ClimaSouth Policy Series
Paper N.1

# TRANSPARENCY OF CLIMATE ACTION IN THE ENPI SOUTH REGION

## An assessment of the capacity of South Mediterranean countries to undertake Measurement, Reporting and Verification (MRV) and related challenges

**Andrea Rizzo**, *ClimaSouth project*

ClimaSouth
Low carbon development
for climate resilient societies

A project funded by
the European Union

# TRANSPARENCY OF CLIMATE ACTION IN THE ENPI SOUTH REGION

## An assessment of the capacity of South Mediterranean countries to undertake Measurement, Reporting and Verification (MRV) and related challenges

**Andrea Rizzo**, *ClimaSouth project*

***Citation:*** ClimaSouth Policy Series, Paper N.1, 2016. Transparency of Climate Action in the ENPI South region. An assessment of the capacity of South Mediterranean countries to undertake Measurement, Reporting and Verification (MRV) and related challenges. Prepared by Andrea Rizzo.

Produced by the ClimaSouth project: www.climasouth.eu

***Author:*** Andrea Rizzo, ClimaSouth project:

***Graphic design & layout:*** Raffaella Gemma

***Editor:*** G.H. Mattravers Messana

***ClimaSouth Team Leader:*** Bernardo Sala

***Agriconsulting Consortium project directors:*** Ottavio Novelli / Ghizlane Lajjal

Project implemented by
AGRICONSULTING CONSORTIUM
Agriconsulting Agrer CMCC CIHEAM-IAM Bari
d'Appolonia Pescares Typsa Sviluppo Globale

# CONTENTS

# EXECUTIVE SUMMARY

The Mediterranean region has been identified as a climate change hotspot by the Intergovernmental Panel on Climate Change (IPCC). Most countries in the region are already experiencing rising temperatures, increasing water scarcity, rising frequency of droughts and forest fires, as well as growing rates of desertification. The entry into force of the Paris Agreement represents an historical step in the fight against climate change and may also open new opportunities for further economic development, particularly those associated with the transition to low-carbon options.

The EU-funded ClimaSouth project supports partner countries in the ENPI South region (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia) towards low carbon development while building climate resilience.

One of the specific purposes of ClimaSouth is to provide technical assistance to partner countries on Measurement, Reporting and Verification (MRV) and support them in delivering on their Nationally Determined Contributions (NDCs) under the Paris Agreement. MRV is the core obligation of the transparency framework of the United Nations Convention on Climate Change (UNFCCC) and an important instrument for strengthening the capacity of countries to prepare for monitoring and implementation of their NDCs. As such, MRV will play a pivotal role in building international trust and confidence that the transformative climate action towards a low-carbon future called by the Agreement is taking place.

In this context, ClimaSouth undertook a comparative analysis of the MRV policies and frameworks of ENPI South countries, using available public material and carrying out individual interviews with national MRV focal points, including through conducting specific country missions. The aim of this analysis was two-fold: on the one hand, to create a comprehensive and up-to-date overview of the progress that ENPI South countries have made in the development of MRV structures; on the other hand, to illustrate and reflect on the challenges they face with regard to the operationalization of these structures.

This policy paper presents the findings of this analysis, which can be summarized as follows:

- an **understanding of the importance of MRV exists broadly** across **all ENPI South countries** and in many sectors of government, with the Ministries of Environment being the entity on the lead with respect to mobilizing related efforts and resources;
- ENPI South countries have made **considerable efforts in complying with their UNFCCC obligations on transparency and engage in MRV**, both domestically and internationally. Their capacity to do so in the timely manner mandated by the Convention, however, is still developing;
- the **institutional and technical capacity of ENPI South countries to undertake**

**MRV has progressed through external financial and technical support**. Through this, ENPI South countries have established (or initiated to establish) domestic MRV structures to engage in international reporting, tracking of emission levels, mitigation actions and support.

- **several challenges, capacity building gaps and needs, however, undermine the establishment of robust MRV systems throughout the ENPI South Region**. These include: the **difficulty to mobilize the necessary inter-ministerial cooperation** to operationalize them and **the lack of appropriate legal and regulatory frameworks** to support them; **the loss of progress made and inability to build in-house MRV capacity; the lack of appropriate links between MRV and the NDC implementation process**.
- ENPI South countries **must continue to channel their efforts into strengthening their MRV capacity and operationalizing the MRV structures already in place**. To achieve these goals, however, international support will have to remain consistent.

The document is structured into four broad sections. Sections 1 and 2 outline the MRV obligations under the UNFCCC and Paris Agreement, with the aim of familiarising readers with the context in which the analysis took place. Sections 2 and 3 give an overview of the status of MRV in the ENPI South region and related challenges. Section 4 presents the main conclusions while Section 5 contains detailed country profiles in annex format. Each ENPI South country is profiled against their MRV obligations at the domestic and international levels, assessing the status of their MRV systems and their level of compliance with what the UNFCCC broadly mandates with regard to collection of GHG emission data, mitigation actions and support. The analysis further provides information on the international support that ENPI South countries have received to build their MRV capacity, citing specific projects, initiatives and results achieved from which target countries have benefitted.

# LIST OF SELECTED ACRONYMS

| | |
|---|---|
| **BUR** | Biennial Update Report |
| **CBIT** | Capacity Building Initiative for Transparency |
| **CGE** | Consultative Group of Experts |
| **COP** | Conference of the Parties |
| **ENPI** | European Neighbourhood Policy Instrument |
| **FSV** | Facilitative Sharing of Views |
| **GEF** | Global Environment Facility |
| **GHG** | Greenhouse Gas |
| **ICA** | International Consultation and Analysis |
| **IPCC** | Intergovernmental Panel on Climate Change |
| **INC** | Initial National Communication |
| **LDCS** | Least Developed Countries |
| **NC** | National Communication |
| **INDC** | Intended Nationally Determined Contribution |
| **MRV** | Measurement, Reporting and Verification |
| **NAMA** | Nationally Appropriate Mitigation Actions |
| **NDC** | Nationally Determined Contribution |
| **SBI** | Subsidiary Body for Implementation |
| **SIDS** | Small Island Developing States |
| **TTE** | Team of Technical Experts |
| **UNDP** | United Nations Development Programme |
| **UNEP** | United Nations Environment Programme |
| **UNFCCC** | United Nations Framework Convention on Climate Change |

# 1. INTRODUCTION TO MRV: UNFCCC OBLIGATIONS FOR DEVELOPING COUNTRIES

An effective transparency system which provides information on the level of global emissions over time and on the ambition of country efforts to combat climate change at the national and the international level is one of the building blocks of international climate action.

The United Nations Framework Convention on Climate Change (UNFCCC) and later the Kyoto Protocol laid the foundations for such a system,[1] obliging all Parties to report on greenhouse gas (GHG) emissions and removals, as well as on climate actions undertaken to mitigate and adapt to climate change and implement the Convention.[2] This system allows the Convention to gather comprehensive information on the level of emissions and track the ambition of country efforts and related progress in climate action at the national and international levels.

Measurement, Reporting and Verification (MRV) is a core element of the transparency framework under the UNFCCC and the more recent Paris Agreement.

**MRV** is **the process whereby Parties take measures to collect data on their emissions, mitigation and adaptation actions, support needed and received, compile them in inventories and reports and subject them to a form of international review or analysis**. This is key to build a transparent system and enhance confidence amongst Parties regarding the level of ambition and progress on their commitments.

**The MRV framework of the UNFCCC is characterized by a strict differentiation between developed and developing country Parties**, informed by the Annex I / non-Annex I division underpinning the Convention system. While all countries are obliged to report to the Convention on their GHG inventories and implementing actions, the content and timetable for submission of these reports varies for developed and developing country Parties in accordance with the principle of "Common but Differentiated Responsibilities" (CBDR) enshrined in the Convention.

As section 2 will explain, **this system has been profoundly changed by the Paris Agreement**, which contains enhanced provisions on transparency of climate action applying broadly to all countries. The Paris Agreement entered into force in October 2016, but it is expected to become operational in 2020, once appropriate technical rules, including on transparency, have been developed. **This means that the transparency system of the UNFCCC will remain in place until then**.

[1] Coined at COP13 in 2007 through the Bali Action Plan (Decision 1/CP.13) and operationalized through subsequent COP decisions until 2013 (Decision 1/CP.16, Decision 2/CP.17, Decision 19/CP.19, Decision 21/CP.19).

[2] UNFCCC Article 12 and in accordance with Article 4, paragraph 4.

For **developing country Parties** (non-Annex I), the existing MRV framework under the UNFCCC is composed of obligations at the international level and national levels.

At the **international level**, the MRV framework includes:

- Reporting through National Communications (NCs) and Biennial Update Reports (BURs)
- Undergoing International Consultation and Analysis (ICA)

At the **national level**, the MRV framework includes:

- Development of a domestic MRV system
- Implementation of the international MRV requirements

A third, voluntary strand exists for non-Annex I countries wishing to undertake **REDD-plus activities** to receive results-based payments. *

* See UNFCCC Handbook on Measurement, Reporting and Verification for Developing Country Parties, 2015, for a more comprehensive analysis of this framework.

## 1.1 National Communications and Biennial Update Reports

### National Communications (NCs)

Submitted periodically to the UNFCCC, they are the core element of reporting on the progress that countries make in implementing the Convention as well as their emissions by sources and removals by sinks.

Non-Annex I Parties should submit their national communications to the COP **every four years**, taking into account the support they have been provided to do so.[3]

According to the latest UNFCCC guidelines,[4] **national communications from non-Annex I Parties should contain at a minimum**:

- A **description of national circumstances and institutional arrangements**, to provide an overview of the country's vulnerability and capacity to adapt to climate change and address its GHG emissions, and information on the distribution of responsibilities within relevant government bodies
- A **national GHG inventory**, using the suggested IPCC guidelines at a minimum,* and choosing a methodology that reflects the availability of data
- A general description of the high- level steps taken or envisaged to implement the Convention, alongside information on national **programmes containing measures to facilitate adequate adaptation and mitigation** of climate change
- Any other relevant information on the achievement of the objectives of the Convention (in relation to technology transfer, research and systematic observation, education, training and public awareness, capacity-building, information and networking)
- **Constraints and gaps** and related financial, technical and capacity building needs
- An optional technical annex

* http://www.ipcc-nggip.iges.or.jp/public/index.html

[3] Decision 1/CP.16. The submission timeframe is calculated since the receipt of financial resources for the actual preparation of the national communication.

[4] Decision 17/CP. 8, Annex.

## Biennial Update Reports (BURs)

They provide an update on the information contained in the national communications (GHG inventories and steps to implement the Convention), but in addition request the measurement of the specific **mitigation actions and their effects as well as the support needed and received**.

Non-annex I Parties have to submit BURs **every two years**, **provided that they have the capacity or have received appropriate support to do so**. COP17 decided that the first round of BURs submissions was due by December 2014. Subsequent BURs should be submitted every two years either in the form of summary documents as parts of NCs, if submitted in the same year as the national communication is due, or as separate documents.

According to the latest UNFCCC guidelines,[5] **BURs should contain at a minimum**:

- A description of **national circumstances and institutional arrangements** relevant to the preparation of national communications
- A national GHG inventory **including an inventory report**, using the suggested methodologies prescribed by the latest UNFCCC guidelines
- Information on the **mitigation actions and their effects**,* providing inter alia a description of the mitigation action and its objectives, methodology used and assumptions, qualitative and quantitative progress in the implementation and estimated outcomes
- **Domestic MRV measures** for mitigation actions and their effects, particularly for domestically supported National Appropriate Mitigation Actions (NAMAs), if any (see infra section 1.3)
- Constraints and gaps, and related financial, technical and capacity needs, including a description of the support needed and received for the preparation of the BUR as well as for the implementation of climate activities described in the BUR
- Any other relevant information on the achievement of the objectives of the Convention
- An optional technical annex.

* Mitigation actions by non-Annex I Parties can take different forms, i.e. economy-wide goals, specific policies and programmes and project-level activities, National Appropriate Mitigation Actions (NAMAs). Parties are not required to report on each and every mitigation action they take. Rather, they are encouraged to provide a snapshot of their mitigation actions according to the level of detail at which the action is implemented.

Developing countries are eligible to obtain financial, technical and capacity building support from the UNFCCC in relation to MRV.

**Financial support:** provided primarily by the Global Environment Facility (GEF) as an operating entity under the Convention's Financial Mechanism.

Countries can access **up to USD 500,000** through a GEF agency (UNDP, UNEP and the World Bank) or directly, by preparing and submitting a project proposal to the Facility following its suggested policy guidelines.* For BURs, non-Annex I Parties can access up to USD 352,000.

* "GEF Policy guidelines for the financing of biennial update reports for Parties non included in Annex I to the United Nations Framework Convention on Climate Change", available at https://www.thegef.org/gef/guideline/biennial_update_reports_parties_UNFCCC

[5] Decision 2/CP.17, annex III.

**Technical support:** provided through the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE).*

Support is offered by: assisting with problems and constraints identification, process facilitation and sustainability, setting up and maintenance of appropriate institutional arrangements and national technical teams, providing recommendations for future revision of the guidelines for preparation of NCs and BURs, providing advice on available financial sources at bilateral, regional and multilateral level to support MRV, providing guidance on how to integrate climate change considerations in relevant national policies.

The CGE also develops and organizes relevant training programmes and workshops to facilitate assistance to non-Annex I Parties in collaboration with bilateral and multilateral support programmes, using the CGE training materials.**

* Divided in four thematic groups: national GHG inventories, vulnerability and adaptation assessments, mitigation and cross-cutting issues which includes research and systematic observation, technology transfer, capacity-building, education, training and public awareness, information and networking and financial and technical support.

** Available here: http://unfccc.int/national_reports/non-annex_i_natcom/cge/items/2608.php

## 1.2 International Consultation and Analysis

International Consultation and Analysis (ICA) is the 'second step of international MRV for developing countries. It is a process which **aims to increase the transparency of their mitigation actions and their effects** by subjecting the submitted BURs to a two-step process:

- **A technical analysis conducted by a team of technical experts (TTE)** nominated by the UNFCCC and trained by the CGE
- **A facilitative sharing of views (FSV)** in the form of a workshop organized under the Convention's Subsidiary Body for Implementation (SBI)

ICA is conducted in a manner that is **non-intrusive, non-punitive and respectful of national sovereignty**. Its aim is not to discuss the appropriateness of the domestic climate policies and actions that developing countries put forward according to their national priorities, but rather to **encourage a process of information-sharing that would contribute to building the reporting capacity of developing countries and ultimately lead to an improvement in the quality of their BURs over time**.

### Technical Analysis

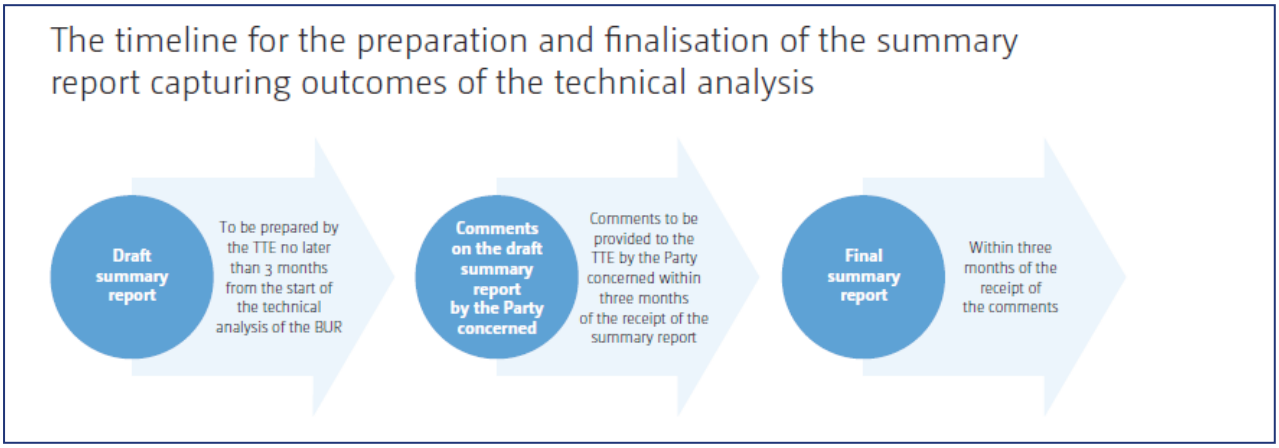
The technical analysis of BURs (presented either as summaries of parts of national communications or as a separate reports) is conducted in consultation with the submitting country. It aims to **verify to what extent key information - as per UNFCCC guidelines - has been included**. This process allows the TTE to identify eventual capacity-building needs that, if addressed, could facilitate future reporting in subsequent BURs and participation in ICA.

**No later than three months** from the start of the technical analysis, the TTE produces a

draft summary report of its analysis, which is then submitted to the concerned country for review and comments. The concerned country can submit comments on the draft summary within three months of the receipt. Finally, within the following three months, the TTE produces a final summary report that incorporates the results of this exchange, later posted on the UNFCCC website. Additional technical comments can be provided voluntarily by the country at any time throughout the technical analysis process.

**The record of the FSV, together with the final summary report of the TTE, constitutes the final outcome of the whole ICA process**.

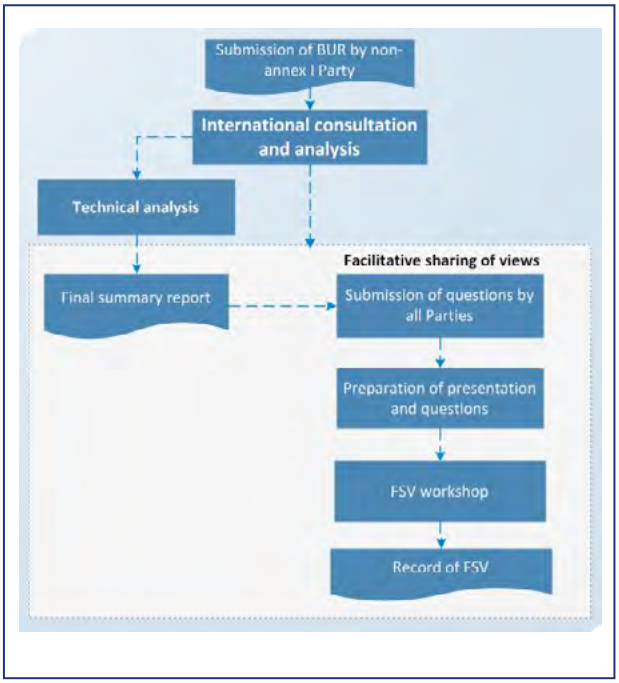
COP17 set the first timeframe for BURs submission in December 2014 and subsequent rounds have been set until September 2016. As of October 2016, 34 non-Annex I Parties have submitted their BUR.




source: UNFCCC

## Facilitative Sharing of Views

The FSV is convened at regular intervals in the form of a workshop under the SBI. The workshop functions **as an open exchange platform open to all countries, prior to which any country can submit to those undergoing FSV questions on their reporting**. Interested countries can then prepare answers to these questions alongside presentations to illustrate their BURs, which will then be used during the workshop. The workshop gives the possibility to interested countries to directly address the questions received and provide clarifications. The questions and answers are then compiled by the UNFCCC Secretariat and a record of the FSV is produced.




source: UNFCCC

The first workshop under the FSV was held at the Bonn Climate Change Conference on 20-21 May 2016. It saw the participation of the 13 developing country Parties that have submitted their BURs between the first and third submission timeframe (December 2014 – September 2015).

## 1.3 National MRV obligations

BURs of non-Annex I Parties should provide information on their domestic MRV, particularly with regard to Nationally Appropriate Mitigation Actions (NAMAs).[6]

A domestic MRV framework typically encompasses a set of domestic policies, processes and arrangements to enhance transparency through the tracking of national GHG emission levels (**MRV of emissions**), the tracking of climate finance flows received (**MRV of support**) or the impacts of mitigation actions (**MRV of mitigation actions**), such as NAMAs or other policy or regulatory interventions.

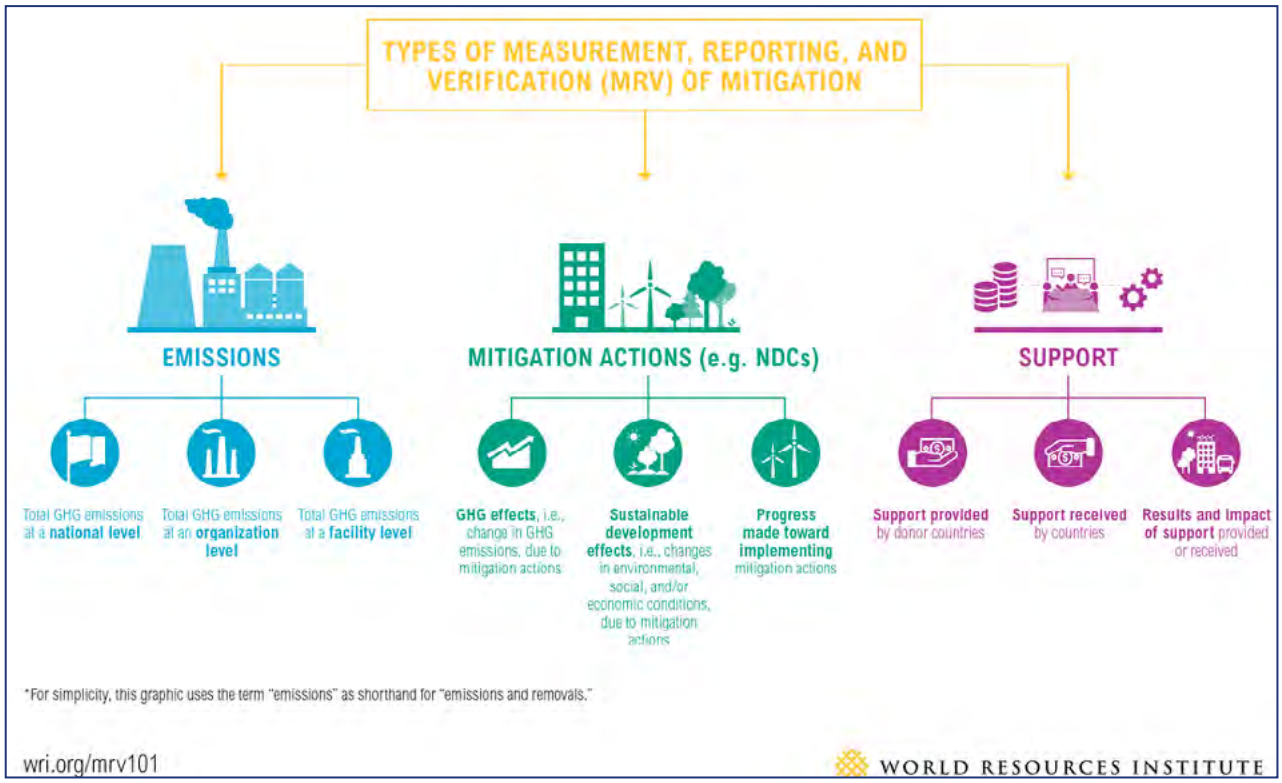
As such, it **is an essential system aiming to set and track progress towards domestic climate goals and priorities**, which also covers the domestic implementation aspects of international MRV requirements (NCs and BURs).

No specific guidelines exist for driving countries towards setting up sustainable, domestic MRV institutional arrangements. However, based on UNFCCC experience, a sound domestic MRV framework should be encompass the following features:

- the establishment of national legal/formal arrangements;
- the establishment and maintenance over time of an appropriate coordination body;
- the undertaking of in-country institutional and technical capacity building;
- the setting up and implementation of a mechanism for stakeholder involvement.[7]

[6] Introduced in the climate negotiations in 2007 through the Bali Action Plan, NAMAs refer to mitigation actions undertaken by developing country Parties with the aim to achieve a deviation in GHG emissions relative to 'business as usual' emissions in 2020. NAMAs can be undertaken with a country's own financial support (domestically supported NAMAs) or with international support, including capacity-building, finance or technology (internationally supported NAMAs). NAMAs can take various forms, ranging from policy or regulatory interventions at the national or sectoral level to project-based actions targeting specific investments or a given technology. Aside from the goal of emissions mitigation and the need for MRV, there is almost no limitation for the type of action that could be taken as a NAMA. Both domestically and internationally supported NAMAs are subjected to a domestic MRV framework and reported in the BURs as part of their mitigation actions.

[7] See UNFCCC Handbook on Measurement, Reporting and Verification for Developing Country Parties, 2015.




source: World Resources Institute

More specific guidance exists on MRV in the context of NAMA development, provided that countries have the capacity to do so. In this regard, UNFCCC COP guidelines recommend the inclusion of the following three key elements in their BURs[8]:

- A **description of the overall institutional arrangements**, similar to that contained in NCs, including information on relevant structures, methodologies and expertise. Countries are encouraged to utilize existing processes, arrangements and systems, but they can also voluntarily set up new domestic systems and processes
- A **description of the approach to measure domestically supported NAMAs**, including specific methodologies and documentation processes and institutional arrangements in place
- A **description of the approach used to conduct domestic verification of the information** (experts engaged and relevant mechanisms)

[8] Decision 21/CP.19.The application of these guidelines remains voluntary, and they are informed by a pragmatic, non-prescriptive, non-intrusive and country-driven approach.

# 2. MRV IN THE PARIS AGREEMENT

Transparency and accountability of climate action, and therefore MRV, is **the backbone of the Paris Agreement**. It is a vital instrument for building international trust and confidence that the transformative climate action towards a low-carbon future called by the Agreement is taking place broadly across countries.

Article 13 of the Agreement sets out a binding, common international MRV system largely informed by flexibility and therefore capable of taking into account the different capabilities of State Parties in a manner that is **no longer based upon the strict - and outdated - Annex I / non-Annex I division of the UNFCCC**.

This means that the new MRV framework of the Paris Agreement takes into account that the status of countries as developing or developed has changed drastically from the situation in 1992. In doing so, it sets out **common transparency provisions that apply to all countries**, but **with a built-in flexibility that respects their different capacities** and no longer differentiates the content and timetables of the reporting obligations between developed and developing countries.

**The transparency framework of the Paris Agreement brings all countries together into a common process** for providing enhanced data and tracking their progress in relation to respecting their commitments on mitigation, adaptation and support provided and received. In this respect, **the Paris Agreement obliges all countries** to regularly provide the following information:

- A **national inventory report of their GHG emissions** and removals, using the appropriate IPCC methodologies
- Information necessary to **track progress made in implementing and achieving their nationally determined contributions** (NDCs)* under Article 4
- Information related to **climate change impacts and adaptation, financial, technology transfer and capacity-building support provided and received** (for developed and developing countries, respectively)

* NDCs are at the core of the universally agreed, legally binding mitigation system put in place by the Paris Agreement. In Paris, governments took a commitment to communicate internationally the steps they will take to address climate change in their own countries. Based on the Intended Nationally Determined Contributions (INDCs) submitted before and after COP21, NDCs will reflect each country's ambition for reducing emissions, taking into account their domestic circumstances and capabilities. The Paris Agreement also calls for the submission of NDCs to be guided by the principles of environmental integrity, transparency, accuracy, completeness, comparability and consistency, and avoidance of double counting. Guidance for accounting methodologies to be used in NDCs is expected to be developed and adopted by 2020.

This information is to be submitted at a minimum **every two years by every country**, with additional flexibility for Least Developed Countries (LDCs) and Small Island Developing States (SIDS).[9]

[9] Decision 1/CP.21.

Appropriate modalities, procedures and guidelines under which countries and other actors will report and account for their climate actions under the Paris Agreement are **not yet in place**. They are expected to build on and "eventually supersede" the current MRV system of the UNFCCC **by 2018**, and be formally adopted **by 2020** – in time for the next round of NDCs and the entry into force of the Agreement. [10]

Similarly to the UNFCCC system, Article 13 of the Paris Agreement also **establishes an international verification process** of the information submitted by countries in their reports. However, contrary to the UNFCCC, this process **is harmonized for all countries and able to hold them accountable** towards meeting their obligations.

In particular, the information submitted by Parties under the Paris transparency framework is expected to undergo a common **technical expert review process** focused on:

- reviewing efforts on climate finance undertaken by developed countries, and
- considering the level of implementation of NDCs by all countries.[11]

This means that, in contrast to the UNFCCC ICA process, which focuses only on increasing the transparency of actions and fostering information-sharing by developing countries, the enhanced review process of the Paris Agreement also focus on the **implementation and level of achievement of their national climate actions** expressed through their NDCs.

In addition, the technical expert review process is also called to pay particular attention to **assessing the national capabilities and circumstances of developing country Parties, and assisting them in identifying capacity-building needs and areas of improvement**, especially for LDCs and SIDS.

To this end, the Paris Agreement requested the GEF to establish a **Capacity-building Initiative for Transparency (CBIT)**.[12] The scope of this initiative is to strengthen the institutional and technical capacity of developing countries and **support them in meeting their requirements under the Agreement leading up to 2020 and beyond**.[13]

By the time the Paris Agreement becomes operational, **many developing countries may have submitted only one BUR and undergone ICA only once**. This may limit the experience that developing countries may draw on for engaging in ambitious climate action. As such, **the CBIT is expected to play a key role for building the MRV capacity of developing countries in the future** and, by doing so, contributing to a successful implementation of the Paris Agreement.

---

[10] Decision 1/CP.21, par. 99.

[11] Article 13, para 11.

[12] Decision 1/CP.21, para. 86.

[13] The architecture of the CBIT was established at the GEF Council meeting held in June 2016, during which the creation of a CBIT Trust Fund was proposed. The CBIT Trust Fund will be governed by the GEF Council and have the World Bank acting as its Trustee. The CBIT will combine the contributions of multiple donors on the basis of individual agreements between the donor and the Trustee. Its proposed programming priorities cover activities at the national and regional levels, including: building the capacity of national institutions, providing tools training and assistance to meet the provision of Article 13 of the Agreement, improving the transparency over time and serving as a global coordination platform to engage interested stakeholders and entities in creating synergies between existing capacity-building initiatives.

Besides undergoing the technical expert review process, all countries under the Paris Agreement are also called to participate in a **facilitative, multilateral dialogue on consideration of their progress** (to take place in 2018 and subsequently every five years under the name of **'global stocktake' starting from 2023**).[14] This dialogue aims to address implementation questions, particularly regarding provisions on climate finance and NDC implementation, and promote compliance in a facilitative and transparent way. Ultimately, this process is expected to bring countries together into a public exposure platform where each country will be able to evaluate and analyse the commitments of their peers and their respective levels of compliance on the basis of the inputs provided through the transparency framework.

**The details of the transparency system under the Paris Agreement are to be worked out in the forthcoming COPs**. This process will be critical for the establishment of a sound, harmonized transparency and accountability framework that in turn will "provide a clear understanding of climate change action" (Article 13) and guide both developed and developing country Parties towards meeting their obligations under the Agreement.

[14] Article 13, para 11.

# 3. MRV CAPACITY IN THE ENPI SOUTH REGION

The ten countries and territories of the South Mediterranean region covered by the European Neighbourhood Policy Instrument South (ENPI South), namely Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia, are all Parties to the UNFCCC.[15] Under the Kyoto Protocol, they classify as developing (non-Annex I) Parties.

All ENPI South countries have **signed the Paris Agreement on 22 April 2016**, and, as of 20 October 2016, two of them have ratified it.[16]

From a general standpoint, the capacity of ENPI South countries to develop and implement robust climate policies **remains largely dependent on the availability of financial, technical and technological support by international donors or more developed countries**. This factor, coupled with the overall political instability in the area, creates **a diversified picture of climate policy**, and points to **a notable differentiation between countries in their capability to comply with UNFCCC obligations**.

The capacity of the ENPI South region to carry out comprehensive MRV and fulfil the reporting requirements under the UNFCCC is no exception to the scenario described above.

While a more in-depth profiling of each country of the ENPI South region against their MRV obligations is given in the annexes of the present document, a comparative overview of the MRV capacity points to the existence of **a number of common challenges faced by ENPI South countries**. These challenges relate in particular to the difficulty of building national institutional capacities to undertake comprehensive MRV across climate-relevant sectors.

**An awareness of climate change and an understanding of the importance of MRV and related UNFCCC reporting obligations generally exists** in many sectors of government, **particularly** the Ministries of Environment, which are responsible for climate change in all **ENPI South countries**.

The vast majority of countries have made considerable efforts to comply with their UNFCCC reporting obligations and to engage in international MRV in accordance with their respective capacities to do so (*see table 1*).

[15] The EU has temporarily suspended cooperation with Syria until further notice. The present document deliberately omits any further reference to Syria.

[16] Palestine has ratified it on the same day as the signature. Morocco has ratified in September 2016.

Table 1. Status of submission of National Communications and Biennial Update Reports of ENPI South Region countries (as of October 2016)

| Country | Initial National Communication | Second National Communication | Third National Communication | Biennial Update Report |
|---|---|---|---|---|
| **Algeria** | 30 April 2001 | 25 November 2010 | | |
| **Egypt** | 19 July 1999 | 7 June 2010 | | |
| **Israel** | 18 November 2000 | 7 December 2010<br><br>GHG Inventories updated on 23 November 2015 | | 18 April 2016 |
| **Jordan** | 6 March 1997 | 8 December 2009 | 2 December 2014 | |
| **Libya** | | | | |
| **Lebanon** | 2 November 1999 | 16 March 2011 | | 13 October 2015<br><br>22 September 2016 (summary and technical reports of ICA) |
| **Morocco** | 1 November 2001 | 3 November 2010 | 7 May 2016 | 7 May 2016 |
| **Palestine** | | | | |
| **Tunisia** | 27 October 2001 | 14 February 2014 | | 31 December 2014<br><br>17 February 2016 (summary and technical reports of ICA) |

With very few exceptions, most ENPI South countries have submitted up to two NCs. The **rather large time gaps between submissions**, although consistent with the general trend of most non-Annex I countries, suggest **that the ENPI South region is still developing the capacity to undertake international MRV in the timely manner mandated by the UNFCC**. Nonetheless, the submission of BURs by four countries out of the nine analysed (with two of them undergoing of ICA), points to **positive progress being made with respect to the willingness of countries in the region to subject their national conditions to the Convention's transparency system**. These results have been largely fostered by the receiving of financial and technical support to do so.

All ENPI South countries have received international support, **from UNFCCC financial entities and/or international organizations and foreign governments**, to build their capacity to report to the UNFCCC through NCs and BURs and, more broadly, build their MRV frameworks at the domestic level.

In most cases, the support was provided **on a project basis** and/or **through employing external resources**, with a focus on achieving results related to:

- the **training of ministerial and/or technical staff on relevant GHG data collection, management and methodologies** (Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Tunisia);
- the development of **integrated GHG inventory systems** (Jordan, Lebanon, Palestine, Morocco, Tunisia);
- the development of **Quality Assurance and Control (QA/QC) systems** (Israel, Lebanon, Morocco, Palestine);
- the **identification, development and financing of potential mitigation actions** (i.e. NAMAs) in different sectors (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia).

The support provided has been instrumental in helping targeted countries build their domestic MRV capacity. Nonetheless, a number of **challenges, capacity building gaps and needs undermine the establishment of robust MRV systems throughout the ENPI South Region**.

Some of the overarching challenges and gaps identified by ClimaSouth relate to:

- the **operationalization of existing institutional frameworks that encompass relevant institutional entities, necessary staff, systems and processes**. Most ENPI South countries (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, Tunisia) have established institutional structures – some more advanced than others – for climate change, attributing roles and responsibilities to different entities in charge of activities that are MRV-relevant. Activities in this respect include policymaking and implementation progress tracking, national GHG inventories, air quality measurement systems, mitigation actions and more recently, (I)NDC preparation. **In many cases, however, these structures are not yet operational due the lack of appropriate legal frameworks** (i.e. Egypt, Jordan, Tunisia) or **the great difficulties they face in coordinating their mandates** with existing structures belonging to government departments that do not directly deal with climate change, but are nonetheless climate-relevant and therefore MRV-relevant (i.e. Algeria, Lebanon, Morocco). This holds true particularly for the need to ensure information flows related to GHG emission data, as **many institutional frameworks are not supported by specific reporting obligations that apply widely across sectors**. As such, many of the institutional entities in charge of climate change, which are usually within the Ministries of Environment, often struggle to cooperate with entities from other line Ministries to obtain the data that is necessary to undertake comprehensive reporting.
- the **creation of in-house MRV capacity and loss of progress achieved**. As the ENPI South region benefits from financial and technical support on MRV through external resources and on a project basis, **the progress achieved by targeted countries is not always built in-house nor maintained throughout time**. In some instance (Algeria, Egypt, Jordan, Morocco), targeted countries employ the support received for the preparation of their NCs or BURs by engaging a team of external consultants to carry out research, data gather-

ing and compilation. This, however, results in the **inability of local staff to build and keep in-house expertise**. In other cases (Lebanon, Libya, Tunisia), the discontinuous nature of the available funding results in a **loss of sustainability of the results achieved**, affecting the ability of targeted institutions to build up on the technical knowledge amassed throughout the project and maintain the benefits over time.

- the **establishment of appropriate institutional links between MRV frameworks and the NDC implementation process**. Most ENPI South countries have submitted an INDC. However, only five of them (Algeria, Egypt, Jordan, Lebanon, Tunisia) include specific reference to MRV (*see table 2*). This is an encouraging indication of the fact that many countries recognize the importance of building solid MRV structures as part of their efforts to implement their NDCs under the Paris Agreement. Despite this, **the challenges previously outlined are very likely to also impact this process**. In particular, the difficulty of ENPI South countries to pursue engagement in MRV by institutions other than the Ministry of Environment may severely **hinder the achievement of the inter-ministerial cooperation that is essential to move forward with the NDC implementation**.

Table 2. INDCs/NDCs of ENPI South Region countries (as of October 2016)

| Country | Unconditional target | Conditional target | Target year | Reference | Conditions for Implementation / Financial Support Required | Reference to MRV |
|---|---|---|---|---|---|---|
| **Algeria** | 7% | 22%* | 2030 | BAU | High end of the range conditional to support in terms of external financing, technology development & transfer and capacity building | Establishment of national MRV system between 2016-2020 |
| **Egypt** | | To achieve "high $CO_2$ mitigation levels" | 2030 | N/A | Financial contributions required for implementing the INDCs for both adaptation and mitigations estimated at 73.04 billion USD | Development of MRV system as part of national comprehensive emission reduction program |
| **Israel** | 26% | | 2030 | 2005 | N/A | |
| **Jordan** | 1.5% | 14% | 2030 | BAU | Upper bound conditional to availability of international financial aid (estimated at USD 5,157 million) and support to means of implementation | Efforts to put in place MRV system for GHG inventory and mitigation actions (i.e. NAMAs) |
| **Libya** | | | | | | |
| **Lebanon** | 15% | 30% | 2030 | BAU | Upper bound implemented upon the provision of additional international support | MRV of emissions, mitigation actions and support as essential component of NDC implementation; to be integrated into existing reporting processes and structures |
| **Morocco (NDC)** | 17% | 42% | 2030 | BAU | The high end of the range is conditional on gaining "access to new sources of finance and to additional support relative to support received in recent years" | |
| **Palestine** | | | | | | |
| **Tunisia** | 13% | 41% | 2030 | 2010 | The upper bound of the range is conditional on the support of the international community for funding (estimated USD 18 billion + 2 billion for adaptation), capacity building and technology transfer | MRV of emissions, mitigation actions and support as part of its national mitigation strategy |

* Global target inclusive of the unconditional one.

# 4. CONCLUSIONS

In order for international climate action to be effectively tracked, it needs to be reported and accounted for by all countries through active engagement in the UNFCCC transparency processes. This is critical to promote mutual trust and confidence widely across nations to raise the level of ambition of their own response to the challenge of climate change.

With the entry into force of the Paris Agreement, **MRV is expected to play the crucial role of serving as the global blueprint for reporting and accounting for climate action undertaken by all countries**, keeping track of their progress with regard to implementing the Agreement, including through achieving their NDCs.

In this context, it is important that developing countries continue to step up their efforts to strengthen their institutional and technical capacity to adequately report to the UNFCCC, while mutually benefitting from each other's experience. Central to achieving this goal, however, remains **the necessity to provide developing countries with adequate financial and technical capacity-building support** in relation to MRV.

The situation analysed in the ENPI South region shows that, largely through international support, **countries have made considerable progress – albeit at a different pace and with different results – in the development of their MRV capacity**. Under the leadership of their Ministries of Environment, most countries have built (or initiated the process of building) **domestic institutional structures to engage in international reporting, tracking of GHG emission levels, mitigation actions undertaken (i.e. NAMAs) and support received**.

Despite this, most **ENPI South countries continue to face several challenges and experience many capacity building gaps, particularly when it comes to operationalizing the MRV structures and mechanisms they have established**. This was observed as being due to a number of overarching factors, such as:

- the difficulty in mobilizing inter-ministerial cooperation widely across all climate-relevant sectors, and
- the lack of appropriate legal frameworks and rules coordinating MRV mandates, cross-sectoral reporting and GHG data flows.

In addition to this, many ENPI South countries experience **difficulty in creating domestic MRV capacity (particularly on reporting) and loss of progress achieved**. Some countries use the support received to employ external resources, especially for the undertaking of reporting tasks (research, data collection and compilation). This often results in the **inability of local staff to build and keep in-house expertise**. In other instances, the project-based nature of the support received does not always allow targeted countries to **build on**

**the progress achieved and maintain the sustainability of results throughout time**.

These challenges become all the more acute in a post-Paris scenario, especially considering their implications on the ability of ENPI South countries to pursue the extensive domestic institutional mobilization outside their Ministries of Environment that is required to **prepare for implementation and monitoring of NDCs**.

From this perspective, **it is crucial that ENPI South countries continue to channel their efforts into strengthening their domestic MRV capacity, operationalizing existing structures, enhancing and streamlining communication among key ministries and agencies**. Having proper national institutional arrangements in place will help them ensure that nationally appropriate procedures for collecting, processing, reporting and archiving required data and information are established and operational in a sustainable manner and on a continuous basis. This will be essential to meet their reporting requirements under the UNFCCC and gain the necessary experience to eventually meet those under the Paris Agreement.

However, **ENPI South countries cannot be expected to achieve these goals on their own**. International support to the ENPI South region on MRV, both technical and financial, will have to remain consistent, if not intensify, in the coming years, so as to ensure the scaling up of the progress made. As the approaches that countries have taken vary widely, moreover, the support provided will have to meet their individual needs and be in line with their national priorities. All of these efforts will be critical to enable the ENPI South region to develop comprehensive and sustainable MRV systems, and ultimately put targeted countries on the transformational path towards a low-carbon future called for by the Paris Agreement.

# 5. ANNEX: MRV CAPACITY PROFILES OF ENPI SOUTH COUNTRIES

The sections below profile the ENPI South countries against their MRV obligations under the UNFCCC and Paris Agreement, both at the international and domestic levels. Each country profile provides a general overview of the status of submission of NCs and BURs. Additional information is provided on the status of each country's MRV capacity, analysing the domestic MRV arrangements for emissions, mitigation action and support and related future priorities for capacity-building on the basis of data contained in NCs, BURs and existing support projects undertaken by international donors. Furthermore, each country profile includes an analysis of the status of preparation of NAMAs – and related MRV systems – and submission to the UNFCCC NAMA Registry,[17] alongside appropriate reference to the presence of MRV pledges in their INDCs/NDCs.

## 5.1 Algeria

Algeria has submitted two NCs in 2001 and 2010, respectively, but has not yet submitted a BUR. The large time between the NC submissions, coupled with the non-submission of a BUR, suggests that Algeria has not yet developed the necessary institutional capacity nor received appropriate financial or technical support to adequately report on its national climate-related circumstances internationally. Reporting to the UNFCCC is typically done by engaging a team of consultants to develop the national GHGs inventory and gathering the appropriate data and information. All relevant ministries and departments are involved in the elaboration of National Communications. **The third NC is currently under preparation with support from UNDP**.

On GHG emission reporting, Algeria has conducted and published two national GHG inventories in line with the IPCC guidelines: the first in 1996, which is reported on in the first NC, and the second in 2000, which is reported on in the second NC.

The national entity entrusted with preparing inventories of GHG emissions is the **National Agency for Climate Change (ANCC)**, which was created in 2005 but only operationalized in 2015. The Agency's primary mission is to contribute to the protection of the environment by assisting with the **integration of climate change impact concerns in development plans**. Additionally, the ANCC is charged with **researching, synthesizing and**

[17] Countries are invited to submit information on their NAMAs to the UNFCCC Secretariat, which then includes them in a publicly available online platform known as NAMA Registry. Its purpose is to increase opportunities for implementation and recognition of NAMAs undertaken by developing countries. The registry, in particular, allows developing countries to record information for all NAMAs seeking support for development or implementation, whether they are smaller individual projects or larger national initiatives by sector. Parties are also encouraged to enter information for NAMAs that they have implemented using domestic resources (thus without external support) in order to be recognized for their mitigation efforts.

**engaging with the public** regarding: (i) GHG emissions and sequestration and (ii) mitigation and adaptation to climate change impacts. Following from this mission, the ANCC is responsible for engaging in capacity building, establishing and maintaining a climate change database, aggregating weather data and preparing periodic reports, and coordinating climate change responses across different government and industry sectors.

Besides ANCC, Algeria's institutional framework for climate change includes:

- **Ministry of Foreign Affairs (MFA)**, which acts as the UNFCCC National Focal Point and liaises with donor activities
- **Directorate of Climate Change within the Ministry of Water Resource and Environment**, entrusted with setting and implementing climate change policies and strategies and communicating with key ministers on climate issues
- **National Climate Committee**, headed by the Minister in charge of Environment and composed of representatives of other ministerial departments. It was established in 2015 for the preparation of the INDC and entrusted with assessing mitigation and adaption related policies, strategies and actions, as well as proposing measures to guarantee the implementation of Algeria's commitments under the UNFCCC
- Focal points for climate change within Ministries.

The cooperation between ANCC and other relevant government agencies involved in the MRV, however, has not yet been formalized. Moreover, despite having an institutional climate change framework as described above, **Algeria has yet no law or decree regulating annual GHG data reporting nationally**.

**As part of its INDC** submitted in September 2015, Algeria foresees the **establishment of a national MRV system between 2016 and 2020**. The national MRV system is envisaged as one of the four pillars on which Algeria's climate action is to be based. These pillars include: enhancing the role of ANCC, promoting coordination and monitoring through the National Climate Committee, implementing the roadmap guiding climate action and defining a national climate strategy that is the National Climate Plan, and establishing a national MRV system. To achieve these goals, Algeria recognizes the need to receive appropriate technical support and capacity building.

A CGE workshop conducted in Algeria in 2011 suggests that climate-related data are centralized amongst different ministries and that **cooperation and data-sharing between concerned authorities remains a challenge**. The development of **an integrated GHG inventory system linked to all line Ministries** is therefore required. Data on **emissions from the private sector**, moreover, remains largely unavailable, and involvement of researchers, universities and laboratories in the process is not yet fully developed. **Further institutional capacity and greater involvement of the private sector and non-State actors** are required to support the establishment of a comprehensive and permanent MRV system at the national level.

As of October 2016, Algeria has not formally submitted any NAMAs to the NAMA Registry for support in preparation or implementation, or to implement using domestic resources. However, **two NAMA feasibility studies have been conducted**: one for the development of solar power plants and another one on energy efficiency in residential buildings.[18]

[18] http://www.nama-database.org/index.php/Algeria

In the energy sector, the Agency of Energy Conservation (APRUE) in cooperation with the French Agency of Environment and Energy Conservation (ADEME) notably launched the development of an **Information System on Energy Efficiency indicators**, which serves as a first step towards the preparation of an MRV system for NAMAs in Energy sector.

## 5.2 Egypt

Egypt has submitted two NCs in 1999 and 2010, respectively, and is **receiving support from UNDP for the preparation of its third NC**, which has been finalized in April 2016 and is due to be submitted to the UNFCCC. Egypt has not yet submitted a BUR but has initiated a process to compile it.

The lead agency responsible for the **GHG inventory preparation** in Egypt is the **Climate Change Central Department (CCCD)** of the Egyptian Environmental Affairs Agency (EEAA), which is the executive arm of the Ministry of Environment (MoE). The CCCD was established in 2009 and also acts as the National Focal Point to the UNFCCC. The Ministry of Environment coordinates the involvement of other Ministries in climate change issues. This was formalized in 2015 through the establishment of a **National Council for Climate Change** (NCCC), which is entrusted with ensuring better flow of information across all institutional stakeholders relevant to climate policy, as well as formulating mitigation measures guided by more ambitious targets for GHG emission reductions.

Other institutional bodies involved in mainstreaming climate change goals within the country's national agendas are the Ministry of Water Resources and Irrigation (MWRI), the Ministry of Agriculture and Land Reclamation (MALR), the Ministry of Electricity and Renewable Energy (MOERE) and the New and Renewable Energy Authority. Both the MWRI and MALR have dedicated institutional structures for climate change within their respective ministry. In general, **institutional capacity on climate research and GHG inventory preparation remains weak**, and the government relies on external consultants to carry out research and data gathering for many sectors. More efforts should be put in strengthening the domestic capacities for preparing the GHG inventory.

Currently **there is no single GHG inventory database** and **no legal basis requiring Ministries and stakeholders to collect and provide GHG-related data to the MoE**. As such, data are typically collected through direct enquiries with each Ministry, institution or sector bodies. Support from donor projects has attempted to develop comprehensive data collection systems but further efforts are required to operationalize these systems. Strengthened linkages between the Ministry of Environment and other institutional stakeholders are envisaged as a result of the preparation and subsequent submission of the first BUR.

**Egypt's INDC submitted in November 2015 states that the country intends to develop a sound national MRV system** as part of a comprehensive emission reduction programme to achieve its 2030 emission reduction target. However, no specific timeframe for setting a domestic MRV system has been included.

Egypt's INDC has allowed the Ministry of Environment to reinforce its position as the lead institution on climate change. However,

**further training and institutional capacity building for moving the national climate agenda forward is required for staff at all levels and broadly across all relevant sectors** – government staff at MoE and other ministries, industry staff in all sectors, and (national) private consultants. Moreover, senior government officials would also need to be informed about the technical aspects of maintaining a robust national GHG MRV system in place. **Trainings that have taken place so far with the help of international donors have focused only on basic MRV concepts without reaching an extensive level of detail**.

As of October 2016, Egypt has not formally submitted any NAMAs to the NAMA Registry for support in preparation or implementation, or to implement using domestic resources. However, **one regional NAMA feasibility study has been conducted** by the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) on renewable energy investment.[19]

Egypt is currently receiving support from UNDP through its "Low Emission Capacity Building Project-LECB". Developed in partnership with the EEAA, the project aims to enable Egypt to design a Low Emission Development Strategy (LEDS), identify opportunities for NAMAs and for mitigation actions by selected industries and design related MRV systems. The project is focused on three main industry areas: cement, fertilizers, iron and steel. As such, it focuses on developing an MRV system through a sectoral approach in the context of sectoral mitigation plans.

This project has so far delivered **four concept proposals for NAMAs, ten detailed reports for NAMA Mapping** that identify mitigation potential in ten sectors, and ten **NAMA Information Notes (NINOs)**, each of which includes a sample MRV plan.[20]

## 5.3 Israel

Israel has submitted two NCs in 2000 and 2010, alongside an update of its GHG inventory in 2015). Without receiving any international support for its preparation or submission, Israel has also submitted its first BUR in April 2016.

The national entity responsible for GHG emission inventory preparation and management in Israel is the **Ministry of Environmental Protection (MoEP)**, which also serves as the UNFCCC National Focal Point. Other notable ministries important for climate and the environment include National Infrastructures, Energy, and Water Resources (Ministry of Energy), Transport, Agriculture and Rural Development, and Finance. The **Central Bureau of Statistics (CBS)** also plays an important role in GHG emission management, being the entity responsible for collecting data from the public and business sectors including GHG emissions, and publishing it in the form an annual inventory. The CBS operates on the basis of an understanding with the MoEP.

[19] http://www.nama-database.org/index.php/Egypt

[20] http://www.eg.undp.org/content/egypt/en/home/operations/projects/environment_and_energy/low-emission-capacity-building-project-.html

**Israel's BUR does not illustrate the country's constraints and gaps related to financial, technical and capacity needs**, despite acknowledging this as one of the focus areas subject to BUR reporting as per the COP guidelines.

As such, **there is no publicly available information on where Israel recognizes the need for improved domestic action or increased external support to strengthen its efforts on GHG emission monitoring, reporting and mitigation actions and related MRV**. Nonetheless, a consultation undertaken by ClimaSouth with the MoEP of Israel suggests that the country recognizes the need for an ongoing improvement of its national inventory. To this end, three professionals from Israel are expected to take part in an upcoming workshop organized by the Technical Assistance and Information Exchange instrument (TAIEX) of the European Commission in Germany in September 2016. In addition, Israel's BUR provides a general overview of the status of MRV in the country as per how reported below.

With the assistance of a team of external expert consultants from Ecotraders Ltd. **the MoEP has started the process of establishing an MRV system as part of a broader national system for GHG management**. Central to this national system is the 2016 National Plan for Implementation of the Greenhouse Gas Emissions Reduction Targets and for Energy Efficiency, adopted by the Government in April 2016. Notably, paragraph 17 of the National Plans sets up a steering and monitoring committee headed by the MoEP with representatives from other relevant ministries. The committee is tasked with reporting on the implementation of the decision and reviewing the results of the envisaged MRV system.

As per the information contained in the BUR, Israel's MRV system is to be developed in line with **the GHG Protocol Policy and Action Standard developed by the WRI**,[21] and is envisaged to facilitate, inter alia:

- the **assessment of implementation of government public policy related to GHG reduction measures and energy efficiency**, including success rates based on various indicators
- the **assessment of governmental and private investments** for these measures
- the identification of **related barriers** impeding progress
- the **formulation of recommendations** for additional mitigation measure

No estimated timeframe is mentioned as regards when the MoEP would intend to complete the setting of the MRV system. However, the BUR recognizes that the MoEP intends to rely on the CBS as a partner authority to support the establishment and implementation of the intended MRV system.

Israel has taken notable steps to **involve the private sector in reporting on their GHG emissions**. In 2010, the MoEP launched a voluntary national GHG registry scheme, in partnership with the Samuel Neaman Institute for National Policy Research and cooperation with a wide range of stakeholders from government ministries, as well as from the industrial, power, cement, civil society and local governmental sectors.

[21] A system providing a standardized approach for estimating and reporting the change in GHG emissions and removals resulting from policies and actions, available at http://ghgprotocol.org/policy-and-action-standard

This protocol includes guidelines for mapping, quantifying and reporting GHG emissions developed by the Ministry. While participation is voluntary, those who choose to partake are expected to calculate and report their emissions using these quantification methods and procedures.

Preparation of the voluntary reports is meant to develop capacities and tools for the business sector and industry to calculate their emissions with the added benefit of identifying opportunities for saving on energy and resources, and thus cutting costs. The GHG registry program also includes a verification process in the form of a 3-tier recognition awards system. Through this, organizations that want to get recognized as Level 2 (verified emissions) or 3 (verified and reduced emissions) are required to submit an inventory report noting emissions and/or emissions reductions to a "verification body" that is approved by the MoEP and will review and verify the figures during the reporting year. **Over 50 companies and organisations, including several major companies, have joined the project on a voluntary basis, covering more than two thirds of the total emissions of the country**.

Israel's INDC, submitted in September 2015, contains no specific reference to MRV. Nonetheless, it mentions that initial steps have been taken for the establishment of a national system for managing and monitoring greenhouse gas emissions. Quantitative and qualitative data collection and analysis will be carried out in order to track and record headway on implementation of the abatement measures. An inter-ministerial committee will perform a regular review process of the national strategy and recommend new policy instruments where necessary.

As of October 2016, Israel has not formally submitted any NAMAs to the NAMA Registry for support in preparation or implementation, or to implement using domestic resources.

## 5.4 Jordan

Jordan has submitted three NCs in 1997, 2009 and 2014, respectively, **and is receiving support for the preparation and submission of its first BUR from UNDP with funding from the GEF**.

At the national level, responsibility for climate change rests within the Ministry of Environment (MoEnv), particularly within its **Climate Change Directorate (CCD)**, created in 2014. The CCD acts as the institutional hub for coordinating and developing all climate change activities in Jordan in relation to the UNFCCC and the global climate governance system, and it serves as the UNFCCC National Focal Point. In particular, it is mandated to incorporate climate policy decision-making processes both at the high-level and executive level, and facilitate the involvement of all relevant stakeholders in developing climate response actions/strategies and their implementation.

In addition to the CCD, there exists a **National Committee on Climate Change (NCCC)** created in 2001 and headed by the MoEnv, which performs the national administrative functions for the UNFCCC Secretariat, inter alia supervising the implementation of the Convention, providing technical and institutional guidance, leading climate adaptation and mitigation efforts and providing feedback on climate change programme and projects. Other ministries important for climate and the environment include the Ministry of Energy and Mineral Resources, the Ministry of Agriculture and the Ministry of Health.

At the time of Jordan's third NC, the institutional setting described above is still under development. In particular, the NC highlights the needs to **strengthen the organizational capacity of the CCD, expand and enhance the role of the NCCC and facilitate information flows and processing between its members** as important priorities to fulfil.

With regard to GHG emission inventory preparation, Jordan relies on a "project based" activity that is conducted whenever preparing a NC is required. Jordan's third NC acknowledges having complied with its reporting obligations despite the **lack of a sustainable system to collect, process, archive, monitor and report on the sources of GHG emissions and their sinks**.

According to the present institutional structures, the process of GHG data collection is conducted in the form of **paper-based exchanges between the MoEnv and relevant stakeholders**, with very little reporting obligations or specific methodologies to be followed by key stakeholders. Such system is flawed by quality and information management gaps. In order to address these gaps, the GHG data collection system should be strengthened by means of **introducing specific, formalized protocols, guidelines and quality assurance controls grounded in statutory requirements and possibly covered by a legal framework**. This is necessary to enhance data access and quality and ultimately improve the technical quality of national GHG inventories and the formulation of national mitigation strategies and low carbon policies.

Jordan's third NC proposes the following steps to address the above mentioned gaps:

- creating a **Single National Entity (SNE)** within the CCD as the designated national GHG inventory authority
- conducting intensive **trainings of officials on the development of GHG inventories** by using IPCC guidelines and data sheets and calculations
- preparing the **BUR** (currently ongoing)
- identifying all **sources of data, their measurement units and sources** that are required by an GHG inventory using 2006 IPCC guidelines and arrange for a sustainable flow of information amongst institutions
- developing a **legal structure** that requires data producers to submit information to the MoEnv.

Improving the country's GHG monitoring and reporting capacity is also recommended in the **National Climate Change Policy for 2013-2020**, a first-of-its-kind policy document for a country located in the Middle Eastern region which Jordan developed with the support of UNDP. The Policy is owned by the MoEnv and it serves the purpose of providing the government with guidance to implement the major climate change objectives of national priority related to adaptation and mitigation of GHG emissions.

Jordan's third NC regards **the development of a sustainable GHG inventory system as the first step towards the development of a national MRV system** that adheres to international guidelines. This need is also highlighted in Jordan's Climate Policy, recognizing how an effective MRV system is important to provide policymakers with effective information on mitigation policies.

**The need for establishing an MRV system is also recognized as an essential step to enable to Jordan to implement NAMAs** and demonstrate the avoided emissions in a manner that qualifies the action for international climate finance. To this end, Jordan's

Climate Policy envisages **utilizing the NCC as a forum for coordinating and facilitating** the development and submission to donors of proposals for international financing of mitigation and adaptation projects.

**The link between MRV, NAMA development and climate finance is also acknowledged in Jordan's INDC**, submitted in September 2015, which calls for increased efforts to provide institutional capacity strengthening for data collection and management particularly with regard to mitigation. To this end, **Jordan will strive to put in place a functioning MRV system for GHG inventory and mitigation progress** building on the appropriate institutional and technological settings available. Jordan's INDC also foresees the **preparation of the country's first BUR in 2016 and its completion in late 2017**.

As of October 2016, Jordan has submitted to the NAMA Registry six NAMAs for support in preparation and three NAMAs for support in implementation.[22] These NAMAs relate to sectors such as waste and water management, renewable energy and energy efficiency, fuels and emissions savings. The NAMAs have been submitted in the form of concept notes, for the preparation of which Jordan has not received any external support. Jordan acknowledges the presence of limitations in its ability to prepare sound NAMAs, from proposal writing to tracking of related finance and MRV, and could benefit from further capacity building for designing effective mitigation actions.

Jordan is currently benefitting from MRV capacity building support through **UNDP's project for the preparation of the BUR**, under which options and possibilities for domestic MRV of mitigation are being explored, and technical support for strengthening the necessary institutional arrangements is being provided. The project is being carried out by local consultants and is currently in the assessment phase, through **which an initial framework for action is being prepared, alongside a mapping of all relevant stakeholders that should be included in the MRV system and an outline of necessary steps to do so**. The first draft report of this information is expected to be ready by September/October 2016.

Jordan also joined the **World Bank's Partnership for Market Readiness (PMR) instrument**, an international platform providing support to developing countries in preparing and implementing climate change mitigation policies—including carbon pricing instruments—in order to scale up GHG mitigation. **This instrument includes building capacity and infrastructure for robust MRV systems and providing technical assistance to enhance the capacity and readiness of public and private sector actors for climate financing and market instruments**. These are considered key steps for creating a pipeline of mitigation actions that will build the target country's market readiness to benefit from market-based instruments (MBIs).

Jordan submitted a PMR proposal in April 2016. The proposal contains components related **to extensive technical assistance and capacity building in the public and private sector** with the aim to develop a multi-tier MRV framework and support the creation of a pipeline of mitigation activities **with a focus on renewable energy and energy efficiency as priority areas in line with Jordan's INDC**. To do so, extensive engagement with public

[22] http://www4.unfccc.int/sites/nama/SitePages/Country.aspx?CountryId=88

and private sector actors is foreseen in order to identify potential instruments and sources of demand and create incentives for greater engagement in mitigation. The Proposal also foresees the expected tracking of mitigation actions to contribute to the achievement of the mitigation goals contained in Jordan's INDC.[23] The project is currently in the early stages of implementation.

**The UNDP project and PMR instrument together are expected to build the foundations of Jordan's MRV institutional framework and related procedures**. For both projects, capacity building activities and hands-on trainings with members of relevant institutions (max 4 for each institution) are envisaged. Moreover, cooperation with the Ministries of Water and Energy is expected to be strengthened.

## 5.5 Lebanon

Lebanon has submitted two NCs in 1999 and 2011, respectively, and its first BUR in October 2015. The BUR was prepared by the Ministry of Environment with the support of UNDP and funded by the. UNDP and GEF are also supporting the preparation of the third NC, which is to be submitted in 2016.

In 2012, Lebanon established a **National Council for the Environment (NCE)**, made of 14 members representing 7 ministries and headed by the Ministry of Environment. The NCE is mandated to work as a platform through which environmental issues, including climate change, are coordinated at the national level. While institutionally established, the NCE has not yet become fully operational.

The Lebanese **Ministry of Environment** is the national entity responsible for international reporting in climate change and serves as the National Focal Point to the UNFCCC. Having been involved in the preparation of the first two NCs, the Ministry of Environment has developed some experience and know-how on the national GHG inventory process and established a cooperation network among different stakeholders working on climate issues, from both governmental and non-governmental sectors. Other ministries involved in the national process related to climate change policy making and GHG inventories include the Ministry of Energy and Water, the Ministry of Finance and Ministry of Industry. NGOs and the academic sector are also involved in the process, particularly through validating and reviewing GHG inventory results.

Despite these positive advancements, Lebanon's BUR cites the **lack of institutional memory** from compiling previous inventories, together with **difficulties in sharing data between agencies** and the **need for greater involvement from the private sector** as the major institutional challenges encountered in complying with international reporting obligations. Further limitations are also found in **the ability to track national climate change activities and their related financing across stakeholders**, both at the domestic and international levels.

The major constraints and gaps relating to MRV of emissions are identified as the **unavailability, inaccessibility and inconsistency of activity data and emission factors** – a

[23] https://www.thepmr.org/country/jordan-0

challenge which has persisted since the preparation of the country's first inventory in 1994.

While Lebanon has benefitted from technical capacity building through workshops undertaken with international support and targeting individuals and institutions engaged in the preparation of GHG inventories, these constraints suggest that **further support is needed to consolidate existing technical and institutional capacities**.

Lebanon is also benefitting from UNDP's Low Emission Capacity Building programme (LECB), which supports the Ministry of Environment with its national GHG inventory and related MRV capacity. However, progress has been hampered by slow institutional arrangements due to the unstable political situation in the country. As such, **Lebanon still lacks a clearly defined system for data collection and processing, quality assurance and control, reporting and monitoring**. This includes a specific legal framework that would attribute relevant tasks and responsibilities at the institutional and operational levels.

Despite the persisting challenges, Lebanon is making progress on **collection of GHG-related data in the energy sector**. A consultation with the MoE suggests that **the Ministry is working on finding sustainable solutions that would make cooperation and information sharing with the Ministry of Energy smoother**. To this end, the MoE recognizes that, in order to achieve positive results and establish effective synergies, it is important to avoid creating additional reporting burdens on its counterparts and rather resort to practices that would foster a seamless and intuitive data flow.

Another challenge relates to **discontinuous funding** coupled with **insufficient technical equipment and human resources broadly across all relevant institutions**, which affects the ability of key individuals to build up on the technical knowledge amassed throughout the process and ultimately compromises their ability to produce quality reporting outputs.

The Ministry of Environment **is determined to work towards designing a national MRV system** to provide a sustainable and structured data collection, maintenance, archiving and reporting processes. Part of this system is based on the introduction of **new incentives to team up with the private sector** in a manner that will encourage private institutions to report on their GHG emissions on an annual basis. UNDP's LECB programme helped take a first step in this regard, supporting the Ministry of Environment in issuing a Ministerial Decision (99/1 of April 2013) which **encouraged Lebanese private commercial and industrial firms to properly audit, report and communicate their yearly GHG emissions**. In return for doing so, the Ministry awards a GHG Reporting Certificate to all those that comply.

Another key action that the Lebanese MoE has taken to strengthen the involvement of the private sector in climate change is providing support to the launching of an initiative known as **"Lebanon Climate Act"**. The initiative was launched by the NGO Green Mind in partnership with the United Nations Development Programme and the MoE, with the support of the Central Bank of Lebanon and the Chamber of Commerce. It seeks to **establish a network of Lebanese non-State actors engaged in climate change action by mobilizing businesses, cities and municipalities to showcase their climate-related engagement through developing and implementing their own climate change plans**. Notably, the initiative would also entail establishing a related MRV

system for keeping track of each participant's mitigation actions and providing assistance for their climate plans throughout implementation.

Other steps taken by the Ministry of Environment to pave the way for the establishment of a national MRV system include the signing of a **Memorandum of Understanding with the Ministry of Industry**. This MoU allows the Ministry to retrieve basic emission data from industries activities as part of the information they need to provide to renew their import/export licence. As of today, this system is paper-based. **Similar cooperation is being pursued with the Ministry of Finance** by asking commercial, institutional and industrial entities to report additional information related to GHG emissions while declaring their annual VAT information. The cooperation encourages transmitting this data via an online system that has been created specifically for this purpose.

With regard to MRV of support, Lebanon has **not yet designated a single entity responsible for tracking and reporting on climate change projects and related expenditures**. The Ministry of Environment undertook a one-off survey in 2015 aiming to capture a snapshot of climate activities in the country but progress has been limited since then. According to the BUR, it is crucial part of Lebanon's strategy to **establish a permanent climate change and MRV unit with solid institutional and legal arrangements**. Such unit would be entrusted with assessing the progress and gaps of the national projects, monitoring and evaluating the work of a wide range of national stakeholders, promoting a better understanding of common objectives across institutions and prioritizing effective climate policy actions. The proposed unit would be inter-ministerial in composition and it would be responsible for looking exclusively at climate-related activities, undertaking MRV of emissions, national actions and financial flows. As such, it would allow for continuous tracking and updating of climate change related projects and budgets broadly across stakeholders. The unit would function through a Secretariat based within the MoE and focal points based in other relevant ministries.

As of October 2016, Lebanon has not yet presented any NAMAs to the UNFCCC for support in preparation or implementation, or to implement using domestic resources. However, **the country has established an internal mechanism for preparing and approving NAMAs**, with the Ministry of Environment appointed as the official NAMA coordinator entity. This mechanism also envisages an MRV system aligned to the implementation phase.

Two NAMAs – **one to transform waste into energy and another to promote fuel efficient and hybrid vehicle** – are being developed by the Ministry of Environment through the LECB for submission to the NAMA Registry for support in implementation. The BUR also indicates the Ministry of Agriculture as having started a **forestry NAMA**, which would be submitted to the Registry for support in preparation. In addition to this, three feasibility studies have been conducted: on reducing GHG emission through the promotion of renewable energy sources; on introducing low-carbon transport modalities; on scaling up renewable energy and energy efficiency in the building sector.[24]

[24] http://www.nama-database.org/index.php/Lebanon

Lebanon recognizes **MRV also as an essential component of its INDC**, submitted in September 2015. The envisaged MRV system is expected to cover planning and implementation of mitigation activities, assessment of impacts (GHG and non-GHG) as well as tracking of support (both national and international) needs and flows. Lebanon aims to integrate the necessary MRV activities for its INDC implementation into the existing processes and structures for reporting under the UNFCCC (NCs and BURs), so as to ensure an efficient and consistent approach. No reference to a specific MRV methodology is contained in the INDC.

Lebanon is **making progress on establishing a system to track and monitor the implementation of its INDC**, particularly with regard to mitigation actions in the energy sector. The MoE is currently undertaking gaps and needs analysis and working on creating an internal system that would function as a platform for all the concerned government entities to share technical information and report on their respective sectors relevant to the NDC. Such system may take the form **of an NDC intranet serving as a hub of internal information that would enable Lebanon to keep track of its NDC and comply with the obligations under the Paris Agreement**.

Upon submission of its first BUR, **Lebanon took part in the fourth round of ICA**. Lebanon's BUR was subjected to the technical analysis by the TTE between February and March 2016. The summary report of the process was published in September 2016.

**The report commends Lebanon for preparing its first BUR in a comprehensive manner**. The TTE acknowledges the efforts made by Lebanon to **perform a key category analysis of its GHG emissions in accordance with the IPPC good practice guidance**. It further acknowledges that the BUR provides **detailed information on the country's mitigation actions and a good understanding of the related national context**. The TTE also commends Lebanon for **providing comprehensive information on constraints and gaps and related financial, technical and capacity-building needs, including a well presented description of the financial support needed and received**.

In the report, it is mentioned that Lebanon emphasized that the main constraint related to the preparation of its BUR was **the lack of sustainability of the team responsible for the climate reporting processes at the MoE**. In this respect, Lebanon calls for the need to provide permanent financial and administrative support in order to guarantee the sustainability, continuity and integrity of the information reported in the BUR and notes that this could be ensured through the establishment of the proposed MRV unit.

The report underlines a number of **capacity-building needs and areas for improvement** with regard to Lebanon's MRV capacity, as shown by some of the findings reported below:

- the BUR could **enhance the transparency of the information** reported by providing separate information on technical, technological, financial and capacity-building needs, clearly outlining and categorizing them
- Lebanon's institutional arrangements need to **be further defined and strengthened** in the priority areas of mitigation actions and their effects, finance, technology and capacity-building needs and support received, and domestic MRV system

- the BUR lacks information on the **progress of individual mitigation actions**. This is related to capacity-building needs that Lebanon has identified as a key step in building a robust domestic MRV system
- identifying, implementing and documenting appropriate methodologies, approaches and processes for data collection, including **identifying key data for monitoring and verifying mitigation actions**, appear to be a constraint and a key need for Lebanon to enhance its future reporting
- Lebanon should continue to undertake efforts towards enhancing the capacity of experts working in the different ministries and agencies involved in the **preparation, development and monitoring of NAMAs**
- Lebanon should work towards **establishing a standardized and sustainable system for monitoring the financial support received**

Lebanon's BUR is **expected to undergo FSV** in the foreseeable future.

## 5.6 Libya

Libya has not yet submitted any NCs, BURs or INDCs to the UNFCCC Secretariat. In 2002, Libya received funding from the GEF to assist in the development of the scientific and technical capacity needed to produce an initial NC, but the project was terminated in 2005.

Climate change issues fall under the authority of the General Environment Authority and the Ministry of Electricity and Renewable Energy and its National Committee for Climate Change, which also oversees the management of climate change projects receiving international support. Other ministries important for climate change issues include the Ministry of Agriculture, Animal and Marine Wealth and the General Water Authority.

As of October 2016, Libya has not formally submitted any NAMAs to the NAMA Registry for support in preparation or implementation, or to implement using domestic resources.

## 5.7 Morocco

Morocco has submitted three NCs in 2001, 2010 and 2016, respectively, and its first BUR in May 2016.

Morocco's **Ministry of Environment (MoE)** is the national entity responsible for climate change serving as the National Focal Point to the UNFCCC. Other notable authorities that are part of Morocco's climate-related institutional framework include:

- the **National Committee for Climate Change (NCCC)**, an inter-ministerial body with representatives from the public and private sector and institutional responsibility for international reporting on climate change
- a **National Scientific and Technical Committee on Climate Change (CNST-CC)** serving as a national scientific advisory body and composed of members of public institutions, universities and consulting firms
- an **Inter-ministerial Monitoring Committee (CIS)** in charge of guiding the pro-

cess for the preparation, monitoring and approval of the technical documents presented by Morocco vis-à-vis its UNFCCC commitments (National Communications, INDCs, NAMAs, etc.).

Morocco's BUR acknowledges that the preparation of GHG inventories (including for the third NC and BUR) has so far relied extensively on external, independent consultants. This has determined the **inability to build and keep in-house expertise**. Through the support of UNDP, attempts were made during the 2000s to set up a national inventory system but they did not follow through.

Since then, Morocco has undertaken **significant steps to develop a formal climate change institutional structure at the national level**, including with support from international donors. With the support of GIZ, between 2009 and 2014 Morocco undertook an interview-based assessment targeting a wide range of stakeholders, which resulted in a **proposed institutional scheme related to GHG inventory preparation, outlined in its BUR**. The scheme setting would comprise:

- a **national GHG Inventory Committee**, chaired by the Ministry of the Environment, entrusted inter alia with validating the technical inputs provided by responsible agencies and the final reports before transmission to the UNFCCC
- a **technical unit within the Ministry of the Environment**, in charge of the coordination of the technical aspects related to the inventory preparation and acting as the interface between the Committee and other sectoral units
- **sectoral units** covering energy, agriculture and forestry sectors, entrusted with providing GHG emissions data in relation to their sectors
- data providers and experts from other industry sectors.

Each of the proposed units is envisaged to function by c**onvening working groups with participation from relevant experts** to consult with them on technical issues, i.e. methodologies and data interpretation and then report on the results achieved.

**Morocco's MoE expects to run a capacity building programme throughout 2016** to operationalize the system described above.

Other notable steps include the creation of the CIS specifically for the preparation of the third NC and BUR, alongside a **Project Management Unit** which is responsible for regularly monitoring of the activities of CIS as well as undertaking capacity building activities for corporate services, local authorities at the regional level.

In addition, with the support of GIZ, Morocco is establishing a **Climate Competence Center (4C Maroc)**, entrusted with better positioning the country to further develop and implement its national climate policy. The Center is envisaged as a hub of information on Morocco's climate policy, potential adaptation and mitigation measures that would contribute to a better flow of information amongst stakeholders at the national and regional levels. Moreover, it will serve as an engine for mobilization and capacity building of all the different actors engaged in climate policymaking.[25]

[25] More information on the project can be found at the following page: https://www.giz.de/en/worldwide/27018.html

Morocco's BUR calls for the establishment of **a sound national MRV system**, linking it to the possibility of **exploiting the country's large mitigation potential through NAMAs and the implementation of LEDs**. In particular, Morocco is determined to establish a national MRV system to achieve the following goals:

- ensure transparency, accuracy and enhanced comparability of information on climate change to identify good practices, promote learning process and allow international comparisons
- obtain recognition and visibility of mitigation results, which may serve as incentives in other countries
- assign quantified impacts to policies
- measure national and international progress
- identify gaps and needs in international support
- promote access to international public and private finance as a solid MRV system is essential to attract more financing.

To date, **Morocco has developed a portfolio of five NAMAs with the support of international cooperation, and the possibility of setting up of a related MRV system has been utilized as one of the criteria for the identification of these priority NAMAs**. Three NAMAs (in agriculture, habitat and waste sectors, respectively) have been developed within UNDP's LECB. Two other NAMAs in the energy sector have been developed as part of the project Facilitating Implementation and Readiness for Mitigation (FIRM) with the support of the United Nations Environment Programme (UNEP).

**For each of these NAMAs, which as of October 2016, have yet to be submitted to the NAMA Registry for recognition, Morocco proposes a tailored and detailed MRV system**. The proposed MRV systems designate different entities, such as ADERE (the National Agency for the Development of Renewable Energies and Energy Efficiency) in the case of energy NAMAs as the coordinating actors responsible for their implementation. The data recorded and collected by the technical actors will be sent to the responsible entity and then subjected to an audit by a third, independent and accredited party.

In addition to receiving support from UNDP and UNEP, **Morocco also joined the World Bank's PMR instrument** submitting a framework proposal in 2012. The proposal foresees informing and assisting the Moroccan government in **evaluating the implementation of an international crediting mechanism in the three targets sectors (electricity generation, cement production, and phosphates processing**). Among its components is building and improving the capacity of the government and the private sector to design and pilot MRV systems in the project's selected sectors and establishing core technical components for the design of sectoral crediting mechanism in Morocco.[26] The project started in 2015 and is currently under implementation.

Morocco's first NDC, submitted in September 2016, contains no specific reference to MRV.

[26] https://www.thepmr.org/country/morocco-0

## 5.8 State of Palestine

Palestine has not yet submitted any NCs or BUR. Its Initial National Communication (INC) is in the final steps of revision and approval while the preparation of its INDC is currently under consideration and expected to start soon.

In Palestine, climate change and the preparation of inventories of GHG emissions rests under the competence of the **Environmental Quality Authority (EQA)**. Other notable authorities important for climate issues are the Palestinian Energy and Natural Resources Authority, Ministry of Transport, Ministry of Agriculture and the Palestinian Water Authority and the Palestinian Central Bureau of Statistics in addition to others.

Even before becoming a Party to the UNFCCC on 17 March 2016, followed by the signing and ratifying of the Paris Agreement on 22 April 2016, Palestine has been actively working on building its capacity to mainstream climate change into national policies, engage in climate action in the areas of mitigation and adaptation, and step up its efforts to comply with the reporting obligations of the Convention.

With the technical support of UNDP's project "Enhancing Capacities of Palestinian Institutions in Mainstreaming Environment and Climate Change", **Palestine is preparing its INC**, the first draft of which has already been completed and is currently under final revision before submission. Palestine's first national GHG inventory to be included in the NC has been prepared in accordance with the IPCC guidelines.

Other components of the UNDP project include:

- an assessment of Palestine's national capacities for implementing mitigation and adaptation measures
- the implementation of a "National Capacity Development Program" aimed at enhancing the capacities of the six institutions mentioned above to mainstream and address the climate change challenge
- the implementation of 4 pilot projects on mitigation and adaptation targeting sectors including water, agriculture, renewable energy and transport
- financing NGOs for adaptation and mitigation action using UNDP's Small Grants Program mode of work.

Within the framework of UNDP's project, government officials have received **trainings on GHG emission measuring processes, the use of inventory IPCC software and the application of relevant UNFCCC guidelines** – all useful steps to build up Palestine's institutional capacity for future climate action – in addition to training on mitigation scenarios using the LEAP software.

Further assistance to Palestine on international reporting is expected. **Palestine intends to apply to the GEF's Readiness and Preparatory Support Programme to receive technical assistance for the compilation of its second NC and first BUR**. A readiness request to the GCF has already been submitted after appointing the EQA as the National Designated Authority (NDA). Another request was also submitted to the Climate Technology Centre & Network (CTCN) with regard to Technology Needs Assessment (TNA).

Palestine prioritizes adaptation, but **recognises the importance of mitigation as well**.

As of October 2016, Palestine has not yet formally submitted any NAMAs to the NAMA Registry for support in preparation or implementation, or to implement using domestic resources. However, Palestine intends to do so and bilateral negotiations between international donors and national agencies are being undertaken to this end.

Palestine's national MRV system is not developed yet. The country's current MRV-related priorities are to **set up a national system with related regulatory** support and **attribute appropriate tasks and responsibilities to relevant institutions within government bodies**. Involvement and collaboration amongst stakeholders (i.e. representatives of various Ministries concerned with climate issues) remains a challenge and in need of further development.

## 5.9 Tunisia

Tunisia has submitted two NCs in 2001 and 2014, respectively, and its first BUR in December 2014 being the only ENPI South country able to do so within the timeframe set by COP17.

In Tunisia climate change falls broadly under the responsibility of the **Ministry of Environment, while reporting on climate change and NDC more specifically falls under the Ministry's Directorate General for the Environment and Life Quality (DGEQV)**. The DGEQV acts in consultation with other government institutions, private sector actors, NGOs, university and research centers. The overall responsibility for the compilation of the BUR, however, was placed under the Ministry of Public Works, Spatial Planning and Sustainable Development.

On GHG inventory preparation, Tunisia's **National Agency for Energy Control (ANME)** is the responsible entity for coordinating all the workings related to GHG mitigation and collection of related data, and its **Information Unit on Sustainable Energy and Environment (CIEDE)**, created in 2001, acts as the responsible body for carrying out activities related to capacity building and studies on climate change in the energy sector. CIEDE plays a key role in contributing to the emergence of an MRV system at the national level and the development NAMAs, particularly in the energy sector. In addition, the **National Committee on Climate Change** (CNCC), established in the early 2000s, serves as an institutional platform for monitoring and supervising the country's implementation of the UNFCCC.

Despite numerous attempts, Tunisia has been unable to establish stable institutional structures for conducting GHG inventories until 2010, when with the support of GIZ **a stable working group was created to develop and inventory of emissions in the energy sector**. The working group was structured as a task force with sectoral representatives operating in relevant institutions (ANME, Ministry of Agriculture, National Agency on Solid Waste, National Sanitation Office). Tunisia's BUR acknowledges the importance of formalizing this structure and making it permanent for future workings on GHG emission inventory preparation.

In 2012 **Tunisia launched a consultation process to prepare for the establishment of an MRV system**, structured around three major GHG components:

- MRV of mitigation measures (emission reductions, co-benefits, etc.)

- MRV of GHG emission reduction support (financing, technology transfer and capacity building)
- MRV of national GHG emissions for developing, notifying and verifying GHG inventories

Tunisia has significant mitigation potential, particularly in the energy sector, and recognizes NAMAs as a valuable option to exploit such potential. **Tunisia has developed five NAMA documents**. With the support of GIZ and UNDP, ANME has prepared a portfolio of three NAMAs in the energy sector, particularly in the areas of cement, buildings and solar energy (Tunisian Solar Plan - TSP). These three NAMAs were identified as priority on the basis of the following criteria:

- willingness of concerned authorities to overcome the implementation obstacles
- the level of progress and maturity of implementation circumstances
- the identification of funding sources and possibilities to set up appropriate mitigation mechanisms
- the impact on sustainable development indicators
- the potential for reducing GHG emissions
- the possibilities of establishing an MRV system

The other two proposed NAMAs, supported by GIZ, relate to sanitation and forestry.

As of October 2016, only the NAMA for TSP has been submitted to the NAMA Registry for support in implementation.[27]

For each of the five NAMAs presented above, Tunisia's BUR proposes **a tailored MRV system within a broader technical component which includes capacity-building elements for relevant institutional stakeholders**.

The proposed MRV systems, which are currently at different stages of development for each NAMA, designate different entities, such as ANME in the case of energy and cement NAMAs, as the coordinating bodies responsible for their overall implementation.

On a general note, each MRV system proposes that the technical data collected by actors operating on the ground be **shared with the responsible designated entity and then subjected to an audit by a third, independent and accredited party**. The processed data would then be sent to the UNFCCC National Focal Points for preparing for submission through international reporting.

Particularly in the energy sector, since 2005 **ANME has put in place an information system called SIM2E** that allows the monitoring and evaluation, according to a top-down approach, of the country's energy policies and related GHG mitigation. This system provides three key functions, namely: the collection and centralization of energy data and GHG emissions in the energy sector; alignment and data archiving; the calculation of energy efficiency indicators and GHG emissions, according to a top-down approach. Complementary to SIM2E is **EnerInfo**, a system that ANME is putting in place with the support of the EU, which makes it possible to track energy-related national action programmes through a bottom-up approach by monitoring indicators such as avoided emissions, energy savings, aid received, policy subsidies, jobs created.

[27] http://www4.unfccc.int/sites/nama/SitePages/Country.aspx?CountryId=178

Alongside the tailored MRV systems for mitigation actions described above, **Tunisia intends to develop an MRV system for support that will cover three main parameters: financial flows, capacity building and technology transfer**. Regarding financial flows, the MRV system is expected to indicate the source (country, organization, private, public) of the financial resources obtained, the date of receipt, the recipients and users. Regarding capacity building activities, the MRV system is expected to indicate the cost of these activities, the themes, number of targeted people and duration, impacts and chances. Regarding technology transfer, the MRV system is expected to indicate the cost of action, the types of technology involved and its origin, transfer arrangements and impacts. In all cases, this MRV system is expected to serve as support for individual projects in accordance with national and international recommendations. The information collected is to be reported internationally through NCs and BURs.

With regard to MRV of GHG emissions, finally, Tunisia recognizes that the success of its MRV system will be based on the achievement of national inventories of emissions and removals in accordance with the latest international IPCC recommendations. In 2013 **Tunisia prepared a GHG inventory and subjected it to a diagnostic study which resulted in the elaboration of the organizational recommendation** to create a **National System of Inventory of GHG emissions (SNIEGES)** as the primary MRV entity in the country. The SNIEGES would be entrusted with monitoring, reporting and verifying emissions on the basis of inventories prepared by an **Inventory Coordination Center (PCI)**. The PCI would play the role of coordinating and facilitating the technical realization of the inventories, providing technical procedures and methods and conducting information-gathering, compiling and processing data and reporting. The PCI would, in turn, be composed of:

- an **Emission Inventory Coordination Group (GCIE)** bringing together representatives from different ministries and agencies concerned with GHG inventory sectors, to ensure the smooth running of inventory operations and leverage active participation from all relevant entities
- a **Transversal Technical Coordination Team (ECTT)** with the responsibility to conduct daily inventory operations and compile the results in the final inventory report
- a **group of experts** reflecting the emission areas identified by IPCC to collect and process data and prepare the respective portions of the inventory report. The BUR proposes five experts group on energy, processes, agriculture, forest and land use, waste.

On the basis of the institutional setting described above, the BUR proposes that **the realization of national inventory should be based on data and statistics made available by relevant ministries, in accordance with the UNFCCC procedural and methodological recommendations**. It further proposes that the PCI would serve as support to national agencies and departments involved in the inventory making processes. Once prepared, the inventory report would be widely circulated and made publicly available on the Ministry website. The inventory report may also be subjected to an optional "review" by a third party, or by UNFCCC evaluators if necessary.

As of October 2016, the SNIEGES has yet to be formalized through regulation.

**Tunisia links the importance of establishing a sound MRV system also to the implementation of its INDC**, submitted in September 2015. Tunisia envisages the establishment of a rigorous MRV system, following the approach broadly described above of its BUR, and based on the same three strands of action (national emissions, mitigation measures and support), which will apply to all the elements of its national mitigation strategy.

**Tunisia took part in the first round of ICA upon submission of its first BUR**. Tunisia's BUR was subjected to the technical analysis by the TTE in May 2015, which produced a summary report published in February 2016. **The report commends Tunisia for its efforts in providing detailed information on its institutional arrangements, mitigation actions and steps taken towards establishing a domestic MRV system**, both with regard to mitigation actions, underlying the notable NAMA-tailored approach used, as well as support received.

The report underlines a number of **capacity-building needs and areas for improvement** with regard to Tunisia's MRV capacity, as shown by some of the findings reported below:

- the BUR **does not provide a clear description of procedures and arrangements undertaken to collect and archive data on national GHG emissions and Tunisia's efforts to make this a continuous process**. During the technical analysis, Tunisia explained that the process of establishing official institutional arrangements has not started
- the BUR **does not report on all the mitigation actions** listed in the document. During the technical analysis, Tunisia clarified that this decision was due to the taking into account of its national priorities and its decision to submit a concise report
- the transparency of the information provided on the mitigation actions could have been enhanced by **describing in more detail the methodologies and hypotheses used for estimating the GHG emission reduction effects** and by specifying how **the estimated effects of the NAMAs** relate to the overall mitigation effects presented
- the BUR **does not provide information on areas where data may be further improved through capacity-building**. During the analysis, Tunisia highlighted that there is only a need to improve data archiving. In its review of the draft summary report, Tunisia referred to the NIR as an additional source of information
- the BUR **does not provide a description of the constraints and gaps encountered in the preparation of the BUR. Tunisia therefore needs more capacity-building in the understanding of the importance to report on constraints and gaps**
- **no information is provided on technology transfer and technical support received**, although detailed information on capacity-building support received for all activities related to climate change is provided
- **Tunisia's capacity to set up and implement an MRV system to operate on a permanent basis should be enhanced**

**Tunisia's BUR underwent the first-ever FSV**, held at the Bonn Climate Change Conference between 20 and 21 May 2016. The

record of this first FSV session was released in August 2016.

**Tunisia is currently benefitting from MRV capacity building support from** GIZ through its "Capacity Development for Greenhouse Gas Inventories and MRV in Tunisia" project.[28] The project is supporting the development of a comprehensive MRV system for GHG monitoring and a pilot application of MRV for mitigation for the NAMA TSP. Among its results the project has developed an internet portal (www.mrv.tn), prepared in collaboration with ANME, which presents the work undertaken on monitoring and reporting, alongside general information on the different NAMAs in Tunisia. Notably, the project has also supported the operationalization of an MRV system for the Building NAMA, as a result of **which reductions of $CO_2$ emissions from private and public administration buildings are now measurable**. Several trainings have also been conducted for various government staff of all sectors involved and data providers.

In addition, **Tunisia also joined the World Bank's PMR instrument** submitting a framework proposal in February 2014.[29] The proposal seeks the implementation of several components to build Tunisia's market readiness, including: the setting up of a coordination entity for mitigation policy at the national level, the setting up of a national registry to keep record of all mitigation initiatives and financing sources, building market readiness by developing the legal, financial and technical framework in the cement and energy sector, and piloting a sectoral crediting mechanism in at least one of the two sectors.

Specifically, the proposal requests support for **action in the cement sector** through:

- developing the organizational, regulatory, technical and financial framework of the mechanism
- developing a detailed MRV system and capacity building for the cement plants negotiating the required agreements between the stakeholders and
- piloting and testing a crediting mechanism in the sector

and **in the electricity sector** through:

- designing, piloting and testing a crediting mechanism
- exploring the possibilities of linking a feed-in tariff to the carbon market.

The project preparation is still under development. In April 2016, UNDP was appointed as the project's delivery partner.

[28] Further info can be found at the following link https://www.giz.de/en/worldwide/19523.html

[29] https://www.thepmr.org/country/tunisia


ClimaSouth
Low carbon development
for climate resilient societies