigation actions*" (or NAMAs), "*supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner…*" in the 2007 Bali Action Plan at COP13. They also supported national determination of what came to be known as climate *contributions*, to acknowledge that climate actions not only include emissions reductions, but also encompass adaptation, and possibly other elements such as the provision of "means of implementation" (which usually includes finance, capacity building and technology development and transfer).

COP13 launched the Ad hoc Working Group on Long-term Cooperative Action (AWG-LCA), aimed at reaching an agreed outcome and adopting a decision at COP15 in Copenhagen, in 2009. However, Parties could not conclude their negotiations at COP15. Instead, the AWG-LCA continued at COP16 and COP17, where significant decisions were made on adaptation, mitigation and means of implementation. Importantly, COP17 in Durban, in 2011, launched a process to develop "*…a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties*". This was significant because it implied that mitigation commitments would be applicable to *all* Parties, developed and developing. The Ad hoc Working Group on the Durban Platform for Enhanced Action (ADP) was launched to negotiate this outcome, and eventually resulted in the adoption of Paris Agreement at COP21 in 2015.

INDCs were first mentioned in decision 1/CP.19 adopted in COP19 in Warsaw in 2013, which invited all Parties to "*…initiate or intensify domestic preparation for the* ***intended nationally determined contributions*** *… in the context of adopting a protocol, another legal instrument or an agreed outcome with legal force … and to communicate them well*

in advance of the twenty-first session of the Conference of the Parties (by the first quarter of 2015 by those Parties ready to do so) in a manner that facilitates the clarity, transparency and understanding of the intended contributions, without prejudice to the legal nature of the contributions". However, the decision provided no guidance on the elements or format of an INDC.

The Lima Call for Climate Action adopted at COP20 in 2014 reiterated this invitation to Parties to submit an INDC. It further stated that the INDCs should "…*represent a progression of its current mitigation efforts*" (1/CP.20, paragraph 14). Parties were invited to consider communicating their adaptation activities and include adaptation components in their INDCs. Flexibility was provided to Least Developing Countries (LDCs) and Small Island Developing States (SIDS); in light of their special circumstances, they could communicate information on strategies, plans, and actions. COP20 also called on Parties to provide further information to "*facilitate clarity, transparency and understanding*".

Switzerland was the first country to submit an INDC on 27 February 2015. By 1 October 2015, 119 INDCs by 147 Parties (including the EU, a single Party representing 28 EU countries) were submitted, representing 86% of global emissions in 2010. By 4 April 2016, the number of INDCs rose to 161 by 189 Parties, representing 96% of all Parties to UNFCCC and 99% of the emissions of all Parties to the convention. The latest submission was received by Uzbekistan on 19 April 2017.

WHAT DOES THE PARIS AGREEMENT SAY ON NDCs?

The foundation of the Paris Agreement's architecture is that all Parties will *nationally* determine what actions they are able and willing to take in achieving the purpose of the Agreement (to limit warming to 1.5–2°C above pre-industrial levels; enhance adaptation and climate resilience efforts; and make financial flows consistent with a pathway towards low emissions and climate-resilient development).

Article 3 calls for ambitious NDCs, representing progression over time, and recognises the need to support developing country Parties for their effective implementation.

Article 4 goes into greater detail on the NDCs, stating, *inter alia*, that:

- Each Party *shall* prepare, communicate and maintain successive NDCs (Article 4.2).
- Each Party's successive NDC will represent a progression beyond the Party's current NDC, and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances (Article 4.3).
- Developed country Parties *should* continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances (Article 4.4).

- Support *shall* be provided to developing country Parties for the implementation of this Article (Article 4.5).
- LDCs and SIDS have the flexibility to prepare and communicate strategies, plans and actions for low GHG emissions development (Article 4.6).
- All Parties shall provide the information necessary for clarity, transparency and understanding (Article 4.8).
- Each Party shall communicate a NDC every five years (Article 4.9).
- NDCs communicated by Parties shall be recorded in a public registry maintained by the UNFCCC secretariat (Article 4.12).
- In accounting for their anthropogenic emissions and removals corresponding to their NDCs, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting (Article 4.13).

Article 6 discusses "voluntary cooperation" in the implementation of NDCs, including "internationally transferred mitigation outcomes" (ITMOs); a sustainable development mechanism; and non-market approaches to sustainable development.

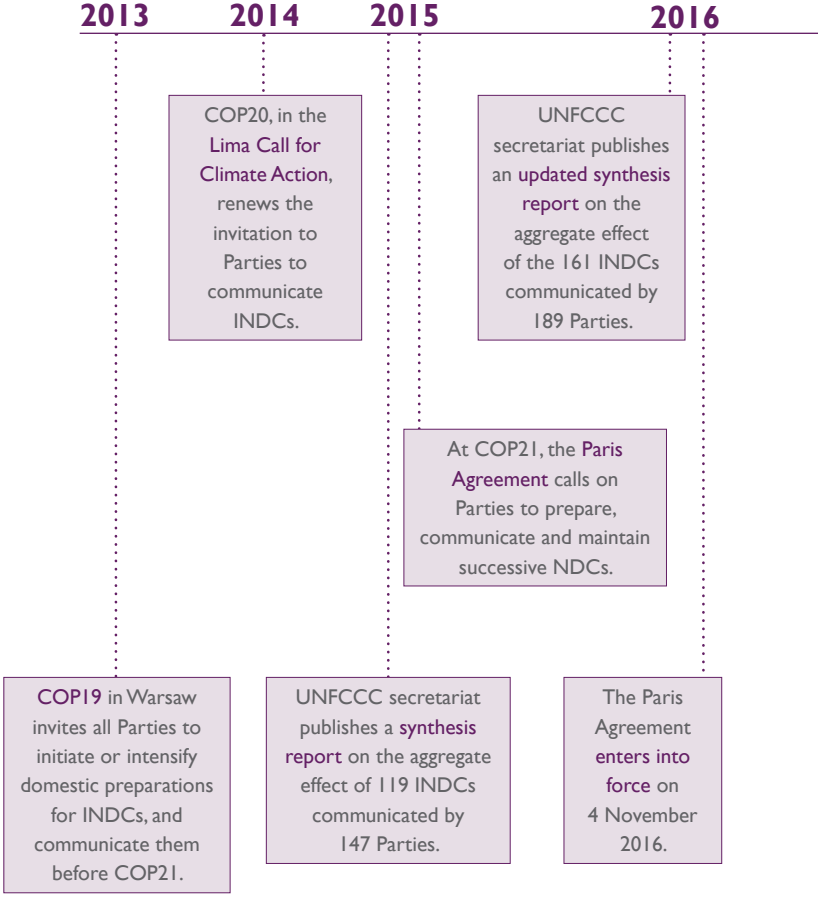
Article 7, on adaptation, states that adaptation communications can be submitted as components of, or in conjunction with, NDCs, national adaptation plans and/or national communications.

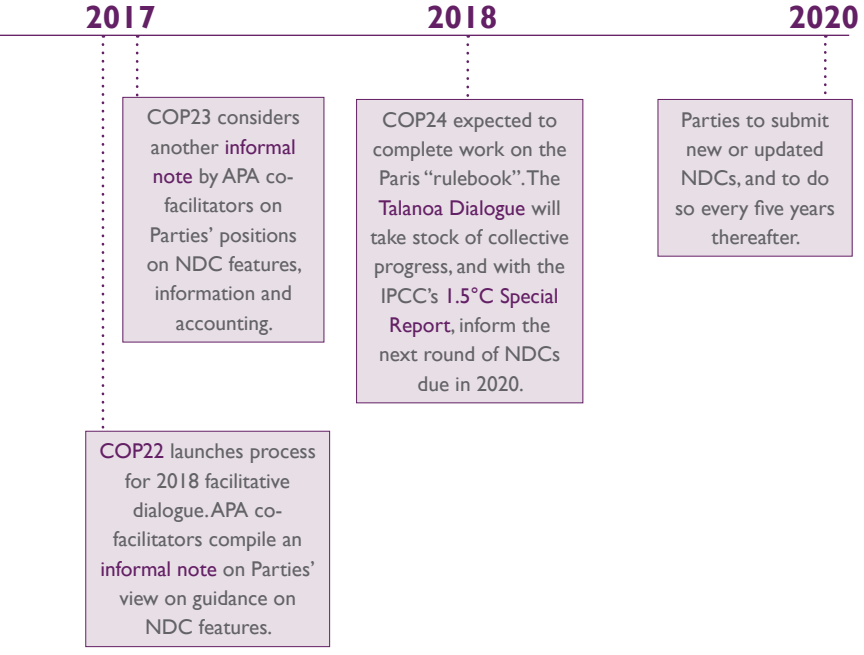
Article 13.5 refers to the purpose of the framework of transparency: to provide a clear understanding of climate change action, including, *inter alia*, clarity and tracking and progress towards achieving Parties' NDCs. In this context, Article 13.7(b) calls on Parties to provide information

necessary to track progress in implementing and achieving NDCs. This information will be subject to a technical expert review (Article 13.11).

Article 14, which calls for a global stocktake every five years to take stock of the implementation of the Agreement, states that the outcome of the stocktake shall inform Parties in updating and enhancing their NDCs.

TIMELINE


2013
2014
2015
2016
COP20, in the Lima Call for Climate Action, renews the invitation to Parties to communicate INDCs.
UNFCCC secretariat publishes an updated synthesis report on the aggregate effect of the 161 INDCs communicated by 189 Parties.
At COP21, the Paris Agreement calls on Parties to prepare, communicate and maintain successive NDCs.
COP19 in Warsaw invites all Parties to initiate or intensify domestic preparations for INDCs, and communicate them before COP21.
UNFCCC secretariat publishes a synthesis report on the aggregate effect of 119 INDCs communicated by 147 Parties.
The Paris Agreement enters into force on 4 November 2016.


2017
2018
2020
COP23 considers another informal note by APA co-facilitators on Parties' positions on NDC features, information and accounting.
COP22 launches process for 2018 facilitative dialogue. APA co-facilitators compile an informal note on Parties' view on guidance on NDC features.
COP24 expected to complete work on the Paris "rulebook". The Talanoa Dialogue will take stock of collective progress, and with the IPCC's 1.5°C Special Report, inform the next round of NDCs due in 2020.
Parties to submit new or updated NDCs, and to do so every five years thereafter.

ARE NDCs LEGALLY BINDING?

While some of the elements of the Paris Agreement related to NDCs are legally-binding, others are not. All Parties are required to prepare, communicate and submit their NDCs – but the ambition of those NDCs is a national decision.[5]

The following NDC-related elements, mostly procedural and requiring Parties to submit certain types of information at certain points in time, are legally-binding obligations for all Parties:

- Prepare, communicate and maintain NDCs.
- Pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.
- Provide information necessary for clarity, transparency and understanding (CTU) in communicating NDCs.
- Communicate NDCs every five years.
- Account for NDCs and promote environmental integrity, transparency, accuracy, completeness, comparability and consistency and ensure the avoidance of double counting.
- Regularly provide information on national inventories of emissions by sources and removals by sinks of GHGs, and information necessary to track progress made in implementing and achieving NDCs.

The Agreement also sets the expectation that each Party's successive NDC will "*represent a progression*" beyond its previous one and "*reflect its highest possible ambition*".

The achievement by a Party of its NDCs is, however, not a legally binding obligation.[6]

ACCOUNTABILITY MEASURES

The Agreement also contains robust and binding transparency and information sharing provisions which are legally binding, and intended to incentivise countries to both, submit ambitious NDCs and do their best to achieve them.[7] These include a transparency framework, a global stocktake, and a compliance and facilitation committee.

The transparency framework will solicit specific information from countries, which will enable the global stocktake to assess collective progress towards the achievement of the Paris Agreement's overall goals. It is hoped that this collective peer review process will help Parties to hold *each other* accountable.

The compliance and facilitation committee will operate, according to Article 15 of the Agreement, in a way that is "*facilitative, non-intrusive, non-punitive and respectful of national sovereignty*". There is no mandate for sanctions or similar enforcement measures that may be associated with legal obligations, as typically found in national contexts.

The lack of material sanctions does not necessarily mean Parties will try to free-ride and avoid taking any action, as sensitivity to 'peer pressure' and concern for reputational damage can affect state behaviour. Positive peer-pressure seemed to be a mechanism at work for the unexpectedly early entry into force of the Paris Agreement.[8]

The primary drivers for government actions and the strongest accountability relationships could be in the domestic contexts. National institutions, direct civil society engagement, and internal government processes – each with their own strengths and weaknesses – could provide additional accountability pathways.[9]

WHAT SHOULD THE NDCs CONTAIN?

The Lima Call for Climate Action called on Parties to communicate their INDCs, but offered limited guidance on their scope, features, and the information they should contain.[10] Detailed guidance was not provided in subsequent COPs in Paris, Marrakesh and Bonn either.[11] As a result, the information that Parties have included in their NDCs and the way they have presented this information varies considerably – including, for instance, on: how to formulate a mitigation contribution; address adaptation; interpret "*clarity, transparency, and understanding*"; and consider fairness and ambitious.[12] This makes it very difficult to compile and collate this information, to assess collective global progress in addressing climate change.

The Ad-hoc Working Group on the Paris Agreement (APA) is currently working to clarify the scope, features and information that NDCs should contain, for inclusion in the Paris "rulebook". It is expected that this work will be completed by the end of 2018.

COMPONENTS OF NDCs

Article 4.2 of the Paris Agreement requires Parties to include a mitigation contribution in their NDCs, as the most explicit provision with regard to the component of NDCs. The Lima Call for Action also invites Parties to consider communicating their undertakings in adaptation planning or including an adaptation component in their INDCs.

However, Article 3 of the Paris Agreement states: "*As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement*." This Article may therefore be interpreted to mean that NDCs may contain components related to:

- Mitigation
- Adaptation
- Financial support
- Technology transfer
- Capacity building
- Transparency

NDC FEATURES

The Paris Agreement does not mention the word "feature" or provide any clarification of what such a NDC feature constitutes. COP21 merely requests the APA to develop guidance on features of NDCs for adoption at the first Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA1) (1/CP.21, paragraph 26), as the only mention of NDC features in the COP decision. Thus, different interpretations arise of what NDC features are, what further guidance will entail and whether it will relate to new features only or to existing ones.

Article 4 of the Paris Agreement lists a number of characteristics required of NDCs but does not refer to features as such. NDCs are required to:

- represent a progression from previous NDCs;

- represent the highest possible ambition (and, whenever required, be adjusted for that purpose);
- include economy-wide emissions reduction targets (for developed countries);
- move over time towards economy-wide emissions reduction or limitation targets (developing countries);
- be communicated every five years;
- be informed by the outcomes of the global stocktake;
- be accounted for in order to promote environmental integrity, transparency; and
- ensure accuracy, completeness, comparability and consistency, and avoid double counting.

At CMA1 in Marrakesh in 2016, progress was made on features but without formal output. The co-facilitators of the APA session in November 2017 compiled an informal note to capture the different views expressed by Parties on features on NDCs as well as information for CTU and accounting of NDCs. The informal note identifies and lists existing features as well as new/additional features. It also lists elements of guidance and elaboration on features. Negotiations on NDC features are ongoing and are to be finalised at COP24 with the so-called Paris rulebook.

NDC INFORMATION

The Paris Agreement states in Article 4.8 that in communicating their NDCs, all Parties shall provide the information necessary for CTU.

In Decision 1/CP21, it was agreed that the information to be provided by Parties communicating their NDCs, 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;
- how the Party considers that its NDC is fair and ambitious, in the light of its national circumstances; and
- how the NDC contributes towards achieving the objective of the Convention as set out in its Article 2.

It further "*requested*" the APA to develop further guidance for the information to be provided by Parties for consideration and adoption. During the negotiations so far, strong opinions have been expressed by Parties who still could not agree on a "*structure of the guidance, including differentiation and scope of NDCs*".

To illustrate the complexity of this issue, we take the example of the NDC target type. NDC target types have significant implications for the information needed from countries to ensure the environmental integrity, transparency and comparability of cooperative approaches:[13]

- Absolute targets over the NDC period or in a target year. Such targets already clarify the future level of allowable emissions.
- Relative targets expressed in tonnes of CO2 equivalent emissions:
  - Relative to a base year. This requires information on emissions in the base year.

- Relative to a business as usual (BAU) emissions scenario. This needs information on the BAU emissions over the NDC period, as well as on whether and how the BAU may be adapted over the period.
- Intensity targets per unit of output. These require information on the projected development of the output (e.g. GDP) over the NDC period.
- Intensity reduction targets expressed as a percentage change of tonnes CO2 equivalent emissions per unit of output. These require information on BAU emissions and output projections (e.g. output).

HOW WILL PARTIES ACCOUNT FOR THEIR NDCs?

The diversity of approaches used by Parties to express mitigation targets in their NDCs under the Paris Agreement presents challenges in understanding, comparing and aggregating Party efforts. Accounting is needed to allow Parties to track individual progress towards their own mitigation-related NDC targets, understand others' NDC targets and their progress toward them, and assess collective progress towards the long-term mitigation goal.

The Paris Agreement and Decision 1/CP.21 include a number of elements relevant to accounting for mitigation targets.[14]

- **Up-front information to be provided by Parties when submitting their NDCs (Article 4.8):** Article 4.8 requires Parties, when they communicate their NDCs, to provide the information necessary for CTU. This obligation to provide up-front information aims to ensure that Parties define their NDCs with sufficient precision to enable both *ex ante* assessments of ambition and *ex post* determinations of implementation and achievement. Without information on factors such as an NDC's time frame, sectoral scope, GHG coverage, and methodological assumptions (for example, about BAU emissions, if an NDC includes a BAU target), it is unclear what a Party has pledged to do or determine whether it has met its pledge.
- **Accounting by Parties of their NDCs (Article 4.13):** Article 4.13 is the principal accounting provision and requires Parties to account for their NDCs in order to avoid

double counting and promote environmental integrity, transparency, accuracy, comparability, and consistency, in accordance with guidance adopted by the CMA. Like up-front information, accounting rules help define a Party's NDC and determine what counts as achievement. In doing so, they promote both transparency and environmental integrity.

- **Accounting by Parties of ITMOs (Article 6.2):** Article 6.2 requires Parties, when using ITMOs, to promote sustainable development, ensure environmental integrity and transparency, and apply robust accounting to ensure, *inter alia*, the avoidance of double counting.
- **Common modalities, procedures and guidelines for the transparency of action and support (Article 13.13), which could include rules on the information to be provided by Parties under Article 13.7 on their progress in implementing and achieving their NDCs:** Article 13.7 requires Parties to provide information on their emission inventories as well as information necessary to track progress in implementing and achieving their NDCs.

Table 1: Key elements of Paris Agreement and Decisions relevant to accounting

PARIS AGREEMENT	DECISION 1/CP21
Accounting for NDCs	
Article 4.13: Parties shall account for their NDCs. In accounting for anthropogenic emissions and removals corresponding to their NDCs, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting, in accordance with guidance adopted by the CMA.	**Paragraph 31:** Requests the APA to elaborate, drawing from approaches established under the Convention and its related legal instruments as appropriate, guidance for accounting for Parties' NDCs, which ensures that: ■ Parties account for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the Intergovernmental Panel on Climate Change (IPCC) and adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP); ■ Parties ensure methodological consistency, including on baselines, between the communication and implementation of NDCs; ■ Parties strive to include all categories of anthropogenic emissions or removals in their NDCs and, once a source, sink or activity is included, continue to include it; ■ Parties shall provide an explanation of why any categories of anthropogenic emissions or removals are excluded. **Paragraph 32:** Parties shall apply the guidance referred to in paragraph 31 above to the second and subsequent NDCs and that Parties may elect to apply such guidance to their first NDC.

PARIS AGREEMENT	DECISION 1/CP21
Communication of NDCs	
Article 4.8: In communicating their NDCs, all Parties shall provide the information necessary for clarity, transparency and understanding.	[Paragraphs 27–28 provide further implementation guidance]
Tracking progress towards NDCs / the enhanced transparency framework	
Article 13.7: Each Party shall regularly provide the following information: ■ A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the IPCC and agreed upon by the CMP and achieving its NDC under Article 4. **Article 13.11:** Information submitted by each Party under paragraphs 7 and 9 of this Article shall undergo a technical expert review, in accordance with Decision 1/CP.21.	[Paragraphs 91–98 provide further implementation guidance]

PARIS AGREEMENT	DECISION 1/CP21
Use of cooperative approaches	
Article 6.2: Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards NDCs, apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the CMP. **Article 6.5:** Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's NDC if used by another Party to demonstrate achievement of its NDC.	**Paragraph 36:** Requests the Subsidiary Body for Scientific and Technological Advice to develop and recommend the guidance, including guidance to ensure that double counting is avoided on the basis of a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by their NDCs under the Agreement. **Paragraph 37:** Recommends that the CMP adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement.

Source: Hood, C. & Soo, C. (2017). Accounting for mitigation targets in Nationally Determined Contributions under the Paris Agreement. *OECD/IEA Climate Change Expert Group Papers*. No. 2017/05. Paris: OECD Publishing.

Parties are at the preliminary stages of developing guidance to account for mitigation targets in NDCs and the task is complex. Though it does not start from a blank sheet given the experiences from the Kyoto Protocol's accounting framework, methodologies developed by the Intergovernmental Panel on Climate Change (IPCC), UNFCCC accounting provisions (including for REDD+), the diverse spectrum of NDCs that have been communicated and the wide range of developed and developing country capacities to implement accounting raise new challenges.

The nature of the guidance to be developed present also its own challenges. First, there is a risk that very accurate, precise

accounting guidance could become very complex, which could impede universal participation in the Agreement unless there is significant capacity-raising. This concern is particularly acute with respect to accounting for ITMOs under Article 6: Parties will need to strike the appropriate balance between broad participation and maintaining environmental integrity by having the most robust accounting possible. Second, the need for continuous improvement in methodologies and processes used (for example, countries progressively moving to more recent or higher-tier GHG inventory methodologies and systems), set against the concern that this could cause NDC targets to be updated frequently and/or significantly, potentially causing confusion regarding the meaning of NDC targets and whether they have been achieved.[15]

HOW DO NDCs OF DIFFERENT COUNTRIES VARY?

Given that very little guidance was available at the time of the first submission of INDCs, and because of the variety of national circumstances, the NDCs vary greatly in content, scope, form, and coverage.

MITIGATION

Parties to the Paris Agreement have adopted a variety of different kinds of pledges in their NDCs. Many NDCs specify explicit GHG reductions targets, but some indicate general actions to be undertaken, or targets specified in non-GHG terms (such as technology penetration goals – see **Figures 3** and **4**). Broadly, they can be classified as follows:

- **GHG targets:** These are pledges framed as explicit GHG targets, usually for a single year. Pledges may specify a specific numerical target, or a range or "corridor" for the emissions they will achieve. Different Parties have specified targets in different ways, such as:
  - **Absolute targets.** A pledge to achieve an absolute level of GHG emissions. These targets can be specified as either:
    i. Reductions from a base year level of emissions. For example, reducing emissions 20% below 2015 levels by 2030.
    ii. Achievement of a fixed level of emissions. For example, reducing emissions to 400 MtCO2e per year by 2030.

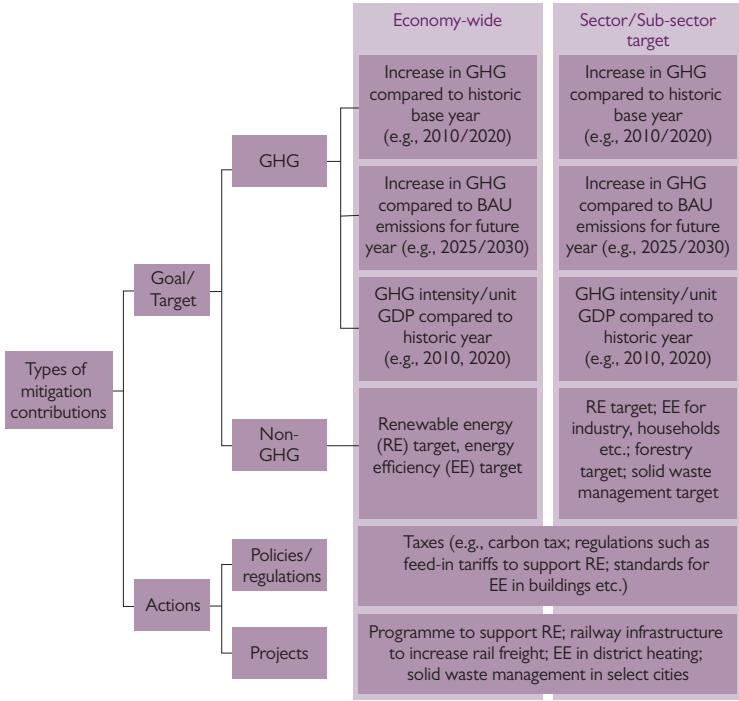
iii. Achievement of an emissions trajectory or range. For example, South Africa has pledged to achieve a "peak, plateau, and decline" emissions range that would keep GHG emissions between 398 and 614 MtCO2e between 2025 and 2030.

- **Relative targets.** A pledge to achieve GHG reductions relative to some (variable) reference point. Different formulations include:
  i. Reductions relative to a BAU scenario. For example, reducing GHG emissions 40% relative to what they otherwise would have been (in the absence of mitigation efforts) in 2030.
  ii. Reductions in GHG intensity. For example, reducing GHG emissions per unit of GDP by 20% relative to the current emission rate.

- **Non-GHG targets:** These are pledges framed in terms of technology goals or types of mitigation actions, with or without numerical targets attached:
  - **Non-GHG quantitative targets,** such as pledging to generate 40% of all electricity from renewables by 2030.
  - **Action-based targets.** For example, The Gambia has pledged "*use of renewable energy sources in lighting, communication and health facilities, and for lifting water from wells and boreholes; and the Department of Forestry and local communities will continue to plant and care for trees annually*".

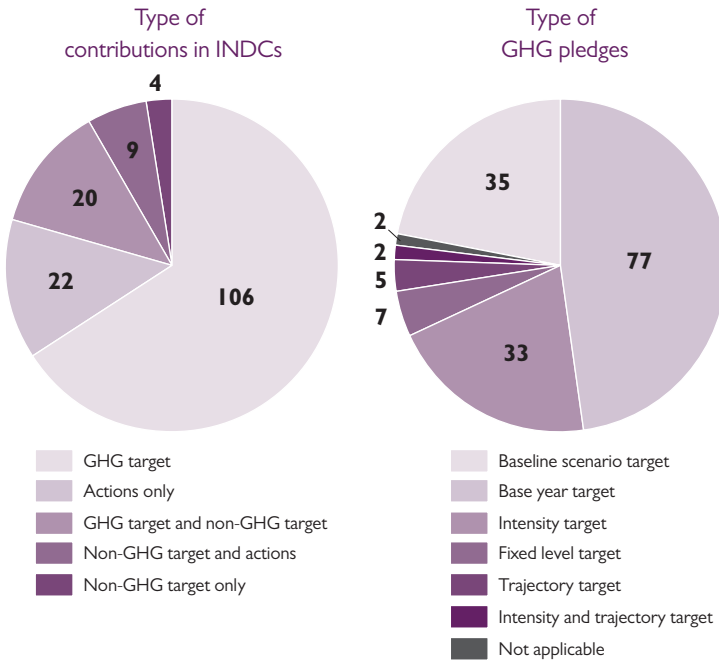
Some countries have pledged a mix of both GHG and non-GHG targets.

Figure 2: Different types of mitigation contributions



Source: Bakkegaard, R. K., Bee, S., Naswa, P., Ngara, T., Olhoff, A., Sharma, S., & Desgain, D. D. R. (2015). *Developing INDCs: A Guidance Note*. Copenhagen: UNEP DTU Partnership.

Figure 3: Type of contributions in INDCs and type of GHG pledges, out of 169 INDCs



Source: WRI CAIT Climate Data Explorer

Article 4.4 of the Paris Agreement calls on developed country Parties to undertake economy-wide absolute emission reduction targets and encourages developing country Parties to move over time towards economy-wide emission reduction or limitation targets in light of different national circumstances. The current diversity of NDC target types could therefore be seen as a starting point, with convergence toward economy-wide emission targets expected over time in subsequent NDCs.

ADAPTATION

Although it is not mandatory, most countries have chosen to include an adaptation component in their NDCs, and many countries made reference to their national adaptation plan (NAP) process.[16] The content is varied, ranging from a summary of observed impacts of climate change in a country, to the identification of vulnerable sectors and priority adaptation needs; descriptions of ongoing and planned adaptation measures and actions; and the articulation of time-bound adaptation targets – or some combination thereof.

MEANS OF IMPLEMENTATION

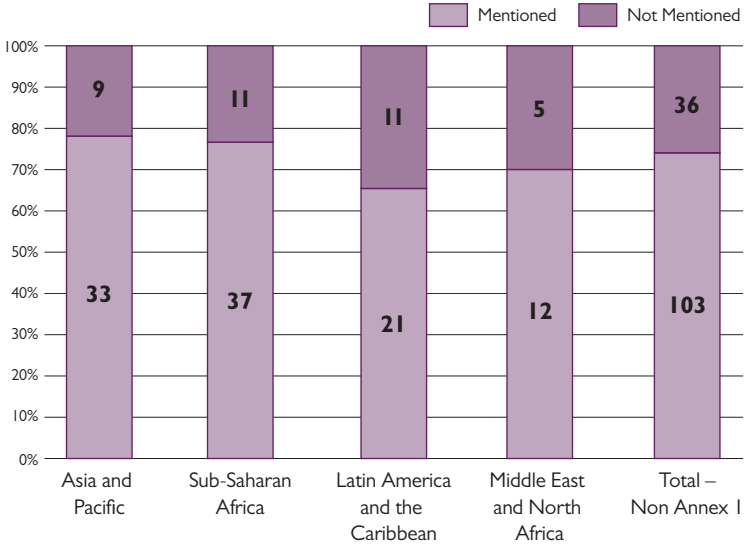
The vast majority of developing countries request assistance in fully implementing their NDCs.[17] Some Parties require the provision of international support for the full implementation of their NDC, whereas others include an enhanced conditional mitigation component alongside an unconditional one.[18] Ghana, for instance, has an unconditional emission reduction goal of 15% relative to a BAU scenario, and an additional 30% emission reduction that is contingent on external support in the form of finance, technology transfer and capacity building.

Capacity building: The importance of capacity building is reflected in the NDCs, with 86% of all developing countries considered including capacity building as key support for the full implementation of their NDC.[19]

Technology transfer and specific technology needs: One area where the broadness of the NDCs is particularly evident is the call for technology transfer. The majority (74%) of the NDCs analysed identify the need for technology transfer as a means of international cooperation to help meet their targets.[20] However, the NDCs generally do not specify what sectors need technology transfer and what technologies are needed. In the

cases where technology needs are identified, the priorities relate to the power generation sector, and agriculture.

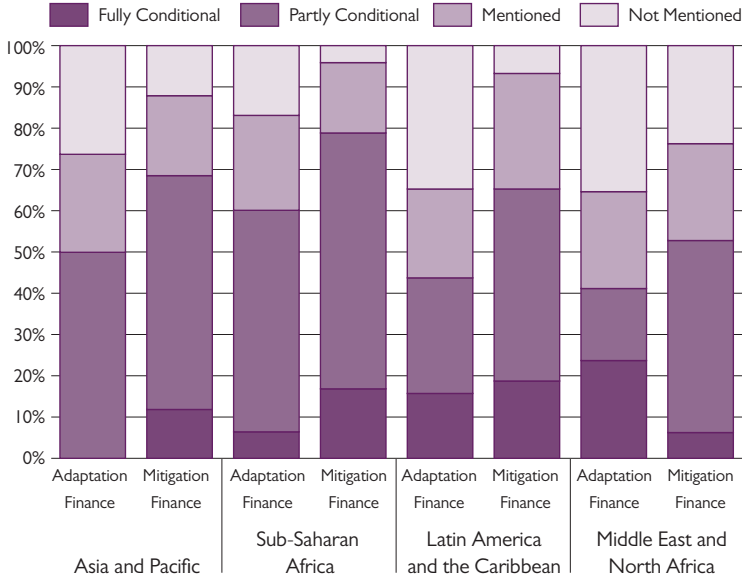
Figure 4: Technology transfer mentioned in countries' NDCs by region



Source: Schletz *et al.* (2017). *Taking stock of the (I)NDCs of developing countries: regional (I)NDC coverage of mitigation sectors and measures.* Nairobi: United Nations Environment Programme.

Finance: The NDCs of most developing countries include both mitigation and adaptation actions that are conditional to the provision of international finance, with more requests for mitigation finance (partial and fully conditional) than for adaptation finance.

Figure 5: Requests for mitigation and adaptation finance in countries' NDCs by region



Source: Schletz *et al.* (2017). *Taking stock of the (I)NDCs of developing countries: regional (I)NDC coverage of mitigation sectors and measures*. Nairobi: United Nations Environment Programme.

Some countries mention the need for international financial assistance from the private sector, international funds or multilateral development banks in their NDCs. However, in most cases, financial sources are not identified.

WHAT ARE CONDITIONAL AND UNCONDITIONAL CONTRIBUTIONS?

The concept of unconditional and conditional contributions has been introduced in NDCs mainly in the context of developing countries. An "unconditional contribution" is what countries could implement without any conditions and based on their own resources and capabilities. A "conditional contribution" is one that countries would undertake if international means of support are provided, or other conditions are met. For example, Morocco´s unconditional contribution is 17% reduction below BAU emissions by 2030, and its conditional contribution is an additional 25% reduction below BAU by 2030.

Table 2 shows the proportion of all INDCs with conditional contributions (developing and developed countries) – the majority of countries have an explicit conditional component in their contribution.

Table 2: Overview of the proportion of INDCs with conditional contributions

NATURE OF CONTRIBUTION	PROPORTION OF INDCs
Including an explicitly conditional component	**78%**
Both conditional and unconditional	43%
Conditional only	33%
Partially conditional	2%
Not including an explicitly conditional component	**22%**
Explicitly unconditional only	3%
Unspecified	19%

Source: Day, T., Röser, F. & Kurdziel. M. (2016). *Conditionality of Intended Nationally Determined Contributions (INDCs).* Berlin: International Partnership on Mitigation and MRV.

Several types of conditions have been included in developing countries NDCs, including:[21]

- **Conditional to the provision of international financial and technical support:** Over 80% of the conditional contributions are linked to the provision of financial support for all or part of the proposed mitigation actions, although few NDCs clearly identify a specific volume of required finance.
- **Conditional to collective ambition:** Several Parties indicate their wiliness to increase their contributions if there is an increase in the collective ambition of NDCs. In all such cases, the conditions do not specify a precise level of required ambition, so the threshold for the realisation of the commitment remains unclear.

- **Conditional to the final agreement and rules:** Many NDCs link their level of ambition to the final agreement and rules of engagement. For example, many NDC submissions indicate explicitly that the Parties will use international flexibility mechanisms or market-based approaches to fulfil their contributions. For some countries, such as Mexico, the availability of such mechanisms was a specific condition for enhanced ambition.
- **Conditional to general circumstances:** The vaguest of conditions, presented in some NDCs, were general statements relating to national circumstances. For example, one INDC indicates that ambition enhancements would be considered "*if circumstances allow*".

While NDC conditionality increases uncertainty with regard to the achievement of the Paris goal and poses difficulties in aggregating the effects of NDCs, it does however offer the potential for increasing ambition beyond what may have been possible in its absence. Many countries, especially developing countries, have merely compiled their sustainable development strategies and their existing plans into the NDCs. The conditional elements, through showing countries' willingness to increase their efforts, offer a potential to go further and to increase the level of ambition due to the lack of resources.

HOW HAS ADAPTATION BEEN DEALT WITH IN CURRENT NDCs?

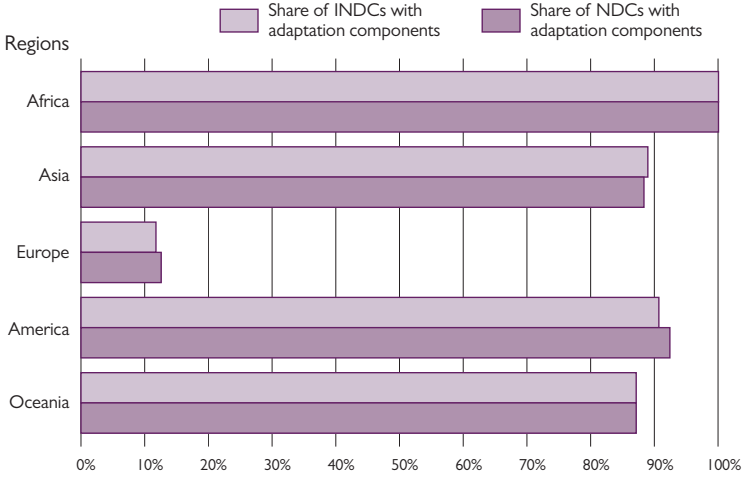
Adaptation has been included in 120 out of 162 NDCs (or 145 INDCs out of 192 INDCs) submitted to the UNFCCC of as of 26 October 2017, 48 of which specifically refer to their NAP process.[22] The extent of the inclusion of adaptation varies – while some countries have dedicated almost the entire NDC, or more than half of it, to adaptation, others have included only a few lines. As of 17 May 2017, most countries that have ratified the Paris Agreement did not modify, or only modified very little, the adaptation-related information in their NDC.[23]

Countries have highlighted their common determination to strengthen national adaptation efforts in the context of the Paris Agreement, and some countries have stressed that adaptation is their main priority for addressing climate change, in particular as they see it to be strongly linked to national development, sustainability and security.

All NDCs with an adaptation component include information on key impacts and vulnerabilities. Most countries have referred to developing nationwide adaptation plans and strategies and recognised the need to involve relevant stakeholders in the planning and implementation of adaptation, including vulnerable communities. Overall, the adaptation components of the NDCs constitute a representative overview of how countries, building on progress made so far, intend to deal with adaptation, including the costs, in coming decades. Countries have also communicated the need for means of implementation to implement planned adaptation actions. The adaptation components also indicate that many

countries have integrated, or plan to integrate, climate change adaptation into development planning and relevant sectors. As of 26 October 2017, more than half of the 120 NDCs and 145 INDCs that include adaptation refer to plans to be implemented in the future, whereas approximately a third refer to both, plans that already have been implemented and plans to be implemented in the future.[24]

Figure 6: Regional share of NDCs and INDCs with an adaptation component, out of 162 and 192 submitted NDCs and INDCs respectively, as of 26 October 2017



Source: Tool for Assessing Adaptation in the NDCs

Loss and damage is mentioned in 30 NDCs, and eight NDCs mention loss and damage in the context of financial support (as of 27 February 2018).[25]

WHAT IS THE LIFE CYCLE OF AN NDC?

When ratifying the Paris Agreement, most Parties automatically transferred their INDC into their first NDC. A few Parties updated or revised their NDCs – some only changing a title or providing more details, while others, like Morocco, updated their contribution.

The Paris Agreement establishes a five-year cycle for the communication of NDCs (Article 4.9). NDC submissions are due in 2020, and every five years thereafter. However, since the INDCs did not specify a specific timeframe for countries, the timeframe addressed in the INDCs varies, with the majority of countries adopting either a five-year or ten-year timeframe. The Paris outcome tried to accommodate both. Paragraph 23 of Decision 1/CP.21 calls on Parties with a timeframe up to 2025 in their INDCs to submit a new NDC by 2020, whereas paragraph 24 calls on Parties with a timeframe up to 2030 to simply update their NDC by 2020. However, a Party may update its NDC at any time if the update represents enhanced ambition and no backsliding.

For each five-year cycle, Parties shall submit their NDC at least 9–12 months in advance of the relevant session of the CMA. The UNFCCC secretariat will then synthesise the NDCs in a report, which will be published before the CMA session. Beginning in 2023, a global stocktake will take place every five years to review collective progress towards achieving the objectives of the Paris Agreement. The outcomes of this stocktake are expected to inform

national efforts in preparing their next NDC – for instance, the 2023 stocktake will inform the 2025 NDCs (see **Figure 7**).

Figure 7: Five-year submission cycle for NDCs

NDC update possible at any time as long as it is a progression

Source: UNFCCC (2016). *The NDC Cycle in the Paris Agreement.* Bonn: UNFCCC.

WHAT IS THE GLOBAL STOCKTAKE?

Article 14 of the Paris Agreement requires the CMA to periodically take stock of the implementation of the Paris Agreement, to assess progress towards achieving its purpose and its long-term goals in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science. This is called the global stocktake. It was also decided that the first stocktake will take place in 2023, and every five years thereafter.

The formulation of Article 14 highlights two features that clearly differentiate the global stocktake from existing review processes in global governance: the assessment of exclusively **collective**, rather than individual, progress towards shared global goals; and the implicit aim to increase ambition over time by encouraging Parties to present scaled up NDCs and increase their levels of cooperation. These two features will have major design implications for the stocktake, the details of which are currently being negotiated by the APA.

The sources of input for the global stocktake and its modalities are still under negotiation in APA. Designing the stocktake is a challenging process – not least because of the variety of NDCs that Parties have submitted, which makes it very difficult to aggregate the information they contain and present a coherent picture of collective progress.

So, on mitigation for instance, while it is relatively easier to aggregate contributions that are framed as absolute emission reduction targets (particularly given the experience with the

Kyoto Protocol), it is difficult to aggregate contributions that are framed as qualitative policies, actions and measures; or goals to peak emissions by a given date. Developing common methodologies to estimate the expected effects of different mitigation policies will be crucial for the global stocktake to be effective.

Assessing collective progress towards adaptation can be a bigger challenge, given the locally-determined, context-specific nature of national adaptation goals and action. Guidelines are currently being developed for the communication of adaptation efforts, and these will provide important inputs to the stocktake. The NAP Technical Guidelines, which provide guidance on reporting, monitoring and review, are a useful resource to support the development and institutionalisation of methods that can also be usefully applied to monitoring adaptation progress.[26] A basic, common framework to aggregate national adaptation progress at the global level will be necessary for an effective global stocktake. Such a framework could ensure that national adaptation actions are categorised in ways that connect the global goal, and countries with similar national goals (related to adaptation planning processes, for example, or outcomes in specific sectors) could be grouped to understand progress and gaps nationally and globally.

Assessing global progress towards meeting the financial goal will be equally, if not more, challenging, given that there is lack of agreement on what counts as climate finance,[27] and that tracking both public and private investments is difficult. Parties will need to consider how to assess whether finance flows are "*consistent with a pathway towards low greenhouse gas emissions and climate-resilient development*". A growing number of researchers,[28] non-governmental organisations,[29] and governments[30] are grappling with these challenging questions.

Although Article 13, on the transparency framework, states that one purpose of the framework is "*to the extent possible*", *"provide a full overview of aggregate financial support provided, to inform the global stocktake*", this is more complicated than simply adding together what individual countries currently report. In Paris, countries agreed to develop modalities for accounting of financial resources provided and mobilised through public interventions. This process, taking place in the Subsidiary Body for Scientific and Technological Advice (SBSTA), will need to develop clear, consistent and workable modalities to allow an accurate aggregation of climate finance flows for the global stocktake to consider.

Meanwhile, the 2018 Facilitative Dialogue, now called the Talanoa Dialogue, presents an opportunity to see how a stocktake process can be effective in making climate action more ambitious.

WHAT IS THE TALANOA DIALOGUE?

Talanoa is a traditional word used in Fiji and across the Pacific to reflect a process of inclusive, participatory and transparent dialogue. The 2018 facilitative dialogue agreed by Decision 1/CP.21, paragraph 20 was re-christened the Talanoa Dialogue during the Fijian presidency of the UNFCCC process in 2017 after extensive consultations with Parties. Its approach was agreed at COP23 as per Annex II to 1/CP.23.

The Dialogue was launched in January 2018. It is expected to create political momentum, which many hope that it will drive higher ambition and result in the updating of the 2020 NDCs.

The dialogue will be structured around three general topics:

- Where are we?
- Where do we want to go?
- How do we get there?

It will consist of a preparatory and a political phase and a dedicated space will be provided in the dialogue, during both phases, to facilitate the understanding of the implications of the Special Report by the IPCC on Global Warming of 1.5°C.

CAN GREATER AMBITION BE ACHIEVED THROUGH NDCs?

Countries have an opportunity to strengthen their NDCs after the Talanoa Dialogue in 2018 (paragraphs 23 & 24) and to submit new or updated NDCs by 2020. From this point on, all countries are to enter a five-year cycle of communicating NDCs, with each representing a "progression" beyond the previous one and reflecting the Party's "*highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances*" (Article 4.3).

For this purpose, there is a general call to move towards economy-wide, absolute emission reduction targets. NDCs of this nature are expected from developed countries as part of their lead in addressing climate change. Developing countries are to continue enhancing their mitigation efforts and are encouraged to move to economy-wide emission reduction or limitation targets, "*in light of different national circumstances*" (Article 4.4). NDCs may be adjusted at any time, if it is to enhance ambition (Article 4.11).

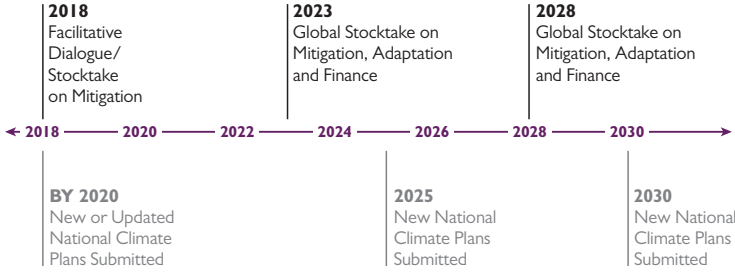
The global stocktake is a key element in the ambition mechanism of the Agreement; it will provide countries with the basis for strengthening their actions and submitting new national climate commitments in the two years following each successive global stocktake. To achieve its purpose, the global stocktake must be closely linked with other key processes under the Paris Agreement – namely, the enhanced transparency framework for action and support[31] and the mechanism to

facilitate implementation of, and promote compliance with, the Paris Agreement.

The transparency framework will provide the information for the global stocktake, including national reports of GHG emissions, progress in implementation, climate impacts, support (in the form finance, technology transfer and capacity building) provided and mobilised, and support needed and received. The relationship could also work the other way, though; the experience and outputs of the global stocktake should also identify additional information needs or areas to improve the transparency or clarity of information to facilitate the assessment of collective progress.

Ensuring a two-way street between the transparency framework and global stocktake will be crucial for the effectiveness of the overall regime.[32]

Figure 8: Ambition Mechanism in the Paris Agreement



Source: Northrup, E., Mogelgaard, K. & Thwaites, J. (2017). *INSIDER: Designing the Global Stocktake under the Paris Agreement: The Catalyst for Climate Action*. Washington, D.C.: World Resources Institute.

Through combining non-binding nationally-determined pledges with international progress checking, the transparency and review mechanisms are essential for the effectiveness of the Paris Agreement.

However, there is also concern that this so-called "ambition mechanism" may not be sufficient to drive global ambition to the level that is necessary.

To begin with, it is not yet clear that all countries will have five-year cycles in the post-2020 period. If the five- and ten-year cycles of the first NDC cycle continue beyond 2020, the countries with longer cycles will not feel the same pressure to enhance ambition in their NDCs every five years (although they will have the option to do so) as the countries with five-year cycles (who will have to submit a new NDC, which will have to be more ambitious than the previous one).[33]

Secondly, some Parties fear that if countries submit their NDCs for the first time only 9–12 months before a CMA, this will not really give other countries the opportunity to weigh their own levels of ambition with that of their peers, or give them the time and opportunity to potentially re-calibrate their NDCs for greater ambition (either in response to higher ambition from their peers, or indeed aggregations by research institutions or civil society that show that aggregate ambition levels are still lower than necessary). Without the opportunity to compare levels of ambition among each other and given the concerns that countries tend to have with regard to complementarity and comparability of efforts at least among peers, countries may simply choose to opt for lower levels on ambition in the NDCs in the first place (so as to not commit to more ambitious action than their peers).

Instead, these Parties and observers call for a process whereby Parties submit "indicative" NDCs well in advance,

which have not yet been finalised or been through due process at the national level. A number of developing country negotiators proposed a "dynamic contribution cycle",[34] whereby countries submit an indicative NDC for the next five-year period at the same time as they submit a five-year NDC – so for instance, an indicative NDC for the 2025–2030 period when they submit the 2020 NDC.[35] This 2025–2030 NDC can then inform other countries and at the same time provide an opportunity for global aggregation to project potential impacts. Parties can decide whether they choose to formalise the indicative NDC as it is in 2025, or to revise it and to enhance their ambition further.

A number of issues therefore need to be resolved by the Paris rulebook, before the ambition mechanism can truly drive ambition.

ARE NDCs ADEQUATE AND AMBITIOUS?

Based on the analysis of the NDCs submitted so far, the UN Environment's *Emissions Gap Report 2017* concludes that the current NDCs cover only approximately one third of the emissions reductions needed to be on a least-cost pathway for the goal of staying well below 2°C.[36] The Paris Agreement specifically recognises the link of reaching the temperature goal and the need for adaptation as it would "*significantly reduce the risks and impacts of climate change*"(Article 4.3). The gap between the reductions needed and the national pledges made in Paris is alarmingly high.

Looking beyond 2030, it is clear that if the emissions gap is not closed by 2030, it is extremely unlikely that the goal of holding global warming to well below 2°C can still be reached. Even if the current NDCs are fully implemented, the carbon budget for limiting global warming to below 2°C will be about 80% depleted by 2030. Given currently available carbon budget estimates, the available global carbon budget for 1.5°C will already be well depleted by 2030.

Action by subnational and non-state actors, including regional and local governments and businesses, is key to enhancing future ambition. There is still limited evidence that non-state action will fill a significant part of the emissions gap, although there is significant potential for it to do so. Enhanced monitoring and reporting of non-state actions and the resulting emissions reductions be will be essential to make pledged actions transparent and credible.

More ambitious NDCs will be necessary by 2020 and should build on the existing, extensive knowledge about the cost-effective policies and measures that can be taken. A systematic assessment of sectoral mitigation options shows that the gap can be closed before 2030 by adopting already known and cost-effective technologies, often by simply adopting or adapting best practice examples already deployed in the most innovative country contexts. A large part of the potential comes from just six relatively standardised categories: solar and wind energy, efficient appliances, efficient passenger cars, afforestation and stopping deforestation. These six present a combined potential of up to 22 GtCO2e per annum.[37]

WILL SUFFICIENT FUNDS BE AVAILABLE TO IMPLEMENT NDCs?

With such a large portion of NDCs listed as conditional to the availability of finance, finance becomes a critical component for the achievement of even the (currently inadequate) level of mitigation and adaptation ambition set out in the NDCs.

The Paris Agreement states, *"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"* (Article 9.1). Developing countries can also contribute finance, but this is voluntary (Article 9.2). Developed countries are expected to report on the finance pledged and provided biennially (Article 9.5) and support for developing countries provided and mobilised (Article 9.7), and the provision of financial resources should aim to achieve a balance between adaptation and mitigation (Article 9.4).

A number of countries have included quantitative estimates of the costs of their mitigation and adaptation contributions. According to the NDC Explorer, out of 139 developing countries analysed, 62 and 57 countries provide the costs of their mitigation and adaptation contributions respectively.[38] The total cost of mitigation (US$ 2,984 billion) of the 62 Parties is more than three times higher than the total cost of adaptation listed by the 57 (US$ 918 billion). These numbers, however, are likely to underestimate the total costs communicated in all NDCs, as the NDC Explorer only considers costs that are specifically dedicated to either mitigation or adaptation, and does not include costs of

crosscutting or integrated approaches with adaptation and mitigation elements.[39]

International funds from sources such as the Green Climate Fund are unlikely to be adequate, making the need for more innovative sources of funding critical. Sources such as the private sector and domestic fiscal budgets are essential. Many countries are considering the development of national climate investment plans, setting out the investments needed to implement the NDC, and a strategy to meet those needs.[40] A significant transformation in the world´s economy, and the way climate change investments and development and sustainable development are thought about, is necessary to generate the finance needed to achieve the Paris climate goals.

In order to plan and implement a comprehensive and appropriate approach to mobilising finance for NDCs, a good starting point is to understand the current situation in the countries. This will help identify and prioritise the required activities and ensure they are based on a robust and up to date evidence base. Relevant activities to develop such an understanding include looking at current flows of finance, assessing the amount of finance needed to implement the NDC, working out what capacities are needed and to what degree they already exist, and identifying barriers hindering investment that need to be overcome.[41]

ARE MARKETS INSTRUMENTS INCLUDED IN NDCs?

Of the 155 Parties that have submitted NDCs as of September 2018, 81 state that they plan to, or are considering, the use of carbon pricing as a tool to meet their commitments. These Parties account for 55% of global GHG emissions, and include three of the world's five largest economies (China, Japan and India).[42]

Article 6 of the Paris Agreement allows Parties to voluntarily cooperate in the implementation of their NDCs through market and non-market based mechanisms. Article 6.2 of the Paris Agreement allows cooperative approaches, where Parties can use ITMOs to meet their commitments. Articles 6.4, on the other hand, establishes a mechanism for countries to cooperate in GHG emissions mitigation and sustainable development under the authority and guidance of the CMA. Emission reductions generated from both mechanisms can be used to meet the NDC of either the host country or another country. While the mechanism described in Article 6.4 would most likely look like the Clean Development Mechanism, the design of the cooperatives approaches under Article 6.2 and the nature of the ITMOs are still being negotiated by the Parties.

The new post-Paris environment characterised by the absence of the divide that existed under the Kyoto Protocol between Annex 1 and non-Annex 1 Parties, as well as the nature of the cooperatives approaches under Article 6, makes the operation of carbon markets very complicated.

Over three quarters of the NDCs contain emission targets in GHG terms. Around half of these are expressed relative to

a historical base year, meaning that the target level of future allowable emissions is known and fixed in advance. However, around half are expressed relative to BAU, and several are expressed on an intensity basis. These rely on future revisions of BAU scenarios and future data (for instance, on GDP), introducing uncertainty and complicating the operation of carbon markets. Many targets are expressed in GHG terms, but only in terms of a target in a single future year – say 2030 – rather than over period of multiple years (say 2020–2030). As there is no mitigation contribution defined for emissions outside this single year – and indeed none for the country's cumulative contribution to climate change over time – countries with single and multi-year targets do not have a common basis for using ITMOs.[43]

The diversity in the NDCs significantly complicates the use market instruments, but it does not rule it out. Clever and innovative design features would need to be agreed by the Parties. The guidance on information needs for NDCs and the move towards more conformity in subsequent NDCs will help with the operationalisation of a robust carbon market that ensures environmental integrity and drives ambition, instead of creating perverse incentives.

WHAT CHALLENGES DO NDCs POSE TO MEASURING GLOBAL PROGRESS?

AGGREGATION AND COMPARABILITY

The NDCs are diverse in many aspects: target types, timeframes, metrics, sectoral scopes, and with unconditional and conditional elements. However, aggregating this information to assess global performance will require comparability across targets and information. To achieve further clarity, transparency and understanding of NDCs, countries will need to provide information relevant to their NDC types. For instance, clearer boundaries will be needed between what a country intends to contribute unconditionally, and which elements of an NDC are conditional.

NDCs may cover entire economies or may be limited to specific sectors. A comprehensive move towards economy-wide emission reduction or limitation targets will help comparability and, even more importantly, help raise ambition. However, this can only be expected to take place incrementally.

TRANSPARENCY

Transparency is likely to become the biggest challenge for NDCs at the global level, for at least three reasons:

- First, monitoring, reporting and evaluation systems and tools are sub-optimal in most developing countries, even in the area of climate change mitigation. Improvements will in most cases be gradual, building upon existing systems. Distributing monitoring, reporting and evaluation duties

by integrating them into development projects, as opposed to today's approach, which has those duties managed centrally from climate change offices, with little or no influence over line ministries, is arguably a cost-effective approach to the problem.

- Second, there is limited experience with monitoring, reporting and evaluation of adaptation actions, due to the relative newness of the issue and the disaggregated nature resilience-building activities. Issue-specific guidance and good-practice examples will be needed to promote improvements.
- Third, agreement on the specific mechanisms to be used for independent appraisal and review will be challenging to obtain, and the implementation of those mechanisms is likely to suffer from data shortcomings and potential ambiguities in definitions.

COMMON BASIS FOR ITMOs

A major issue that has emerged from the diversity of NDCs is that multi-year and single-year emissions targets do not share a common basis for using ITMOs. This would be considerably helped by countries providing information on their expectations for their emissions trajectories over time.

At a different level, sector-specific approaches to ITMOs may be needed to promote cost-effective emission reductions across borders. Indeed, while ITMOs were introduced in the international climate change regime to ensure that emission reductions are achieved where it is cheaper to do so, the vast majority of NDCs have ignored ITMOs. Lack of familiarity with the issue, and the generic nature of the provisions concerning ITMOs may have deterred countries from relying

on this mechanism, a problem that sector-specific guidance may be able to overcome.

ACTION BY NON-STATE ACTORS

Ensuring that state and non-state actor actions are coordinated and effective is a further problem that the UNFCCC needs to consider, in an effort to promote cost-effective emission reductions. At present, state actors are not delivering at the scale needed, and non-state actors are yet to prove their potential.[44] Roles and responsibilities have to be clarified, and realistic expectations have to be set, in the interest of obtaining a more realistic overview of what levels of delivery can actually be expected, by whom.

WHAT CHALLENGES ARE COUNTRIES LIKELY TO FACE IN IMPLEMENTATION?

Implementation of the first NDCs will begin in 2021. The main challenges that countries could face, in addition to the issue of finance that is discussed separately, can be categorised under eight sets of issues:[45]

- **Lack of capacity in the countries to launch and coordinate a whole-of-government process**, incorporating contributions from all relevant governmental agencies and non-governmental partners. Most coordination entities lack financial and human resources. These constrains seriously limit the entity's ability to fulfil its role. This is especially worrisome in situations where high-level commitment and support is limited, institutions are fragmented, and the role of the coordination entity expands beyond the core duties specific to NDC implementation actions.
- **Lack of capacity to integrate NDC priorities into sectoral and cross-sectoral programmes and projects**, to ensure that the latter do not undermine efforts to achieve the NDC priorities, or vice versa. A separate budget will be necessary for integration efforts, as it involves both a review and screening of those sectoral policies and plans, and – possibly – the adoption of alternative measures.
- **Lack of resources and mandates to train relevant government agency staff** (and possibly non-government agency staff), to increase the technical and managerial skills of these individuals. In some cases, governments find it challenging to set up basic know-how development

programmes, which creates frustration and disengagement among stakeholders. In other countries, staff turnover linked with changes in government creates a different but parallel situation, in that a number of institutional processes, notably related to human capacities, need to be re-created. In all cases, these situations hinder the government's ability to design and implement the policies and actions required to further NDC goals. In most countries, governance and coordination problems arise in the context of human capacity development initiatives that comprise sub-national government agencies. At this administrative level, finance is often the main obstacle to creating and implementing know-how development programmes.

- **Lack of capability to involve all relevant stakeholders**, through consultations designed to draw their inputs to be taken into consideration. Countries generally face difficulties in identifying and engaging the right stakeholders. Stakeholders with an interest in climate change are often keen to participate in consultations, while other stakeholder groups are less inclined. Most countries do not have a strong stakeholder consultation tradition and consequently governments lack specific mandates. The lack of mandates often directly results in limited expertise with regard to convening stakeholders and eliciting input from them. Managing stakeholder input, to identifying trade-offs, is the weakest element in the vast majority of countries.
- **Lack of capacities to conduct a regulatory framework revision**, to streamline and complement existing laws and regulations, and fortify related governmental processes and entities. Elements such as staff time, knowledge

required and most importantly inability to retain skilled staff, insufficient coordination among different parts of government, and insufficient transparency in policy formulation hinder the identification of priorities with regard to improving the regulatory framework.

- **Lack of capacities to monitor progress, and report on it**, which limits the best use of existing data collection mechanisms. Lack of reliable information and quantitative data, in particular, appears to be the most common challenge faced by countries. Lack of funding to set up comprehensive monitoring programmes is cited as a key reason. Limited expertise, paucity of reporting methodologies, and inadequate political support compound the funding challenge. Most countries appear to have difficulties with coordinating data collection efforts. Lack of a mandate represents a further problem, structural in nature, which adds to these challenges. Based on experience from the National Communications reporting process, actual implementation of the plan usually demands longer time than envisaged, mostly because some reporting arrangements are only worked out during the implementation phase. It follows, then, that timeframes could be another challenge for NDC implementation. At present, relatively little guidance is available that is directly relevant to reporting on NDC implementation, most notably in the area of adaptation. This has implications with regard to the quality of the reporting practices that will be used, especially with regard to data collection and data analysis.
- **The lack of integration between development-oriented plans and projects**, and the priorities related to climate change management included in the NDCs will arguably

remain the main national-level challenge for NDC implementation. Overcoming this problem requires much closer alignment between these two sets of policy goals, an undertaking that has proven difficult in most countries, developed and developing alike. Closer alignment can only be achieved if climate change priorities are recognised as such at the highest levels of government, something that continues to be rare, especially with regard to climate change mitigation. Such high-level recognition would have to translate in budgetary allocations (recognised in a country's national budget) to implement NDC actions. At present, this is seldom the case, and sectoral plans and projects are rarely screened against key climate change objectives, to ensure consistency. This will require an institutional mechanism that has both the means and the authority to promote consistency between development and climate change management priorities, from the stage of policy formulation.

- **The challenge to raise mitigation ambition** is likely to be the main challenge for national-level government agencies tasked to update and coordinate the implementation of NDCs. As NDCs are updated at five-year cycles, and presuming that the first NDCs have included the most cost-effective mitigation options, increasing the level of ambition will entail achieving comparatively larger emission reductions, and targeting emission reductions that have comparatively higher marginal costs. This is likely to raise concerns about the competitiveness of the sectors responsible for those emissions. In the area of adaptation, on the other hand, the key future challenges are likely to revolve around the need to go beyond the largely generic goals and actions outlined in most countries' first NDCs.

Limited experience with adaptation, which manifests itself at all stages of the policy cycle, from policy definition, to implementation, to monitoring and evaluation, will need to be overcome, potentially through increased emphasis in knowledge-sharing and closer engagement with stakeholders at all governance levels.

WHAT ARE THE BEST PRACTICES FOR NDC IMPLEMENTATION?

Effective NDC implementation begins with the NDC formulation process, not after an NDC has been formally communicated. To facilitate implementation, the formulation process should follow a transparent process to build trust and accountability with domestic and international stakeholders.

An NDC should also articulate how the country is integrating climate change into other national priorities, such as sustainable development, food security and poverty reduction; and send signals to all relevant sectors, including the private sector, to contribute to these efforts. The following factors have been identified as good practice during NDC formulation, and can help to enhance implementation:[46]

- Commitment and leadership at the highest political level throughout the process.
- The involvement of, and consultation with, a wider group of cross-sectoral non-government stakeholders (academia, civil society organisations, private entities) in the preparation process.
- An inter-ministerial process with government participation and support across the whole vertical and horizontal spectrum of government.
- Integration of the NDC into development priorities and other climate-related programmes, policies and strategies (building on available information and established structures/ existing practices).[47]

- Financial support, securing adequate financial resources, and implementing the right incentives; redirecting public investment to less emission intensive activities.
- Providing a long-term perspective to reassure and convince private companies and other stakeholders of the benefits of action, and potential return on investments. Clear links with immediate and long-term development goals can also enhance political acceptability.
- Conducting a comprehensive evaluation of capacity, finance and technology needs.

In the area of climate change mitigation, ambitious targets have been shown to drive investments in cleaner energy options across the entire value chain (that is, from research and development to manufacture and operation and, with time, to export). Choosing a small number of niche sectors and setting stringent emission reduction targets for each of them has the potential to spur economic development in comparatively higher value-added activities within and sector, while reducing emissions of GHGs. National endowments in renewable sources of energy or the presence of large forested areas in a country will be central to developing domestic industries in renewable energy or forest conservation, respectively. From a different starting point, persistent air quality and mobility problems, such as those experienced in many developing country cities, can prompt a government to champion emission reduction actions in the area of transport, or to seek to advance land-use planning approaches.[48]

In the area of adaptation to climate change, low-regret policies represent an approach to decision-making that countries are gradually adopting, in response to the challenges posed by the multiple uncertainties associated with both

the climate system (for example, related to variability and so-called discontinuities) and societal developments (for example, with regard to demographics or economic growth). These approaches work on two different time horizons. In the short-term, they focus on actions that are worth undertaking under most plausible future situations. In the medium-term, they help chart policy options that are especially flexible, in the sense of leaving as many courses of action as possible open. The latter is helpful because it helps prevent investments, for instance in a bridge or a new settlement, that may prove ineffective as climatic and social conditions change in ways that may have seemed unlikely at the time decisions were made.[49]

WHAT IS THE LINK BETWEEN NDCs AND SDGs?

The adoption of the 2030 Agenda for Sustainable Development and the Paris Agreement in 2015 represented a significant achievement towards a more sustainable world. The 17 Sustainable Development Goals (SDGs) and the NDC commitment of Parties under the Paris Agreement carry a great potential for synergies and complementarities.

While one would think that NDCs would mainly help achieve SDG13 (related to climate change), this is far from true. Numerous NDC activities entail synergies that can promote several SDGs at once. For instance, increasing the share of solar energy in the energy mix, a goal that is common in many NDCs, helps achieve several SDGs, notably SDG1 (no poverty), SDG7 (affordable and clean energy), SDG9 (industry, innovation and infrastructure), and SDG11 (sustainable cities and communities).[50]

To maximise synergies, NDC and SDG implementation processes should be coordinated at the national level to prevent duplication and thereby reduce the costs.

To this end, Parties should use future NDC updates to more closely align their climate activities with their SDG priorities. Most developing countries are very low emitters with no great potential for mitigation. However, aligning their SDG priorities with NDC implementation would constitute a meaningful motivation for the benefit of a better and more effective implementation of both agendas.

USEFUL RESOURCES

NDC PARTNERSHIP TOOLS

The NDC Partnership has developed a number of online tools to help address the challenges outlined in this guide, empowering countries to accelerate climate action and take on more ambitious goals. These tools, can be found on the NDC Partnership Knowledge Portal or directly here:

- NDC Toolbox Navigator
- Funding & Initiatives Navigator
- NDC Content Pages
- NDC-SDG Linkages module
- Historical Emissions module
- Country Profiles

BRIEFING SERIES ON SECTORAL IMPLEMENTATION OF NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has published a series of briefing papers dealing with the sectoral implementation of NDCs. The eight different briefing have been complied by the GIZ Climate Policy Support Programme, which supports developing countries in their efforts in climate change adaptation and mitigation, and focus each on a different sector: the finance, transparency, energy supply, energy sufficiency, transport, agriculture, and forestry and land-use sectors are covered. Find the individual briefing papers here:

- Overview
- Finance

- Transparency
- Energy Supply
- Energy Efficiency with a focus on buildings
- Transport
- Agriculture
- Forestry and land-use change
- Circular economy and solid waste management

SIDA GUIDES TO SUPPORT IMPLEMENTATION OF THE PARIS AGREEMENT

- Part One: *Supporting Access to Finance for Climate Action*
- Part Two: *Towards Green Climate Fund Accreditation and Support.*
- Part Three: *Integrating Climate Action into National Development Planning – Coherent Implementation of the Paris Agreement and Agenda 2030*

UNEP DTU: INDC SUPPORT PORTAL

This support portal is the place where you can ask questions about the implementation of NDCs.

NDC CLUSTER TOOLBOX

The Toolbox provides easy access to a selection of tools in the four cluster support areas offered by the cluster implementing partners. These provide support when implementing, coordinating, tracking and revising NDCs.

UNFCCC

- Understanding INDCs, NDCs and long-term strategies
- UNFCCC Webinar Series on NDCs

ANNEX

Decisions from COP19, COP20, COP21 & COP22

COP19

Decision 1/CP.19

2. *Decides*, in the context of its determination to adopt a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties at its twenty-first session (December 2015) and for it to come into effect and be implemented from 2020:

   (…)

   (b) To invite all Parties to initiate or intensify domestic preparations for their intended nationally determined contributions, without prejudice to the legal nature of the contributions, in the context of adopting a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties towards achieving the objective of the Convention as set out in its Article 2 and to communicate them well in advance of the twenty-first session of the Conference of the Parties (by the first quarter of 2015 by those Parties ready to do so) in a manner that facilitates the clarity, transparency and understanding of the intended contributions, without prejudice to the legal nature of the contributions;

   (…)

COP20

Decision -/CP.20

Lima call for climate action

8. *Notes* that the arrangements specified in this decision in relation to intended nationally determined contributions are without prejudice to the legal nature and content of the intended nationally determined contributions of Parties or to the content of the protocol, another legal instrument or agreed outcome with legal force under the Convention applicable to all Parties;
9. *Reiterates* its invitation to each Party to communicate to the secretariat its intended nationally determined contribution towards achieving the objective of the Convention as set out in its Article 2;
10. *Agrees* that each Party's intended nationally determined contribution towards achieving the objective of the Convention as set out in its Article 2 will represent a progression beyond the current undertaking of that Party;
11. *Also agrees* that the least developed countries and small island developing States may communicate information on strategies, plans and actions for low

greenhouse gas emission development reflecting their special circumstances in the context of intended nationally determined contributions;

12. *Invites* all Parties to consider communicating their undertakings in adaptation planning or consider including an adaptation component in their intended nationally determined contributions;
13. *Reiterates* its invitation to all Parties to communicate their intended nationally determined contributions well in advance of the twenty-first session of the Conference of the Parties (by the first quarter of 2015 by those Parties ready to do so) in a manner that facilitates the clarity, transparency and understanding of the intended nationally determined contributions;
14. *Agrees* that the information to be provided by Parties communicating their intended 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 intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2;
15. *Reiterates* its call to developed country Parties, the operating entities of the Financial Mechanism and any other organisations in a position to do so to provide support for the preparation and communication of the intended nationally determined contributions of Parties that may need such support;
16. *Requests* the secretariat to:
    (a) Publish on the UNFCCC website the intended nationally determined contributions as communicated;
    (b) Prepare by 1 November 2015 a synthesis report on the aggregate effect of the intended nationally determined contributions communicated by Parties by 1 October 2015;

COP21

Decision 1/CP.21

II. Intended nationally determined contributions

12. *Welcomes* the intended nationally determined contributions that have been communicated by Parties in accordance with decision 1/CP.19, paragraph 2(b);
13. *Reiterates* its invitation to all Parties that have not yet done so to communicate to the secretariat their intended nationally determined contributions towards achieving the objective of the Convention as set out in its Article 2 as soon as possible and well in advance of the twenty-second session of the Conference of the Parties (November 2016) and in a manner that facilitates

the clarity, transparency and understanding of the intended nationally determined contributions;

14. *Requests* the secretariat to continue to publish the intended nationally determined contributions communicated by Parties on the UNFCCC website;
15. *Reiterates* its call to developed country Parties, the operating entities of the Financial Mechanism and any other organizations in a position to do so to provide support for the preparation and communication of the intended nationally determined contributions of Parties that may need such support;
16. *Takes note* of the synthesis report on the aggregate effect of intended nationally determined contributions communicated by Parties by 1 October 2015, contained in document FCCC/CP/2015/7;
17. *Notes* with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2°C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2°C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5°C above pre-industrial levels by reducing to a level to be identified in the special report referred to in paragraph 21 below;
18. *Further notes*, in this context, the adaptation needs expressed by many developing country Parties in their intended nationally determined contributions;
19. *Requests* the secretariat to update the synthesis report referred to in paragraph 16 above so as to cover all the information in the intended nationally determined contributions communicated by Parties pursuant to decision 1/CP.20 by 4 April 2016 and to make it available by 2 May 2016;
20. *Decides* to convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term goal referred to in Article 4, paragraph 1, of the Agreement and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Agreement;

III. Decisions to give effect to the Agreement

Mitigation

22. *Also invites* Parties to communicate their first nationally determined contribution no later than when the Party submits its respective instrument of ratification, acceptance, approval or accession of the Paris Agreement; if a Party has communicated an intended FCCC/CP/2015/10/Add.1 5 nationally determined contribution prior to joining the Agreement, that Party shall be considered to have satisfied this provision unless that Party decides otherwise;
23. *Requests* those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2025 to

communicate by 2020 a new nationally determined contribution and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement;

24. *Also requests* those Parties whose intended nationally determined contribution pursuant to decision 1/CP.20 contains a time frame up to 2030 to communicate or update by 2020 these contributions and to do so every five years thereafter pursuant to Article 4, paragraph 9, of the Agreement
25. *Decides* that Parties shall submit to the secretariat their nationally determined contributions referred to in Article 4 of the Agreement at least 9 to 12 months in advance of the relevant session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement with a view to facilitating the clarity, transparency and understanding of these contributions, including through a synthesis report prepared by the secretariat;
26. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop further guidance on features of the nationally determined contributions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;
27. *Agrees* that the 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. *Requests* the Ad Hoc Working Group on the Paris Agreement to develop further guidance for the information to be provided by Parties in order to facilitate clarity, transparency and understanding of nationally determined contributions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session;
30. *Further requests* the secretariat to make available an interim public registry in the first half of 2016 for the recording of nationally determined contributions submitted in accordance with Article 4 of the Agreement, pending the adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement of the modalities and procedures referred to in paragraph 29 above;
31. *Requests* the Ad Hoc Working Group on the Paris Agreement to elaborate, drawing from approaches established under the Convention and its related legal instruments as appropriate, guidance for accounting for Parties' nationally determined contributions, as referred to in Article 4, paragraph 13, of the Agreement, for consideration and adoption by the Conference of

the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, which ensures that:

(…)

(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;

(…)

32. *Decides* that Parties shall apply the guidance referred to in paragraph 31 above to the second and subsequent nationally determined contributions and that Parties may elect to apply such guidance to their first nationally determined contribution;

36. *Requests* the Subsidiary Body for Scientific and Technological Advice to develop and recommend the guidance referred to under Article 6, paragraph 2, of the Agreement for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, including guidance to ensure that double counting is avoided on the basis of a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by their nationally determined contributions under the Agreement;

Transparency of action and support

94. *Requests* the Ad Hoc Working Group on the Paris Agreement, in developing the modalities, procedures and guidelines referred to in paragraph 91 above, to consider, inter alia:

(…)

(b) The consistency between the methodology communicated in the nationally determined contribution and the methodology for reporting on progress made towards achieving individual Parties' respective nationally determined contribution;

(…)

Global stocktake

99. *Requests* the Ad Hoc Working Group on the Paris Agreement to identify the sources of input for the global stocktake referred to in Article 14 of the Agreement and to report to the Conference of the Parties, with a view to the Conference of the Parties making a recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for consideration and adoption at its first session, including, but not limited to:

(a) Information on:

(i) The overall effect of the nationally determined contributions communicated by Parties;

(…)

PARIS AGREEMENT

Article 3

As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement.

Article 4

(…)

2. Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.
3. Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances,

(…)

8. 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 Conference of the Parties serving as the meeting of the Parties to this Agreement.
9. Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement and be informed by the outcomes of the global stocktake referred to in Article 14.
10. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall consider common time frames for nationally determined contributions at its first session.
11. A Party may at any time adjust its existing nationally determined contribution with a view to enhancing its level of ambition, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.
12. Nationally determined contributions communicated by Parties shall be recorded in a public registry maintained by the secretariat.
13. Parties shall account for their nationally determined contributions. In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double

counting, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

14. In the context of their nationally determined contributions, when recognizing and implementing mitigation actions with respect to anthropogenic emissions and removals, Parties should take into account, as appropriate, existing methods and guidance under the Convention, in the light of the provisions of paragraph 13 of this Article.

(…)

16. Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under paragraph 2 of this Article shall notify the secretariat of the terms of that agreement, including the emission level allocated to each Party within the relevant time period, when they communicate their nationally determined contributions. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of that agreement.

Article 6

1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.
2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.
3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.
4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to this Agreement, and shall aim:

   (…)

   (c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and

   (…)

5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of

the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution.

8. Parties recognize the importance of integrated, holistic and balanced non-market approaches being available to Parties to assist in the implementation of their nationally determined contributions, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, as appropriate. These approaches shall aim to:
   (a) Promote mitigation and adaptation ambition;
   (b) Enhance public and private sector participation in the implementation of nationally determined contributions; and
   (…)
9. Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include:
   (…)
   (c) The assessment of climate change impacts and vulnerability, with a view to formulating nationally determined prioritized actions, taking into account vulnerable people, places and ecosystems;
11. The adaptation communication referred to in paragraph 10 of this Article shall be, as appropriate, submitted and updated periodically, as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution as referred to in Article 4, paragraph 2, and/or a national communication.

Article 13

5. The purpose of the framework for transparency of action is to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions under Article 4, and Parties' adaptation actions under Article 7, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14.
7. Each Party shall regularly provide the following information:
   (…)
   (b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.
11. Information submitted by each Party under paragraphs 7 and 9 of this Article shall undergo a technical expert review, in accordance with decision 1/CP.21. For those developing country Parties that need it in the light of their capacities, the review process shall include assistance in identifying capacity-building needs. In addition, each Party shall participate in a facilitative, multilateral consideration of progress with respect to efforts under Article 9, and its respective implementation and achievement of its nationally determined contribution.

12. The technical expert review under this paragraph shall consist of a consideration of the Party's support provided, as relevant, and its implementation and achievement of its nationally determined contribution. The review shall also identify areas of improvement for the Party, and include a review of the consistency of the information with the modalities, procedures and guidelines referred to in paragraph 13 of this Article, taking into account the flexibility accorded to the Party under paragraph 2 of this Article. The review shall pay particular attention to the respective national capabilities and circumstances of developing country Parties.

Article 14

3. The outcome of the global stocktake shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action.

COP22

Decision 1/CP.22

II. Completion of the work programme under the Paris Agreement

8. *Further takes note* of the consideration by the Ad Hoc Working Group on the Paris Agreement of 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;

Decision 7/CP.22

Long-term climate finance

7. *Notes* the increase in adaptation finance to date as identified in the 2016 biennial assessment and overview of climate finance flows, and the need to continue efforts to significantly scale up adaptation finance, while stressing the need to strive for a greater balance between adaptation and mitigation finance, and invites Parties and relevant institutions to consider the key messages from the in-session workshop referred to in paragraph 6 above, including that:

(…)

(b) The nationally determined contributions and adaptation communications could constitute a good opportunity for supporting the scaling up of adaptation finance;

(…)

Decision 10/CP.22

Report of the Green Climate Fund to the Conference of the Parties and guidance to the Green Climate Fund

2. *Also welcomes* the following actions taken by the Board in response to previous guidance from the Conference of the Parties as contained in decisions 3/CP.17, 6/CP.18, 4/CP.19, 7/CP.20 and 7/CP.21:

   (…)

   (i) The acknowledgment that the Green Climate Fund's modalities enable support for the preparation and implementation of the nationally determined contributions and adaptation-related elements of the Paris Agreement;

   (…)

Decision 11/CP.22

Report of the Global Environment Facility to the Conference of the Parties and guidance to the Global Environment Facility

13. *Encourages* the Global Environment Facility to continue its efforts to encourage countries to align, as appropriate, their Global Environment Facility programming with priorities as identified in their nationally determined contributions, where they exist, during the seventh replenishment, and to continue to promote synergies across its focal areas;

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