ROYAUME DU MAROC



Ministère délégué auprès du Ministère de l'Énergie, des Mines, de l'Eau et de l'Environnement, chargé de l'Environnement

Morocco's INDC – The role of economic analyses



Agenda

- 1. Morocco's vision for its INDC
- 2. Costing mitigation actions
- 3. Formulating the INDC
- 4. Concluding remarks



1. Morocco's vision for its INDC

- Morocco very engaged internationally
 - Member of the PMR, CCAC, and GGGI
 - Host of COP-22
- Morocco is already very active on mitigation
 - Energy efficiency target to reduce consumption by 35% by 2030
 - 42% of renewable energy in the energy mix by 2020



1. Morocco's vision for its INDC

Need (B USD)

| SOLAR POWER (2000 MW) | 9 | |
|-----------------------|------|-----|
| WIND POWER (2000 MW) | 3,5 | The |
| HYDRO POWER (500 MW) | 1,2 | |
| TOTAL | 13,7 | |



1. Morocco's vision for its INDC

Green Investment Plan published in 2014

| USD 25 billion by 2030 | | |
|---------------------------------|----------------------|--|
| <u>Mitigation</u> | Adaptation | |
| <u>USD 23</u> <u>billion</u> | <u>USD 2 billion</u> | |



1. Morocco's vision for its INDC

Water stress and desertification



54 % of the population 80% of industry 50% of tourism

Agriculture:

- 19 % of GDP
- Employs 43 % of t population
- 81 % rainfed



1. Morocco's vision for its INDC

- INDC anchored in National Sustainable Development Strategy and National Climate Policy
- Morocco envisages 3 components for its INDC:
 - 1. Mitigation contribution
 - 2. Adaptation undertakings
 - 3. Contribution to fight climate change (e.g. southsouth cooperation)
- INDC to include an economy-wide GHG target



1. Morocco's vision for its INDC

- Strong basis for the INDC
 - Green Investment Plan
 - 3rd National Communication
 - Technology Needs Assessment (2012)
 - LEDS in development
 - Several NAMAs at design stage



2. Costing mitigation actions

- Costing exercise done in 3rd National Communication (TCN)
- For the TNC (to be published in 2015):
 - Definition of baseline scenario 2010-2040
 - Mitigation scenario with 50 mitigation actions largely from sectoral strategies
 - GHG and cost/benefit assessment of actions
 - Several consultations to validate input and assumptions were undertaken over 2014



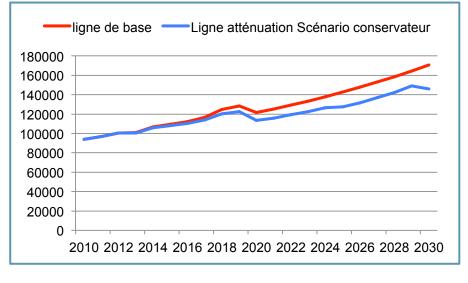
3. Formulating an INDC – From TNC to INDC

| TNC | INDC |
|--|-------------------------------------|
| Tool to communicate emission trends, policies and actions | Tool to communicate intentions |
| Technical review and compilation process (limited political ownership) with expert validation | Political validation and commitment |



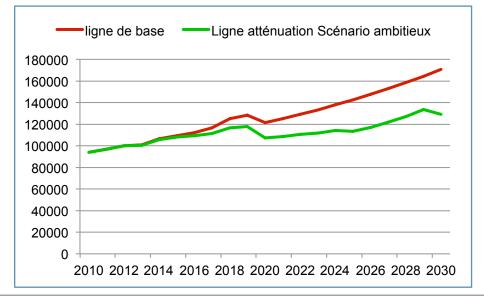
3. From TCN to the INDC

1. Develop scenarios by selecting actions from 50 mitigation actions



Priority actions in Energy and Waste

Broad mix of measures



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3. From TNC to INDC

2. Refine economic analyses and projections

- Testing different assumptions used in LEAP
- Conducting a optimization exercise would be complementary
- Conducting macro-economic modelling to better understand intersectoral interactions, notably of some fiscal policies



3. What contribution from the national budget?

- CPEIR Review of public CC expenditures
 - 2005-2010: Yearly average expenditure of 185 M\$ on mitigation (0,6% of GDP)
- Int'al climate finance flows
 - 2007-2014: Yearly average ~ 350 M\$ (95% loans) for mitigation
- Investment needs for mitigation scenarios
 - ~1.2 to 2.6 MM\$ yearly



3. Lessons-learned

- Mobilise government experts and build capacity
 - Explain to government experts the data needs and why they are needed
 - Validation and ownership of results
- Use expert validation to build confidence and ownership from decision-makers
- Plan ahead and give yourself time more than 1 year



5. Concluding remarks

- Economic analyses are useful to inform level of ambition
 - Transparency is key Validation and ownership of mitigation scenarios and cost/benefit assessment completed with technical expert
- At the same time ambition is ultimately a political decision
 - On-going consultations with decision-makers and ministers to set level of ambition
 - National conference presided by Head of Government on June 2nd



Thank you for your attention



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