

# Morocco's experience with domestic carbon markets and the opportunities for further engagement with Article 6





### oIntroduction

- **OKyoto Protocol / CDM**
- **OPartnership for Market Readiness**
- National greenhouse gas inventory system
- **ONationally Determined Contribution**
- National economy decarbonization convention
- National Commission of Climate Change and Biodiversity
- Participation at coopertraives approches under art 6 of P.A
- Conclusion



- Morocco is building on its CDM experience and is looking how it can develop its market readiness to support its GHG mitigation efforts and facilitate the introduction of clean technologies.
- Morocco also aims to pilot a carbon market instrument based on its experience with NAMAs and Partnership for Market Readiness / PMR (2014-2018)

The PMR gives the opportunities to use appropriate carbon market and pricing mechanisms at the national level.

# Kyoto Protocol / CDM

- □ Signature by Morocco since 1997
- □ Ratification : 25 January 2002
- □ Morocco's action under the Protocol:
- **Establishment of the**
- Designated National Authority for the Clean Development Mechanism (DNA-CDM) in 2002,
- National CDM Council (CN-CDM) a
- CDM secretariat.
- Projects under the Clean Development Mechanism (CDM): a portfolio of 37
  CDM Projects, 17 projects have been registered.

Three sectors: power generation, cement production and phosphate processing;

The corresponding measures relate to:

- The development of renewable energies (EnR), in the electricity sector and for the self-production of electricity in the targeted industrial sectors (cement, phosphate).
- **Controlling electricity demand**.
- □ Improving the efficiency of processes in targeted industrial sectors.

The different scenarios of carbon pricing instruments for the national context

- Three scenarios have been proposed for the introduction of carbon pricing instruments corresponding to the national context;
- Each instrument has advantages and disadvantages in terms of:
- effectiveness (i.e. the lowest cost incurred to achieve a given environmental objective)

# Three qualitative scenarios were selected, each optimizing **Scenario 1 :**

- Maximized environmental integrity through the introduction of a short-term carbon tax followed by an allowance trading system (ETS of the cap & trade type) whose dynamic efficiency (the ability to induce structural changes).
- The challenges then are to foster acceptability (e.g. tax starting at a low level or replacing an existing tax, redistribution of tax proceeds), ensuring the high level of institutional effort needed and addressing the concentration of national actors in difficulty for an allowance trading system (e.g. by linking to the European ETS).

#### Scenario 2:

Maximized acceptability, by the use of an incentive instrument only, a tax reduction based on the emission reductions obtained compared to the trend scenario.
 By simply being an incentive, this scenario does not guarantee effectiveness.

#### Scenario 3 :

- Optimized level of effort, by introducing a carbon tax that is relatively easy to implement from an institutional point of view.
- Its limited acceptability can be improved (as in scenario 1) by measures to transform existing taxes and redistribute tax proceeds.

Measurement, Reporting and Verification (MRV) system for the GHG emissions of the three targeted industrial sectors

- An emissions MRV system aims to ensure the consistency and traceability of GHG emissions, their reporting to the competent authorities and the verification of the data reported by the competent authorities or an accredited third party;
- Any carbon pricing instrument, whether regulatory or voluntary, relies on an MRV system to ensure compliance with emission reduction targets;

# National Green House Gas Inventory system

The SNI-GHG is a set of institutional and technical arrangements for collecting, processing and reporting information on GHG emissions and contributing to the development of national emission factors.

The sectors concerned are: Energy, Industrial Processes, Agriculture, Waste and Land Use Land Use Change and Forestry.

Decree No. 2-18-74 of 14 rejeb 1440 (March 21, 2019) specifies in particular the missions and roles of the stakeholders as well as the operating methods of the system.



# National Green House Gas Inventory System

Results of GHG Inventories in Morocco:

- Morocco has developed, according to the 2006 IPCC guidelines, inventories of GHG emissions for the time series: 2004, 2006, 2008, 2010, 2012, 2014, 2016 and 2018.
- □ Total GHG emissions went from 72,979.0 Gg E.CO2 in **2010** to 90,944.5 Gg E.CO2 in **2018** thus recording an **average annual growth rate of 2.8%**.

# National Green House Gas inventory system

Total net emissions\*\* (2010, 2012, 2014, 2016, 2018)



#### **Nationally Determined Contribution (revised NDC)**



Objectif d'atténuation pour l'économie dans son ensemble « en 2030 par rapport au scénario cours normal des affaires



18,3%

objectif inconditionnel

27,2%

objectif conditionnel

34 actions inconditionnelles

27 actions conditionnelles

17,3 milliards US dollars 21,5 milliards US dollars

5,5 millards US millars

#### **Nationally Determined Contribution (revised NDC)**



The **updated NDC**, contains a portfolio of **61 measures** (34 unconditional measures), that will **mitigate emissions** for the year 2030 by 64,771.5 Gg Eq CO2, or **45.5% of baseline emissions in 2030**.

# National economy decarbonization convention

As a Convention on low emission carbon of national economy under Article 6 signed by 6 Departments:

- Mohammed VI Foundation for the protection of Environment (National NGO);
- The General Confederation of Enterprises of Morocco (CGEM / Private Sectors);
- □ The Ministry of Energy Transition and Sustainable Development;
- □ The Ministry of Industry and Trade;
- □ THE Moroccan Agency For Energy Efficiency (AMEE);
- □ the Moroccan Institute for Standardization.

# National economy decarbonization convention

□ Creation of Task Force: Focal Points from each Department;

- □ Studies launched:
- update of the carbon footprint tool;
- Methodologies for certification of offset projects;
- Development of communication platform for using the carbon footprint tool and methodologies for certification of offset projects;
- Training on carbon footprint assessors and accreditors.

## National Commission of Climate Change and Biodiversity

- 4 Working Groups:
- □ Finance;
- Mitigation;
- □ Adaptation;

□ Negociation.

To participate in cooperative approaches, Morocco is called upon to put in place a series of dispositives and prerequisites to *authorize* and *monitor* the use of the ITMOs for the purposes of achieving the NDCs

- Set up the Designated National Authority (DNA);
- Apply the necessary corresponding adjustments,
- Ensure reporting (initial, annual and regular reports),
- Set up required domestic registry,
- Develop the methodologies and procedures for calculating the baseline and additionality.
- Accreditation of the independants Verifiers,

We are working to establish a **Roadmap** aiming to put in **place the institutional arrangements**, **the legal basis** and develop **the required functions and methodologies** as well as **the necessary implementation capacities**, while capitalizing on the achievements and existing capacities.

Switzerland / Kilk Foundation:

 Energy Efficiency in Industry and Tourism sectors: phase MADD (Mitigation Activity Design Document)

- Technical discussion with 'South Pole' consultant

Organic Waste to Energy / GGGI : phase MADD
 Technical discussion with 'First Climate' consultant

The agreement has been signed between the two parties in this conference COP27.

#### Norway:

DAPA / GGGI: Designated Article 6 Policy Approaches / Global Green Growth Institute;

Singapore : Collaboration under article 6 / Carbon market, this year 2022;

#### South Korea :

Global agreement on Environment and Climate Change included activities under article 6, this year 2022.



### Ongoing processes:

We are working on the introduction of the carbon tax and a switch to ETS that can be linked to regional or international carbon market such EU ETS.

Formulation of TORs regarding the Road Map activities in order to implement it with bilateral and miltulateral partnership. Thank you for your attention