

# INDCs beyond mitigation: TNAs as testing ground



## Towards Paris

In preparation of the UN climate conference in Paris in December 2015 (COP21), countries publicly present their *intended nationally determined contributions* (INDCs) wherein they outline which climate actions they intend to take after 2020. The request for INDCs by all countries was initially made at COP19 in Warsaw (2013, decision 1/CP.19) and reiterated a year later as part of the Lima Call for Climate Action (decision 1/CP.20). The INDCs should outline the countries' contribution to the climate change mitigation objective of the UNFCCC, and are supposed to be based on the countries' national

priorities, circumstances and capabilities, in a framework that should lead to global collective action towards a low-carbon and climate-resilient future.

COP19 requested the submission of INDCs "by the first quarter of 2015 by those Parties ready to do so", but only five INDCs (for 33 Parties, including the EU and its Member States) had been submitted upon this deadline. At present (18 June 2015), twelve INDCs have been submitted, including five from non-Annex I Parties: Mexico, Gabon, Morocco, Ethiopia and Andorra. The UNFCCC Secretariat will prepare a synthesis report on the aggregate effect of the submitted INDCs in October 2015.

## From commitments to contributions

The road of the international climate negotiations towards COP21 has been marked by a "shift from global efforts to domestic processes, as well as a move from commitments to contributions".<sup>i</sup> After the failure of COP15 in Copenhagen,<sup>ii</sup> the approach has been that actions should be 'nationally appropriate' and 'based on low-emission development strategies'. This is reflected in the 2010 Cancun Agreements, which contain a joint vision for long-term cooperative action between all countries which "addresses mitigation, adaptation, finance, technology development and transfer, and capacity-building in a balanced, integrated and comprehensive manner to enhance and achieve the full, effective and sustained implementation of the Convention".<sup>iii</sup> In other words, as the issues and goals of climate change policy and development are inseparable, and interact in a circular fashion, there is growing recognition that these issues should be regarded together.<sup>iv</sup>

An important benefit of this new line of thinking, the embedding of emission reduction in countries' domestic sustainable development policies, is that developing countries may be better enabled to identify and accept greenhouse gas emission (GHG) reduction measures, as these would also support achieving domestic development goals. For example, through the technology needs assessment (TNA) process under the UNFCCC developing countries identify technologies for mitigation and adaptation in light of their sustainable development priorities.

## At a glance

**Thematic area** International climate policy

**Key words** Bottom-up, COP21, INDC, Paris, Sustainable Development, TNA, UNFCCC

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## Summary

Countries present their INDCs as input to the international climate negotiations. This briefing note argues that experience with technology needs assessments (TNAs) can be considered as a structured approach for the development of the INDCs, which do not only contribute to the target of limiting global temperature rise to 2 degrees Celsius, but also to domestic sustainable development priorities.

Another example are nationally appropriate mitigation actions (NAMAs), through which developing countries can develop climate actions in accordance with their sustainable development plans, and supported by international transfer of technologies and finance and capacity support.<sup>v</sup> The development of INDCs could thus be considered a next step towards “a spectrum of climate action in light of country specific development context”.<sup>vi</sup>

## INDCs and development planning

According to the World Resources Institute, INDCs should be ambitious, transparent and equitable, while they should show that climate change is being integrated into other national priorities, such as sustainable development and poverty reduction.<sup>vii</sup> However, the submitted INDCs – and their reviews – merely focus on their ambition, transparency and equity, with regard to the contribution of the country to the overall ambition to limit global temperature rise to two degrees Celsius above pre-industrial levels. From most INDCs, however, it is unclear how the proposed climate measures relate to domestic development planning. Moreover, a first assessment of submitted INDCs shows that intended contributions often lack action plans towards their implementation.

As a result, the likelihood of pledges to be achieved, as well as the contributions to adaptation and general sustainable development, often remain unclear in current INDCs. Considering the experiences with TNAs (since 2001) and NAMAs, INDCs would preferably be the result of a participatory domestic planning process. In that way, apart from contribution to the global climate agreement, INDC development “can also create significant non-climate domestic benefits.” In addition, INDCs should highlight the needs, priorities and possibilities for the implementation of both mitigation and adaptation actions, including finance, technology, and capacity building needs.

As explained, not all INDCs submitted to date are based on such an integrated mitigation, adaptation and sustainable development agenda, and the substantiation of targets is not always clear. For example, the US intends to achieve 26-28% emissions reductions below its 2005 level by 2025. Experts call this pledge “serious and achievable”, but “whether

it’s a fair share of global action is another question”.<sup>viii</sup> Gabon also has submitted its INDC, with a headline pledge of a 50% emissions reduction by 2025, compared to a business-as-usual scenario. Although Gabon states its INDC is “in accordance with (...) its strategic development plan”,<sup>ix</sup> the INDC does not seem to be linked to the domestic sustainable development planning process. Unlike the developed countries, all developing countries did include an adaptation component in their INDCs.

## TNA as a testing ground for INDC

Several provisions have been developed under the UNFCCC to enable for a country-specific identification of low-emission and climate-resilient development measures. A particular example of that is the TNA process, which was introduced at COP7 as part of the UNFCCC Technology Framework of 2001. Given the wide range of TNAs, and also NAMAs, conducted over the years, they could be considered useful ‘testing grounds’ for INDC formulation, especially in developing countries. In the remainder of this briefing note, we focus on possible interlinkages between TNAs and INDCs.

During 2009-2013, TNA processes have been carried out in 36 developing (non-Annex I) countries across Latin America and the Caribbean, Africa, Asia and Eastern Europe, with support from the Global Environment Facility (GEF) and the UNEP Risø Centre (currently renamed to UNEP DTU Partnership). Before 2009, 96 developing countries had already conducted a TNA. TNA Phase II was launched in November 2014 and will facilitate the process in 26 countries in the same regions. Figure 1 shows the countries where TNA processes have been or will be carried out.

How could TNAs support INDCs? The TNA process takes developing countries’ development priorities as a

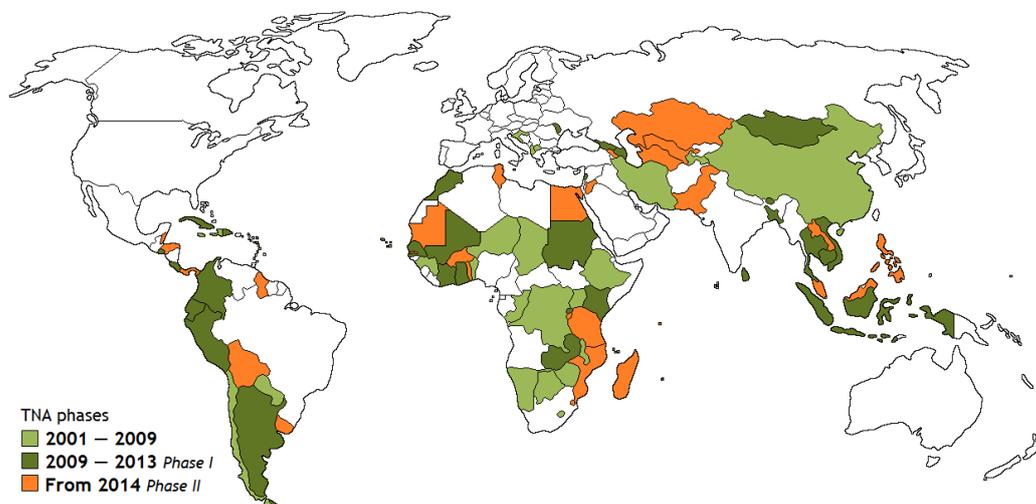


Figure 1. World map with countries that have conducted or will conduct a TNA process. Countries that have conducted multiple TNAs are only indicated for their most recent phase.

starting point for identifying strategic sectors for achieving climate and sustainable development goals and selecting technologies for mitigation and adaptation with development benefits. Embedding the action based processes into such a long-term national framework would increase the coherence of the action portfolio.<sup>x</sup> Utilising a TNA or similar process as input for an INDC can have several advantages:<sup>xi</sup>

- TNAs follow a **structured approach** based on the TNA Handbook.<sup>xii</sup> Figure 2 shows how each stage of the TNA can contribute to the aspects of the INDC.
- As the TNA is a **country-driven, participatory process**, the needs and preferences of national stakeholders are taken into account. Successful engagement of stakeholders can lead to transfer of new knowledge and insights on specific technology challenges and opportunities that might otherwise have been missed. The involvement of amongst others financial experts, high-level policy makers and technology experts leads to the prioritisation of technologies with the highest combined climate and development benefits, and successful preparation for their implementation. An INDC can benefit from this as the results of such a process will have a broader support base, and therefore higher chances of successful implementation.
- As the TNA approach takes **national development priorities as a starting point**, and explores how these can be realised with low GHG emissions and enhanced climate resilience, it has been suggested that developing countries' willingness to engage in global climate policy cooperation is strengthened.<sup>y</sup> The process can help ensure an integrated approach for mitigation, adaptation, technology transfer and finance so that coherent actions can be formulated. This could enhance the ambition level of INDCs, which will strengthen the international post-2020 climate framework.
- The TNA process concludes with the design of **action plans for implementation**. The technology action plans (TAPs) describe measures needed for the implementation of prioritised technologies, for example with regard to policies, organisational change, market support and financial services, skills training, and international cooperation. In addition, concrete project ideas are proposed, (ideally) functioning as pilots or demonstrations for the wider implementation of the TAP. Feeding these concrete action plans and project ideas in an INDC can increase the likelihood of successful implementation of the countries' INDCs.

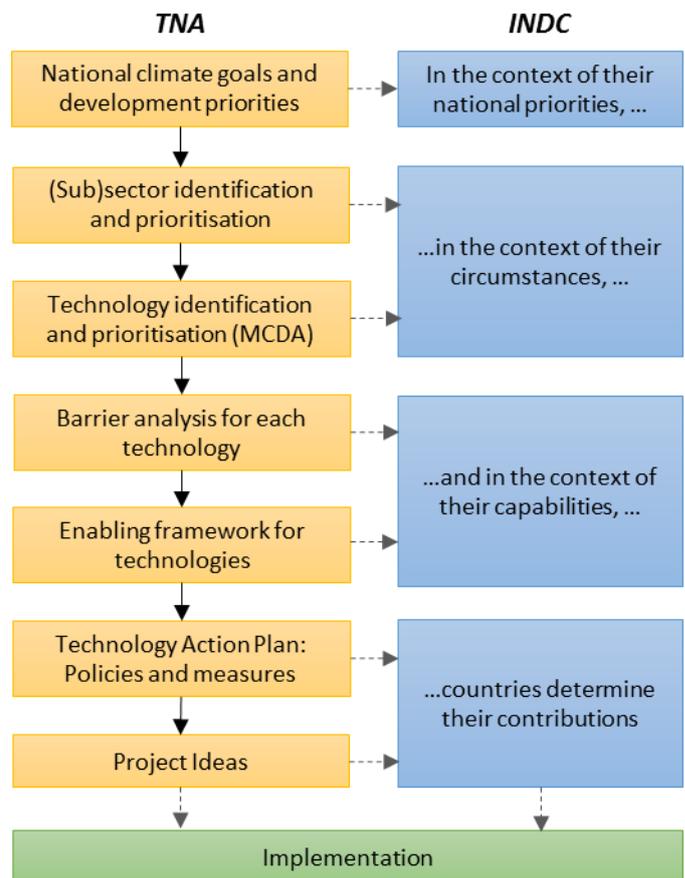


Figure 2. TNA process and aspects of INDCs.

In other words, the TNA process – or a similar country-based participatory process – could feed into the INDC. This reduces the need for developing countries to do multiple separate exercises and would support that the outputs for mitigation and adaptation strategies and action plans will deliver the sustainable development benefits for countries. In addition, it provides access to advice, networks, finance, and overall capacity building, such as education, supporting economic, legal and technical services, and improved enabling environments for adoption of measures for mitigation and adaptation in the timescales and scale required.<sup>y</sup> Targets described in the INDC, as input for the global climate framework, will then be based on actions that are genuinely nationally appropriate.

### Good practice for INDC

Morocco is an example of a country that did base its INDC on a well-structured and broad stakeholder consultation process, and a review of existing policies and programmes, while providing clear statements on the needs for financing and capacity building. Morocco's INDC finds its roots in the National Strategy for Sustainable Development, and the implementation of the INDC is "based on several laws, strategies and national action plans that include clear and ambitious sectorial targets".<sup>xiii</sup>

Although Morocco does not directly refer to its TNA process, which was conducted from December 2010 to September 2012, the mentioned strategies, action plans and targets are similar. A key target underlying both the TNA and the INDC, for example, is to provide 42% of the installed electrical power from renewable sources by 2020.<sup>xiv</sup> Morocco's INDC also includes a clear overview of its actions and targets for adaptation, which are in line with its TNA.

Similarly, India plans to present a "sustainable development-based INDC" on mitigation, adaptation, finance, technology and capacity building. The comprehensive INDC would also project the requirement of support in terms of finance, technology transfer and training support. "Recognising the important role that non-state actors must play in shaping India's response to climate change, the Government of India is taking steps to make this an inclusive and consultative process and invites the participation of all communities, non-governmental organisations and industry".<sup>xv</sup>

## Financing

Financing will be a crucial aspect of the climate agreement in Paris at COP21. The target is to reach a commitment of USD 100 billion of climate finance annually by 2020. COP21 should lead to agreement, and "the key to a successful agreement would be for rich countries to come forward with plans to provide financial assistance to the poorer world".<sup>xvi</sup> However, financing can only be planned and successfully be delivered "if the costs of climate change measures are known, priorities are identified and financial demand is articulated".<sup>xvii</sup> This can be enabled by an INDC based on a TNA or similar process, provided that they produce actions in addition to a plain mitigation pledge.

The World Resources Institute<sup>xviii</sup> states: "In order for international negotiators and civil society to have confidence the INDC will be achieved, each country should define what domestic policies and planning processes exist or will be put in place to achieve the INDC. This information will also be critical for understanding to what extent a country is putting in place policies that will drive transformative change over the longer term." A TNA-based INDC can provide such confidence, and will support the country's readiness to be a recipient of climate finance.

## Conclusion

In conclusion, the INDCs can be a useful means for linking the high level UNFCCC negotiations and policy making to bottom-up, country-based participatory

inputs. Experience with TNA can be considered as a structured approach for the development of the INDCs, which do not only contribute to the target of limiting global temperature rise to 2 degrees Celsius, but also to domestic sustainable development priorities. With a well-structured and inclusive process leading to the INDC, the results are more likely to lead to successful implementation. In addition, the proposed projects and technologies will be more receptive for the successful distribution of climate finance.

## Read more

An overview of INDCs that have been submitted to the UNFCCC is available on the [INDC Submissions page](#). The UNFCCC secretariat will prepare a synthesis of INDCs in October 2015, but several organisations review individual INDCs as soon as they are submitted, such as [Climate Action Tracker](#), [PBL](#), and [WRI](#).

Reports on the TNA process in 36 countries – conducted in Phase I between 2009 and 2013 – are available on the [Tech-Action.org](#) website. These TNAs have all been based on the [Handbook for Conducting TNA for Climate Change](#). A more analytical background of the TNAs conducted is available in the background paper on [Good Practices of TNAs](#).

In the doctoral dissertation by Wytze van der Gaast – "[International climate negotiation condition: past and future](#)" – it is analysed how the international climate negotiations have developed since 1990. It concludes that an effective climate policy with global country participation is more likely if climate measures are embedded in (developing) countries' longer term sustainable development priorities.

More general background information on climate policy, including the history of the international climate negotiations, is available on the [ClimatePolicyInfoHub](#).

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The **POLIMP** project aims to address gaps in knowledge and to inform policy at various decision-making levels regarding the implications of international climate policies under discussion. [www.polimp.eu](http://www.polimp.eu)



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