

# CGE SUPPLEMENTARY TRAINING MATERIAL FOR THE TEAM OF TECHNICAL EXPERTS

## Module 2.1

Technical analysis of biennial  
update reports: thematic elements

*Mitigation actions and their effects*

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<b>Version</b>	<b>Date</b>	<b>Changes</b>
Version 1.0	April 2015	
Version 1.1	June 2015	Correction in chapter 4.2
Version 1.2	November 2015	Table 1: update based on revised summary report template

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## ABBREVIATIONS

<b>BURs</b>	biennial update reports
<b>CGE</b>	Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention
<b>COP</b>	Conference of the Parties
<b>GHG</b>	greenhouse gas
<b>ICA</b>	international consultation and analysis
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>MRV</b>	measurement, reporting and verification
<b>NAMAs</b>	nationally appropriate mitigation actions
<b>Non-Annex I Parties</b>	Parties not included in Annex I to the Convention
<b>SBI</b>	Subsidiary Body for Implementation
<b>TTE</b>	team of technical experts
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change

## 1. BACKGROUND AND INTRODUCTION

The process of international consultation and analysis (ICA) of the biennial update reports (BURs) of Parties not included in Annex I to the Convention (non-Annex I Parties) forms part of the wider reporting framework under the UNFCCC. The following sections provide context within the UNFCCC, as well as a general overview of different forms of mitigation actions that are expected to be reported within the BURs.

### 1.1. THE UNFCCC CONTEXT

**The ICA process is embedded within the context of mitigation actions for developing countries and the measurement, reporting and verification (MRV) framework established to support such actions. This section provides some background on relevant decisions and developments.**

Mitigation actions for developing countries are already part of the Convention (Article 4), which calls on all Parties to implement measures to mitigate climate change “taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances”.

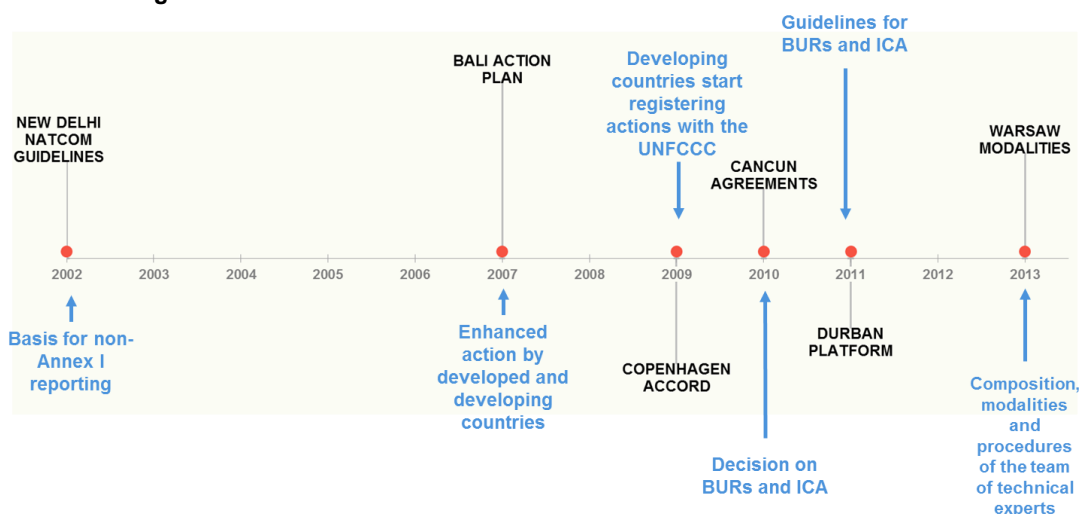
Taking this a step further, the concept of nationally appropriate mitigation actions (NAMAs) goes back to the Bali Action Plan in 2007.<sup>1</sup> After the Conference of the Parties (COP) in Copenhagen, many developing country Parties communicated their mitigation actions, which were compiled in a document by the UNFCCC secretariat.<sup>2</sup> Since then different decisions have provided more detail on the process for MRV of such mitigation actions as illustrated in figure 1.

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<sup>1</sup> Decision 1/CP.13

<sup>2</sup> FCCC/SBI/2013/INF.12/Rev.2

Figure 1  
**UNFCCC decisions related to the measurement, reporting and verification of developing countries' mitigation actions**



Abbreviations: BURs = biennial update reports, ICA = international consultation and analysis

The relevant decisions include:

- **New Delhi:** Decision 17/CP.8: In New Delhi, the “Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention” (hereinafter referred to as the NC guidelines) were adopted. These form the basis for the “UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention” (hereinafter referred to as the BUR guidelines);
- **Bali:** Decision 1/CP.13 (Bali Action Plan): The Bali Action Plan introduced the concept of NAMAs and MRV;
- **Cancun:** Decision 1/CP.16 (Cancun Agreements): Decisions in Cancun enhanced the reporting framework of the UNFCCC and introduced BURs and the ICA process. Additionally the decision encourages non-Annex I Parties to submit their national communications every four years, where before it was left up to Parties to submit at their discretion. The Cancun Agreements also define the setting up of the NAMA registry;
- **Durban:** Decision 2/CP.17 (Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention): In Durban the BUR guidelines were adopted. They include the information requirements for mitigation actions. The modalities and guidelines for the ICA were also adopted;
- **Warsaw:** Decision 20/CP.19: The composition, modalities and procedures of the team of technical experts (TTE) under international consultation and analysis were adopted.

The NC guidelines were originally adopted at COP 2 in Geneva in 1996. The current version of these NC guidelines was adopted by the Parties at COP 8 in 2002. These provide the basis for current reporting for non-Annex I Parties and form the foundation for the BUR guidelines. National communications require a greater variety of information than the BURs, particularly around the impacts of climate change and adaptation measures.

## 1.2. UNDERSTANDING THE NATURE OF MITIGATION ACTIONS

**Mitigation actions by non-Annex I Parties may take different forms. Understanding these differences is paramount to comprehending information provided in the context of the mitigation action. This section introduces some distinctions that are important to providing the context for the subsequent chapters.**

Mitigation actions are not limited to those communicated officially to the UNFCCC and compiled in document FCCC/SBI/2013/INF.12/Rev.2. However, the NAMAs that were originally communicated under the Copenhagen Accord already cover a large range of different approaches and types of actions that can be envisioned.

Depending on the focus of the analysis, mitigation actions can be grouped in different ways. The most common classifications are by:

- **Type of action:** Here the main question is what type of action is the focus of the mitigation action, i.e. which instruments are used as mitigation actions;
- **Scope:** Another dimension is the coverage of the mitigation action by sector, geography or technology;
- **Source of funding:** If the source for funding is the dominant question, a different classification will result.

Depending on which of these categories or combinations of categories are explored, different classifications of mitigation actions will be suitable. The subsequent section provides some further detail of the various approaches to differentiate the mitigation actions mentioned above.

### 1.2.1. TYPE OF ACTION

In principle there are three types of mitigation actions emerging:

- **Goals:** Actions that are framed as commitments. They are formulated as national, economy-wide or sectoral targets. These can be reductions below business-as-usual (BAU) emissions scenarios, or absolute reductions. They can also be formulated as reductions in carbon intensity or as technology related goals, for example renewable energy targets. In this sense, mitigation goals are not necessarily framed in terms of greenhouse gas (GHG) reductions. The achievement of goals is in many cases subject to adequate support;
- **Policies:** Actions that aim to impact emissions through relevant national policies. This includes broad strategies as well as the full range of policy instruments, such as regulations, taxes and incentive schemes;
- **Projects:** Activities that are targeted at a specific investment or that are limited in scope, scale and duration. This includes the installation of renewable power capacity, infrastructure investments as well as pilot projects and capacity building initiatives.



Box 1

**Examples of mitigation actions committed to the UNFCCC by developing country Parties**

**Goals:**

**Reductions below business-as-usual:** Mexico “aims to reduce its GHG emissions by up to 30 per cent compared with the ‘business as usual’ scenario by 2020”.

**Absolute reductions:** Indonesia communicated that its voluntary nationally appropriate mitigation actions (NAMAs) will reduce its greenhouse gas (GHG) emissions by 26 per cent by 2020.

**Reduction in emission intensity:** India aims to “reduce the emissions intensity of its GDP by 20–25 per cent by 2020 compared with the 2005 level”.

**Technology related goals:** Peru expressed the goal to modify “the current energy grid, so that renewable energy (nonconventional energy, hydropower and biofuels) represent at least 33 per cent of the total energy use by 2020”.

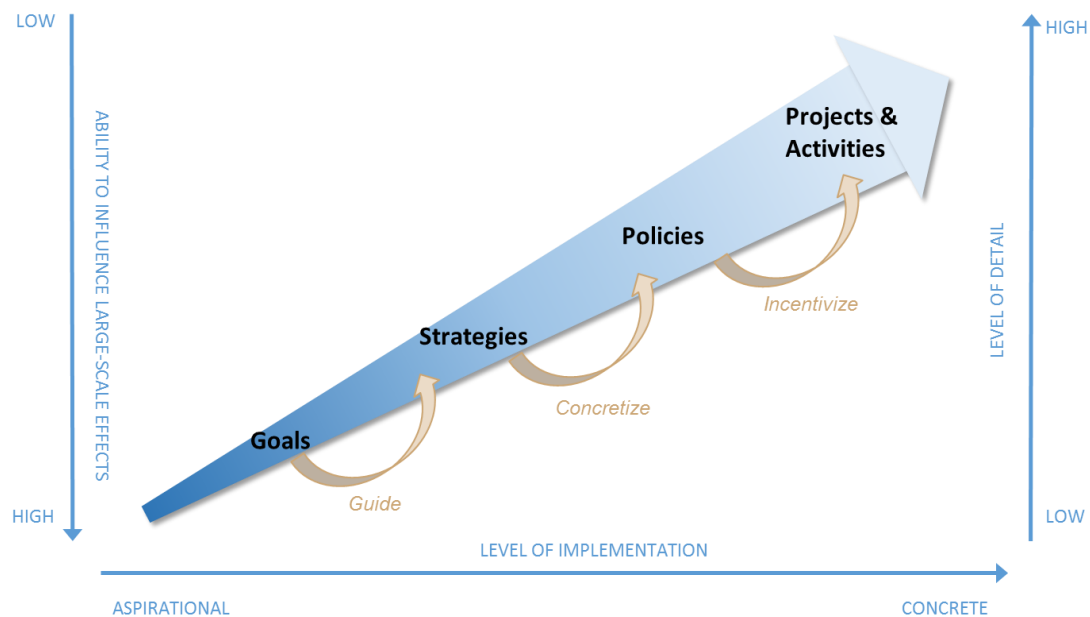
**Policies:** Chad, amongst others, communicated the “strengthening of reforestation policy” as one of their NAMAs.

**Projects:** Jordan communicated a range of NAMAs to implement, for example the “Amman–Zarqa Light Rail Project to improve urban transport standards in the greater Amman–Zarqa metropolitan area and to reduce pollution and vehicle emissions by introducing an environmentally friendly transport system”.

*Source:* FCCC/SBI/2013/INF.12/Rev.2

The relationship between these mitigation actions are captured in figure 2.

Figure 2  
 Relationship between different types of mitigation actions



Ultimately all goals need to be translated into policies and/or projects if they are to be achieved. Strategies and plans are often used as intermediate steps to provide more concrete guidance for the formulation of policies and/or projects. Policy-based actions involve the selection of specific instruments to be implemented, which are at least roughly defined.

Goals, either as GHG reduction goals or related to other indicators, such as energy use or energy mix, serve as guidance for subsequent activities and can be used to track and evaluate progress. Strategies, as part of the available portfolio of policy instruments, translate such goals into more concrete steps that are finally implemented through policies that incentivize concrete action on the ground.

This represents an idealized process of translating higher-level aspirations to actions that allow the achievement of goals. However, not all countries may choose to follow this process along all steps. Policies, as well as projects and activities, can be implemented without overarching goals. In such cases individual goals and objectives for the activities can be defined, against which progress can be monitored.

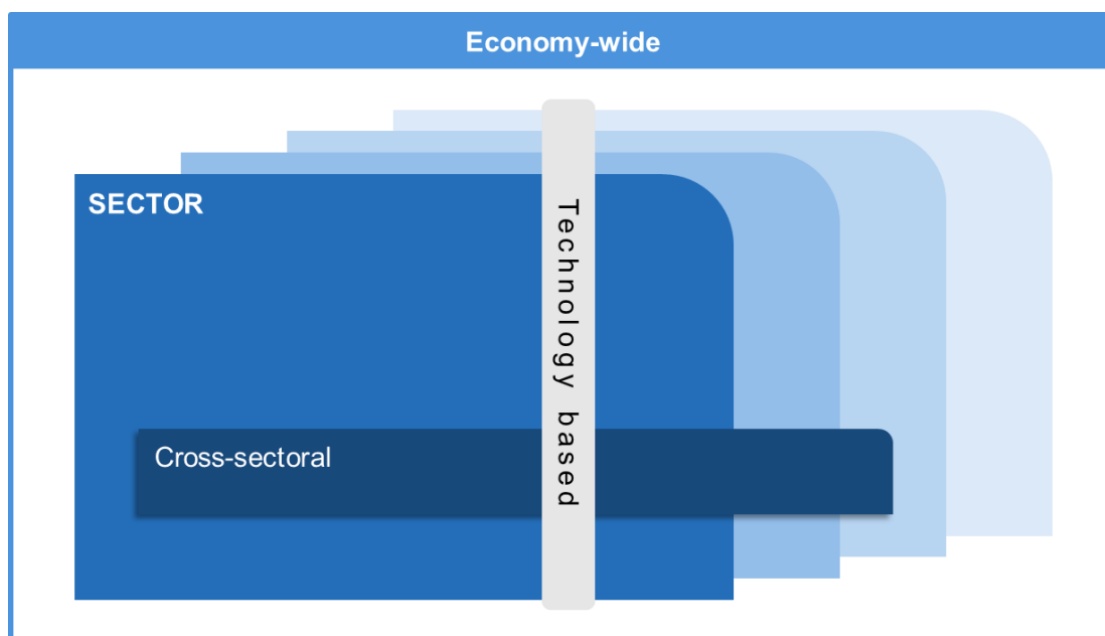
### 1.2.2. SCOPE

Scope refers to the sectoral and geographical coverage of the mitigation action. As illustrated in Figure 3, sectoral coverage may include:

- **Economy-wide:** Mitigation actions that cover the entire economy of a country, for example economy-wide GHG reduction goals;
- **Cross-sectoral:** Actions that span a number of sectors, but not all, which could be the case for actions that target all energy demand sectors;
- **Sector-specific:** Activities that target one specific sector, for example agriculture;

- **Technology-based:** Actions that target specific technologies, for example certain renewable energy technologies, or packages of technologies. Technology-based actions are often sector specific, but could also be cross-sectoral or economy-wide.

Figure 3  
Differentiating mitigation actions by scope



Source: Marion Vieweg based on Jung M, Vieweg M, Eisbrenner K, Höhne N, Ellermann C, Schimschar S and Beyer C. 2010. Nationally Appropriate Mitigation Actions. Insights from Example Development. Cologne, Germany: Ecofys.

### 1.2.3. SOURCE OF FUNDING

Depending on the source of funding, mitigation actions can be further categorized as follows:

- **Domestically supported actions** are implemented unilaterally by the country itself without specific international support (e.g. Israel's target to achieve a 20 per cent reduction in GHG emissions by 2020 below BAU levels, which would be achieved primarily through the implementation of two government decisions by 2020. Further information was communicated, outlining national actions as well as a government sponsored programme of subsidies, up to USD 2.5 million);
- **Internationally supported actions** involve international funding through direct finance (e.g. Indonesia's goal to reduce emissions to 41 per cent below BAU with sufficient international support);
- **Credited activities** would be funded through the international carbon market (no operational examples currently exist outside the Clean Development Mechanism and voluntary crediting initiatives).

Individual activities can also be funded with a combination of sources. In such cases this type of classification would consider the main source of funding.

As part of the BUR, countries do not need to report on each and every mitigation action or project they may be implementing. BURs should paint a broad picture of a country's mitigation actions.

For example, some non-Annex I Parties have made pledges to UNFCCC on NAMAs that they will undertake<sup>3</sup> or have submitted their NAMAs to the registry. Information on such NAMAs could be included as part of the BURs. In these cases, it may be sufficient to present information that relates to the overall mitigation goals and also to specific NAMAs at the level of policies and programmes. It is not necessary to provide information on each individual mitigation project that underpins NAMAs and/or mitigation policies and programmes. However, not all non-Annex I Parties have established national or sectoral policies or NAMAs. Countries without broad mitigation goals in place may report on the packages of projects.

The classification of mitigation actions in the categories outlined, is not a requirement under the BUR guidelines, however, they can provide experts with a better understanding of the nature of actions and the potential order of magnitude of the effects.

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<sup>3</sup> FCCC/SBI/2013/INF.12/Rev.2

## 2. BASIS FOR PREPARING AND REPORTING MITIGATION ACTIONS

**This chapter highlights the relevant paragraphs of decision 2/CP.17, that form the basis for the analysis of mitigation actions.**

The decisions in Durban provide the basis for the reporting of mitigation actions in BURs:

*[Decision 2/CP.17, paragraph 41]*

.....

41. *Decides:*

*(a) That non-Annex I Parties, consistent with their capabilities and the level of support provided for reporting, should submit their first biennial update report by December 2014; the least developed country Parties and small island developing States may submit biennial update reports at their discretion;*

*(b) That in using the Guidelines, non-Annex I Parties should take into account their development priorities, objectives, capacities and national circumstances;*

.....

Additionally, the decision included the consideration of BURs, which upon submission are subjected to, within six months, the international consulting and analysis (ICA) process.<sup>4</sup> The BUR guidelines are divided into sections, pertaining to the different types of information expected within the reporting:

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<sup>4</sup> Decision 2/CP.17, paragraph 58.

*[Decision 2/CP.17, Annex III, paragraphs 11–13]*

.....

*11. Non-Annex I Parties should provide information, in a tabular format, on actions to mitigate climate change, by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol.*

*12. For each mitigation action or groups of mitigation actions including, as appropriate, those listed in document FCCC/AWGLCA/2011/INF.1, developing country Parties shall provide the following information to the extent possible:*

*(a) Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases), quantitative goals and progress indicators;*

*(b) Information on methodologies and assumptions;*

*(c) Objectives of the action and steps taken or envisaged to achieve that action;*

*(d) Information on the progress of implementation of the mitigation actions and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;*

*(e) Information on international market mechanisms.*

*13. Parties should provide information on the description of domestic measurement, reporting and verification arrangements.*

.....

These guidelines form the basis for the subsequent sections. The background materials for this set of training materials, provide definitions and guidance on available methodologies related to the different areas of information required by the guidelines.

### 3. THE TECHNICAL ANALYSIS OF MITIGATION ACTIONS

**The technical analysis under ICA will aim to increase transparency of mitigation actions and their effects, in a manner that is non-intrusive, non-punitive, and respectful of national sovereignty; discussion on the appropriateness of such domestic policies and measures is not part of the process. Additional to the key principles for the ICA, there is also guidance on the modalities and procedures for conducting the technical analysis of BURs, including the role of the TTE.**

The technical analysis of information reported on mitigation actions and their effects in BURs will be undertaken in accordance with the modalities, guidelines and procedures contained in decision 2/CP.17, annex IV, paragraph 58 and the annex to decision 20/CP.19.

Box 2

**Guidelines for the team of technical experts**

The team of technical experts (TTE) shall:

- (a) Identify the extent to which the elements of **information** listed in decision 2/CP.17, annex IV, paragraph 3(a) are included in the BUR of the Party concerned;
- (b) Undertake a **technical analysis** of information contained in the BUR as outlined in the “UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention” contained in annex III to decision 2/CP.17, and any additional technical information that may be provided by the Party concerned;
- (c) In consultation with the Party concerned, identify **capacity-building needs** in order to facilitate reporting in accordance with annex III to decision 2/CP.17, and participating in international consultation and analysis in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention.

*Source: Decision 2/CP.17*

In undertaking the technical analysis of information reported on mitigation actions and their effects, the members of the TTE responsible for this task shall have the following documents:

- BURs submitted by Parties;

- Annex to decision 20/CP.19, composition, modalities and procedures of the TTE for undertaking the technical analysis of BURs from non-Annex I Parties;
- UNFCCC BUR guidelines;
- NC guidelines;
- An example of an outline of the summary report prepared by the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) as a part of this training material.

The analysis is guided by the overall scope of the technical analysis defined in decision 20/CP.19, annex, paragraph 15, which was further elaborated in module 1, chapter 5, and by the principles for the ICA process adopted in Durban.<sup>5</sup>

*[Decision 2/CP.17, Annex IV]*

*I. Objectives*

*1. International consultation and analysis (ICA) of biennial update reports under the Subsidiary Body for Implementation (SBI) will be conducted in a manner that is non-intrusive, non-punitive and respectful of national sovereignty; ICA will aim to increase the transparency of mitigation actions and their effects, through analysis by technical experts in consultation with the Party concerned and through a facilitative sharing of views, and will result in a summary report.*

*2. Discussion on the appropriateness of such domestic policies and measures is not part of the process.*

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<sup>5</sup> Decision 2/CP.17, Annex IV.



## 4. GUIDANCE FOR UNDERTAKING THE TECHNICAL ANALYSIS OF MITIGATION ACTIONS

**This chapter will provide guidance on each of the three elements of the technical analysis. The background material for Module 2.1, serves to provide experts with a comprehensive understanding of the mitigation analysis process to facilitate better comprehension of the information provided in the BUR being analysed.**

### 4.1. IDENTIFY INFORMATION

To facilitate transparency, the BUR guidelines request or encourage specific information on mitigation actions. Table 1 provides a high level completeness checklist based on the BUR guidelines. Given the wide range of possible mitigation actions to be reported, and the very different stages of implementation, the level of detail and completeness will vary accordingly.

Table 1  
**Identification of the extent to which the elements of information on mitigation actions are included in the [first] biennial update report**

<i>Decision</i>	<i>Reporting requirements</i>	<i>Yes/ Partly/No/NA</i>	<i>Comments on the extent of the information provided</i>
Decision 2/CP.17, annex III, paragraph 12	<p>For each mitigation action or groups of mitigation actions including, as appropriate, those listed in document FCCC/AWGLCA/2011/INF.1, developing country Parties shall provide the following information to the extent possible:</p> <ul style="list-style-type: none"> <li>• Name and description of the mitigation action:                             <ul style="list-style-type: none"> <li>○ Information on the nature of the action and coverage (i.e. sectors and gases)</li> <li>○ Quantitative goals</li> <li>○ Progress indicators</li> </ul> </li> <li>• Information on methodologies and assumptions:                             <ul style="list-style-type: none"> <li>○ Methodologies</li> <li>○ Assumptions</li> </ul> </li> <li>• Objectives of the action and steps taken or envisaged to achieve that action:                             <ul style="list-style-type: none"> <li>○ Objectives of the action</li> <li>○ Steps taken or envisaged to achieve that action</li> </ul> </li> <li>• Information on the progress of implementation of the mitigation actions and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible:</li> </ul>		

Decision	Reporting requirements	Yes/ Partly/No/NA	Comments on the extent of the information provided
	<ul style="list-style-type: none"> <li>○ Progress of implementation of the mitigation actions</li> <li>○ Underlying steps taken or envisaged</li> <li>○ Results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible</li> <li>● Information on international market mechanisms</li> </ul>		
Decision 2/CP.17, annex III, paragraph 13	Parties should provide information on the description of domestic measurement, reporting and verification arrangements		

If all of the elements in the checklist are answered with “yes”, the information provided is complete. In the analysis of information provided, you need to consider the fact that some of the information is not a strict requirement (“should”), and that even the required information (“shall”) is to be provided “to the extent possible”.

Should you find the information is incomplete, you should engage with the Party and seek clarification on the reasons for the lack of information. This exchange should also aim to support the identification of capacity-building and support needs.

## 4.2. TECHNICAL ANALYSIS

**Section 4.1 provided guidance through the checklist in table 1, to ensure that information reported is complete as requested by the BUR guidelines. The technical analysis aims to ensure the information reported is transparent and thus meets the objective of the ICA process, which is to increase the transparency of mitigation actions and their effects. Additionally, the general reporting principle of consistency, outlined in both the NC guidelines and BURs guidelines, and the principle of accuracy as outlined in the BUR guidelines (as described in module 1) also provide guidance.**

The following sections provide guidance on how to conduct the technical analysis related to the different reporting elements. The content aims to guide an objective technical analysis of the information reported in the BUR, without making any value judgement. For each reporting element the content reiterates the basis for reporting and then proposes some useful questions to analyse the transparency of the provided information.

#### 4.2.1. DESCRIPTION OF THE MITIGATION ACTIONS

*[Decision 2/CP.17, Annex III, paragraph 12 (a)]*

*For each mitigation action or groups of mitigation actions including, as appropriate, those listed in document FCCC/AWGLCA/2011/INF.1, developing country Parties shall provide the following information to the extent possible:*

*(a) Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases), quantitative goals and progress indicators;*

The reporting requirements related to the description of the mitigation actions are relatively straightforward and the analysis will focus on the completeness of the information provided. There are, however, a few useful questions that can help to ensure full transparency, as illustrated in table 2.

Table 2  
Useful questions for the technical analysis of the description of mitigation actions

Title	<ul style="list-style-type: none"> <li>Is the title clearly stated, description of mitigation actions consistent and clearly communicated?</li> </ul>
Description	<ul style="list-style-type: none"> <li>Is the description and nature of the mitigation action consistent and clearly communicated from the information provided?</li> </ul>
Coverage	<ul style="list-style-type: none"> <li>Is the scope related to sectors and gases defined and consistent with the BUR guidelines and the Revised 1996 IPCC Guidelines (or 2006 IPCC Guidelines)?</li> </ul>
Quantitative goals	<ul style="list-style-type: none"> <li>Is the reference for the goal provided, i.e. base year data, reference intensity levels or baseline values?</li> <li>Is the scope of the goal clear and does it correspond to the coverage of the mitigation action?</li> <li>Is the time frame for the goal (year or period) clearly defined?</li> <li>Is information provided how the goal relates to sectoral or national total emissions?</li> </ul>
Progress indicators	<ul style="list-style-type: none"> <li>Are progress indicators qualitative or quantitative in nature?</li> <li>Are data sources for monitoring progress indicators, or procedures to enable the future collection of these indicators, clearly defined?</li> </ul>

#### 4.2.2. METHODOLOGIES AND ASSUMPTIONS

*[Decision 2/CP.17, Annex III, paragraph 12 (b)]*

*Information on methodologies and assumptions;*

Reporting on methodologies and assumptions is the most challenging task within the BUR reporting on mitigation actions. A wide variety of different methods and tools are available and the type of information reported will strongly depend on the nature of the mitigation action, the sector, methods and tools used and national circumstances. The aim of the analysis is to understand which methods were used and which assumptions were made in calculations. It is not part of the analysis to assess the appropriateness of the choices made. The analysis should therefore concentrate on identifying if sufficient information is provided to understand the results reported, based on the calculations and highlighting where additional information would enhance transparency. Table 3 provides some guiding questions for this analysis. The background material for Module 2.1, provides additional guidance.

Table 3  
Useful questions for the technical analysis of methodologies and assumptions

Methodologies	<ul style="list-style-type: none"> <li>• Are the methods chosen for calculation transparently documented?</li> <li>• Is the assessment period clear, i.e. start and end year of the assessment?</li> <li>• Is the assessment boundary clear, including the sectors, gases and geographic coverage?</li> <li>• Is it clear how land use, land-use change and forestry (LULUCF) is treated, i.e. included or excluded (where applicable)?</li> <li>• Is it clear which policies are included in the baseline or what the cut-off date for the inclusion of policies is?</li> <li>• Does the methodology include an uncertainty and sensitivity analysis?</li> </ul>
Assumptions	<ul style="list-style-type: none"> <li>• Are all relevant assumptions for the calculations reported in a transparent way?</li> <li>• Are key parameters and/or drivers in the calculations identified and historic and projected data for the identified parameters provided?</li> <li>• Are all sources for historic data and for assumptions on future developments provided?</li> <li>• Is it clear which sources and values for global warming potential (GWP) were used?</li> <li>• Are activities to ensure data quality reported?</li> </ul>

### 4.2.3. IDENTIFICATION OF STEPS TAKEN OR ENVISAGED

*[Decision 2/CP.17, Annex III, paragraph 12 (c)]*

*Objectives of the action and steps taken or envisaged to achieve that action;*

Steps to achieve the mitigation action depend on the type of mitigation action. Countries may require:

- **Steps to select the policy or instrument of choice to achieve objectives:** If the mitigation action is framed as a goal and the process of determining the measures to support the goal is not yet completed, steps include the analysis and selection of mitigation options to be implemented;
- **Steps to implement the chosen policy or instrument:** If the mitigation action is framed as a concrete measure or the policy or instrument for implementation are already selected, the individual steps for implementation need to be outlined.

For concrete mitigation actions in the form of policies, measures or projects, it is important to clearly outline the status of the measure, i.e. if it is already implemented, was adopted for implementation or is currently in the planning phase. This information will enhance the understanding of results reported in their context. Table 4 provides some guidance questions on the identification of steps.

Table 4  
Useful questions for the technical analysis of steps taken or envisaged

Objectives	<ul style="list-style-type: none"> <li>• Are the stated objectives consistent with the description and the scope of the mitigation actions?</li> </ul>
Steps taken and envisaged	<ul style="list-style-type: none"> <li>• Are mitigation actions clearly distinguished according to their status of implementation (implemented, adopted or planned)?</li> <li>• Are steps clearly distinguished into steps taken (i.e. already implemented) and steps envisaged (i.e. planned for the future)?</li> <li>• Are responsibilities for the mitigation actions, including communication and reporting processes clearly defined?</li> <li>• Is information on the availability of funding provided?</li> </ul>

#### 4.2.4. ANALYSING THE PROGRESS OF IMPLEMENTATION OF MITIGATION ACTIONS

*[Decision 2/CP.17, Annex III, paragraph 12 (d)]*

*Information on the progress of implementation of the mitigation actions and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;*

Progress of implementation and the steps taken or envisaged are closely linked. Knowing which steps were already undertaken and which are planned to be implemented are the first prerequisites to understanding progress. The steps alone, however, are not sufficient to analyse progress. This requires an understanding of these steps on the timeline, i.e. asking not only WHAT has been or will be done, but WHEN it was done or is it planned and for HOW LONG. An additional element in understanding progress is the question BY WHEN did effects of an action come into effect or are planned to start? Table 5 provides some guidance questions on analysing the progress of implementation of mitigation actions.

Table 5  
Useful questions for the technical analysis of progress of implementation

Progress of implementation	<ul style="list-style-type: none"> <li>• Is the timeline for planning, implementation and expected effects of reported mitigation actions clear, i.e. steps taken and envisaged?</li> </ul>
Results achieved	<ul style="list-style-type: none"> <li>• Are results achieved and estimates of expected future results for mitigation actions (intermediate outcomes, greenhouse gas effects, sustainable development effects, economic and social consequences of the implementation of response measures) provided separately and in a transparent way?</li> <li>• Is potential interaction between mitigation actions and other policies, and potential interaction between different mitigation actions, included in the analysis?</li> <li>• Are the findings reported and sources used specific to the national context?</li> </ul>

#### 4.2.5. INTERNATIONAL MARKET MECHANISMS

*[Decision 2/CP.17, Annex III, paragraph 12 (e)]*

*Information on international market mechanisms.*

Many non-Annex I countries are already participating in international market mechanisms and will potentially do so in the future. Apart from the existing Clean Development Mechanism (CDM) under the UNFCCC there are a wide range of potential international market mechanisms a Party could engage in. To enhance transparency it is important to understand in which mechanisms a Party already engages or plans to engage. It is also useful to understand the order of magnitude of units generated or expected to be generated and their potential interaction with reductions achieved by the reported mitigation actions.

Table 6

**Useful questions for the technical review of information on international market mechanisms**

Nature of international market mechanisms	<ul style="list-style-type: none"> <li>• Is information on the type(s) of market mechanisms in which the reporting country already engaged provided?</li> <li>• Is information on the type(s) of market mechanisms in which the reporting country plans to engage provided?</li> <li>• Is the coverage of such mechanisms clearly described, i.e. project-based, sectoral or other?</li> </ul>
Use of units	<ul style="list-style-type: none"> <li>• Is there a quantification of issued and/or expected credits from these mechanisms included?</li> <li>• Is the expected and/or realized use of generated units from these mechanisms transparently documented?</li> </ul>

#### 4.2.6. DOMESTIC MEASUREMENT, REPORTING AND VERIFICATION ARRANGEMENTS

*[Decision 2/CP.17, Annex III, paragraph 13]*

*Parties should provide information on the description of domestic measurement, reporting and verification arrangements.*

Reporting on domestic MRV arrangements is not a strict requirement of the guidelines; however, it will enhance transparency and trust in reported information. It can also facilitate support for the enhancement of such arrangements through the discussions between the TTE and the Party concerned and by highlighting financial, technology or capacity needs to enable targeted support. The analysis should therefore focus on highlighting gaps and areas for improvement in reporting that can facilitate the subsequent learning and enhancement of arrangements.

Table 7

**Useful questions for the technical review of domestic measurement, reporting and verification arrangements**

Domestic measurement, reporting and verification (MRV) arrangements	<ul style="list-style-type: none"> <li>• Does the reporting include a description of the institutional arrangements and systems, including location, coordination and engagement processes for domestic MRV?</li> <li>• Is information on the methodologies and/or approaches and tools used for data collection, processing and storage reported?</li> <li>• Are constraints and gaps, and related financial, technical and capacity needs identified?</li> </ul>
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### 4.3. IDENTIFYING CAPACITY-BUILDING NEEDS

Apart from the guidelines for BURs and ICA, capacity building needs should be identified taking into account Article 4, paragraph 3, of the Convention:

*[UNFCCC, Article 4, paragraph 3]*

*The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.*

The capacity needs will be determined in close collaboration and discussion with the Party concerned and will vary depending on national circumstances. While some countries will already have strong analytical and institutional systems for conducting the BUR reporting, others will require more in-depth support to enhance their capacity.

Capacity building needs can arise from the section of the BURs on constraints and gaps, and related finance, technological and capacity-building needs and support received, as a starting point. However, capacity building needs can also be identified from areas for improvement, if these are identified in the GHG inventory section by the Party concerned and the outcomes of the first two tasks identified in sections 4.1 and 4.2 of this chapter. The Party concerned can also provide additional needs to improve beyond what is reported in the BUR. Some of the more frequent capacity-building needs could include, but are not limited to:

- Data collection and processing;
- Methods and tools for estimating mitigation impacts (ex-ante and ex-post);
- Institutional setup, processes and tools for MRV.



## 5. REPORTING FINDINGS

Based on the analysis conducted related to the three elements outlined in chapter 4, the review team will prepare a summary report. For each of the reporting elements identified in the BUR guidelines, the team needs to assess whether there are issues related to completeness and transparency. In doing this it is important to keep in mind the voluntary nature of some of the information, as well as the capacity constraints faced by the reporting Party.

In cases where issues regarding completeness or transparency arise, it is advisable to first seek clarification with the Party concerned. This will allow a constructive exchange and provide additional insights that may alleviate the issues raised. It may also help to identify support needs to enhance reporting capacities within the country.

If requested by a Party, the information provided by the Party, can enable the TTE to provide recommendations, suggestions and improvements that aim to enhance the reporting of information in future BURs. In particular, areas where information is incomplete or lacks transparency are likely to provide an opportunity for such recommendations. Such recommendations and suggestions could be presented in various forms: as part of informal exchange between the TTE and the Party concerned or as part of the summary report.

## GLOSSARY

**Anthropogenic greenhouse emissions:** Greenhouse gas emissions resulting from human activities.

**Article 4:** An article of the Convention stipulating general commitments assumed by all Parties, both developing and developed.

**Article 12:** An article of the Convention that describes the how Parties are to communicate information related to implementation of the Convention.

**Baseline scenario:** A reference that aims to represent likely developments under a given policy framework as accurately as possible.

**Baseline value:** The value of a parameter in the baseline scenario.

**Biennial update reports (BURs):** A report submitted by Parties not included in Annex I to the Convention, which provides updates on actions undertaken by the Party to implement the Convention, including the status of its greenhouse gas emissions and removals by sinks, as well as actions to reduce emissions or enhance sinks.

**Business as usual:** Assumes that future development trends follow those of the past and no changes in policies will take place.

**Climate change:** A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

**Capacity-building:** In the context of climate change, the process of developing the technical skills and institutional capability in developing countries and economies in transition, to enable them to address and report effectively on the implementation of the Convention.

**Conference of the Parties (COP):** The supreme body of the Convention. It currently meets once a year to review the Convention's progress. The word 'conference' is not used here in the sense of 'meeting' but rather of 'association'. The 'Conference' meets in sessional periods, for example, the 'fourth session of the Conference of the Parties'.

**Consultative Group of Experts on National Communications from non-Annex I Parties (CGE):** An expert group constituted under the Convention, with representation from Annex I and non-Annex I Parties as well as relevant international organizations, to provide technical advice and support to non-Annex I Parties on the process of and preparation of national communications and biennial update reports and also build the capacity of technical experts nominated by Parties to undertake technical analysis of biennial update reports under the international consultation and analysis process.

**Effects:** Changes that result from a mitigation action. See intermediate effects, greenhouse gas effects, and non-greenhouse gas effects.

**Emissions:** The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.

**Global warming potential (GWP):** An index representing the combined effect of the differing times greenhouse gases remain in the atmosphere and their relative effectiveness in absorbing outgoing infrared radiation.

**Greenhouse gases (GHGs):** The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Less prevalent – but very powerful – GHGs are hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (SF<sub>6</sub>).

**Implementation:** Actions (legislation or regulations, judicial decrees, or other actions) that governments take to translate international accords into domestic law and policy

**International consultation and analysis (ICA):** A process under the Convention, whereby the biennial update reports from developing country Parties are considered, through a technical analysis and a facilitative sharing of views, in manner that is non-intrusive, non-punitive and respectful of national sovereignty. It aims to increase transparency of mitigation actions and their effects.

**Intergovernmental Panel on Climate Change (IPCC):** Established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC surveys worldwide scientific and technical literature and publishes assessment reports that are widely recognized as the most credible existing sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the Convention's subsidiary bodies. The IPCC is independent of the Convention.

**Kyoto Protocol:** An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of greenhouse gas emissions by industrialized countries.

**Land use, land-use change, and forestry (LULUCF):** A greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities.

**Measurement, reporting and verification (MRV):** A process/concept that entails reporting by Parties on their actions to implement the Convention, which are subjected to international verification, with a view to facilitate discussions on such implementation. The reporting and verification are undertaken on the basis of relevant guidelines adopted by the Conference of the Parties.

**Mitigation:** In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other 'sinks' to remove greater amounts of carbon dioxide from the atmosphere.

**Mitigation actions:** Activities that are expected to affect the emissions sources and sinks included in the greenhouse gas assessment boundary. These actions can be framed around economy-wide, sectoral or technology goals.

**Montreal Protocol:** The Montreal Protocol on Substances that Deplete the Ozone Layer, an international agreement adopted in Montreal in 1987.

**National communication:** A document submitted in accordance with the Convention (and the Protocol) by which a Party informs the Conference of the Parties of activities undertaken to address climate change. Most developed countries have now submitted their fifth national communications; most developing countries have completed their second national communication and are in the process of preparing their third.

**Nationally appropriate mitigation actions (NAMAs):** At COP 16 in Cancun in 2010, it was agreed that developing countries will undertake nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, aimed at achieving a deviation in greenhouse gas emissions relative to 'business as usual' emissions in 2020.

**Non-Annex I Parties:** Parties not included in Annex I to the Convention, who are mostly developing countries.

**Party:** A state (or regional economic integration organization such as the European Union) that agrees to be bound by a treaty and for which the treaty has entered into force.

**Progress indicator:** A metric that indicates the progress of a policy or action, such as tracking changes in targeted outcomes. For example, the quantity of wind power generated in a country may be used as an indicator for a production tax credit for wind power.

**Protocol:** An international agreement linked to an existing convention, but as a separate and additional agreement which must be signed and ratified by the parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.

**Recommendation:** A formal act of the Conference of the Parties or the meeting of the Parties to the Kyoto Protocol which is weaker than a decision or a resolution, and is not binding on Parties to the Convention or the Kyoto Protocol.

**Removal:** Removal of greenhouse gas emissions from the atmosphere through sequestration or absorption, such as when CO<sub>2</sub> is absorbed by biogenic materials during photosynthesis.

**Scenario:** A plausible description of how the future might develop, based on a coherent and internally consistent set of assumptions ('scenario logic') about the key relationships and driving forces (e.g. rate of technology change or prices).

**Sink:** Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere.

**Source:** Any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.

**Subsidiary body:** A committee that assists the Conference of the Parties. Two permanent subsidiary bodies are created by the Convention: the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA).

**Subsidiary Body for Implementation (SBI):** The SBI makes recommendations on policy and implementation issues to the Conference of the Parties and, if requested, to other bodies.

**Sustainable development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Team of technical experts (TTE):** A team of technical experts drawn from the UNFCCC roster of experts, responsible for conducting the technical analysis of biennial update reports from non-Annex I Parties under the international consultation and analysis process.

**Technical analysis:** The first part of the international consultation and analysis process, which aims to ensure that the information reported in a biennial update report is transparent. It is conducted by a team of technical experts, guided by the relevant provisions and principles of the Convention and modalities and guidelines contained in the decisions of the Conference of the Parties. A summary report is the outcome of this first part of the technical analysis.

**Transparency:** In the context of the technical analysis, refers to openness and clarity in the communication of information, to enable others to see, understand and replicate the information reported within the biennial update report.