

PROJECT INFORMATION DOCUMENT (PID)**APPRAISAL STAGE**

Report No.: 94508

Project Name	MA-PARTNERSHIP FOR MARKET READINESS
Region	Middle East and North Africa
Country	Morocco
Sector(s)	General energy sector (50%), General industry and trade sector (50%)
Theme(s)	Climate change (100%)
Lending Instrument	Investment Project Financing
Project ID	P128654
Borrower(s)	Kingdom of Morocco, Ministry of Economy and Finance
Implementing Agency	Ministry of Energy, Mines, Water and the Environment
Environmental Category	C-Not Required
Date PID Prepared/Updated	19-Feb-2015
Estimated Date of Appraisal Completion	03-Mar-2015
Estimated Date of Board Approval	N/A
Decision	
Other Decision	

I. Project Context**Country Context**

Morocco is a lower middle-income country and its economy is remarkably growing with excellent economic performance in recent years. The country has experienced an average annual growth rate of about 4.6 percent for the 2006-2012 period in an unfavorable international context marked by a global economic crisis as well as by political and social change in the wake of the Arab Spring. In parallel with this robust growth, emissions of greenhouse gases (GHG) may have increased according to national predictions but their level remains relatively modest, making Morocco a low emitter compared to other countries in the region.

The resilience of the Moroccan economy, especially in a difficult international context, are explained by the importance of structural reforms underway and the implementation of new sectoral plans by the Government. The implementation of these sector-wide plans (in energy, agriculture, tourism, industry, waste management, logistics, fisheries, etc.), along with robust growth in household consumption (vehicles, household items, etc.) considerably influence energy needs, which are projected to increase in the coming years at an average annual rate of five percent.¹ This growth will probably be associated with

¹ MEMEE (2013), *La nouvelle Stratégie Énergétique Nationale Bilan d'étape*, Ministry of Energy, Mining, Water and Environment (MEMEE), January 2013

a substantial increase in GHG emissions as the energy sector contributes more than half of the total emissions in Morocco, followed by the agricultural sector at over 30 percent).²

Morocco strongly depends on imports of hydrocarbons. Poor in fossil fuels and experiencing significant economic, industrial, and social evolution, the country covers its deficit by importing most of its supplies. The consumption of primary energy has considerably increased over the last decade, by about six percent³ annually, from 10.5 megatonnes of oil equivalent (Mtoe) in 2002 to 17.7 Mtoe in 2012, leading to a dependency rate of 96 percent for that year. Consumption per inhabitant per year has increased substantially, from 0.36 toe in 2002 to 0.54 toe in 2012. However, this rate remains relatively modest compared to the world average of about 1.7 toe.⁴ The national economy remains highly vulnerable to any upsurge in the price of oil, particularly in the current context of the reform of the subsidy system in Morocco leading to a liberalization of oil prices.

According to data from the 1994 GHG National Inventory produced as part of the Initial National Communication (INC, 2001), and from the Second National Communication's (SNC, 2010) reference years of 2000 and 2004, Morocco's total GHG emissions increased by 56% between 1994 and 2004. The creation of inventories in line with the methodology recommended by the United Nations Framework Convention on Climate Change (UNFCCC) and that of the Intergovernmental Panel on Climate Change (IPCC) has allowed the emissions generated by Morocco to be accounted for in each of the most emissions-intensive sectors, namely: Energy, Industry, Agriculture, Forestry and Waste.

The emissions from the energy sector are produced by fixed combustion sources, which includes the energy industry, manufacturing and construction, commercial buildings, residential buildings, agriculture and fisheries; and mobile combustion sources, including all modes of transport. Therefore, the energy sector represents more than half of all emissions generated and is by far the main emitter of carbon dioxide (CO₂) and GHGs in general in Morocco. Emissions from this sector also experienced a net increase of approximately 46% from 1994 to 2004.

The agricultural sector ranks second with a contribution to overall emissions of approximately 31% in the reference year 2004, while emissions from other sectors (industry, forestry and waste) contribute to 17% of overall emissions that same year. It should be noted that for some sectors, such as the cement sector, only CO₂ emissions are considered GHG.

The analysis of GHG emissions in Morocco shows that the main factors impacting their increase include:

- A rapid and variable demographic growth in the 20th century, with an annual growth rate of over 3% in the 1950s to a rate of 1.4% in 2004 and 1.1% in 2007;
- The socioeconomic development that influences the consumption patterns of the population;
- Economic development through the consumption of energy by the productive sectors; and
- Regional planning and land-use.

² SEEE (2009), *Inventaire National des gaz à effet de serre, Mission III, Rapport définitif*, State Secretariat for Water and Environment (SEEE), Department of Environment. March 2009.

³ MEMEE (2013), *La nouvelle Stratégie Énergétique Nationale Bilan d'étape*, Ministry of Energy, Mining, Water and Environment (MEMEE), January 2013.

⁴ Ibid.

Sectoral and Institutional Context

Morocco is actively seeking climate-financing opportunities to stimulate investments in renewables and sustainable energy technologies. The Clean Technology Fund⁵ (CTF) provides scaled-up financing for the demonstration, deployment and transfer of low carbon technologies that have a significant potential for long term GHG emissions savings. In Morocco, it supports the large scale renewable energy development through the Ouarzazate Solar Plant (US\$197 million) as well as the National Integrated Wind/Hydro and rural electrification program (US\$125 million). The Global Environment Fund (GEF) provides grants to support Morocco's policy to further develop renewable energy and to promote private participation. Most prominent renewable energy and energy efficiency related GEF projects include Aïn Beni Mathar Integrated Solar Combined Cycle Power plant (US\$43.2 million, IBRD), market development for solar water heaters (US\$2.96 million, UNDP), energy efficiency codes in residential buildings and energy efficiency improvement in commercial and hospital buildings (US\$3 million, UNDP), and energy efficiency in the Industrial sector (US\$2.7 million, AfDB).

Morocco is a low GHG emitter, but its emission profile is rapidly changing. Per capita emissions stand at around 2.2 tCO₂e per capita, for a global GHG contribution of 63.4 Mt CO₂e. Energy accounts for half of net GHG emissions (50.9 percent), followed by agriculture (32.5 percent) and industry (5.9 percent).⁶ Between 1994 and 2010, Morocco's GHG emissions increased by an average rate of 4% per year, and are projected to increase faster in the future to 134 MtCO₂e by 2020, largely driven by a surging electricity demand due to a rapid economic growth and a growing middle class. Total demand grew by more than 6 percent yearly over the same period, compared to 3.5 percent annual economic growth, thus increasing the energy intensity of the economy. Demand is forecasted to double by 2020 and to be four times higher than today by 2030. As the energy mix is dominated by oil (61 percent of primary energy demand) and coal (28 percent), CO₂ emissions per kWh generated are 50 percent higher than the world average. This will be compounded by the rapid growth of high emitting sectors, particularly in industry, but may be partially offset by stronger investments in renewables.

The country has shown an active interest in mobilizing carbon finance. Morocco is leading in carbon finance at a regional level⁷ with eight registered CDM projects (3 MtCO₂/y mitigation potential) and 13 projects in validation process (2 MtCO₂/y). A number of public and private agencies have developed a solid expertise with carbon finance instruments particularly through CDM type projects. Despite this relatively strong track record, domestic capacities are still relatively limited to fully capture the current and particularly future opportunities offered by carbon markets. GoM is now keen on building on its CDM experience and to develop its readiness to benefit from future market mechanisms and mobilize additional finance for its national mitigation programs.

GoM is already active in developing NAMA approaches. Nationally Appropriate Mitigation Actions (NAMA) are currently being identified based on existing national sectoral strategies and programs. Besides this preliminary NAMA identification, Morocco is in the process of launching a consultation process with NAMAs proponents (public and private), in order to proceed with a detailed NAMA development plan, including sector baselines and Measurement, Reporting and Verification (MRV) components. Preliminary results include several sectors such as Energy, Agriculture, and Solid Waste.

⁵ The CTF is a multi-donor trust fund created in 2008 as part of the Climate Investment Funds (CIF)

⁶ Source: UNFCCC Second National Communication (2010), based on year 2000 data

⁷ Morocco holds 10% of registered project, based on a total of 84 CDM registered projects in the whole of Africa, which however accounts only around 2% of total registered CDM projects (on a total of 3927 worldwide), the whole of Africa represents only around 2% of total registered CDM projects.

The energy and industrial sectors show high potential for sector based crediting schemes. The US\$ 9 billion Moroccan Solar Plan aims at developing 2000 MW of solar energy (PV and solar thermal) by 2020, as well as preventing the emission of 3.7 MtCO₂e/y. The US\$ 3.5 billion Moroccan Integrated Wind Energy Plan will enable to bring the installed capacity from 280 MW to 2000 MW by 2020, and prevent the emission of 5.6 MtCO₂e/y. In the industrial sector, there are two fast growing subsectors, namely phosphates and cement. Morocco has the largest reserves of phosphates in the world, and the National Phosphates Office (OCP) is a world champion with more than 90 years' experience in mining and 45 years in industrial processing of acids and fertilizers, with an export turnover of more than US\$ 4 billion representing 24 percent of Morocco's national export value. OCP's total emissions are around 3 MtCO₂e/y. As for cement production, the Professional Cement Association (APC) encompasses all major international players (Lafarge, Holcim, and Italcementi). Despite its prominent importance in terms of GHG emissions, the agriculture sector only represents 4 percent of the mitigation potential in Morocco). Moreover, for this particular sector, the level of readiness for carbon markets is not as mature as in electricity, cement and phosphate production.

Morocco committed itself early and voluntarily to the international effort against climate change by joining the UNFCCC during the 1992 Rio Summit.⁸ Since then, Morocco has implemented a number of activities and programs that confirm its voluntary commitment. These activities also provide the foundation for a transition towards a green economy aimed at achieving responsible growth by preserving the environment and ecosystems, reducing GHG emissions and adapting to the effects of climate change. These activities have enabled Morocco to distinguish itself and become a leading figure in Africa and in the Middle East and North Africa (MENA) region in the fight against global warming.

Morocco has experience with market-based instruments (MBIs), particularly through the Clean Development Mechanism (CDM). Now Morocco is engaging with the Partnership for Market Readiness (PMR) to be part of a group of pioneer nations working on scaled-up crediting, one of the promising future MBIs.

In order to participate in the global effort to mitigate GHG emissions and consolidate and strengthen its national sustainable development policy, Morocco was an early participant in the CDM, one of the MBIs prepared under the Kyoto Protocol. It therefore ratified the Kyoto Protocol in 2002 and at the 7th CoP (Marrakech, 2001) pushed to ensure that legislation implementing the Protocol and its flexible mechanisms were adopted.

II. Proposed Development Objective(s)

The objective of the Project is to assist the Government of Morocco in designing and piloting a Monitoring, Reporting and Verification (MRV) system in one or more targeted sectors, and establishing core technical components needed for the design of a greenhouse gas (GHG) emissions reduction crediting mechanism.

For the purposes of the PDO, "core technical components" includes: (i) analysis of appropriate mitigation instruments and MBI governance; (ii) establishing a baseline for each of the three targeted sectors (electricity, cement, phosphates); and (iii) evaluation of the mitigation potential in the three sectors. These correspond to the completion of activities 1, 7 and 8 from Morocco's Market Readiness Proposal (MRP).

III. Project Description

Morocco's proposed PMR activities:

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1. Morocco signed the UNFCCC in Rio in 1992 and ratified it in 1995.

Morocco submitted its Expression of Interest (EoI) and Organizational Framework (OF) to join the PMR respectively in May 2011 and March 2013, and was subsequently confirmed a PMR implementing country. The extraordinary meeting of the PMR Partnership Assembly (PA) held on 14 March 2012 in Shenzhen, China approved the allocation of the preparation phase funding in the amount of \$315,000 to Morocco to prepare its MRP. The Government of Morocco requested the PMR Partnership Assembly to approve the World Bank (WB) as its Delivery Partner in preparing its MRP. The MRP was prepared and presented to the PA in May 2014 for final approval of the requested US\$ 3.00 million implementation grant. The Government of Morocco will contribute US\$200,000, and US\$ 510,000 will come from parallel co-financing through complementary activities undertaken by existing projects of the United Nations Environment Program, United Nations Development Program, and the German bilateral aid agency GIZ. The total project envelope is therefore US\$ 3.71 million.

An inter-ministerial task force was set up to coordinate the project preparation and implementation phases. The Ministry of General Affairs and Governance (MAGG) and the Ministry of Economy and Finance (MEF) and the Delegated Ministry of the Environment (MDE) within the Ministry of Energy, Mines, Water and the Environment (MEMEE) form the PMR Steering Committee. The inclusion of the MEF within the Steering Committee aims to lend support to enhancing the country's preparedness to grasp the future climate finance opportunities and to ensure consistency and adequate monitoring of project funding. MAGG will be responsible for the needed stakeholders' coordination. Finally, the MDE will assume the lead role in technical implementation.

Morocco's PMR project has three components, as follows:

Component 1: Cross-cutting analysis: This component contains the bulk of the technical assistance activities of this project, related to the following sub-components:

1. Analysis and recommendations on which carbon pricing instruments to implement, and a proposal for an appropriate governance framework;
2. Design of an institutional framework and operational requirements for an MRV system (general and sector-wide);
3. Piloting of the MRV system;
4. Establishment of a baseline for each of the targeted sectors (electricity, cement, phosphates);
5. Evaluation of the mitigation potential in the targeted sectors; and
6. Support for the establishment of a regulatory framework for mitigation measures in the three targeted sectors.

Component 2: Capacity-building: A critical component of technical assistance, this project will invest in building the capacity of the government and the private sector to monitor, report and verify emissions and changes in emissions levels. A capacity-building plan will be prepared which will propose a combination of practical and participative workshops, meetings for participants to share knowledge during piloting activities, study trips, tools and logistics, and knowledge products.

Component 3: Project management and Mid-Term Review: The third component includes the establishment and operation of the PMU to be set up within the MDE to implement and manage PMR activities and to coordinate with related programs and initiatives. The PMU is also expected to support the preparation of an institutional framework for carbon markets in Morocco in the period following the PMR project. This component also includes funding for a mid-term review to be conducted by an external third party.

IV. Financing (*in USD Million*)

Source	Amount
Recipient	0.20
Parallel co-financing	0.51
Partnership for Market Readiness	3.00
Total	3.71

V. Implementation

The Delegated Ministry of the Environment (*Ministère délégué de l'environnement – MDE*) is the lead implementing agency. As the ministry leading Morocco's strategic climate change policy and UNFCCC representation and negotiation, the implementation of this technical assistance on carbon emissions monitoring, reporting and verification and prospects for future market-based instruments is within the MDE's mandate. As a ministry with cross-cutting responsibility for the environment, MDE also has the convening power necessary to interface with both public and private entities whose collaboration will be necessary to implement this project.

A Project Management Unit (PMU) will be created within the MDE to undertake the daily management of the project, as well as its procurement and financial management aspects. The PMU will consist of a Project Director drawn from the staff of the Directorate for Partnerships, Communication and Cooperation (*Direction du partenariat, de la communication et de la coopération – DPCC*), a Project Coordinator to be hired as a consultant, and procurement and financial management staff hired as consultants. The PMU will:

- (a) Ensure effective coordination between different PMR partners (institutions and participating sectors), as well as donors involved in projects related to GHG mitigation;
- (b) Ensure proper management of the operational aspects of activities (preparation of terms of reference, planning, monitoring, etc.);
- (c) Ensure proper management of the fiduciary aspects of the activities (budgeting, disbursements, accounting, reporting, internal controls and auditing of the Project transactions);
- (d) Gather and consolidate knowledge gained on GHG mitigation in Morocco into one knowledge-sharing and management platform, and
- (e) Act as a focal point for the establishment of MBI governance systems in Morocco.

Within MDE, the PMU will be housed within the DPCC. The DPCC is currently the Moroccan Designated National Authority (DNA) for the UNFCCC Clean Development Mechanism (CDM). As such, it is a focal point of Morocco's current experience and expertise with carbon market mechanisms.

A PMR Steering Committee will provide the necessary forum for coordination of activities and consultation with stakeholders. The PMR Steering Committee established during the preparation of the MRP consists of the MDE, the Ministry of General Affairs and Governance (*Ministère des affaires générales et de la gouvernance – MAGG*), and the Ministry of Economy and Finance (*Ministère de l'économie et de la finance – MEF*). For the implementation phase, the Ministry of Foreign Affairs and Cooperation (*Ministère des affaires étrangères et de la coopération – MAEC*) would also be added. MDE will hold the Chair. The role of the Steering Committee is to provide strategic orientation to the project work plan and to facilitate coordination between government ministries and agencies contributing to the project.

A Technical Committee containing all of the main stakeholders will be formed to coordinate technical matters. The Implementation and Monitoring Technical Committee will include representatives of MDE, the PMU, and the three participating sector entities: the national phosphates company (*Office chérifien des phosphates – OCP*), the electricity branch of the National Office of Electricity and Water (*Office national de l'électricité et de l'eau – ONEE*), and the Cement Industry Association (*Association*

professionnelle des cimentiers – APC). This Technical Committee will be the forum for discussion of detailed technical issues relating to MRV and MBI at the working level.

VI. Safeguards Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		✘	
Natural Habitats OP/BP 4.04		✘	
Forests OP/BP 4.36		✘	
Pest Management OP 4.09		✘	
Physical Cultural Resources OP/BP 4.11		✘	
Indigenous Peoples OP/BP 4.10		✘	
Involuntary Resettlement OP/BP 4.12		✘	
Safety of Dams OP/BP 4.37		✘	
Projects on International Waterways OP/BP 7.50		✘	
Projects in Disputed Areas OP/BP 7.60		✘	

VII. Contact point

World Bank

Contact: Andrew Losos
 Title: Transport Specialist
 Tel: (202) 473-6169
 Email: alosos@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Economy and Finance
 Contact: Ms. Maria Oucible
 Title: Multilateral Financing Division Chief
 Tel: +212 (0)537677217
 Email: oucible@db.finances.gov.ma

Implementing Agencies

Name: Delegated Ministry of the Environment
 Contact: Mr. Mohamed Benyahia
 Title: Director of Partnerships, Communication, and International Cooperation
 Tel: +212537564018
 Email: benyahia@environnement.gov.ma

VIII. For more information contact:

The InfoShop
 The World Bank
 1818 H Street, NW
 Washington, D.C. 20433
 Telephone: (202) 458-4500
 Fax: (202) 522-1500
 Web: <http://www.worldbank.org/infoshop>