Tunisia

Collaborating to align data, information and mitigation actions

Activity	Coordination between sectors and stakeholders in the development of a national inventory, NAMAs and MRV
Country	Tunisia
Sector(s) involved	Energy; Industry; Agriculture; Waste
Time frame	2012–2014

Case summary

With an economic and development model closely linked to fossil fuel use, Tunisia's growth in recent decades has led to a marked increase in greenhouse gas emissions. Recognising the need to address climate change, the country has proceeded to pursue various strategies, plans and activities to promote renewable energy and climate protection while at the same time pursuing development goals such as modernising industry, creating jobs, improving quality of life and supporting international climate change mitigation efforts.

This case provides a good example of the development of well-linked national climate change strategy, NAMAs and supporting MRV arrangements. In particular, efforts to collaborate across sectors and government ministries to share data and develop effective use of information to support national inventory, NAMA development and MRV are noteworthy.

Tunisian partners on study tour

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Background

Tunisia has pursued energy efficiency and renewable energy development since the 1980s, mainly coordinated and driven by the National Agency for Energy Conservation (ANME). More recently several national policy initiatives were launched to further drive climate change action.

2009: The Tunisian Solar Plan (TSP) was developed to provide a national strategy for implementing a diverse and sustainable energy supply for the country. The plan reflects Tunisia's ambition to become a regional hub for industrial and energy production and aims to enable the country's transition towards a low carbon energy pathway. It focusses on (1) a significant improvement in energy efficiency for a better control of energy demand; and (2) a substantial use of renewable energy to diversify the mix energy for power generation, including:

- A high penetration of renewable energy including solar energy in electricity production. The planned capacity in 2016 is 230 MW for CSP, 35 MW for PV, 25MW for biogas and 410 MW for wind power.
- Strengthening of the energy demand management, energy savings should reach 23% of primary energy demand in 2016;
- Interconnection with the European electricity grid to export electricity to Europe. In 2016, the export capacity should reach 1000 MW including 800 MW from the gas plant and 200 MW of renewable energies;
- The establishment of a centre of competence for promoting the growth of the solar equipment industry in Tunisia.

2012: The National Climate Change Strategy (NCCS) was launched covering both adaptation and mitigation measures across various sectors. The strategy takes into account a range of short-term social and economic development needs and combines them with measures to guarantee ecological development in the medium term. It is also being aligned and embedded into long-term national development plans. Its key objectives are to reduce CO2 intensity by at least 40 % by 2030 and stabilize emissions at 2012 levels by 2050 (Duchrow, 2013).

2013: Development began on the country's first NAMAs covering: Agriculture, Buildings, Cement, Local GHG Management, Renewable Energy and Wastewater.

2014: Tunisia embeds the importance of addressing climate change in its national constitution (only the third country globally to do this) demonstrating its strong national commitment to the issue.

Activities

- National Inventory Working Group: A cross-sectoral/ministerial working group meets regularly to support the development and use of the national GHG inventory (see figure). The group includes core data suppliers and users including: the Energy Agency (ANME) who lead/drive the work of the group; Ministry of Agriculture (land-use change and agriculture data) and Ministry of Environment agencies (covering solid and liquid waste data).
- Use of National Inventory for developing NAMA and MRV: The National Inventory provides important base-data for the development of NAMAs. For example, in the cement mitigation mechanism (NAMA), the Inventory is being used for: identifying key sectors with the greatest emissions; providing approved calculation methods and national emission factors (based on information from GHG inventory of the energy sector for calculation of baseline in the cement mitigation mechanism); and using the established institutional arrangements (institutional structure and data flow) for measuring and monitoring NAMAs.
- Development of data for NAMA, supporting/strengthening National Inventory and Climate Change Strategy: Tunisia is currently in the process of developing a range of NAMAs covering: Cement, Building, Renewable Energy, Wastewater, Local GHG Management, and Agriculture. These NAMAs require more detailed data for targeting actions and for later MRV activities. These activities are in turn helping

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to progress the National Climate Change Strategy and strengthen the National Inventory by improving access to and understanding of sector specific emissions. For example, the development of the cement mitigation mechanism (NAMA) has built working relationships with and secured access to emissions of the country's 9 cement producers.

Institutions involved

TSP: Ministry of Industry, Energy & Mines/ General Directorate for Energy (DGE); National Agency for Energy Conservation (ANME); Tunisian Electricity and Gas Company (STEG); Ministry of Finance; Ministry of Environment

NAMAs: National Agency for Energy Conservation; National Sanitation Office (ONAS); Ministry for Infrastructure and Environment; City of Sfax; Ministry of Agriculture

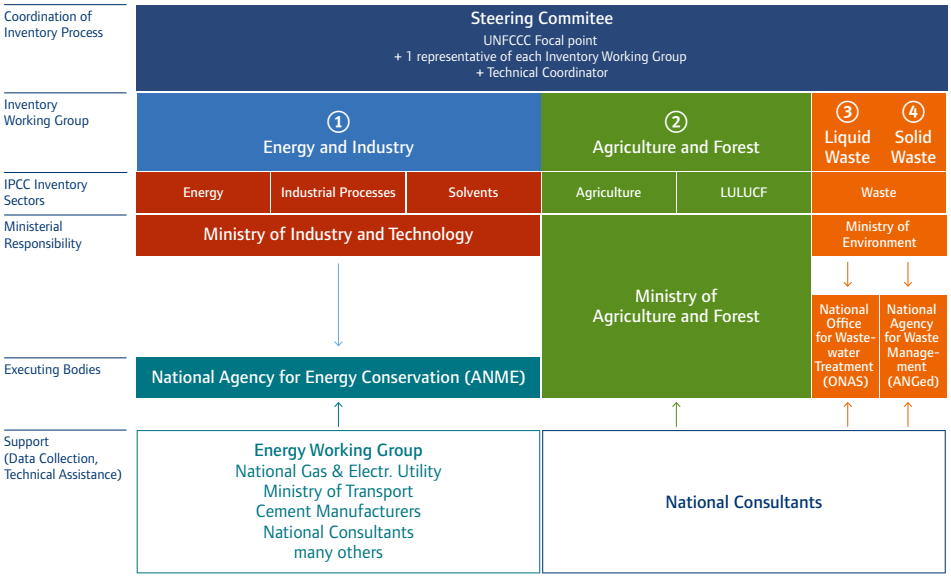
Cooperation with

German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) through its International Climate Initiative (IKI); German Federal Ministry for Economic Cooperation and Development (BMZ); Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); United Nations Development Programme.

Finance

Development of the various programs actions and activities (including development of TSP, NCCS and NAMAs) supported by a combination of private and public sector funds together with international support including from: the French Development Agency (AFD); World Bank; European Union; United Nations Development Programme (UNDP); and the German Federal Government.

National Inventory System in Tunisia



Source: Duchrow, A. (2013) Support for an integrated NAMA strategy in Tunisia. COP19, Tunisia – a front-runner in NAMA development. Warsaw, November 14, 2013.

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Impact of activities

- Capacity building: Staff of partner agencies through e.g. attending training courses and information events on the topics of energy balance, MRV of mitigation measures and the development of greenhouse gas inventories has built skills and knowledge necessary to ensure better greenhouse gas management. Staff are increasingly better equipped to undertake MRV related activities and this in turn reduces dependency on external consultants.
- Awareness was raised among decision makers: Across the various ministries and authorities responsible for relevant, high emissions sectors such as energy, industry, agriculture and waste management. This has supported the development of institutional structures necessary to ensure a sustainable inventory system is established.
- National Inventory Working Group: Has built understanding of the need for more comprehensive emissions data and facilitated stronger sharing of this data. Having key data-suppliers/users directly involved ensures better quality of data and fosters more cross-sectoral understanding. Building trust and stronger relationships through this group has also improved collaboration between agencies (e.g. in developing NAMAs which span various sectors such as energy from waste).
- More comprehensive emissions data: When the NCCS was under development, available data was largely limited to energy and industrial processes, with broader sectoral data unavailable. Demand for more comprehensive data (for NAMA and the NCCS) combined with coordinated efforts to develop and share data is resulting in improved availability and granularity of data to support mitigation and MRV efforts.
- Increased engagement from private sector: Through raising awareness of need and benefits of addressing climate change, key private sector actors have been more engaged and willing to share data. For example in the case of the cement mitigation mechanism (NAMA), the 9 key cement processing organisations central to the NAMAs work, now better understand co-benefits, and are more willing to support the process. This has built trust in the process and consequently these organisations have become more willing to share data for use in the national inventory and NAMA development.
- Increased trust and cross-sectoral understanding: Developed through combined efforts to collaborate in data sharing and design of mitigation actions (e.g. NAMA). This has demonstrably enhanced the efficiency of decision-making in some cases. For example, even though the TSP had to be revised to address regulatory and financial barriers, the targets set through the process were never challenged, in large part as a result of a collaborative, bottom-up approach
- Ready to submit first Biennial Update Report: Improvement in the National Emissions Inventory means Tunisia is now in a strong position to submit BUR's.

Why is it good practice

- The Tunisia approach builds on a long-term vision articulated by the Solar Plan, National Climate Strategy and most notably in the national constitution.
- The case demonstrates effective coordination across different ministries relevant for the development of the inventory and NAMAs. In particular the coordination of data sharing and dialogue through the working group has ensured that efforts will be informed by reliable data and have improved the measurability and regular tracking of climate mitigation actions.

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- Effective awareness raising around climate change and involvement of key stakeholders (e.g. cement sector in NAMA development) also promises to stimulate private investment in NAMA activities. The development of NAMAs covers a broad scope (i.e. not just driven by the solar plan with an energy scope) and propose a diverse set of interventions across numerous sectors which fit into the existing climate strategy.
- While strengthening the national GHG inventory and designing MRV specific to each NAMA an MRV framework is also emerging which will meet the requirements of biennial update reports.

Success factors

- Participatory approach: Engaging key stakeholders in the energy sector who nominated representatives to participate in the working group. Tunisia is already well structured in terms of cooperation and communication between stakeholders (including private sector) and administrations. Consequently, collaborative approaches are quite efficient and a familiar process
- Collaboration between ministries and sectors: Enhanced the availability and quality of data to inform national and sector specific mitigation action. Many of the same people work together on both mitigation actions (e.g. NAMA) and inventory development which has enabled good shared knowledge of the data, and built trust and cross-sectoral understanding.
- Linking energy and climate issues: Through the work of the ANME to develop a general strategy is ensuring efforts flowing from this strategy (e.g. NAMA, MRV etc) are well aligned with both climate change and energy strategies. This connection also improves access to finance by providing a broader basis for meeting funding criteria (e.g. climate change is more appealing than energy to some donors)
- Knowledge of sectors and data: Government agencies have strong understanding of their sectors well which makes it much easier to develop inventory and MRV data and mitigation actions. For example, access to good quality waste data makes it easier to calculate reliable GHG emissions resulting from waste. Good knowledge management and data around energy provided a strong evidence base for development of the solar plan and to identify and align mitigation actions (e.g. NAMA) with the energy strategy.

Overcoming barriers/ challenges

What were the main barriers/challenges to delivery?
How were these barriers/challenges overcome?

Information

Securing data for inventory and NAMA development, particularly private sector data which is often rich but commercially sensitive.

Engaging and collaborating closely with the private sector built trust to share data. For example, through the development of the cement mitigation mechanism (NAMA), regular bilateral meetings with industry and government on data needs and methodologies encouraged the sharing of data. Concerns about commercial sensitivity were addressed by establishing data sharing agreements to ensure that only key partners (e.g. ANME) would have access to the data.

Institutional

Engaging key stakeholders to develop understanding and motivation to support NAMA development was an initial challenge. For example, communicating the relevance and importance to key sectors (e.g. cement manufacturers).

Engagement was achieved through workshops, bilateral meetings with companies and a study tour. The workshops and meetings introduced the international climate policy architecture and national strategies to key stakeholders, linking it to their activities or area of business. European study tours took a selection of key stakeholders (e.g. Energy Agency, Ministry of Industry, private sector, technical institutes) on a

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tour including political meetings with funders and visits to field sites (e.g. for thecement mitigation mechanism). This included a tour of a co-processing plant in Belgium and a meeting with the World Business Council Cement Sustainability Initiative to link to the international private sector view.

Lack of comprehensive, cross sectoral coordination for sharing and discussing GHG inventory data.
An Inventory Working Group was developed over a period of 4–5 months including regular briefings and meetings. Information was provided on the purpose of the work and linked it to mitigation actions (e.g. NAMA) being developed across different sectors. Additionally a data supplier group meets monthly (coordinated by ANME) including key data providers (e.g. energy; gas; transport; aviation etc.). Participation is currently voluntary but in time could be strengthened with an official mandate.

Lessons learned

- Collaboration between key sectors, ministries and research institutes is essential: For developing (and ultimately implementing) effective mitigation action that is well aligned with national priorities.
- Sensitising and raising awareness of key stakeholders: To the relevance and importance of collaboration on climate mitigation actions (e.g. NAMA), in particular by concentrating on win-win measures to strengthen motivation to engage and collaborate.
- Facilitating participation and dialogue: (e.g. through regular meetings) to build trust, understanding and enable joint working and data sharing. This requires investment of time and capacity and clarity around processes such as data collection and use.

How to replicate this practice

- Align climate mitigation actions with other national strategies: (e.g. energy) and priorities to ensure stronger support and buy-in.
- Build capacity and awareness among key stakeholders: To improve cross sectoral/ministerial understanding and trust to collaborate.
- Implement structures and arrangements: To facilitate effective sharing of data, exchange of knowledge and the development of sustainable inventory system (e.g. national inventory working group and a data suppliers group).
- Engage the private sector: By investing time to explain benefits, engaging them in the development of mitigation actions (e.g. NAMAs) and building trust to share relevant data and collaborate in the development of mitigation planning and implementation.

Contact for enquiries

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Further key resources

- National Climate Strategy: www.environnement.gov.tn/fileadmin/medias/pdfs/dgeqv/chang_climatique_3.pdf (French only)

Website(s)

- www.anme.nat.tn

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