Knowledge Product

Process guidance for Intended Nationally Determined Contributions (INDCs)

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International Partnership on Mitigation and MRV

This paper is intended to stimulate a discussion on the possible content on intended national contributions without prejudice of a negotiated outcome. Comments on the content of the paper are welcome.

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On behalf of:
Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
of the Federal Republic of Germany

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Table of contents

International Partnership on Mitigation and MRV

1 Introduction

1.1 Background

Parties agreed at the 19th session of the Conference of the Parties (COP 19) in Warsaw to "initiate or intensify domestic preparations for their intended nationally determined contributions" so that they can be submitted well in advance of the Meeting of Parties to the UNFCCC in Paris; by March 2015 for Parties ready to do so (UNFCCC 2013). It is the first time such an ex-ante process was formally adopted under the UNFCCC, leading to the need to clarify concepts, revisit historical precedents and outline the way forward. When countries undergo a domestic process to initiate, prepare or revisit their potential contributions, the use of technical or policy guidance and good practice examples can inform and promote higher ambition proposals.

Intended Nationally Determined Contributions (INDCs) put forward by countries will form a key input to the negotiations leading towards the 2015 Paris climate agreement. They will therefore need to take into account domestic and international processes as well as requirements for comprehensiveness, transparency and ambition as negotiated under the UNFCCC. It is possible that INDCs put forward by countries before Paris will be the starting point of a mechanism or process to increase ambition over time, further underlining the importance of their timely and well-informed preparation.

While the requirements of INDCs remain unclear, negotiations have started to define the information requirements for reporting INDCs. A decision is to be adopted in Lima in December 2014; a draft decision already lists various elements[1].

Against this background, the objective of this paper is to provide guidance on the preparation process of INDCs according to the responsibilities and respective capabilities of the countries to prepare individual components of their INDC. There will be various options on how to prepare different components of an INDC and countries are free to select the options that best match their capabilities. The overarching objective is to create a common understanding on the topic of INDCs without prejudice to future decisions under the UNFCCC. As such, it can serve as a starting point for countries to elaborate on their INDCs.

This guidance builds upon the earlier paper on this topic, which discusses the technical and policy-related aspects of preparing, consulting, and communicating INDCs.[2] It was prepared in close collaboration with WRI, who develop complementary guidance on INDCs in parallel.[3]

[1] DRAFT TEXT on ADP 2-6 agenda item 3, Implementation of all the elements of decision 1/CP.17, Version of 24 October @ 15.30, Information on intended nationally determined contributions in the context of the 2015 agreement, Draft by the Co-Chairs, available online.

[2] Niklas Höhne, Christian Ellermann and Lina Li 2014: Intended Nationally Determined Contributions under the UNFCCC Discussion paper, Ecofys

1.2 Use of this process guidance

This guidance was prepared to assist country governments in the preparation of their INDC. It can be used when the process is initiated, but can also be applied for individual steps in the process.

Section 2 helps to determine where a country stands in its process of developing its INDC and what appropriate and feasible options for (further) procedures exist.

Section 3 provides the generic process options for politically driven top down process approaches and technically driven bottom-up process approaches. This section includes some key steps on how to develop and operationalize the implementation of national mitigation goals, and highlights the key points for consideration when taking the key steps.

Section 4 introduces the full process, its iterative nature, its steps as well as a first set of tools. It integrates the different approaches from Section 3 in one sequence, which combines political and technical steps to define and successively review and raise the mitigation goal.

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[3] Kelly Levin, David Rich, Ian Noble: Intended Nationally Determined Contributions (INDCs) under the United Nations Framework Convention on Climate Change, World Resources Institute, forthcoming

2 Example components of a contribution

This section provides examples of some components that could be included in an INDC.[4] This list is informed by what countries have provided as contributions to the Copenhagen Accord or Cancun Agreements. The following list is meant to provide options for a possible way forward without being prescriptive. Some countries have requested the inclusion of additional elements such as adaptation and financing, which, however, might be subject to separate provisions under the 2015 agreement.

- **National long-term emissions goal:** An ambitious domestic long-term goal could provide long-term national direction. For some countries, a goal could be to phase out GHG emissions to net zero by a certain date (Example: Costa Rica's carbon neutrality target to be achieved by 2021). For other countries, it could be a peak and decline pathway or a goal in the far future. (Examples: USA pledged to reduce its emissions by 83% from 2005 levels to 2050; China proposed to peak its CO_2 emissions at least by 2030; South Africa want to peak by 2025, plateau until 2035 and then decline its emissions.)
- **National short-term emissions target:** An emission limitation or reduction target could be set to define the minimum level of intended ambition for the short term (2025 or 2030). Ranges or conditions could help to foster domestic agreement. This short-term target would apply to those countries that are in a position to do so, i.e. at least those that had similar types of commitments in the past. Other countries may choose to have such a target or not. (Examples: EU has agreed to reduce GHG emissions by at least 40% below 1990 by 2030, Mexico has pledged 30% below business as usual by 2020.)
- **Energy / sectoral targets:** Renewable and energy efficiency targets could indicate action at a subnational/sectoral level. Over 100 countries have set national renewable energy targets and many have energy efficiency goals. Other countries could propose targets in other areas, for example on reducing deforestation or in waste management. (Examples for 2020: Peru proposed to use 33% renewable energy by 2020, Brazil proposed energy efficiency activities for 2020)
- **Highlight policies and projects:** Countries could provide an overview of policies and projects on mitigation that make up their contribution, including the estimated total impact in terms of GHG emissions. (Example for 2020: Ethiopia proposed several renewable energy projects)

[4] This section builds on Niklas Höhne, Christian Ellermann and Lina Li 2014: Intended Nationally Determined Contributions under the UNFCCC, Discussion paper, Ecofys. Further details are found there.

It is possible that a country's contribution will cover all or several of the components listed above, which may also reinforce each other. The sum of renewable energy, energy efficiency or policy contributions in an INDC could possibly add up to a higher level of ambition than the proposed countrywide emission limitation or reduction target. However, depending on the circumstances, this could potentially help to better understand the overall contribution, in particular when an emissions goal is formulated as an intensity target or reductions are related to a BAU trajectory.

Countries can also provide supporting material for the actions that are to be undertaken:

- **Explanations:** Other countries would want to know why a particular INDC is an ambitious and equitable contribution to the global goal. The country could explain why its contribution is ambitious by using indicators or by relating it to modelling results of regional GHG reductions that would be in line with the 2°C objective. Similarly, the equity considerations underlying the INDC could be made explicit. Countries could also specify their **needs for international support**, such as finance, technology or capacity building for the implementation of individual mitigation and adaptation actions that go beyond those that they finance with their own resources.

Countries may provide information on these elements to varying degrees based on their national circumstances. Although the information that is to be reported is yet to be decided at the COP in Lima in December 2014, indications of the upfront information are already available. A draft decision of the ADP[5] and several papers provide more insights[6,7].

Drafting the elements comprising an INDC is a process that has to rely on in-country analysis like the development of GHG inventories, an understanding of mitigation potentials, GHG projections (e.g. baseline and policy scenarios), as well as an assessment of support needs. It is unlikely that any of these processes can be started and completed in time solely for the purpose of preparing an INDC. As the maturity of the necessary processes is different by countries, it is however reasonable to expect that Parties put forward contributions that are in line with their respective level of preparation. Hence, Parties could be expected to at least make use of the latest level of information and planning available to the country when drawing up INDCs.

Illustrative examples are provided in Table 1 for countries at different stages of development, as well as different degrees of completion of the necessary research and planning processes.

[5] Niklas Höhne, Christian Ellermann and Lina Li 2014: Intended Nationally Determined Contributions under the UNFCCC Discussion paper, Ecofys

[6] Oeko Institute e.V. Up-Front Information for emission reduction contributions in the 2015 Agreement under the UNFCCC. BACKGROUND PAPER. Berlin, 30 April 2014. Available online.

[7] World Resources Institute. Ex-ante clarification, transparency, and understanding of intended nationally determined mitigation contributions. WORKING PAPER. March 2014. Available online.

Table 1. Illustrative examples of the level of detail that could be provided. Some countries could put more emphasis on some elements, here shaded in light orange. Countries can draw upon parts from different columns for each element of the contribution, depending on their capability and level of ambition.

Component	*Higher* ← Level of country capability → *Lower*		
Inspirational national long term emissions goal	Year of intended phase out of GHG emissions	Long-term peak and decline pathway or range	-
National short term emissions target	Precisely defined, economy wide, multi-year target until 2025 and/or 2030	Mitigation ambition until 2025 and/or 2030 (below BAU, intensity, range)	-
Energy / sectoral targets	Precisely defined national energy efficiency or renewable targets and targets related to non-energy emissions	National energy efficiency or renewable targets and/or targets related to land-use and forestry	National energy efficiency or renewable targets, if any
Highlight policies and projects	Governance structures; Highlight policies / projects with intended impacts	Governance structures; Highlight policies / projects with intended impacts	Selection of a few, yet ambitious policies and/or projects
Explanations and international support needs for mitigation	Detailed explanation for why the contribution is an ambitious and equitable contribution to the global goal	Explanation for why the contribution is an ambitious and equitable contribution to the global goal; Precise purpose and value of support needed	Order of magnitude of support needed

3 Generic process options

Observing past mitigation commitments or pledges by Parties, there are two main generic processes for establishing an INDC which in practice always run in parallel and respond to each other:

- Politically driven process of first setting an inspirational goal, then national implementation;
- Technically driven process of determining national implementation first, then the overall national goal.

While the politically driven process tends to orient the national emissions reduction target to the global objective of limiting global warming to below 2°C, the more technically driven process ensures that mitigation policies and actions are robust, realistic and feasible, harness opportunities, and determines the need for international collaboration.

Depending on domestic circumstances, countries will embark on a national process to prepare an INDC with a political decision on an ambitious national goal and/or with a technical process of collecting information on implementation options. These two cases are described here as *either-or* options for illustration purposes – in reality there will be a mix of both. Usually, individual steps from a rather political or rather technical process as described below will form one sequential process mixing steps from both. In Section 4, an integrated process is outlined comprising both a politically driven top-down and a technically driven bottom-up process. These general process options are discussed below, while Section 4 goes into greater detail with regards to the key process steps necessary for a hybrid approach (Figure 4).

3.1 Politically driven top-down process

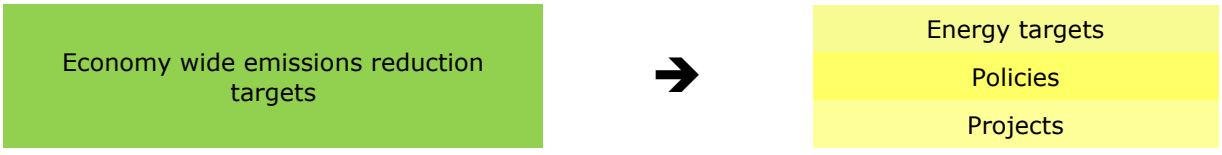

Figure 1. Politically driven process option for arriving at an INDC.

A number of countries have in the past set economy wide emissions reduction targets at the highest level of political leadership. Such decisions were informed by analysis, but the details of the implementation had to be clarified in a second step on planning the implementation options to achieve the overarching goal. For the pledges that were presented in 2009 for the Copenhagen summit, countries like Norway (40%), Japan (25%), Costa Rica (carbon neutral), Maldives (carbon neutral) and South Korea (30% below BAU) used politically driven approaches to define their targets and - only then – went on to identify the technical mitigation options.

Key steps

Setting the goal
The politically driven process encompasses the development of an inspirational GHG emission reduction goal, including the selection of the type of INDC, which will then be translated into individual technically driven bottom-up mitigation actions. The national GHG emission reduction goal could be based on the global goal of limiting global warming to 2°C, or it could aim to achieve the phase out of national GHG emissions.

High-level leadership
Setting such an inspirational national GHG reduction goal depends on strong national political leadership. Continued strong national political leadership as well as coordination among responsible agencies is paramount in order to guarantee effective implementation and achievement of the projected results.

Determining the pathway
It will be necessary to determine a GHG emissions trajectory consistent with the long-term inspirational GHG emission reduction goal in a scientific manner and to establish milestones along the way as a means of setting short-term goals. This includes specifying the regional component and distribution over time, and prioritizing sectors.

Translation into energy targets, policies and projects
Based on a scientific assessment and prioritisation of mitigation options and related costs, analysing political, economic, social and technical feasibility, the shorter term GHG emission reduction goals need to be translated into energy targets, policies and projects, which will act as the actual means to achieve the GHG emission reductions.

3.2 Technically driven process

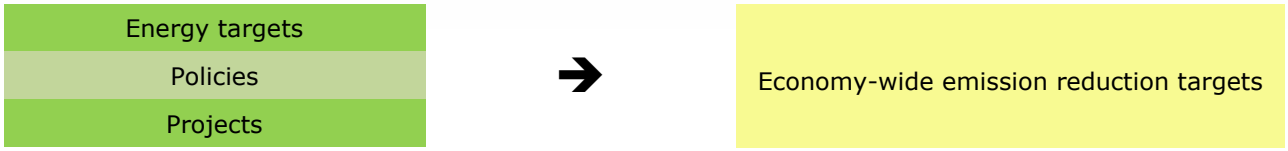

Figure 2. Technically driven process option for arriving at an INDC.

Most countries have started processes that identify and plan national mitigation actions, including:

- National reports (national communications, GHG inventories, biennial reports with information on mitigation actions);
- Projects, actions and plans (Clean Development Mechanism, Nationally Appropriate Mitigation Actions, Technology Needs Assessments, national climate change plans, national economic development plans);

- Laws and strategies (national climate change laws, national climate funds, green growth strategies, Low Emission Development Strategies).

A good understanding of nationally available mitigation options combined with experience gained with related policy development and implementation, can be a good starting point for a technically driven process for establishing an INDC. If the national policy process is quick enough, additional and new options can be developed and included.

Political support for the technically driven INDC process has to be ensured all along the way. Multiple iterative rounds of stakeholder engagement (see Section 4) may be necessary to arrive at an ambitious contribution through such a process.

Key steps

Collect available information
In a stock taking exercise, collect the available information on national mitigation actions – including those that are being implemented and planned as well as those that have been identified as opportunities, but are not yet included in planning, and those that have been identified as options which are technologically possible but depend on the provision of international support.

It is imperative to have a good overview of the available options and their mitigation potentials, collected for example along the lines presented in the next chapter, together with a central institution or an inter-institutional arrangement responsible for coordinating the collection efforts.

Ensure transparency
Transparency serves as an enabling condition for this process. It is necessary to identify all options, the required resources, and the appropriate partners for implementation as well as to track progress toward the defined goals.

Identify and analyse mitigation options
Identify potential mitigation actions, prioritise and select them based on criteria (e.g. transformational impacts, elimination of barriers, alignment with national economic and development priorities and objectives, mitigation potential, costs, etc.).

Wherever information on mitigation cost is available, they can be grouped together as

- Mitigation options that can be feasibly implemented with negative cost;
- Policies/actions/projects that have a net negative or zero cost when considering their social, economic and environmental co-benefits;
- Options that carry a positive cost for mitigation, which are feasible to implement provided the availability of international support.

Aggregate mitigation options into a mitigation pathway and a national goal
Using the information collected on implementable mitigation options, alternative mitigation pathways can be developed. These may differ depending on whether or not support is provided. The quantification of mitigation effects and the aggregation of the individual energy targets,

policies, actions and projects can be presented as an economy wide emission reduction target of the INDC.

3.3 Comparison

Politically driven	Technically driven
First setting an inspirational goal, then national implementation	Determining national implementation first, then the overall national goal
• Ambitious goal can be set in a scientific manner (e.g. following global 2°C goal); • Strong national political leadership required; • Continued strong national implementation must be guaranteed.	• National process to identify and analyse options must be organised; • Sufficient time is required for iterative processes of establishing ambitious emissions pathways based on mitigation options; • Political commitment for the resulting national emissions goal presented in INDC is necessary.

4 Essential process elements and challenges

When preparing an INDC, most countries will make use of existing institutional arrangements for climate policy making, and existing knowledge about their mitigation options. While it is possible that an INDC can be formulated following a high level political decision for an ambitious overarching goal, most countries will still go through a number of essential process elements and encounter certain challenges in the preparation of an INDC.

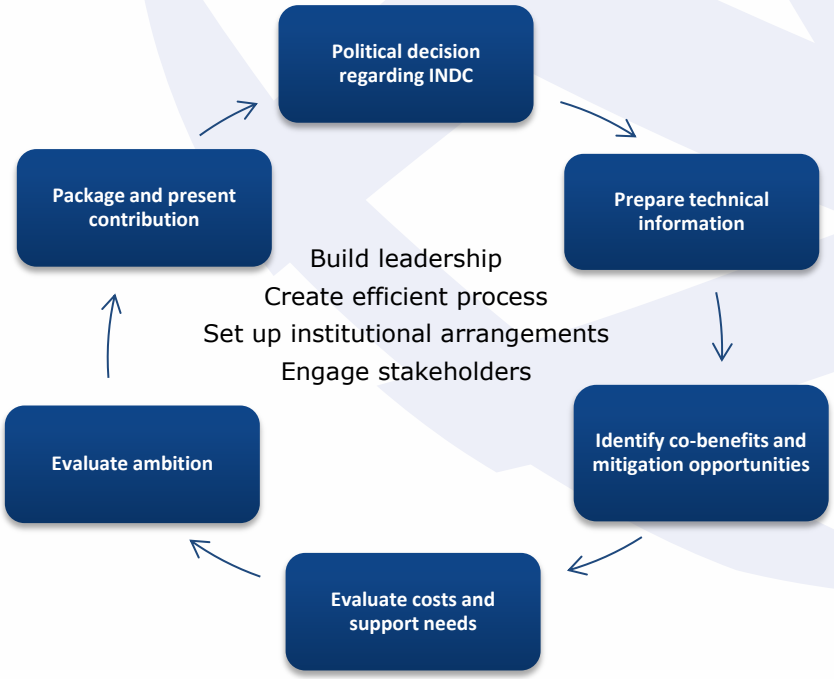

Figure 3. Overview of essential process elements.

It is important to note that the preparation of an INDC is an iterative process and not a *one-time* exercise of going through a number of steps:

1. The political decision to prepare an INDC will initiate a process under the guidance of a national institution that will have to collect and prepare the needed technical information, engage stakeholders such as ministries, agencies, the business sector and civil society, evaluate the cumulative level of ambition, and prepare a draft package of contributions (Figure 3). Due to a range of factors, including the level of country preparedness, willingness of stakeholders to cooperate, and level of ambition of individual elements, it is likely that further iterations (more than one round) are necessary. Some of these factor include: sector ministries/agencies may need additional time or motivation to increase their input; small scale studies for certain topics may need to be commissioned to complement existing technical information; several scenarios may be possible depending

on the possibility of receiving international support; the overall level of ambition may not match expectations of the political level; etc.. It is therefore likely that the process outlined in Figure 3 will not only be undertaken once, but several times.

Example: The Climate Change Commission of country *X* reviews the available information and asks sector ministries to provide input for possible domestic mitigation actions. An assessment of the submitted input suggests that the level of ambition falls below what the Climate Change Commission assumes as business as usual. It begins a new round of consultations with sector ministries, making use of external experts. This results in more ambitious input, which is endorsed by all stakeholders, and which lives up to expectations in terms of political ambition.

2. The preparation of an INDC for submission to the UNFCCC in the first quarter of 2015 most likely marks only the beginning of a longer process in which INDCs will need to be updated, reviewed and adjusted over time.

It will therefore be useful to understand the initial preparation of an INDC as a chance to establish a domestic institutional framework for the preparation of comprehensive climate policy making, for international but also domestic purposes.

Based on the two generic options presented in chapter 3, one could also consider two parallel processes: one political/strategic and one technical (Figure 4). A more detailed version with three iterations of this process is provided in Annex.

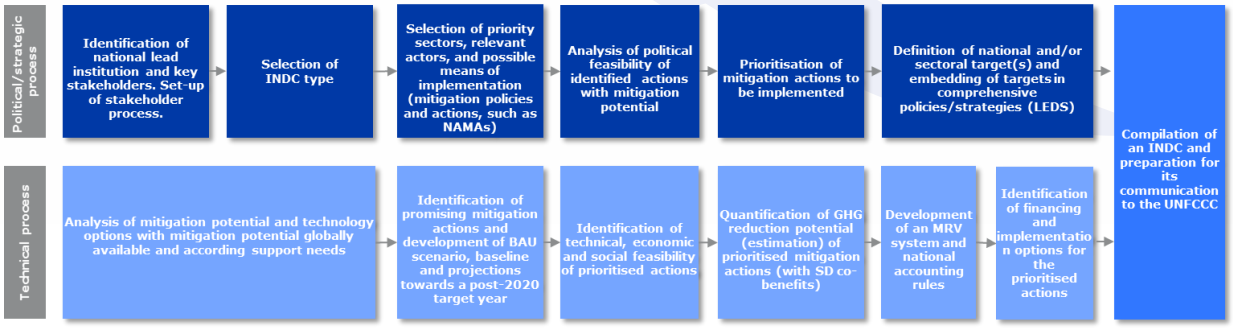

Figure 4. Possible detailed process based on a political/strategic element and a technical element.

The following sections discuss essential process components and challenges in further detail. It is likely that the preparation of an INDC does not take the exact simplified, step-by-step form as depicted in Figure 3. Rather, individual steps could run in parallel depending on national circumstances, or be more advanced or delayed as relevant input becomes available.

Stakeholder engagement

At the beginning of the process, the identification of national lead institutions and key stakeholders and the set-up of the stakeholder engagement process should be arranged adequately. Stakeholder involvement throughout the process is crucial. Information used is to be presented to, and discussed with, government agencies. Furthermore, feedback from other stakeholder groups, such as business and civil society based on country circumstances (i.e. directly or through agencies), should be requested regularly and integrated in follow-up steps. The stakeholder engagement should occur continuously (albeit at defined moments) throughout the whole process.

Key steps

At the start of the process, the identification of national lead institutions and key stakeholders and the set-up of the stakeholder process includes a number of steps:

1. Identification of key policy/sectoral and technical experts;
2. Definition of a work plan for the INDC with a clear timeline including key milestones before COP 20 and the 1st quarter of 2015;
3. Coordination of roles and responsibilities;
4. Establishment of institutional arrangements using existing or new structures (e.g. inter-ministerial roundtables).

Throughout the process, several multi-stakeholder consultations with civil society and private sector will take place. Note that any stakeholder consultation on a certain topic (e.g. on targets and tracking) will occur multiple times (once for each cycle).

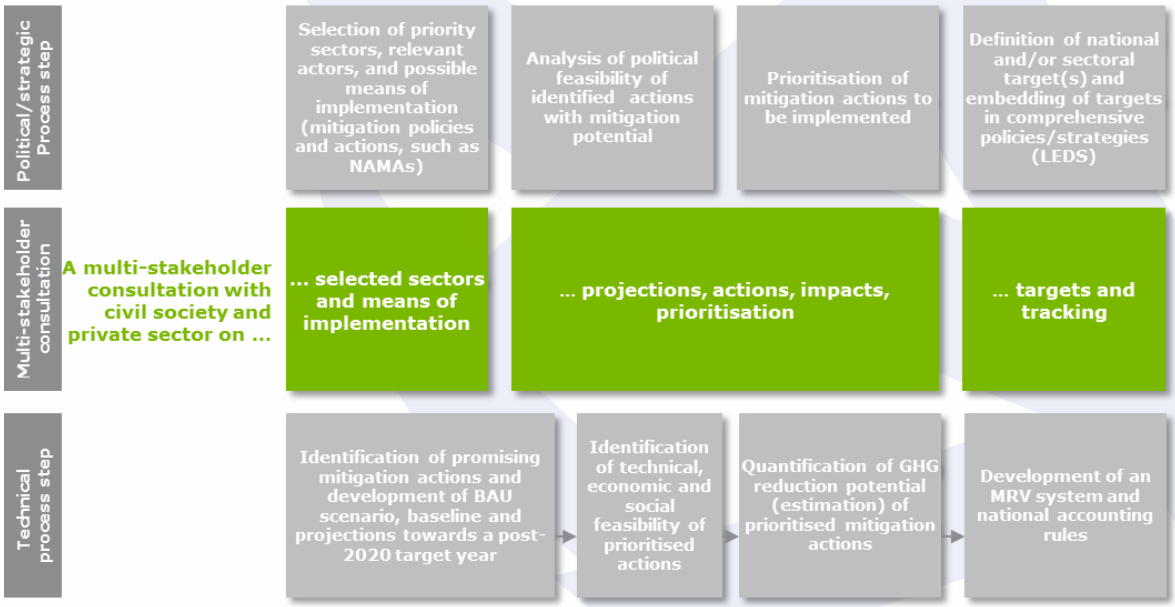

Figure 5. Overview of the different stakeholder consultations during the process

Initiating the process

It is important that the national coordinating body for climate policy (e.g. an inter-ministerial coordination committee or a specialised institution) properly initiates the INDC preparation process, including securing a high level political endorsement and securing the mandate and support from relevant ministries to begin the process. All ministries, agencies and stakeholders involved should understand the importance of the INDC preparation as a national process, and as input for the international climate change negotiations under the UNFCCC.

The national coordinating body manages the process, including, depending on country circumstances:

- Securing high level support;
- Proposing the process elements and establishing a timeline;
- Coordinating roles, responsibilities, and deliverables;
- Managing resources and funds;
- Providing access to international or domestic sources of support for the INDC preparation process;

- Mediating conflicting interests of involved parties; etc.

Preparing and compiling the needed technical information

An essential step is gathering the technical information on benefits, mitigation potential and costs that is needed to decide on an INDC. Stock taking of what mitigation action is already on-going and what mitigation effects will be achieved without any additional action helps to define the Business As Usual (BAU) scenario and thereby what the unilateral unconditional goal will comprise.

Key steps

- Review tables presented below for potential INDC elements
- Prepare an overview (see template Table 2 below) listing the available or needed information based on the detailed questions under each of the components, including the question that is addressed, status, action(s) required, and level of urgency, for each element:
    - Inspirational national long term emissions goal
    - National short term emissions target
    - Energy targets
    - Highlight policies and projects
    - International support needs for mitigation
- For each section, the items are sorted by status
- Complete action items in the order of urgency (high to low) and status (implemented, in planning, to not yet planned)

Table 2. Suggested format for the collection of available or needed technical information.

Component	Item/question	Status	Action required	Urgency
National long term emissions goal	Items from the input tables in Section 0 (e.g. Has the country officially announced long-term mitigation commitments?)	e.g. • Implemented • Partially implemented • In planning • No	e.g. • Request information from ministry X • Situation summary needed • Analysis needed • Delegated to agency Y	e.g. • High – key input • High – decision point for next step • Low – backup information • etc.
National short term emissions	E.g. does the country have a robust MRV system	…	…	…

target	for GHG emissions?			
Energy and other sectoral targets	E.g. for which sectors is information available regarding potential mitigation actions and their costs and benefits?	…	…	…
Highlight policies and projects	E.g. are there any GHG emission related policies in effect or planned?	…	…	…

The following sections will provide detailed questions on the different components.

National long term emissions goal

The level of a country's capability could determine the possible INDC focus of a country's inspirational long term emissions goal.

Table 3. Possible INDC focus of a country's inspirational national long term emissions goal.

Higher ← Level of country capability → *Lower*		
Year of intended phase out of GHG emissions	Long-term peak and decline pathway or range	-

When assessing the information available that could serve as potential input for an INDC, a number of questions should be answered to obtain a comprehensive overview of the data availability and status quo. Considerations depend on the level of country capability. An overview is presented in Table 4.

Table 4. Detailed consideration of possible input for the INDC.

Higher ← Level of country capability → *Lower*		
Is there a national climate change strategy/LEDS?		
Has the country formulated a top-down vision for the phase out of GHG emissions?	Has the country formulated a top-down vision of a pathway or range for long-term peak and decline of GHGs?	
Has the country officially announced long-term mitigation commitments (i.e. submitted to the UNFCCC)?		Has the country submitted information on long-term mitigation pathways (i.e.

		submitted to the UNFCCC in a national communication or BUR)?
Does research exist on the technical and economic aspects of a phase out of GHG emissions?	Does research exist on the technical and economic aspects of a long-term peak and decline of GHG emissions?	Does research exist on viable long-term low GHG emission pathways?

National short-term emissions target

The level of a country's capability could also determine the possible INDC focus of a country's national short-term emissions target.

Table 5. Possible INDC focus of a country's national short-term emissions target.

Higher ← Level of country capability → *Lower*		
Precisely defined, economy wide, multi-year target until 2025 and/or 2030	Indication of mitigation ambition until 2025 and/or 2030 (below BAU, intensity, range)	-

When assessing the information available that could serve as potential input for an INDC, a number of questions should be answered to obtain a comprehensive overview of the data availability and status quo. Considerations depend on the on the level of country capability. An overview is presented in **Fehler! Verweisquelle konnte nicht gefunden werden.**.

Table 6. Detailed consideration of possible input for the INDC.

Higher ← Level of country capability → *Lower*		
Is there a national climate change strategy/LEDS?		
Is there an institution and/or committee responsible for the coordination and implementation of national climate policy?		
		What are process steps (undertaken or planned) towards a national climate strategy?
Has the country formulated economy-wide GHG emission targets for 2025 and/or 2030?	Has the country formulated economy-wide or sectoral, absolute or intensity-based GHG emission targets for 2025 and/or 2030?	Does the national communication or biannual update report provide information on emission scenarios?

Higher ← Level of country capability → *Lower*		
Does a decision exist on the economy-wide emission pathway toward 2025 and/or 2030?	Does a research or a decision exist on economy-wide or sectoral, absolute or intensity-based emission pathways toward 2025 and/or 2030?	Is there information on mitigation scenarios in national development plans or other national strategic documents?
	Is output available of participating countries in the MAPS programme[8]?	
Does the country have a robust MRV system for GHG emissions?	Does the country have an MRV system for GHG emissions?	Has the country undertaken any work preparing an MRV system for GHG emissions?
	Do NAMAs contain any national or sectoral GHG emissions target?	
	Is there information on economy-wide or sectoral mitigation costs (cost curves?)	

Energy and other sectoral targets

Table 7. Possible INDC focus of a country's energy and other sectoral targets.

Higher ← Level of country capability → *Lower*		
Precisely defined national energy efficiency or renewable targets and targets related to non-energy emissions	National energy efficiency or renewable targets and/or targets related to land-use and forestry	National energy efficiency or renewable targets, if existing agriculture or forestry targets

Targets on a sectoral basis allow for concentrating efforts on one focus area each, and thus they are less complex in their design compared to economy wide emission reduction targets. Countries can choose the focus area(s) based on national priorities and capabilities. For those countries with lower capability, we suggest to first focus on those areas or targets which already exist or are under consideration. For countries with a high capability, one or various sectoral targets can complement an economy-wide contribution, by a) demonstrating a feasible pathway towards implementation, and b) securing a level of ambition that may not be met with the economy-wide target.

[8] http://www.mapsprogramme.org

Table 8. Detailed consideration of possible input for the INDC.

Higher ← Level of country capability → *Lower*		
In which sectors do you perceive there to be most support for (highly) ambitious action from public/ the private sector?	In which sectors can additional ambition effectively stimulate green growth or other co-benefits?	Which sectors are priorities in the development agenda and stimulate co-benefits?
	Is the country involved in international or regional initiatives geared towards mitigation?	
	Is the country involved in international or regional initiatives geared towards low-carbon energy supply and energy savings?	
Which sectors have the highest mitigation potential?	For which sectors is information available regarding potential mitigation actions and their costs and benefits?	Have opportunities for emission reductions been previously identified in any sectors?
Which areas are not yet (sufficiently) covered in the current mitigation framework?	Is information available on benefits and costs of new targets/increasing the ambition of existing targets	Do any sectoral plans related to mitigation already exist?
		If yes, in which stage is the implementation of the plans?
		Is support necessary to meet existing targets (if yes, specify)

Highlight policies and projects

Table 9. Possible INDC focus of a country's highlighted policies and projects.

Higher ← Level of country capability → *Lower*		
Governance structures; Highlight policies / projects with intended impacts	Governance structures; Highlight policies / projects with intended impacts	Selection of a few, yet ambitious policies and/or projects

Policies and projects are the most micro-level form of potential information that can be included as part of a national contribution. This type of INDC element is specifically relevant for those countries which do not have the capability to develop sectoral targets or economy-wide mitigation contributions, but nevertheless aim at contributing to the mitigation of climate change. Countries can tailor the activities covered in the contribution to the specific circumstances and can choose themselves the scope of the contribution. Countries with high capabilities can complement their contributions by providing information on the policy structure used to implement its sectoral targets and/or the economy-wide mitigation commitment. Sharing this

information increases the credibility of the contribution and informs other countries about best-practice policy packages.

Table 10. Detailed consideration of possible input for the INDC.

Higher ← Level of country capability → *Lower*		
Is there a national climate change strategy/LEDS?		
Is there an institution and/or committee responsible for the coordination and implementation of national climate policy?		
Are relevant national laws and/or regulations in place to mandate and enable implementation of mitigation activities?		
Is there detailed information on implemented and planned mitigation policies for all important sectors or contributing to sectoral/economy-wide targets?	Is there detailed information on implemented and planned mitigation policies for the most important sectors.	Are there any GHG emission related policies in effect or planned?
	Have any NAMAs been submitted or are in preparation?	
Is there information on the expected impacts on emissions of the mitigation policies?	Is there information available on the expected impacts on emissions of the mitigation policies?	Which would be the projects with important mitigation impacts?
What are other benefits of implemented and planned policies beyond mitigation?	Is there information available on other benefits of the mitigation policies?	Are there any non-climate policies or on-going activities that may have mitigation effects?
		Are there any planned mitigation actions that currently lack financial support? If yes, specify support needed.

Identify co-benefits and mitigation opportunities

When collecting and preparing information on the components of the INDC, potential co-benefits should also be taken into consideration. Beyond emissions reductions, which have negative costs and will pay back in short time frames, mitigation policies and actions can also contribute to local sustainable development. If costs and benefits of these policies and actions can be quantified, a country can include these policies and actions in their INDC additionally and thereby raise the ambition level of the contribution.

Mitigation opportunities can thus contribute not only to the global 2°C objective but also to a national transformation of patterns of economic production and consumption which enables societies and economies to move to a sustainable development pathway, reducing poverty and creating inclusive growth. These co-benefits can incentivise countries and actors from private sector and civil society to invest and participate in additional action.

Key steps

- Collect the information on costs and benefits following the questions in section 0;
- Select those activities with high co-benefits as priority areas.

Evaluation of whether INDC components are ambitious

The collective assessment of INDCs after their submission will be a fundamental step in this bottom up process of countries suggesting contributions. A major question will be the relative ambition level of the actions in light of the common but differentiated responsibilities and respective capabilities. During the preparation of the INDC a country can already evaluate the ambition of its INDC and submit the results of this evaluation with the INDC itself. This evaluation can also present the basis for a review and adjustments of the INDC under development.

A number of different approaches exist for how a country can evaluate whether its contribution or components of its contribution are ambitious:

- A comparison to **business as usual (BAU)** indicates the degree to which a country plans to deviate from an assumed future overall GHG emissions pathway. A BAU can either include no climate policies (without measures) or all currently implemented policies (with implemented measures). The first one would include counterfactual elements, for example what would have happened if there had not been any policies. The "with implemented policies" already includes some efforts/measures and therefore may also not be the desired reference. Using a BAU places importance on the credibility of the underlying assumptions, including for example the level of policy implementation and the resulting impact, the rate of future economic development, as well as the level of related

modelling capacity. Using the same (old) BAU pathway for comparison over time is well suited for comparing different contribution possibilities for a country, or the strengthening of a contribution over time.

- A comparison to **effort sharing** would assess a contribution in light of how future mitigation effort needs to be distributed between countries based on a) an agreed endpoint or total carbon budget, and b) a methodology to share the effort to reach this global target among countries. Different effort sharing methodologies focus on or combine elements like historical responsibility, mitigation potential, capability (e.g. expressed in GDP/cap), etc.. Given the different focus of the methodologies, the range of possible outcomes is wide. Thus, a convincing argument for the chosen effort sharing approach is necessary. Sources of effort sharing calculations data for this analysis include the data compiled for the IPCC (Figure 6) for 10 global regions or country specific tools.[9]

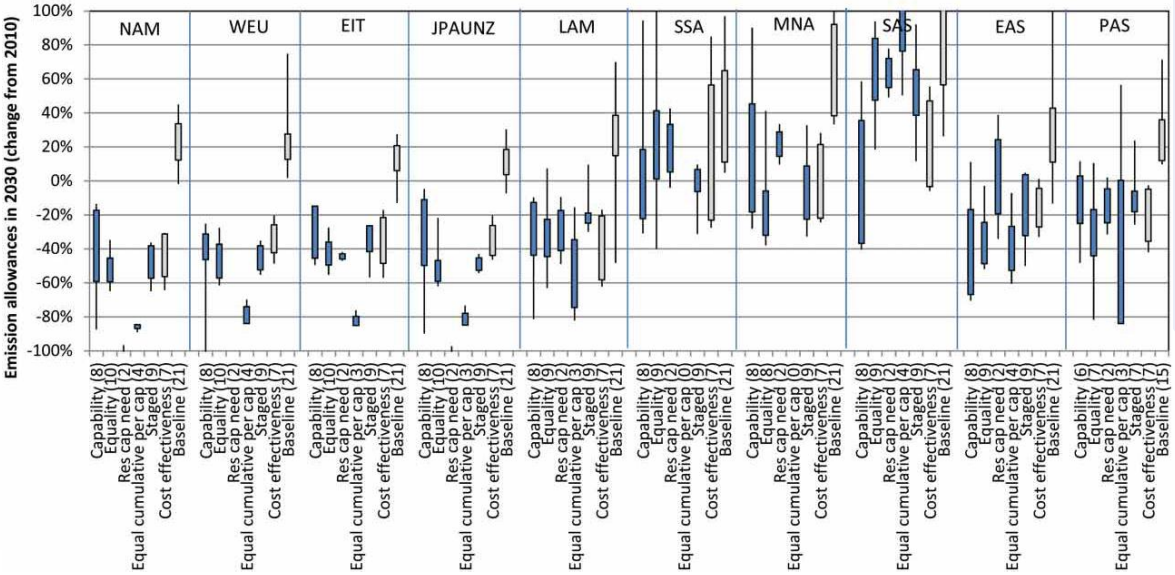

Figure 6. Overview of emission allowances by effort sharing category from 40 studies in 2030 compatible with 2°C, relative to 2010 emissions (minimum, 20th percentile, 80th percentile, maximum)[10]

[9] www.climateactiontracker.org, http://www.gdrights.org/calculator/, http://www.climatefairshares.org/

[10] Source: Niklas Höhne, Michel Den Elzen & Donovan Escalante , Climate Policy (2013): Regional GHG reduction targets based on effort sharing: a comparison of studies, Climate Policy, DOI: 10.1080/14693062.2014.849452
Regions: North America (US, Canada), Western Europe, Japan, Australia, New Zealand, Economies in transition (incl. Eastern Europe, Russian Federation), Latin America and Caribbean, Sub-Saharan Africa, Middle East and North Africa, South Asia (incl. India, Bangladesh, Pakistan), East Asia (incl. China, Korea, Mongolia), South-East Asia and Pacific

- A comparison to **mitigation potential** evaluates whether a country's contribution makes use of the mitigation opportunities that are available, and whether resources for mitigation are spent in a cost-efficient manner. For example, a contribution could be assessed as to whether it captures a) at least all mitigation options with negative costs; b) mitigation options with net-neutral or lower cost when considering co-benefits; c) mitigation options at positive costs based on country capability; d) mitigation options beyond domestic country capacity conditional to receiving international support. Mitigation potential and costs rely on a comparison to a counterfactual business as usual scenario.
  Shorter term mitigation targets can be developed based on mitigation potentials, and therefore this kind of approach can be a good way to evaluate contributions formulated in this way, provided the necessary information exists.

- A comparison to **decarbonisation indicators or benchmarks**, for example CO_2 per kilometre travelled, CO_2 per Megawatt hour electricity production or GHG per ton of cement or steel produced can be made. These indicators are forward looking and do not rely on business as usual or other counterfactuals and their underlying assumptions. These indicators could be included directly as domestic targets or can be derived from the INDC. They could be used to compare starting points and contributions among countries. Using the indicators, one can show the ambition of a contribution if they increase in stringency beyond a business as usual projection, the national historical trend or compared to other countries. Decarbonisation indicators are often formulated in sectoral or technological terms, which renders them particularly useful for evaluating contributions in terms of energy targets and other sectoral mitigation actions.

- A comparison to a **good practice policy package** or a **policy menu** is possible. Contributions would be seen as ambitious if they include concrete and comprehensive plans for the implementation of nationally appropriate variants of good practice policies for certain sectors or go beyond these. As a type of white list, policy packages or menus do not rely on BAU scenarios, but rather on the public acceptance of the policies that are included in the packages/menus. In the future, such lists could be developed within the UNFCCC or by specialised agencies. A start of a policy menu has been made with technical papers of the UNFCCC secretariat.[11]

There is no right or wrong in choosing one or several of these approaches to endorse the level of ambition of an INDC. However individual approaches lend themselves better to assess and show the level of ambition of certain elements of a contribution. Table provides an overview of suitable matches for each possible INDC element.

[11] See for example UNFCCC document FCCC/TP/2014/3 or Niklas Höhne, Nadine Braun, Christian Ellermann, Kornelis Blok, 2014, Towards a policy menu to strengthen the ambition to mitigate greenhouse gases, Ecofys, http://www.ecofys.com/files/files/ecofys-2014-towards-a-policy-menu-to-mitigate-ghg.pdf

It is imperative that each element of an INDC contains a transparent reasoning for why this part of the contribution is considered ambitious. This is to be included in the "upfront information" that is provided on the INDC.

At the same time, the individual elements should constitute a proper "fit" in the complete INDC. For example, if the cumulative GHG mitigation effect of planned energy targets goes beyond what is proposed as a national short-term emissions target, the latter could not be considered ambitious. Conversely, an ambitious national short-term emissions target could be considered not sufficiently transparent if it is not "backed up" by energy targets, policies and projects.

Key steps

- Identify which approach is suitable for assessing the ambition of the INDC
- Gather the required data and undertake the analysis
- Report the results as explanation of the INDC, taking into account any requirements on upfront information that may be decided by then

Examples for ambition

In determining a possible level of ambition, inspiration can be drawn from other countries, keeping in mind their respective capabilities. The following tables show illustrative examples of ambitious proposals.

Table 11. Examples of countries' inspirational national long-term emissions goals.

Country	Goal
Costa Rica	Carbon neutral by 2021
USA	83% below 2005 GHG emissions by 2050
South Africa	Peak, plateau and decline (40% below BAU GHG emissions in 2025, stabilization at that level, decrease after 2035)
Mexico	Halving GHG emissions by 2050

The national short term emission target should be consistent with the sum of individual actions that are described in the next two sections. If this is not the case or if it is not possible to quantify the impact of the individual actions, proposing both elements with the INDC is useful because one of them will define the floor of ambition, while the other could define more ambition.

Table 12. Examples of countries' short-term emissions targets.

Country	Goal
China	Emission intensity reduction by 40-45% by 2020 compared to 2005
Indonesia	Emission reductions of 26% to 41% below reference in 2020
Various countries	Commitments under the Kyoto Protocol

Table 13. Examples of countries' energy and other sectoral targets.

Country	Goal
St. Lucia	30% of electricity generation through renewable energy resources in 2020
Morocco	14% targeted share of solar power in electricity generation capacity in 2020
Germany	40 – 45% electricity generation through renewable energy resources in 2025
China	Energy intensity improvements in 12th FYP
EU	20% renewables, 20% energy efficiency and 20% emission reductions by 2020

The level of ambition be demonstrated well, by showcasing a few but unambiguously ambitious policies and projects. The overall national ambition was shown in the national targets and long-term goals. In the section on policies and projects a country could show which individual policies initiate the transition to a low carbon economy that can lead to massive reductions in the future. Examples are support for electro mobility (which is necessary for a 2°C world, but would today not yet lead to significant reductions because of scale) or initiating projects on distributed electrification with renewables (which start a general transition but would today only reduce the growth of emissions). It could in addition show the policies that reduce the most emissions in the short term. A few country examples are provided below.

Table 14. Examples of a countries' highlighted policies and projects.

Country	Policy instrument
Uganda	Feed-in tariff for renewable energy
India	Perform, Achieve, Trade scheme (White Certificate Scheme for energy efficiency in industrial sector)
China	National emission trading scheme (planned)
Mexico	NAMA in the building sector
USA	New Source Performance Standard (CO_2 emission limit for new power plants)
Norway	Support for electro mobility

Evaluation of costs and support needs

Mitigation actions will include public and private, as well as domestic and international sources of finance. Countries may be technically able to reduce emissions further but do not have the financial or technological capacities to do so. Often countries can engage in ambitious mitigation actions but do not have the capacities or the needed resources upfront. Under these circumstances countries may submit components of their INDC, which are conditional upon the provision of international support or comparable efforts by other countries.

If a country requests support for the implementation of the INDC, it would be beneficial that the country provides information on the nature and level of, as well as a justification for, this support.

The need and level of requested support for **mitigation actions of the whole country** could be determined by comparing the national contribution with results from effort sharing approaches and mitigation potential. Several cases could occur

- If a country's mitigation potential is sufficient to reach the emission level required under effort sharing approaches based on equity (e.g. responsibility and capability), then an INDC could be in that range and no financial transfers would need to occur: the country could reach its "fair" share with domestic mitigation potential. This could be the level of an unconditional INDC (top right in
- **Figure 7**).
- If a country's mitigation potential is larger than what would be required to reach the level required under effort sharing approaches based on equity, the country would be a potential net receiver of climate finance for mitigation. It could set a second INDC conditional to financial support that lifts all the mitigation potential, but is more ambitious than the "fair" share (bottom right in
- **Figure 7**).

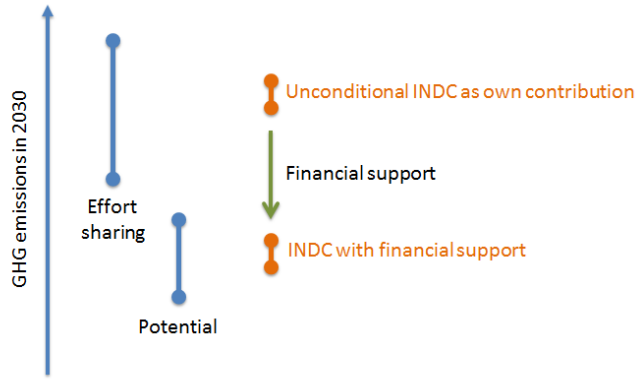

Figure 7. Possible cases for financial support

Alternatively (or in addition), one can evaluate the **support needs for individual actions** within the country. These could be grouped in the following way:

- **Negative and zero cost options for GHG mitigation.** These could be undertaken by the country, possibly with capacity building support to overcome the barriers.
- **Zero cost or lower cost options when taking into account co-benefits.** These are also in the interest of the country and could be implemented unilaterally, possibly with capacity building support to overcome the barriers.
- **Positive cost options.** For such options the costs would have to be specified together with a proposal how they could be overcome with financial and technological support.

Key steps

- Undertake ambition analysis and compare on a national level results from effort sharing approaches with mitigation potential
- For individual actions, sort information on support needs and costs based on the template in Table 2 by
    - Negative and zero cost options for GHG mitigation
    - Zero cost or lower cost options when taking into account co-benefits
    - Positive cost options
- Determine the support needs

Package and present intended contributions

The following five components could be elaborated concisely and transparently when packaging and presenting the intended contributions:

1. Inspirational national long term emissions goal;
2. National short term emissions target;
3. Energy targets;
4. Highlight policies and projects;
5. Explanations and international support needs for mitigation;

As such, the framework as presented in Table 1 (or a similar structure) could be used as a guiding structure.

Although the information that is to be reported is yet to be decided at the COP in Lima in December 2014, some considerations on the upfront information are already available. A draft

decision of the ADP[12] and several papers provide more insights, including those from the Öko Institut e.V.[13] and the WRI[14].

The country's contribution could be described transparently to convince others and to build trust. Information can be listed according to a country's preference.

Formulating an inspirational national long-term emissions goal should be based on the upfront information as presented in Table. This table and the following tables on upfront information have been inspired by the draft decision and the research papers.

Table 15. Upfront information for inspirational national long term emissions goal.

Higher ← Level of country capability → *Lower*		
Type of target and quantified target value (e.g. *x*% below base year or reference) Scope (gases and sectors included) Target year or period		
Targeted absolute emission level	Reference year and level if applicable	
Percentage of total emissions covered		
Interim targets		

[12] DRAFT TEXT on ADP 2-6 agenda item 3, Implementation of all the elements of decision 1/CP.17, Version of 24 October @ 15.30, Information on intended nationally determined contributions in the context of the 2015 agreement, Draft by the Co-Chairs, available online.

[13] Oeko Institute e.V. Up-Front Information for emission reduction contributions in the 2015 Agreement under the UNFCCC. BACKGROUND PAPER. Berlin, 30 April 2014. Available online.

[14] World Resources Institute. Ex-ante clarification, transparency, and understanding of intended nationally determined mitigation contributions. WORKING PAPER. March 2014. Available online.

ANNEX: Detailed process

In addition to the simplified processes described in the main text, we here provide a more detailed process that could be performed in three cycles (Figure 8).

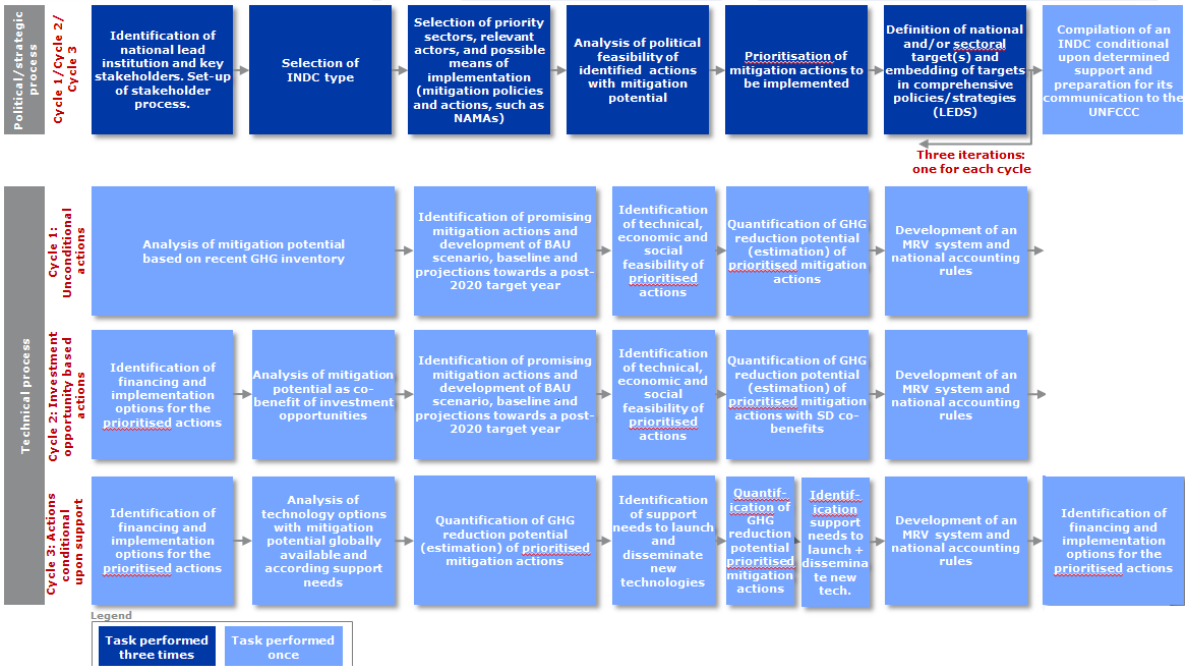

Figure 8. Detailed political / strategic and technical process in three cycles