



## How are INDCs and NAMAs linked?

A discussion paper on the links between INDCs, NAMAs and LEDS  
by the GIZ TUEWAS NAMA Working Group in collaboration with the  
UNEP DTU Partnership

*First Draft for Consultation*

# Imprint

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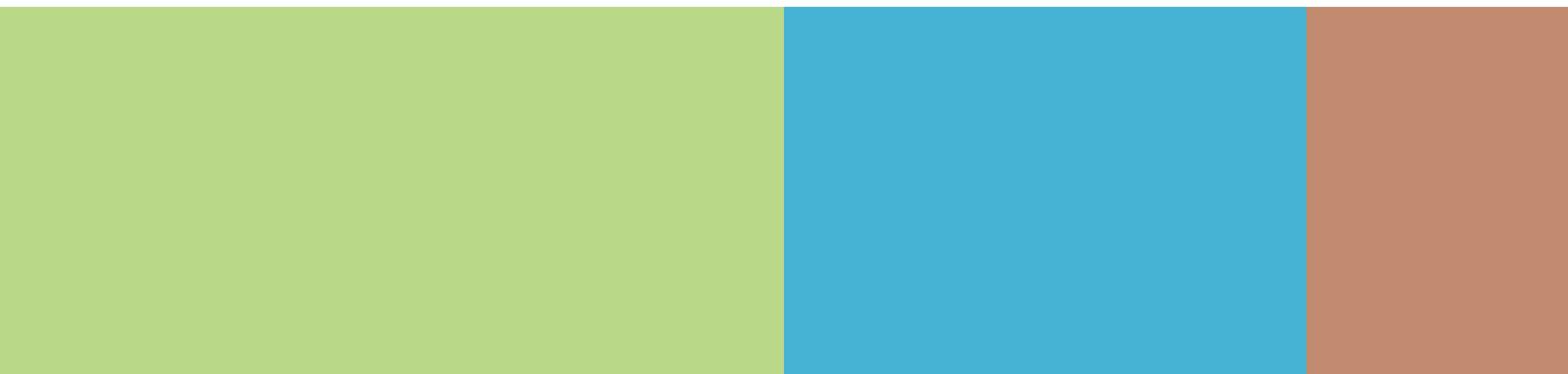
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# Introduction

In light of the urgency ‘to hold the increase in global temperature below 2 degrees Celsius’ above pre-industrial levels, during COP17 in Durban the international community agreed on negotiating a comprehensive climate regime by 2015<sup>1</sup>. While the exact form and scope of the new climate agreement is still open to negotiation, the process initiated presents an opportunity to assess and review past commitments and pledges to increase the short-term ambition to reduce emissions before 2020 on one hand and on the other hand, to lay out a process to increase collective emission reductions in the long-term post-2020.

Parties decided at COP19 in Warsaw to invite all Parties, developed and developing countries, to prepare ‘intended nationally determined contribution’ (INDC) for the period post-2020 by the first quarter of 2015 leaving the scope of INDCs open to Parties. These shall give a first glance at whether the aggregate effect of all Parties’ contributions is adequate to minimise global average temperature rise and consistent with the latest scientific information by the 5th Assessment Report of the IPCC<sup>2</sup>. Countries agreed in Warsaw to forward a draft decision on INDCs for adoption by COP20 at Lima, Peru based on the information Parties will provide when putting forward their INDCs. This so called up-front information shall increase the clarity, transparency and understanding of the intended contributions. All countries are expected to participate in the global effort, albeit in line with their respective capability and responsibility, but also in relation to what they perceive as equitable and delivering their fair share.

Many Developing Countries are presently preparing and implementing Nationally Appropriate Mitigation Actions (NAMA) as part of their national efforts to address climate change. NAMAs are mitigation actions taken in the context of sustainable development

which are measurable, reportable and verifiable and can partly be supported by finance, technology and capacity building from the international community. When NAMAs were first introduced at COP13 in Bali in 2007, Parties’ aim was to increase emission reduction activities in developing (non-Annex I) countries. Further, the Cancun Agreement also encouraged all Parties to develop low emission development strategies (LEDS) to identify sustainable paths for decoupling sustainable economic growth from GHG emissions.

Among other issues, this particularly raises the question of how NAMAs and INDCs are linked in the context of LEDS - and policy makers demand clarification on this issue. LEDS provide Parties with an opportunity to formulate a low-carbon growth path, while considering their own development needs and aspirations. NAMAs can be understood as a tool to partially implement such strategies, to give a face to more abstract policy and seek a measurable, reportable and verifiable low-emission development.

In preparing countries’ submission of their INDCs, there is a need to revisit the experiences gained in the context of NAMAs or LEDS and elaborate its use in the preparation process of INDCs in advance of COP21 in Paris. The objective of this discussion paper is to look at the debate on INDCs from a mitigation-perspective and understand their relationship with LEDS and NAMAs – yet bearing in mind that many countries also seek to include other aspects in their INDCs, such as adaption, finance and technology. The objective of this paper is furthermore to present a pre- and post-2020 mitigation context, highlight facts on the schemes of NAMA, INDC and LEDS, analyse their linkages and finally conclude with key messages for policy makers.

<sup>1</sup> The decision text calls for submission much before the COP in 2015 and by first quarter of 2015 for those who are in position to do so.

<sup>2</sup> ADP.2014.7.DraftText

# Background: Evolution of Climate Change Architecture

## Pre-2020

To address the linkages between INDC with NAMAs and LEDS, it is important to understand the evolution of mitigation responsibility, outlined by the concept of common but differentiated responsibility (CBDR) for reducing GHG emissions under the UNFCCC. Since the adoption of the UNFCCC, countries' responsibilities to address climate change have evolved over time as the understanding and the urgency of climate change has increased (see table below). An important turning point in the discussion was 2007, when in recognition of the increasing urgency to address climate change and increasing capability of developing countries, Parties agreed on the Bali Action Plan (BAP)<sup>3</sup>. A key element of the BAP was to invite mitigation actions of non-Annex I countries, which resulted in developing countries agreeing to implement NAMAs. Prior to BAP, developing countries were solely encouraged to submit measures to mitigate GHG emissions for support from financial mechanism of the Convention.

In the Bali Action Plan, NAMAs were described as mitigation actions taken in the context of sustainable development and supported by finance, technology, and capacity development. The Cancun Agreement also introduced the concept of NAMAs that are implemented by developing countries using their own resources, the domestically supported NAMAs. The implicit understanding being that in developing countries with higher capabilities not all NAMAs will be supported by international sources. Further, an internationally supported NAMA would include along with international public sources different sources

of finances, including private and public domestic sources. Thus, as opposed to developed countries who are expected to take on economy wide emission reduction targets with reference to a base year (under the second commitment period of Kyoto Protocol and Cancun Agreement), developing countries have taken mitigation actions to reduce emissions below a business-as-usual (BAU) scenario. Following the Cancun Agreement, many developing countries submitted NAMAs to the UNFCCC Secretariat, which are also referred to as NAMAs pledges. Given the differing capacities among developing countries, the term nationally appropriate implied scope of pledged NAMAs varies among developing countries, as reflected in submissions made to the UNFCCC in pursuant to the Cancun Agreement<sup>4</sup>.

Some developing countries, especially those with larger capacities, submitted NAMAs in form of national goals, for instance a target to reduce emissions below BAU, whereas others, such as least-developed countries (LDC), submitted a list of individual actions/policies to address GHG emissions<sup>5</sup>. Further, it was anticipated that developing countries with greater capacities might also implement NAMAs using their own resources, termed as domestic NAMAs. For example, Indonesia indicated that its domestic NAMAs will contribute to a GHG emission reduction of 26% below BAU by 2020, and supported NAMAs could succeed in reducing further 15% of GHGs, potentially mitigating a total of 41% GHGs below BAU in 2020 if international support is made available<sup>6</sup>. Hence, NAMAs could be seen as nationally voluntarily determined and potentially partly internationally supported mitigation actions of a developing country.

<sup>3</sup> UNFCCC, 2007. Decision 1/CP.13

<sup>4</sup> And included in FCCC/AWGLCA/2011/INF.1

<sup>5</sup> See Sharma and Desgain, 2014 for more details

<sup>6</sup> See GOI, 2013, for more details on the institutional set-up of NAMAs in Indonesia

## Overview of International Discussions on the Relationship Between the 2015 Agreement and INDCs

International post-2020 discussions focus on the legal form of the new climate regime, and in particular on the legal bindingness of mitigation contributions, that is the relationship between the 2015 agreement and INDCs. Whereas the Parties' decision, taken at COP19 in Warsaw, refers to "intended nationally determined contributions, without prejudice to the legal nature of the contributions", the ADP co-chairs non-paper on the elements for a draft negotiating text (July 2014) clearly states that mitigation commitments and contributions could be formalised as an integral part of the agreement in an annex. Controversial points of view amongst the international community regarding the legal bindingness of mitigation contributions under a new agreement remain. Most developing and emerging countries request a differentiation between quantified emission targets set by developed countries and less strict emission targets (e.g. deviation from BAU) submitted by developing countries. This separation into the existing Annex I and non-Annex I countries is also reflected in the suggestions for a new agreement.

The LDC group for instance proposed a legally-binding 2015 agreement which contains a system based on two annexes. Annex A would comprise economy-wide quantified reduction commitments taken by Annex I countries and parties in a position to do so, while Annex B includes emission limitation commitments taken by non-Annex I Parties. However, Parties would have the possibility to make amendments to increase their level of mitigation ambition through COP decisions. During the Bonn meeting in October 2014, Brazil suggested a more flexible 'concentric' approach for differentiation which places countries with absolute emission targets in the centre. They are surrounded by concentric cycles of countries with less rigid commitments that should aim at

moving towards the centre of the cycle over time. Brazil's attempt for a more dynamic agreement in terms of mitigation commitments gained attention at the meeting as it would prevent 'pure self-differentiation' of the Parties and contradicts the approach of self-differentiation through INDCs proposed by the EU.

In general, industrialised countries like the EU (as a bloc), Switzerland and Japan, aim at time-bound, binding mitigation commitments submitted by all Parties according to the principle of CBDR, whereas the US would exclude the LDCs from the submission of quantified or quantifiable mitigation commitments. Australia and New Zealand are in favour of a bounded flexibility principle of the mitigation commitments, which would allow a deviation of some of the broad parameters which are to be determined under the agreement. China also stresses that a new agreement should not force, but rather encourage developed countries to realise mitigation actions. Another approach presented by the Independent Association of Latin America and the Caribbean (AILAC) suggests the definition of "a global mitigation goal to be achieved through efforts by all Parties according to science and the principles of equity and CBDR&RC, in line with the goal of keeping temperature rise below 2 degrees Celsius.

Considering the broadly differing positions and approaches of the Parties regarding their understanding of INDCs and the incorporation of mitigation commitments into a 2015 agreement, it is still questionable if and to what extent the submitted INDCs can be converted into legally-binding commitments. Some countries even fear a backsliding and ask for according provisions or rules in the new agreement.

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### Sources:

IISD, 2014: Summary of the Bonn Climate Change Conference: 20-25 October 2014. In: Earth Negotiations Bulletin, Vol. 12 No. 605. Online at: <http://www.iisd.ca/download/pdf/enb12605e.pdf>

Center for Climate and Energy Solutions, 2014: Parties' Submissions to the UNFCCC Ad Hoc Working Group on the Durban Platform. Online at: <http://www.c2es.org/international/negotiations/select-issues-submissions-adp-2014#mitigation>

ADP, 2014: Parties' views and proposals on the elements for a draft negotiating text. Non-paper. Online at: <http://unfccc.int/resource/docs/2014/adp2/eng/6nonpap.pdf>

## Post-2020

In Durban (COP17), Parties launched a new round of negotiations for a 2015 climate agreement to be adopted at COP21 in Paris under the Ad hoc Durban Platform (ADP<sup>7</sup>) to be implemented post-2020<sup>8</sup>. The new agreement will be 'applicable to all' implying – unlike the Kyoto Protocol which included binding emission reductions targets only for Annex I countries – that the provisions of the new agreement will be binding for all Parties to the Convention. Parties to the UNFCCC agreed at COP19 in Warsaw to prepare a draft negotiating text in 2014, covering all key elements, mitigation, adaptation, finance, technology development and transfer, capacity-building and transparency of action and support. At last, countries decided to develop and submit their INDCs, which will include actions each country will take to address climate change. The key issue of discussion is the scope of INDCs: should they only include mitigation actions and/or also adaptation and means of implementation (finance, technology transfer, capacity-building). Developed countries are mainly of the view that INDCs are for mitigation actions only, whereas, most developing countries (excluding LDCs) are of the view that INDCs need to cover all elements. This has many reasons inter alia the fact that to avoid dangerous climate change the level of local adaptation need is closely linked to the global mitigation efforts.

The mitigation element of INDCs would be equivalent to national commitments for addressing GHG emissions over a defined period (5 or 10 years

period, e.g. from 2020 - 2025 or 2020 - 2030). Though the new agreement is applicable to all Parties, there is an inherent understanding among all countries that it does not imply that national commitments are similar for all countries - they will take mitigation actions in accordance with the principle of equity as well as common but differentiated responsibility and respective capability (CBDR&RC). Though there is no agreement yet, there have been proposals<sup>9</sup> outlining that commitments could range (not explicitly distinguishing between two categories of countries) from quantified absolute economy-wide targets (compulsory for developed countries) to GHG intensity reduction targets or deviation from BAU (for developing countries with higher capability and responsibility) to other types of commitments, such as policy targets, RE targets or EE targets for developing countries. Countries could also submit more than one target, including several of the above mentioned to allow for realistic targets and more ambitious voluntary ones as well as short-term and long-term targets.

In the proposed draft text on INDC by the ADP co-Chairs they also state that countries could add information on domestic action to enhance their ambition for pre-2020 period.

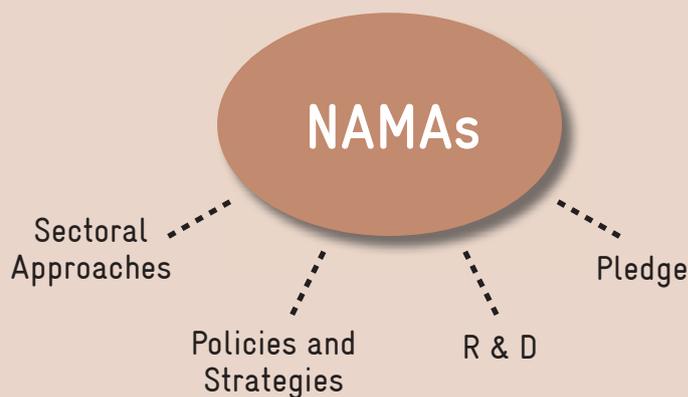
Thus, the nature and scope of mitigation actions by developed countries and the terminology used for them has changed over time. The table below outlines the mitigation actions obligation of Annex I and non-Annex I countries over time.

Timeline	1992 - 1997	1997 - 2010	2010 - 2020	Post 2020
Annex I	Limit GHG Emissions	Economy-Wide Reduction Targets		INDCs
Non-Annex I	Take Measures to Mitigate Emissions		NAMAs	INDCs

<sup>7</sup> ADPB has two work streams: WSI to develop a new agreement that will be effective post 2020; and, WSII to enhance the ambition of mitigation action to close the pre-2020 mitigation gap and delivery of agreed provision of USD 100 billion by 2020.

<sup>8</sup> See UNFCCC, 2012

<sup>9</sup> For instance, from the European Union: [http://unfccc.int/files/bodies/application/pdf/el-02-28-eu\\_adp\\_ws1\\_submission.pdf](http://unfccc.int/files/bodies/application/pdf/el-02-28-eu_adp_ws1_submission.pdf)



**“Nationally Appropriate Mitigation Actions** by developing country parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.”

Bali Road Map (2007: Decision 1/CP.13, Para 1b (ii))

## Key Criteria and Facts:

- **Voluntary actions:** NAMAs generally support sustainable development as interpreted by the host country and are mostly government driven
- Broad NAMA definition, rather defined by experience and practice than by rules set up by the UNFCCC
- Aimed at achieving a deviation in emissions relative to a ‘business-as-usual’ emissions in 2020
- **3 types of NAMAs:** unilateral, supported and credited\* NAMAs which can involve financing, technology transfer and capacity building
- Financing through domestic, bi-lateral and multi-lateral resources: public finance needed to leverage private sector investment
- Accurate, complete, conservative MRV methodology crucial

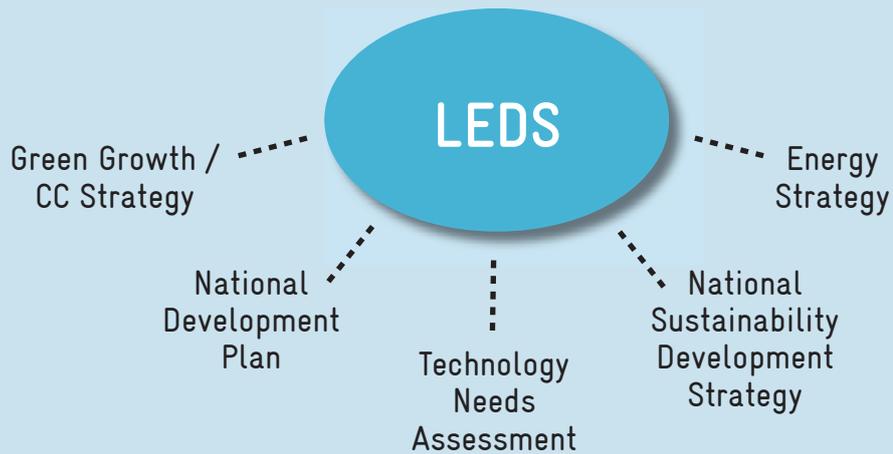
## 107 NAMAs and 23 feasibility studies in 37 countries\*\*

- 107+ NAMAs under development
- 43% of NAMA activities in Latin America, 26% in Africa and Middle East, 18% in Asia, 13% in Europe

- 63% comprising a strategy or policy

- **Main sectors addressed:** Energy supply (39%), Buildings (15%), Waste (14%) and Transport (11%)

\*\*[www.nama-database.org](http://www.nama-database.org) (October 2014)



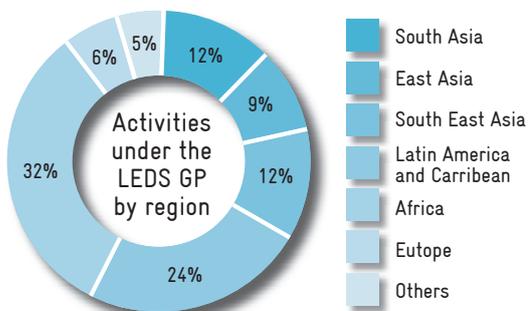
Developing countries are encouraged “to develop **Low-carbon Development Strategies or Plans** in the context of sustainable development”

Cancun Agreement (2010: Decision 1/CP.16, Para. 6)

### Key Criteria and Facts:

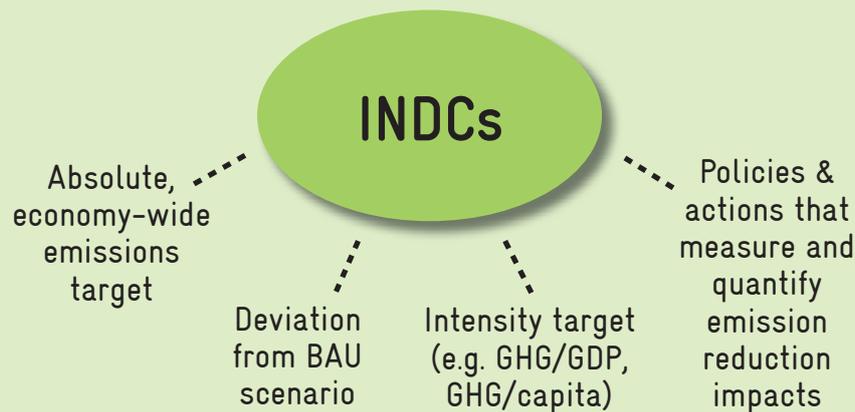
- National, high-level, comprehensive, long-term, holistic strategy developed by domestic stakeholders, which aims at decoupling economic growth and social development from greenhouse gas (GHG) emissions growth
- Long-term, dynamic, cyclical process that should continue for years or decades
- Should contain voluntary national mitigation commitment, e.g. emissions below BAU or base year, climate neutrality, etc.
- **Basic elements:**
  - Long-term strategic vision
  - Baseline GHG emissions
  - Mitigation opportunities and costs
  - Key mitigation sectors and measures
  - Identification of policies and measures

### LEDS activities under the LEDSGP in 116 countries, supported by 77 organisations\*



- Many countries with > 10 LEDSGP related programmes
- Major topics: policies programmes, pathways analysis and implementation, finance, GHG inventory and market analysis

\*Currently 450 activities ([www.en.openei.org/wiki/LEDSGP](http://www.en.openei.org/wiki/LEDSGP) (April 2013))



Parties to the UNFCCC decided “to invite all Parties to initiate or intensify domestic preparations for their **Intended Nationally Determined Contributions** [...] and to communicate them well in advance of the twenty-first session of the Conference of the Parties in a manner that facilitates the clarity, transparency and understanding of the intended contributions.”

COP Warsaw (2013: Decision 1/CP.19, Para. 2b)

### Key Criteria and Facts:

- INDCs may contain a mitigation goal which may to be transformed into an eventually legally binding mitigation commitment in the 2015 agreement and which should be transparent, quantifiable, comparable, verifiable and ambitious
- Up to countries if INDCs should also comprise elements addressing adaptation, finance, technology and capacity building (as suggested by developing countries)
- INDCs may consider equity according to the CBDR&RC principle and reflect national circumstances
- Contributions could be set in short-, medium- and long-term timeframes and may involve a pledge as well as the corresponding action to achieve the pledge
- Up-front information (UFI) shall make the INDCs clear, transparent and understandable. UFI will also provide the information basis for the consultation phase before COP21.
- A process to consider whether the aggregate effect is sufficient to achieve internationally agreed goals

### Potential success factors for INDC preparation

- **Comprehensive domestic process:** e.g. cross-ministry coordination combined with consultative and research process
- **High level of transparency:** of INDC related data to national and international actors
- **Comprehensive content:** INDC including an overall mitigation target as well as according sub-targets and activities
- **High level of ambition:** ambitious targets as inspirational goal and guiding signal for all stakeholders
- **Tracking sustainable development co-benefits** and the potential for transformational changes

\*Source: International Partnership on Mitigation and MRV (2014): Discussion Paper - Intended Nationally Determined Contributions under the UNFCCC

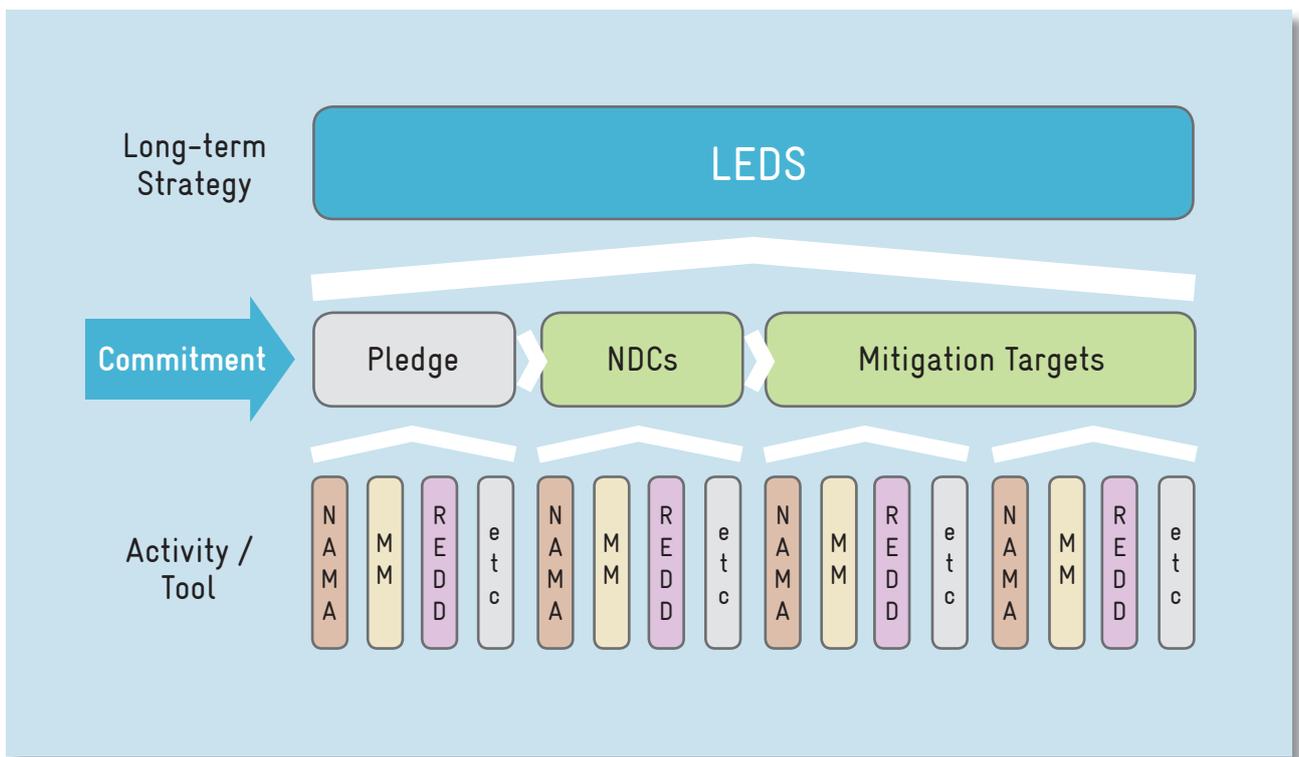
## INDCs, NAMAs and building on NAMAs in moving forward to developing INDCs

### Q: Are INDCs and NAMAs different?

- NAMAs, in the context of Cancun Agreement, were seen as mitigation actions by developing countries in line with their capacities and national circumstances. NAMAs, in this context could be termed as a developing country pledge in line with its capacities to address its GHG emissions (e.g. Mexico's country pledge to reduce GHG emissions by 36% below BAU<sup>10</sup>). Further, NAMA term is used for implementation tools for identified specific mitigation actions. Thus, a NAMA as a country pledge could be seen as short/medium term goal/target (for period 2012-2020) based on a LEDES. NAMA as an implementation tool can be seen as translating the short/medium term goal into action plans for implementation. But this is certainly up to countries how they define NAMAs in their national context, for some countries, like Ethiopia, NAMA country pledge was a collection of specific mitigation actions.
- NAMA country pledge (included in INF.1) reflected the principle of equity and common but differentiated responsibility and respective capability (CBDR&RC). Thus bigger developing countries, given their capability, submitted their mitigation goals (as NAMAs) in terms of economy wide goals (reduction below BAU, reducing national GHG intensity etc.). Other developing countries expressed their mitigation goals as a collection of policies/programmes/mitigation activities. This was submitted to UNFCCC and included in the official UNFCCC INF document.

- Similarly mitigation component of INDC, in context of the negotiation under ADP, which will be for a period 2020-2025 or 2020-2030, are nationally determined actions in context of country capabilities and circumstances to address national GHG emissions. Thus INDCs can be seen as a short/medium term goal/target to implement a LEDES. In this context, a NAMA as a country's pledge is similar to the mitigation component of INDC. INDCs on the other hand should be a comprehensive measure to embrace the different mitigation elements, plans and strategies and therewith consolidate the ambition from a LEDES, NAMAs or for instance REDD+ projects.
- During negotiations, all countries acknowledge that Parties will prepare their INDCs in accordance with the principle of equity and CBDR&RC. Thus 'national appropriateness' as a core of NAMAs, which was a reflection of CBDR&RC among developing countries and thus are reflected in the differentiation of mitigation actions developing countries, is embedded in INDCs as well. As of now it is expected that INDCs will be aligned with national development planning. Depending on the capacity of each country, different types of INDCs could be submitted: economy-wide reduction targets in developed countries; economy-wide targets below BAU or with GHG intensity in large developing countries; and policy goals or sectoral targets, such as renewable energy targets or forest cover increase goals in LDCs.
- Thus, the nature of the relationship between NAMAs as a country pledge and INDC is: both are short/medium terms goals where the LEDES provide the long-term strategy for aligning economic development and climate change. Further, NAMAs are implementation tool to translate short/medium term goals into action by outlining the means and vehicle/action plan to implement these.

<sup>10</sup> For further explanation see Sharma and Desgain, 2013



### Q: Can the NAMA process in countries be leveraged for INDC preparation and implementation?

- Capacities developed in countries, institutional and individual, to develop and implement mitigation actions through NAMAs are equally useful for countries in enabling them prepare INDCs.
- The processes used by developing countries for developing NAMA country pledges could be a starting point for preparing INDCs. Some countries have used the top-down approach in identifying individual NAMAs (LEDS; NAMA as pledge; Implementation NAMA) while others have used a bottom-up approach (NAMA as pledge was designed based on sectors/local governments identifying the mitigation opportunities).
- Increased domestic action (e.g. in the context of NAMAs) will remain relevant to increase mitigation ambition in the pre-2020 and in the post 2020 period.
- Countries have, as part of identification, development, and implementation of specific mitigation actions, developed national systems for NAMA preparation and implementation. These could facilitate identifying other or more ambitious opportunities and potentials for mitigation in the country, as well as feed into the preparation and submissions of INDCs.

- INDCs, as mentioned are goals/targets, and countries will use of NAMA as implementation tools to achieve these goals/targets. Thus, MRV systems being developed and implemented for NAMAs in countries will also enable countries to transparently report progress on implementing actions to achieving goals of INDCs.
- The NAMA momentum has facilitated increased ambition by developing countries, in context of sustainable development and identifying appropriate mitigation actions to reflect national circumstances. INDCs may be implemented through NAMAs and spur their development and implementation in the case where economy-wide or sectoral targets are put forward. Some of the planned and implemented NAMAs may be implemented over a timeframe beyond 2020, and thus would be one means of implementing the goal/target outlined in INDC. The institutional landscape, national climate policies and domestic action should be maintained and build on in the context of INDCs.
- NAMAs as an implementation tool of INDCs might be financially supported. It is expected that countries with low capabilities can receive support for achieving goals/targets outlined in the INDCs – depending however on development state and capacities of each Party. Further, developing countries with higher capability may outline goals/targets in INDCs that

they could achieve beyond goals/targets they would undertake using domestic resources. Clear articulation of goals/targets based on support beyond domestic goal/target will enable avoiding double accounting in this regard.

- Coherence of plans and ambitions can be assessed internationally, but comparability poses a major challenge because of a variety of different INDC interpretations and different or unclear measures for ambition.
- Thus, NAMA as country pledges are national goals and INDCs are the same, as INDCs too are national

short/medium term (until 2025 or 2030) mitigation goals that countries will submit as part of ADP based on countries capability and responsibility. Countries may also include long-term goals or LEDs (until 2050).

- INDCs offer the opportunity to follow a more integrated approach by aligning past commitments and actions through LEDs, NAMAs or even REDD+ projects. In this context, INDCs could enhance coordination at the national and sub-national level on climate change

## Best Practice Example: Indonesia

### LEDs:

- Indonesia's National Action Plan For Reducing Greenhouse Gas Emissions (RAN-GRK)
  - 26% national emission reduction target compared to BAU by 2020 based on unilateral action and up to 41% with international support
  - 52 activities as potential NAMAs in different sectors: peat land management, forestry, agriculture, energy efficiency, renewable energies, waste, transportation

### NAMAs:

- Sustainable Urban Transport Initiative (registered at the UNFCCC NAMA registry by the Indonesian Government - at implementation)
- Cement Industry NAMA (under development)
- RENAMA – Renewable Energy NAMA (under development)
- Small and medium scale renewable energy installations in North Sumatra (under development)
- Smart Street Lighting Initiative (SSLI) (registered at the UNFCCC NAMA registry - under development)  
(Comment: This NAMA is for instance categorised by the Indonesian Ministry of Energy of being implemented, although no significant international financial support hasn't been provided yet)
- Vertically integrated NAMA for solid waste management (under development)

### INDC Preparation and Process:

- Institutional arrangement and responsibility for INDC preparation
- Steps for INDC preparation (five key sectors)
- Barriers/challenges

#### Sources:

International Partnership on Mitigation and MRV: National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK UNEP DTU: NAMA pipeline, October 2014; [http://www.env.go.jp/en/earth/ap-net/documents/seminar/23rd/15\\_Indonesia\\_Bastian.pdf](http://www.env.go.jp/en/earth/ap-net/documents/seminar/23rd/15_Indonesia_Bastian.pdf))

# Key Recommendations to Policy-Makers

1. INDCs are a vehicle for countries to define their goals/targets for mitigation. In case of developed countries these would most likely be in form of economy-wide reduction targets; developing countries with higher capabilities are expected to take economy-wide goals (reduction compared to BAU or GHG intensity reduction compared to base year); and, other developing countries as policy/sectoral goals such that quantum of emission reductions can be easily estimated.

2. Countries can make use of NAMAs as an implementation tool to achieve goal/target included in INDCs. In this context present NAMAs that go beyond 2020 could be continued to be implemented as part of INDCs post-2020.

3. Capacities and institutions built in countries for identifying, developing and implementing NAMAs, including MRV, would help countries develop their INDCs and implement mitigations actions to achieve their goals/targets in the INDCs.





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