FROM COP21 TO COP22:
Renewables and Mediterranean Integration
Discussion group 1: Policy and regulatory framework

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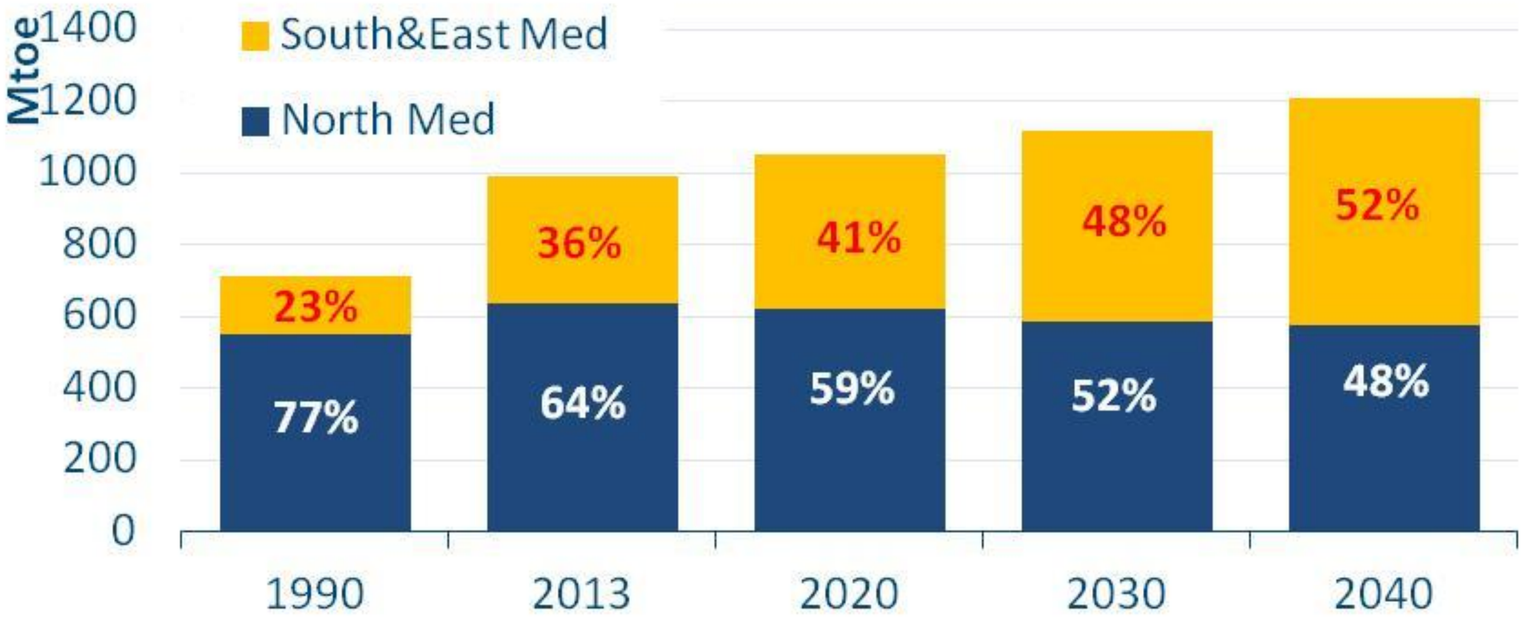
MEDITERRANEAN ENERGY INTEGRATION:SOME BASIC FACTS

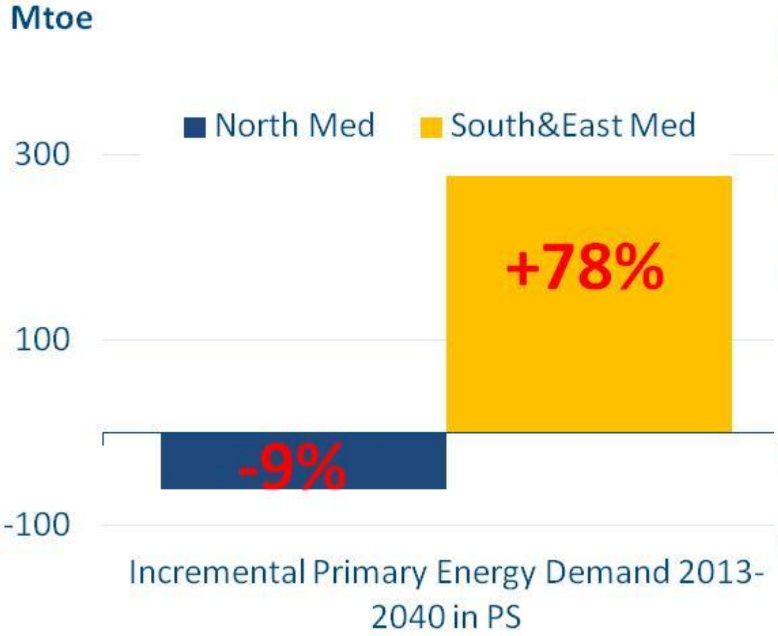


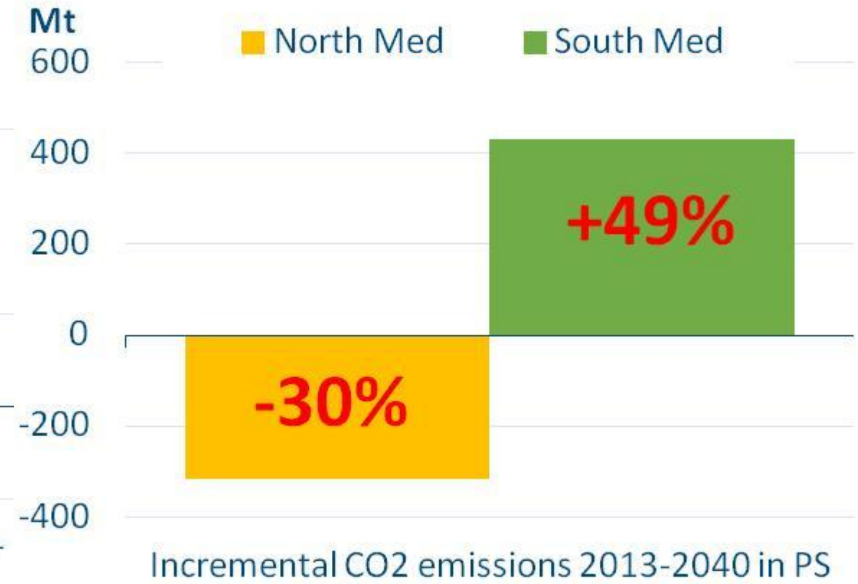
Source: OME MEP2015 – Proactive Scenario

Energy demand is growing in the South&East – much more than in the North; in particular, electricity demand in the South&East expected to double by 2040 even in the PS

Moving from an EU-centered energy security of supply vision to a full Euro-Mediterranean energy security of supply policy

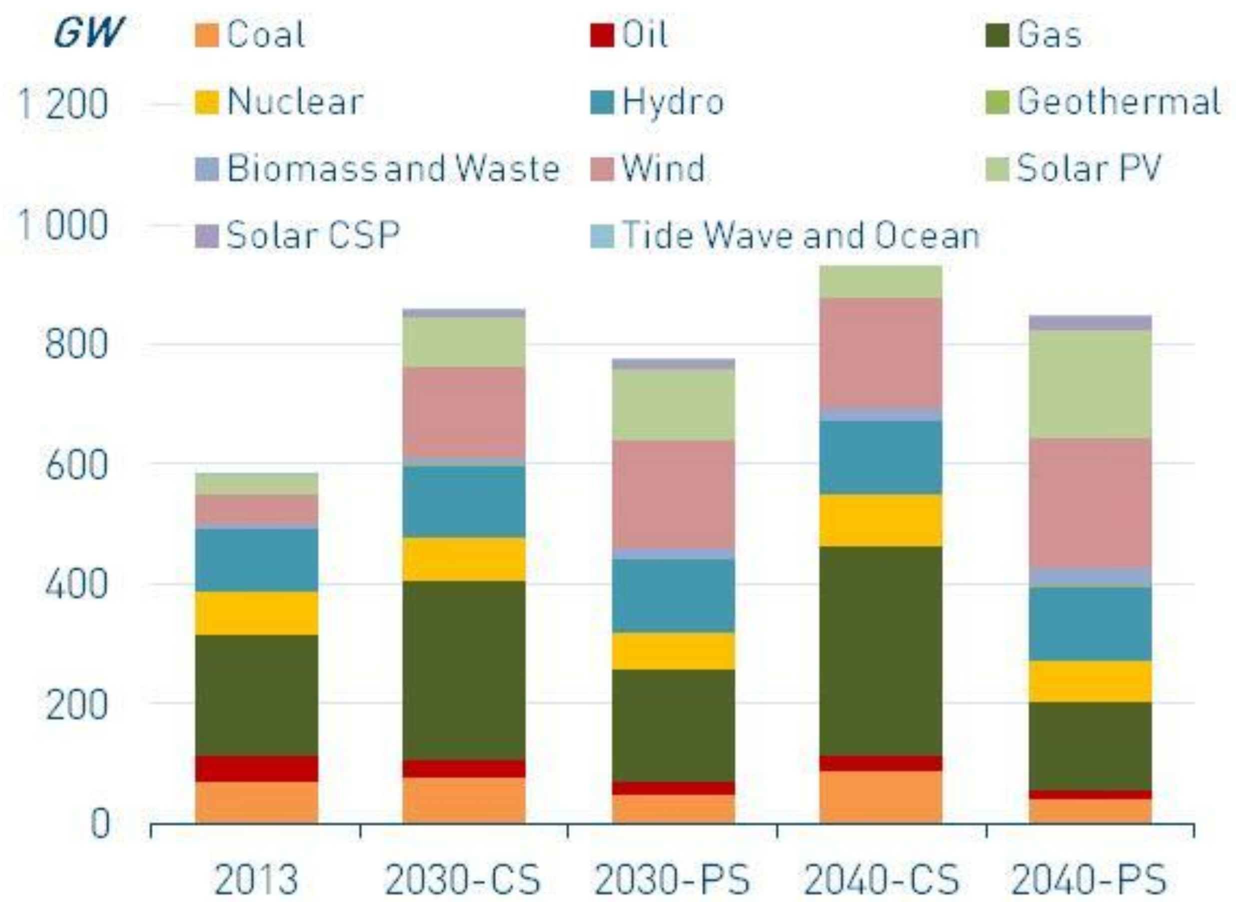
MEDITERRANEAN ENERGY INTEGRATION:SOME BASIC FACTS/2





Despite growth of RETs (a five times increase expected in the South&East Med by 2040 compared to current levels) the energy mix in the South&East Med will still heavily rely on fossil fuels => need to move beyond the Proactive Scenario and foster a sustainable energy transition in line with the Paris Agreement

ELECTRICITY CAPACITY EVOLUTION



Source: OME MEP2015 – Proactive Scenario

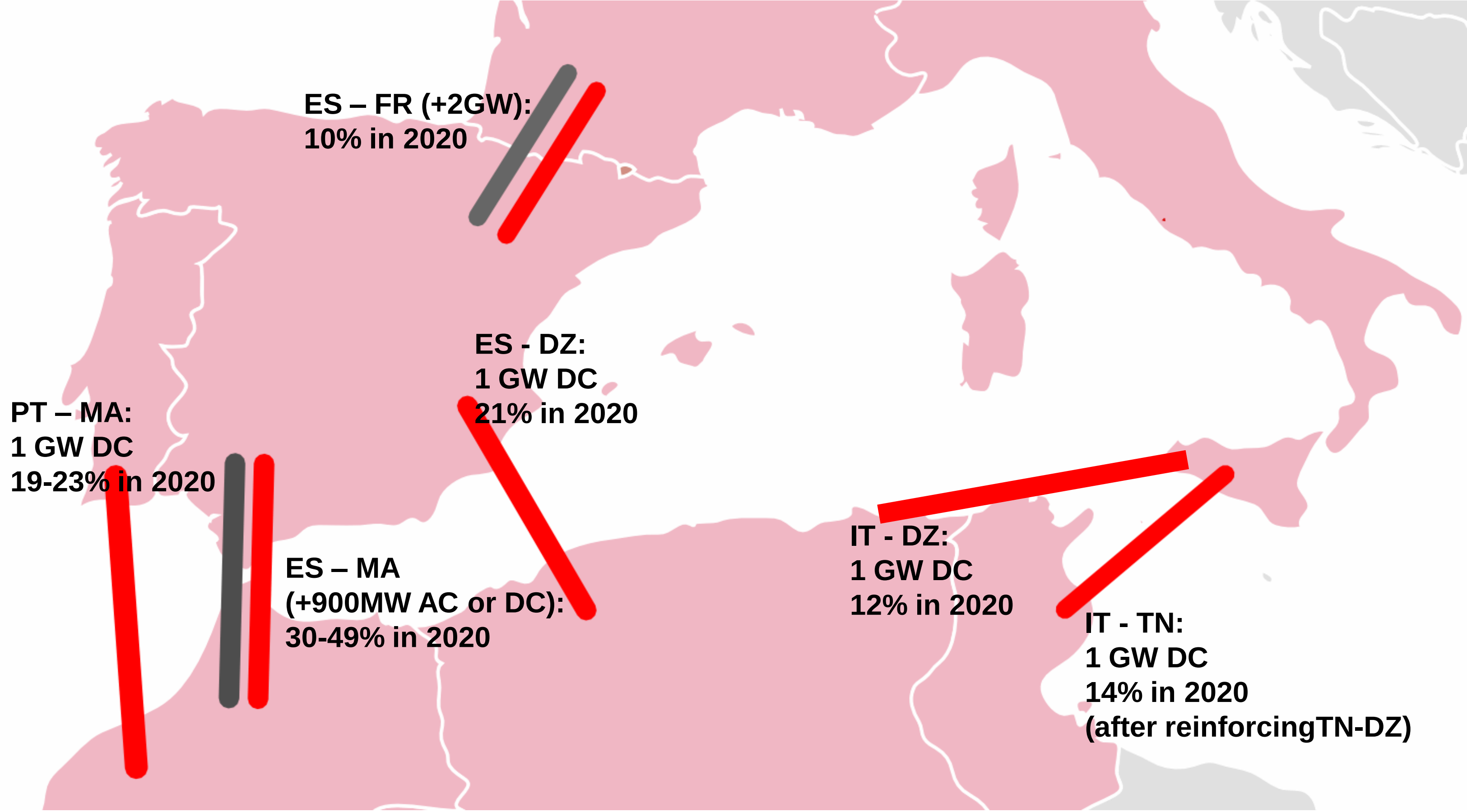
RETs to account for two-thirds of electricity installed capacity by 2040

265 GW extra in the Mediterranean region by 2040; more than two thirds of this capacity (185 GW) would be in the South&East Med, largely from RETs (147 GW).

ASSESSED INTERCONNECTION OPTIONS

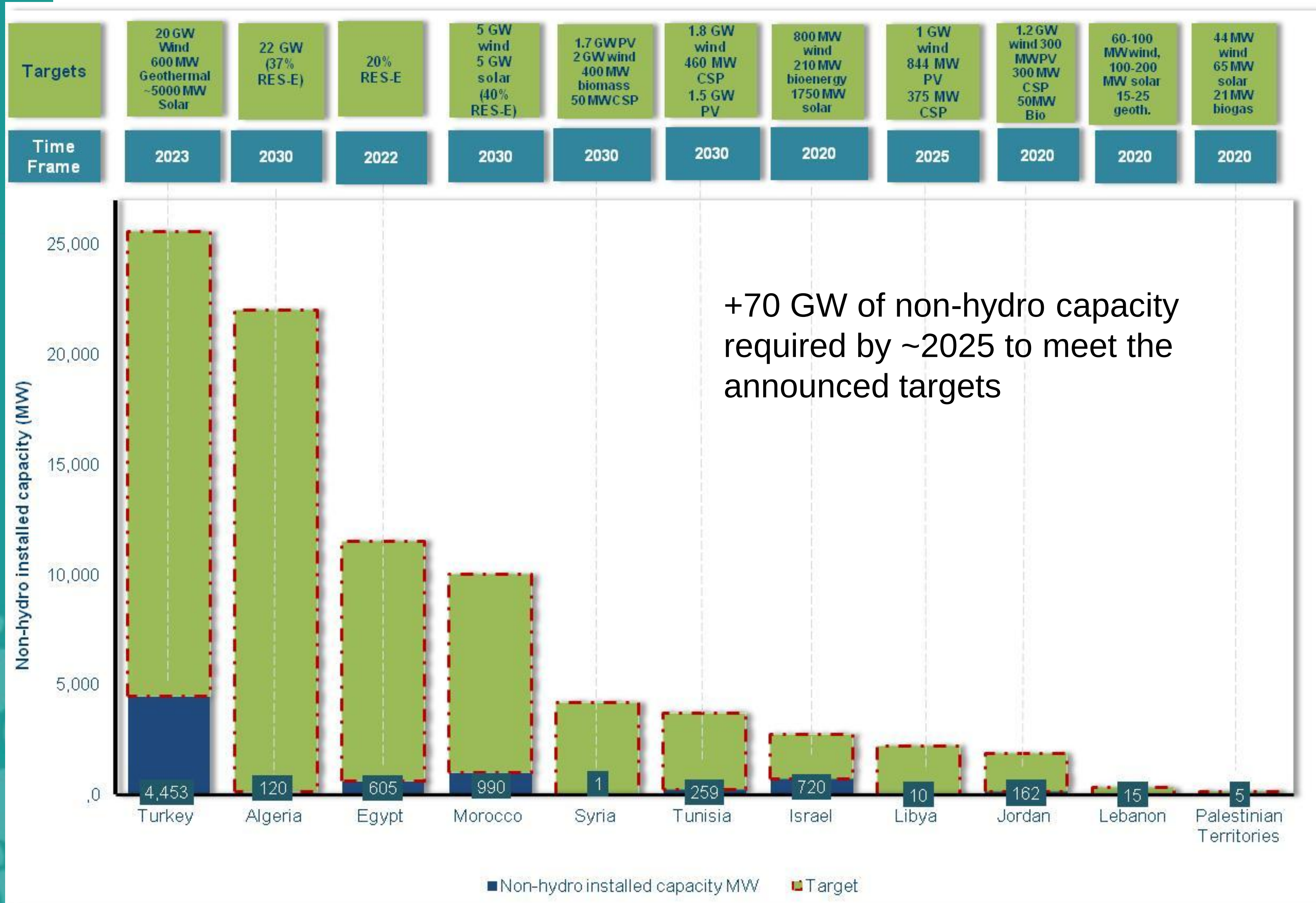
A number of projects have been identified as technically and economically viable

In the short-term mostly for export from the EU to the South (as currently in Morocco); but the direction of flow can be reversed!



Source: Medgrid, 2014. Project profitability for the community by 2020

RE TARGETS IN THE SOUTH & EAST



SUMMARY OF MAIN FINDINGS – SCENARIO ANALYSIS

- A **stagnating energy demand** in the **North Med**, an **energy-intensive development in the South&East** (2.2% c.a.a.g.r. in 2013-2040, more than 70% energy demand in 2040 vs. 2013)
- South&East Med electricity demand **to double in 2013-2040**; an extra-capacity of 185 GW needed, most of which from RES
- Requires a **profound transformation of the electricity supply and demand market structure** in the South&East Med region
- CO_2 emissions are expected to **increase by 400 Mt** in the South&East (+50%) even in the Proactive Scenario => need for more stringent NDCs
- Several plans have been adopted to decouple CO_2 energy emissions from economic growth - about **70 GW of non-hydro RETs** by **roughly 2025** (ten times more than current levels)
- Needs for **more than 400 bn USD** investments to meet the PS + additional investments for infrastructure (which financing tools?)

ANNOUNCED MEASURES TO MEET COP21 OBJECTIVES

Country	Energy efficiency	Renewable Energy	CO_2 mitigation
Algeria	-9% of energy consumption	27% of electricity generation	Min of -7% (up to -22% if intern. financing)
Israel	-17% of electricity consumption (vs. BAU)	17% of electricity generation	-23% compared to BAU
Jordan	-	11% of the energy mix (2025)	Min of -1.5% (up to -14% if intern. financing)
Lebanon	-3% in electricity demand vs. BAU (up to -10% conditional target)	15% of electricity and heat (up to 20% conditional)	Min of -15% compared to BAU (up to -30% conditional)
Morocco	-15% of energy consumption	50% of electricity capacity (2025)	Min. of -13% compared to BAU (up to -32%)
Tunisia	-30% of energy demand vs. 2010	30% of electricity generation	Min of -9% compared to BAU (up to -38%)
Turkey	-	26 GW + full hydro potential (~36 GW)	-21% compared to BAU

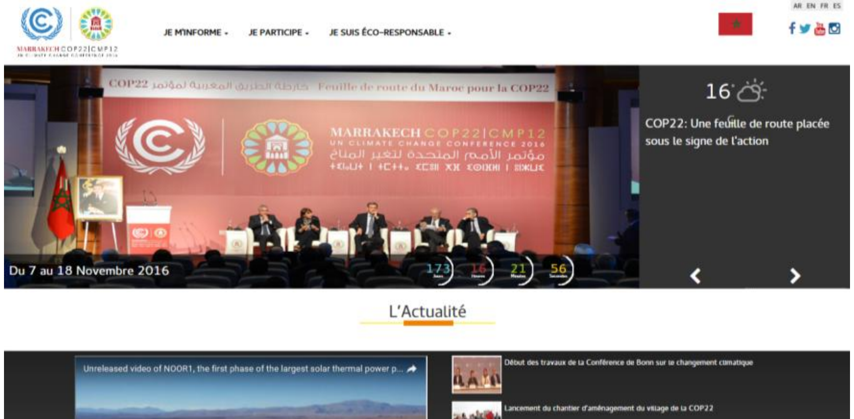
Source: Intended Nationally Determined Contributions to the 2030 horizon

No quantification for Egypt
No INDCs for Libya, Syria and Palestinian Territories

More ambitious targets subject to availability of international financing

THE WAY TO COP22

- Current efforts, as reported in the INDCs are **not enough** to meet the Paris Agreement
- **New and more ambitious NDCs** are therefore expected
- Paris Agreement to become effective after ratification by at least 55 Parties accounting for 55% of global emissions; so far **only 17 ratifications (0.04% of global emissions)**
- Important mandate for **next COP in Morocco** (7-18 November) to keep momentum and accelerate the ratification speed
- COP22 very relevant as the **Mediterranean will be in the spotlight and given policy prominence**



WHICH OPPORTUNITIES FOR EURO-MEDITERRANEAN COOPERATION?

- Euro-Mediterranean cooperation on energy was one of the **key element of the Barcelona process**
- The **Algiers declaration** in 2010 stressed the willingness for a progressive integration of Algerian, Moroccan and Tunisian electricity markets into the EU internal electricity market
- **Three thematic platforms** (on natural gas, REM, RE&EE) have been established with the aim to enhance bottom up dialogue and exchange of best practices; the REM **officially launched in Rabat in October 2015**; will promote sub-regional and regional integration of grids and harmonisation of rules
- Strengthening cooperation between EU and Third countries on renewable energy can lead to **win-win opportunities and improve energy security**
- Several studies (BETTER, DIA-CORE) have clearly indicated that benefits will outweigh costs if a more **collective approach** is followed, also through cooperation mechanisms
- However, **not any single Article 9 project has seen the light** and all **industry and multilateral initiatives in the Euro-Med region have not delivered**

CAN THE NEW EU DIRECTIVE BOOST COOPERATION?

- RE draft directive 2021-2030 to be probably issued by this year
- Will **higher targets/nationally binding targets** be there or the min. 27% EU-wide share will prevail?
- Will **cooperation mechanisms** still be seen as an **opportunity** to reach the targets in a more **cost-efficient way**?
- Physical trade from South and East Med to EU is **technically feasible to the horizon 2030**, provided that:
  - There is an alignment and convergence of policy priorities
  - Infrastructure is developed accordingly
  - Risk mitigation measures are in place to attract investments
- Reaching current targets in the Euro-Med region calls for more than 400 USD bn investments in new RE capacity plus investments in infrastructure
  - Which instruments can be used to foster the energy transition (e.g.: role of NIF, EFSI)?
  - Would a **Juncker Plan for the South and East Med** neighbouring countries be needed?

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