ROYAUME DU MAROC

MINISTERE DE LA TRANSITION ENERGETIQUE ET DU DEVELOPPEMENT DURABLE

Département du Développement Durable

## المملكة المغربية +،xил<+1ис.чо< وزارة الانتقال الطاقي والتنمي المستدامية

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# Morocco's NDC 3.0

## **Process and priorities**

February 18th, 2025

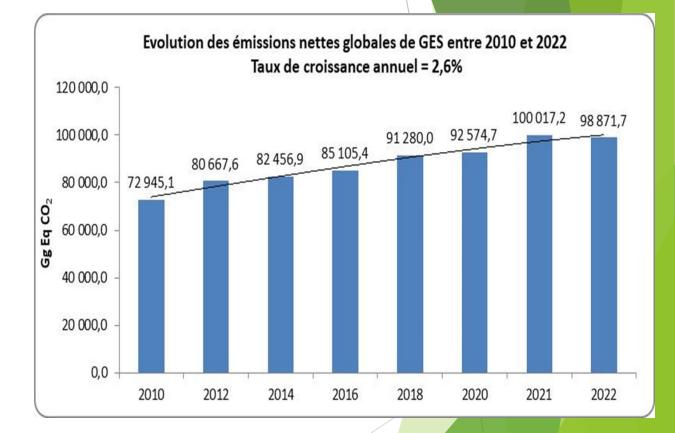
# National context

## National context

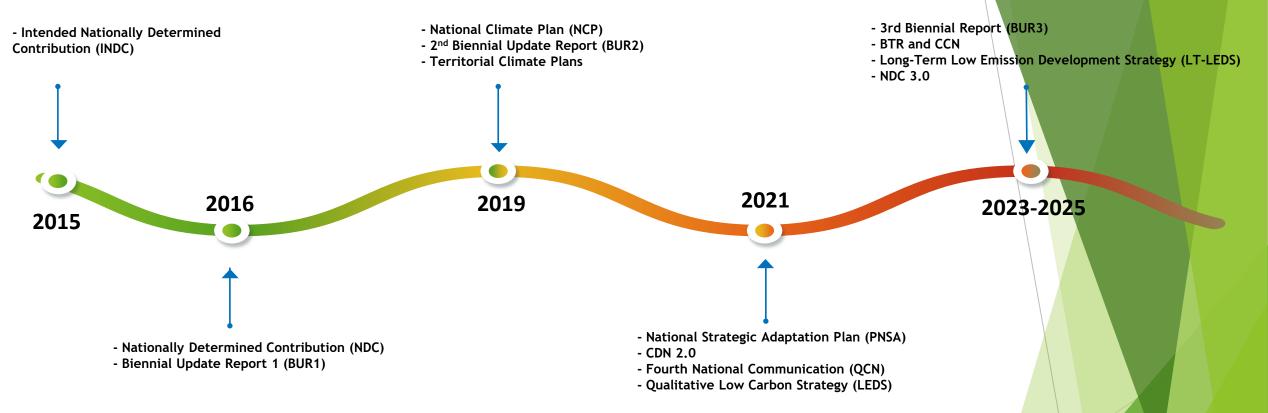
► Today, the whole world is facing **unprecedented challenges**, linked to climate change whose **effects are already visible**, alluding to the floods, heatwaves and fires that have affected the different continents of the planet.

► Summer 2024, from **Spain to Romania, China to the United States, Morocco** too climate catastrophes (floods, heat waves, .....).

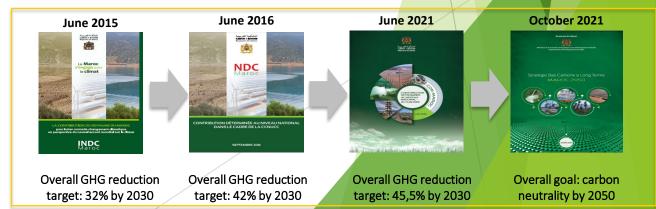
► Aware of the socio-economic and environmental repercussions of this scourge, and despite the fact that its GHG emissions are not significant (emissions of 98,87 million Teq CO2, or 2,73 t. Eq. CO2 per capita), Morocco has made a voluntary, integrated and responsible commitment to the global effort to combat CC, for which the NSSD is the institutional anchor.



## **Climate-related strategic initiatives**



 As part of its commitment to the UNFCCC and the Paris Agreement, Morocco has progressively strengthened its climate objectives through the various versions of the NDCs and the LT-LEDS 2050.



## Morocco's NDC 2021 is multidimensional

## Morocco's NDC is multidimensional and rooted in a variety of supporting elements:



## Morocco's NDC 2021 - ambitious mitigation targets

ione de base



Avoided emissions in 2030 are 64,771.5 Gg Eq CO2, or 45.5% of reference emissions in 2030.

Mitigation target for the economy as a whole in 2030 compared with the business-as-usual scenario -5% 27,3% 18,3% **Conditional target** Unconditional target **Conditional actions Unconditional** actions 17.3 billion US 142 344,9 150 000 140 000 130 000 116 134,5 120 000 45,5% Gg E.CO, 110 000 100 000 90 000 80 000 77 573,5 70 000 2010 2011 2012 2013 2015 021 2029 DEO 2016 2012 201 02 026

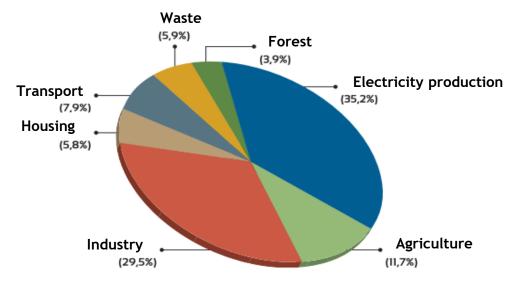
Mesures inconditionnelles

+ Mesures conditionnelles

---- Mesures inconditionnelles

## Morocco's NDC 2021: key mitigation sectors

Breakdown of global mitigation effort (unconditional and conditional) in 2030



Mitigation sectors	Unconditional measure	Conditional measure	Total
Electricity	6	2	8
Industry	10	5	15
Housing and Urbanism	6	3	9
Transport	2	5	7
Waste	0	2	2
Agriculture	6	7	13
Forest	4	3	7
Total	34	27	61

## Mitigation

#### | Electricity production

- National Energy Strategy
- | Industy

#### | Housing and urbanism

- Urban Public Transport Improvement Program
- Ratification of the Kigali Amendment

#### | Transport & logistics

• National Logistics Strategy

#### | Waste

- National Strategy for Waste Reduction and Recovery
- National Liquid Sanitation and Wastewater Treatment Program

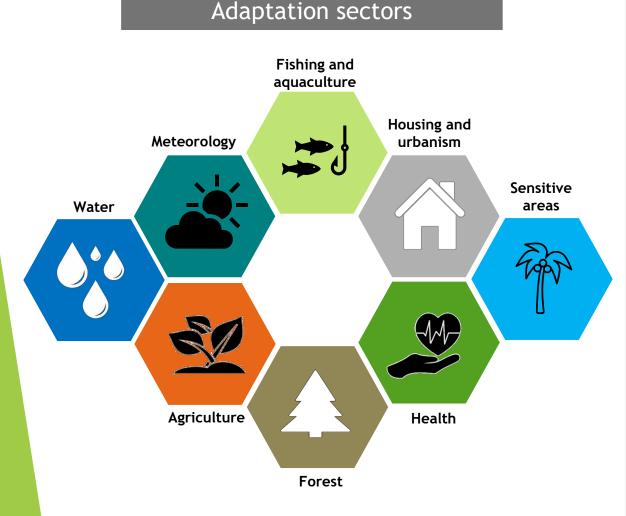
#### | Agriculture

- Green Generation Strategy 2020-2030
- | Land management and forestry
- « Moroccan Forest » Strategy

#### | Transversal

• Administration Exemplarity Plan - PEA (SNDD 2030)

## Morocco's NDC 2021: key adaptation sectors



## Adaptation

#### |Meteorology

Strengthening the network of weather observation stations

#### | Agriculture

Green Generation Strategy 2020-2030

### | Water

- National Water Strategy
- Drought Management Plan
- Integrated Water Resources Management Master Plans
- National Flood Protection Plan
- National Sanitation Program

## Fishing and aquaculture

• Halieutis plan

#### | Forest

- New « Moroccan forest » Strategy 2020-2030
- Forest Fire Fighting Master Plan
- Reforestation Master Plan
- National Forestry Program

### Sensitive areas

- National Strategy for the Development of Oasis and Argan Zones
- National Strategy for the Management and Development of Oasis in Morocco

## | Housing and urbanism

• Regional Spatial Planning Scheme (SRAT)

### | Health

National strategy for adapting the healthcare sector to climate change

## First Biennial Transparency Report (BTR1)

# Morocco has submitted its first BTR to the UNFCCC by the end of December 2024.

National inventory report of anthropogenic emissions by sources and removals by GHG sinks. Necessary information to track progress in the implementation and achievement of Nationally Determined Contributions (NDC) under Article 4 of the Paris Agreement.

Information on the **impacts** of climate change and **adaptation** to these changes, in accordance with Article 7 of the Paris Agreement.

**Support** required and received by the country.

Compilation of the **combined report** (NC/BTR1), knowledge management, monitoring, and evaluation.

## **MRV Morocco platform for climate action transparency**

This platform will enable us to meet the needs of the Paris Agreement implementation, which imposes the following obligations on the future National MRV System of Moroccan NDC:

The implementation of a monitoring and reporting system (MRV) for **GHG** emissions and their evolution.

2

Setting up a monitoring and reporting system (MRV) for mitigation and adaptation measures, to monitor and evaluate efforts to achieve Morocco's objectives.

3

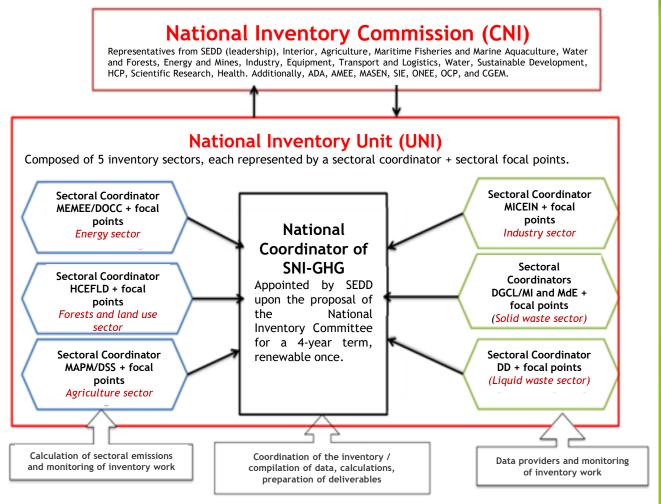
Setting up a monitoring and reporting system (MRV) for resources mobilized or received in the form of financial resources, technology transfer and capacity building.

## **National GHG Inventory System**

## Objective

- Have a sustainable and reliable system;
- Collect data from focal points;
- **Centralize data** for calculations;
- Produce national GHG emission inventories systematically;
- Meet international commitments in the most optimal, reliable and transparent way.

## SNI GES institutional diagram



# Towards a new NDC 3.0

Question 1: What strategies has your country adopted to ensure the timely submission of NDC 3.0? and what is the current status of NDC 3.0 preparation in your country

- The development of Morocco's NDC 3.0 is a sovereign process led by the Moroccan Government. However, it is supported by the Just Transition Project, funded by the EU and Germany and administred by GIZ.
- Efforts to mobilize expertise began in early 2024, allowing ample time to thoroughly assess the challenges and priorities of NDC 3.0.
- The decision to launch the NDC 3.0 development process shortly before submitting the BTR provided Moroccan stakeholders with clear visibility into the NDC's progress and the measures that will be maintained.
- The process fully aligns with the Paris Agreement Rulebook and integrates insights from the Global Stocktake (conducted every five years under the Paris Agreement), to ensure greater ambition, transparency, and effectiveness in achieving climate goals.

## NDCs 3.0 meet the requirements of :

The Paris Agreement Rulebook (Katowice, 2018)

## Global Stocktake (Dubai, 2023)

## NDCs 3.0 meet the requirements of the Paris Agreement

The Paris Agreement Rulebook (Katowice, 2018)		
Decision 4/CMA.1 (Annex 1) on disclosures to improve clarity, transparency and understanding		
Quantifiable information (reference year, reference indicators, targets in relation to reference indicators, data sources used, circumstances in which the Party may update reference indicator values);		
Implementation timetables/periods, scope and coverage;		
Planning process (national institutional arrangements, contextual issues, manner of elaboration);		
Assumptions and methodological approaches to accounting for GHG emissions;		
How the Party considers its NDC to be fair and ambitious;		
how the NDC contributes to achieving the objective of the UNFCCC (Article 2).		
Decision 9/CMA.1 specifies the guidelines for communicating the adaptation when the country decides to do so in its NDC.		
National context, institutional arrangements & legal frameworks		
Impacts, risks, and vulnerabilities		
Adaptation priorities, strategies, and policies		
Implementation and support needs (for developing countries)		
Adaptation measures with mitigation co-benefits		

## **GST** main conclusion and decisions

Despite overall progress on mitigation, adaptation and means of implementation and support, we are still a long way from achieving the goals of the Paris Agreement.

## Mitigation

#### Adaptation

To limit global warming to 1.5°C/2°C (art. 2.1.a) :

- Cut global GHG emissions rapidly & sustainably : -43% by 2030, -60% by 2035 (vs 2019 levels), carbon neutrality by 2050
- Triple renewable energy capacity and double annual energy efficiency improvement by 2030.
- Phase out coal-fired power generation.
- Ensure a **just and equitable transition** away from fossil fuels.
- Shift to low-carbon fuels well before mid-century
- Accelerate zero and low emission technologies
- Phase out **inefficient fossil fuels subsidies** as soon as possible.

Building resilience and reducing vulnerability to climate impacts (article 2.1b)

- Significantly reduce climate-induced water shortages.
- Enhance climate resilience in food and agricultural production.
- Lower climate-related morbidity and mortality, especially in vulnerable communities.
- Mitigate impacts on ecosystems and biodiversity; scale up nature-based adaptation solutions.
- Strengthen infrastructure and human settlements against climate impacts.
- Minimize climate change's negative effects on poverty reduction and livelihoods.
- Protect cultural heritage from climate risks through adaptation strategies.

### **Implementation means**

Financing and supporting lowcarbon, climate-resilient development (article 2.1.c).

- Despite the increase in funding to combat climate change, gaps remain.
- Needs estimated at 5,800-5,900 billion dollars for the period up to 2035.
- Importance of the private sector
- Call for transformation of the global financial strategic system, deployment of international public financing. simplified access to climate funds and accelerated technology transfer for effective implementation.

## NDCs 3.0 meet the requirements of GST

➤The Global Stocktake provides a comprehensive review of collective progress toward longterm climate goals. Insights from the GST should be used to refine and strengthen NDC 3.0.

> NDC 3.0 is incorporating Key Findings from the GST:

•Global Gaps: insights into the gap between current NDC commitments and the 1.5°C target should drive more ambitious actions in NDC 3.0;

•Sectoral Priorities: use GST data to identify priority sectors (e.g., energy, transport, industry) where mitigation and adaptation actions can have the greatest impact;

•Adaptation Needs: draw on GST findings to enhance resilience-building measures, focusing on vulnerable populations and ecosystems;

•Finance and Support: address GST findings on gaps in financial support for mitigation, adaptation, and capacity building.

## Current status of NDC 3.0 preparation in Morocco:

• The evaluation of progress in implementing the current NDC, carried out as part of the preparation of the Biennial Transparency Report (BTR);

•Currently, stakeholder consultations are underway to identify both mitigation and adaptation measures Bilateral consultations with relevant sectoral stakeholders, planned throughout the month of February;

•The definition of the emissions reduction target to which Morocco commits by 2035, in addition to the reduction potential for each mitigation measure;

•The establishment of conditionality criteria for identifying unconditional measures, to be developed and validated by stakeholders;

•The estimation of costs and the identification of funding sources.

Question 2: Has your BTR helped you address data gaps and methodological challenges in finalizing NDC 3.0? If so, how? Question 3 : Is your country incorporating lessons learned from the BTR preparation process into the development of NDC 3.0? If so, in what way?

- The BTR provided relevant stakeholders with a clear snapshot of the progress of their NDC measures.
- It also highlighted gaps in transparency and highlighted areas where data availability and quality needed improvement. and identified areas where efforts should be focused.
- For the Moroccan NDC 3.0, the goal is to develop a structured program and project portfolio with sufficient detail to facilitate its transformation into bankable project proposals. Additionally, it will include well-defined indicators to support effective monitoring.
- The experience of preparing the BTR has reinforced the importance of early stakeholder engagement and cross-sectorial collaboration which are being prioritized in NDC 3.0 process.

• The emphasis on transparency in the BTR has been carried forward into NDC 3.0, ensuring that commitments are measurable, reportable, and verifiable (MRV).

 Necessity for setting higher targets for emissions reductions and expanding the scope of NDCs to include additional sectors and subsectors.

• The BTR process facilitated international cooperation and knowledge sharing. Morocco is building on these experiences to strengthen international collaboration on climate action, including through South-South cooperation and partnerships with international organizations.

- Great importance will be attached to estimating the costs of NDC mitigation and adaptation measures.

 During the NDC 3.0 development phase, best practices should be put in place to facilitate reporting under the ETF:

- Define the institutions responsible for each mitigation or adaptation action;
- Propose monitoring indicators for each action;
- Build stakeholder capacity on the ETF framework and on the BTR development exercise every 2 years.

By incorporating these lessons learned, Morocco aims to develop a more ambitious, robust, and effective NDC 3.0 that contributes significantly to global climate action efforts.

Question 4 : As per the Paris Agreement, each successive NDC shall represent a progression from the previous NDC. How is your country addressing this?

•The Moroccan NDC will also **be aligned to the National Long-Term Strategy** which sets the trajectory to net zero by 2050

•NDC 3.0 include:

- Expanded coverage of sectors and gases (e.g., maritime transport, civil aviation, steel and Iron, Chemical and Petrochemical, Aluminium, Pulp and Paper Industry ....).
- ✓ Increased emissions reduction targets.
- ✓ Strengthened policies and actions to support implementation.

• NDC3.0 integrate innovative solutions and highlighting advancements like green hydrogen, carbon capture and storage (CCS), or digital climate tools that enable greater reductions.

• NDC 3.0 will integrate detailed adaptation targets, measurable indicators, and strategies for vulnerable sectors and communities including a portfolio of adaptation projects.

- Establish a process for aligning CDN3.0 sectoral planning with budgetary programming.
- A clear definition of unconditionality will be developed.

• The private and financial sectors have a role to play in implementing and financing the NDC.

•NDC3.0 incorporate **clear provisions for ITMO transfers** and align with Article 6.2 and 6.4 mechanisms, ensuring transparency and consistency.

In addition to carbon markets, other financing instruments need to be explored to implement the NDC:, blended finance, green bonds, etc.

•Integrating just transition principles into NDC 3.0 which is critical for fostering social cohesion, promoting sustainable development, and ensuring no one is left behind, by developing quantifiable targets for job creation in green sectors (e.g., renewable energy, sustainable agriculture) and including metrics for protecting livelihoods and ensuring social protections for affected workers

•NDC 3.0 will integrate robust monitoring, reporting, and verification (MRV) systems to track progress.

•Clear methodologies will be applied for quantifying emissions reductions and adaptation actions.

•NDC 3.0 includes a needs-based assessment for finance, technology transfer, and capacity building.

•NDC 3.0 will incorporate climate co-benefits.

# Question 5: How the Institutional Arrangements used for BTR Preparation are supporting the NDC 3.0 Preparation?

- A strong coordination between the teams that were responsible for the BTR and the ones responsible for the NDC is taking place is order to ensure coherence and alignment
- Almost the same stakeholders consulted for the BTR process are approached for the NDC development process.
- The Climate Sub-Commission and its Working Groups will monitor the entire NDC development process as part of a "Whole of Government" approach.
- It is recommended that focal points per institution/establishment be designated to monitor the NDC 3.0 process.
- A very high level of coordination with the Ministry of Economy and Finance is planned to ensure that the NDC, in addition to its ambition, is anchored in budget planning frameworks, thus guaranteeing its feasibility.

# •The NDC 3.0 development process includes a broader scope of bilateral consultations.

•Representatives of new sectors have asked to be consulted with a view to including their measures in NDC 3.0.

 Consultation with civil society and young people is of great importance for NDC 3.0

## **Critical points !**

Ensure the submission of a high-quality NDC, taking into account tight timelines: deadline for submission → September 2025

Giving equal importance to adaptation and mitigation

Strike a balance between increased ambition and the realism and feasibility of NDC Ensure coherence despite the time lag between the NDC and national frameworks (budget planning, sectoral strategies to 2030)

# Examples of potential new mitigation projects

## Floating Solar Installations on Dams in Morocco (Mitigation & Adaptation)

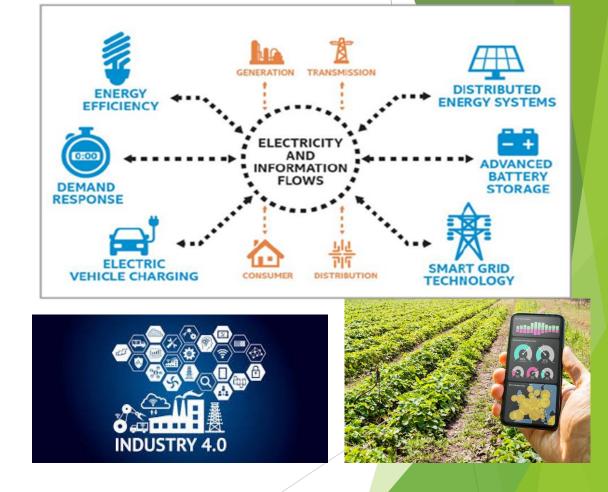


## **Considerable potential**

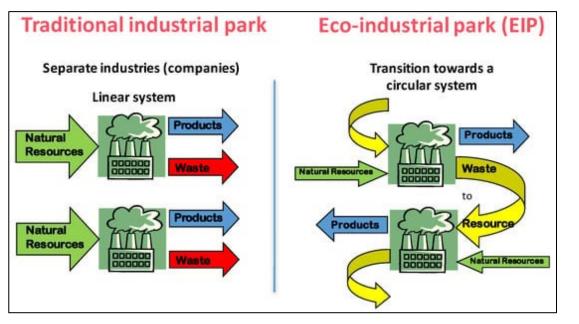
- +145 large dams in Morocco covering more than 30,000 ha of surface area
- 1 GWc of floating solar power requires around 1,000 ha
- With these available surfaces, the technical potential exceeds 30 GWc
- Emissions avoided: +1.2 MtCO<sub>2</sub>eq/year per 1 GWc installed Multiple benefits
- Reduction of evaporation and recovery of water from panel washing
- Exploitation of aquatic surfaces for green energy
- Reduced temperatures improving solar panel efficiency

## Digitalization and ecological transition

- 1. Dematerialization and reduction of paper consumption
- 2. Reduction of travel
- 3. Optimization of transport thanks to smart technologies
- 4. Smart Grids and energy efficiency Industries and agriculture 4.0
- 5. Blockchain and traceability of carbon emissions



## Eco-Industrial parks (EIP)



## Ex: Potential reduction of 250,000 TCO2/year for an industrial zone

#### 149 Industrial Zones in Morocco

- 1. Energy Synergy: Optimizing and sharing energy to reduce consumption.
- 2. Waste Recovery: Reuse of industrial waste to limit emissions.
- 3. Low-carbon logistics: Pooling transport to reduce carbon footprint.
- 4. Clean Technologies: Adoption of low-emission processes.
- 5. Green Infrastructure: Sustainable water management and ecological development.
- 6. Renewable Energies: Decarbonized production through collective solutions.
- 7. Circular Economy: Reducing, recycling and optimizing resources.
- 8. Collaboration: Partnerships to innovate and accelerate the lowcarbon transition.

# Thank you for your attention!