





# Establishment of a National Competence Centre for Climate Change Mitigation and Adaptation in Morocco (4C Maroc)

## **Summary**

Due to its geography, Morocco is very vulnerable to the impacts of climate change. It signed the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and intends to remain a low-level emitter of greenhouse gas emissions despite rapid economic growth. A climate competence centre has been set up in order to establish a climate change mitigation and adaptation structure. Through the establishment of this National Competence Centre for Climate Change Mitigation and Adaptation in Morocco (4C Maroc), Morocco is in a better position to implement and further develop its national climate policy. This case study can be regarded as an 'Innovation on Trial'.

Morocco will suffer considerably from the impacts of climate change in the following ways (Verner 2012):

- Summer temperatures in the Atlas Mountains are projected to rise by more than 6 °C by 2080.
- The frequency and severity of heat waves are projected to increase strongly by the end of the century (e.g. almost 50 days per year are projected to reach above 35 °C in the Atlas foothills).
- Less rainfall is projected, ranging from about a
  25% decrease in the south to approximately a 40% decrease in the agro-economic zone in the north.

# Challenge

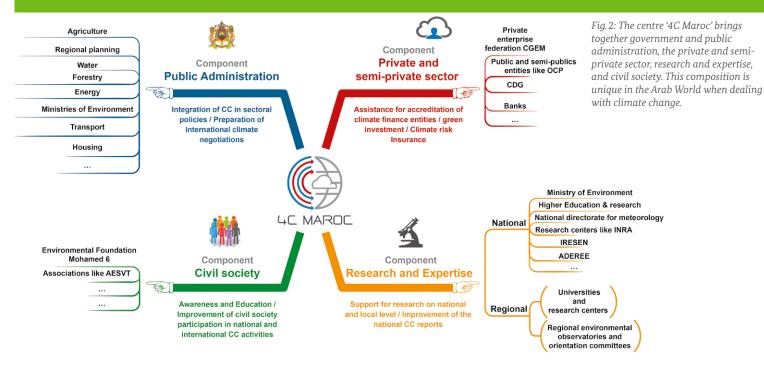
As Morocco is very vulnerable to the impacts of climate change, the government decided to contribute actively to mitigating climate change and adapting to its impacts. Morocco signed the UNFCCC in 1992 and completed its first national greenhouse gas inventory in 1994. Its national plan for combating global warming (PNRC), which was presented by Morocco's delegation in Copenhagen in 2009, reflects the country's intention to remain a low-level emitter of greenhouse gases despite rapid economic growth. A climate competence centre was established to bring Morocco into a better position to implement and further develop its national climate policy.

## Setup

Following a long process of dialogue between stakeholders, key ministries, representatives of public administrations, the private and the semi-public sector, civil society and training and research organisations, '4C Maroc' finally held its constitutive general assembly meeting in October 2015 (Fig. 1). It commenced its activities in 2015, but action had already been taken within the framework of Project 4C, which supported the establishment of 4C Maroc. Project 4C is being implemented by GIZ on behalf of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety within the scope of the International Climate Initiative. The national lead executing agency is the Ministerial Delegate to the Minister of Energy, Mining, Water and Environment responsible for environment. The GIZ project started in 2013 and will last until 2017.







**Morocco set ambitious targets** to limit greenhouse gas (GHG) emissions. These depend to a great extent on a major transformation of the energy sector. The main objectives are:

- achieving over 50% of installed electricity production capacity from renewable sources by 2025;
- reducing energy consumption by 15% by 2030;
- substantially reducing fossil fuel subsidies and increasing the use of natural gas.

Outside the energy sector, the following programmes are being carried out:

- National Waste Recovery Program
- National Liquid Sanitation and Wastewater Treatment Programme
- Morocco's Green Plan (for the modernisation of the agricultural sector and the promotion of natural resources and their sustainable management)
- Preservation and Sustainable Forest Management Strategy.

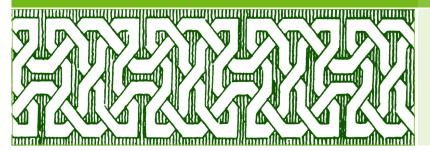
# **Opportunities**

The implementation of these ambitious plans to reduce GHG emissions requires an unprecedented mobilisation of Moroccan society and international partners. To facilitate this mobilisation, Morocco set up 4C Maroc, which provides a capacity-building and information-sharing platform on climate change. The platform is available to various stakeholders and has a regional and African outreach.

The GIZ project aims to define the roles and tasks of the climate competence centre at regional and national level through consultation with the relevant partners. It assesses demand and provides support in the training of experts, along with any necessary equipment. To ensure Moroccan institutions can systematically assess, document and disseminate successful measures already in place, the project shares examples of good practice with them and provides detailed information on methodologies, costs and results. In addition, instruments are being developed that will help to establish a sustainable knowledge management system in the field of greenhouse gases and adaptation to climate change. This work includes (Fig. 2):

- developing vulnerability indicators and identifying vulnerability 'hotspots';
- establishing a climate database;
- identifying, processing and disseminating data and tools which can be used for training in the field of climate (climateproofing, nationally appropriate mitigation actions (NAMAs), etc.:
- drawing up a list of contacts who are responsible for ensuring climate risks are taken into account in territorial and sectoral planning;
- developing an information system to facilitate the systematic development of greenhouse gas inventories and therefore make it easier to draft the national reports;
- developing a 'Green Investment Plan';
- preparing the members of the Moroccan delegations for the international climate talks so they can effectively represent Morocco's interests in international climate dialogue or negociations;
- creating and regularly updating a website for 4C Maroc.

### **Contact persons**



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The aim is to train at least 20 national experts, whose role it will be to disseminate information on Moroccan climate policy, potential adaptation and mitigation measures, and services provided by 4C Maroc. Officials from the relevant ministries, including those operating at regional and local level, are to receive training to inform them of developments in these areas. An awarenessraising campaign is being carried out that targets decision-makers operating at local level as well as private sector companies, civil society and the media.

At international level, the project supports climate policy dialogue with other Maghreb countries, Germany and the European Union, and ensures that the private sector, the research community and civil society are brought on board. A partnership agreement is to be signed that will include provisions for cooperation with at least one similar centre in Europe.

### Outlook

Lessons Learned: 4C Maroc provides a capacity-building and information-sharing platform on climate change. It can serve an example on how to create a multi-stakeholder framework with an integrated work plan that other countries can adapt and adopt.

Transferability: In the Maghreb region, Morocco is on the cutting edge regarding climate change mitigation and adaptation efforts, similar to Jordan in Mashrek region. It will need the strong will of the government, a high level of awareness within civil society and a far-sighted private sector to establish such a centre. Non-governmental organisations and foreign agencies can be extremely helpful in catalysing the process, supporting it financially and mediating in the negotiations.

Assertive but flexible decision makers at all levels are a prerequisite for success in the establishment of such an entity and for giving it a transformative role for economy and society.

Literature: Verner, D. (ed.) (2012). Adaptation to a Changing Climate in the Arab Countries: A Case for Adaptation Governance and Leadership in Building Climate Resilience, MENA Development Report. The World Bank, Washington, DC

http://documents.worldbank.org/curated/en/2012/07/16919186/adaptation-changing-climate-arab-countries

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