



# CDM Development in MENA Region, Current Status, Barriers and Opportunities

**11 May 2010**

**Redouane Haddadji**

EE/CDM Implementation Manager

Abu Dhabi Future Energy Company (Masdar)

**MASDAR**  
ABU DHABI FUTURE ENERGY COMPANY



**مصدر**  
شركة أبوظبي لطاقة المستقبل

# Contents

- CDM Development in MENA Region, what has been done?
- Barriers to CDM development, why the Region remains undeveloped?
- Opportunities to overcome barriers

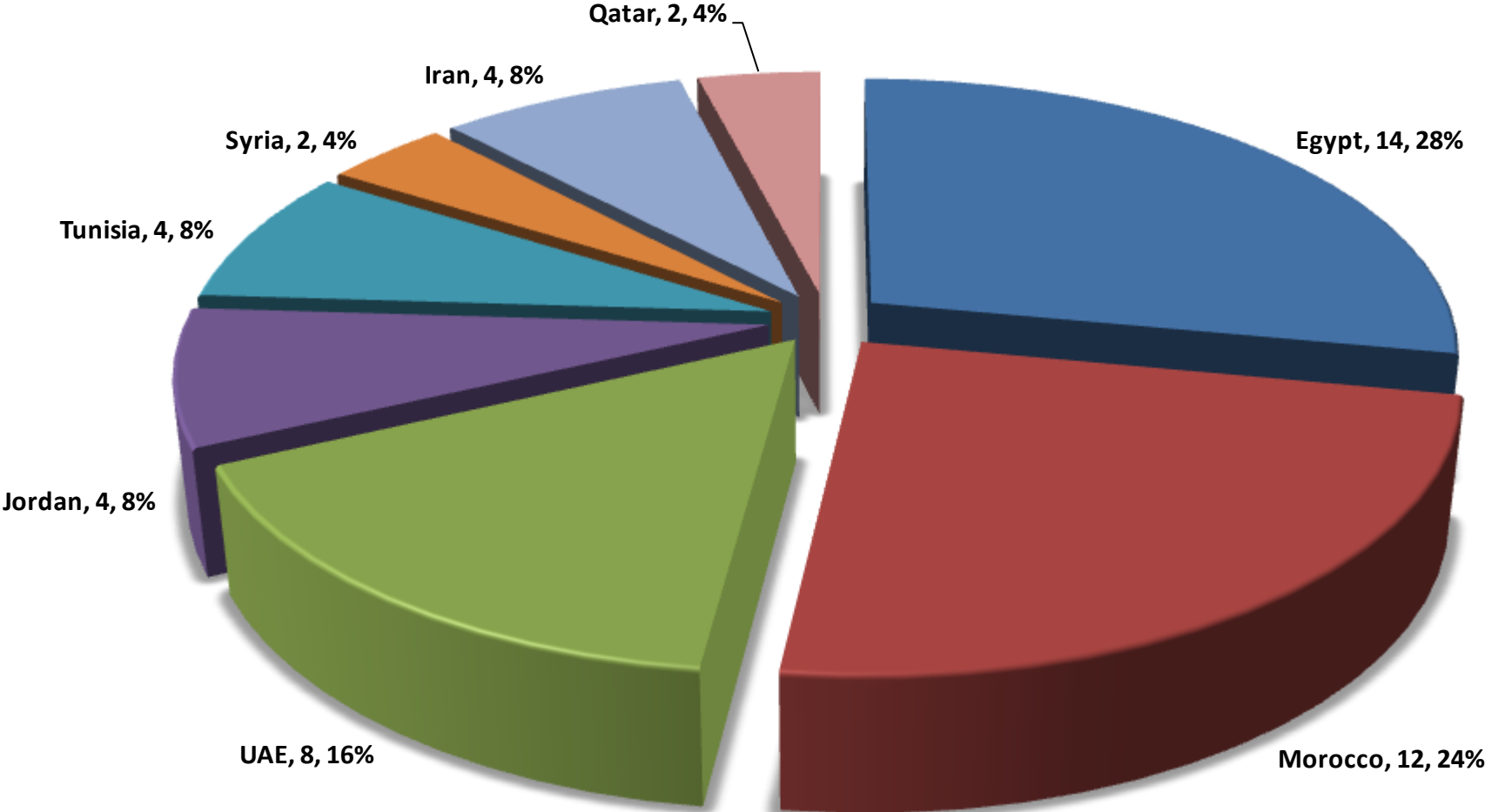
# CDM Project pipeline in MENA

	<b>Registered</b>	<b>At validation</b>	<b>Total</b>	<b>TCO2e</b>
<b>Egypt</b>	5	9	14	61
<b>Morocco</b>	5	7	12	9
<b>UAE</b>	4	4	9	8
<b>Jordan</b>	2	2	4	11
<b>Tunisia</b>	2	2	4	12
<b>Syria</b>	2	0	2	2
<b>Iran</b>	1	3	4	10
<b>Qatar</b>	1	1	2	48
<b>Total</b>	<b>22</b>	<b>28</b>	<b>50</b>	<b>160</b>

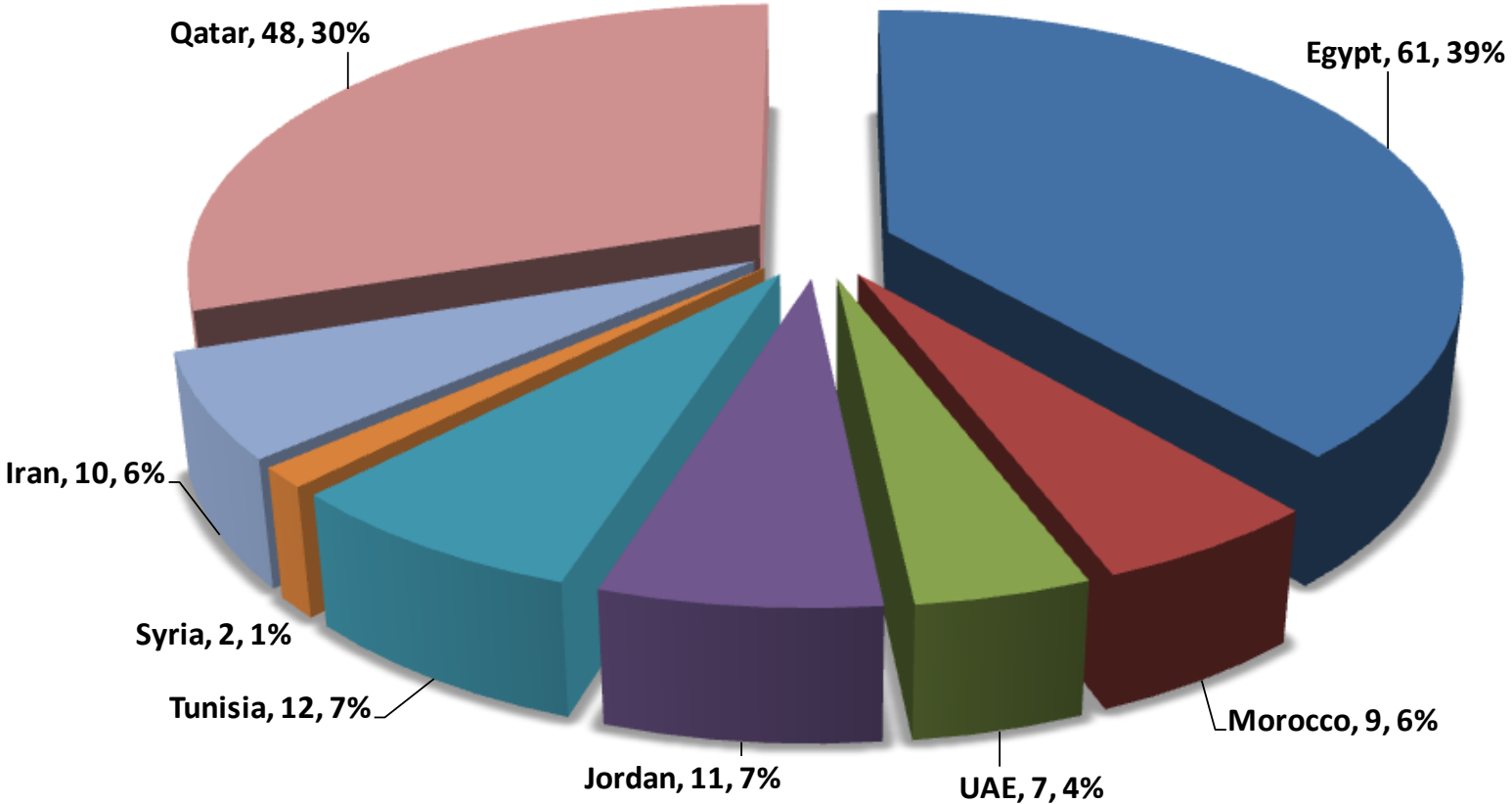
At validation category includes CDM projects at registration request and correction request stages

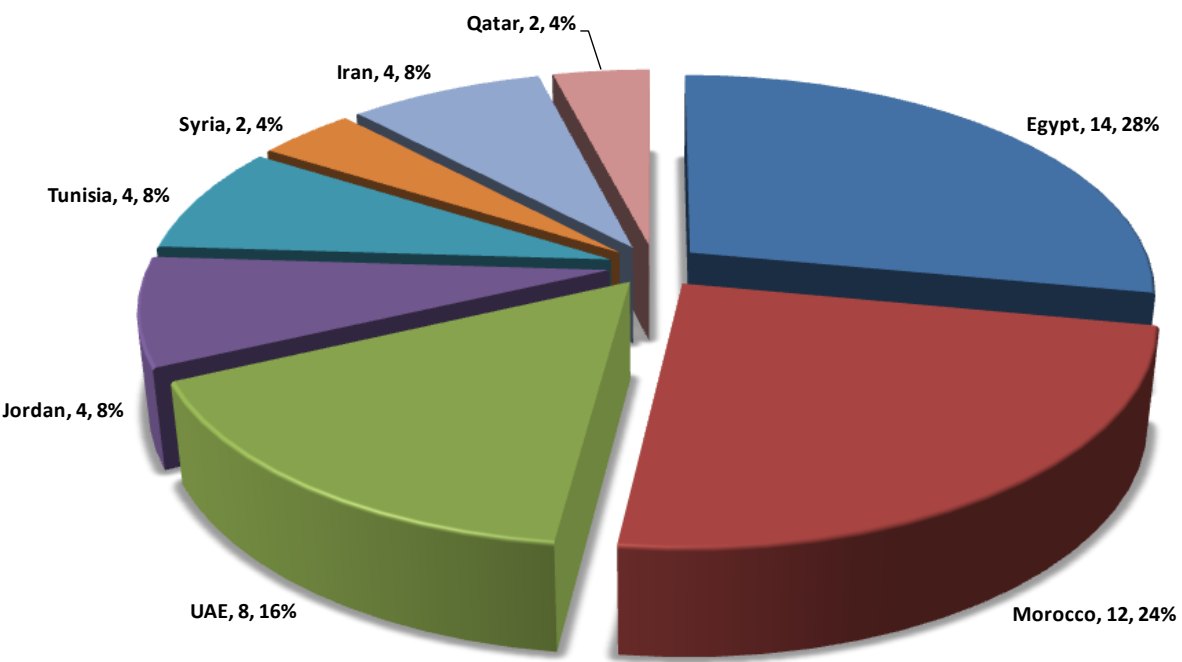
Source: UNEP Risoe Centre (May 2010); UNFCCC CDM Statistics

# Projects by country



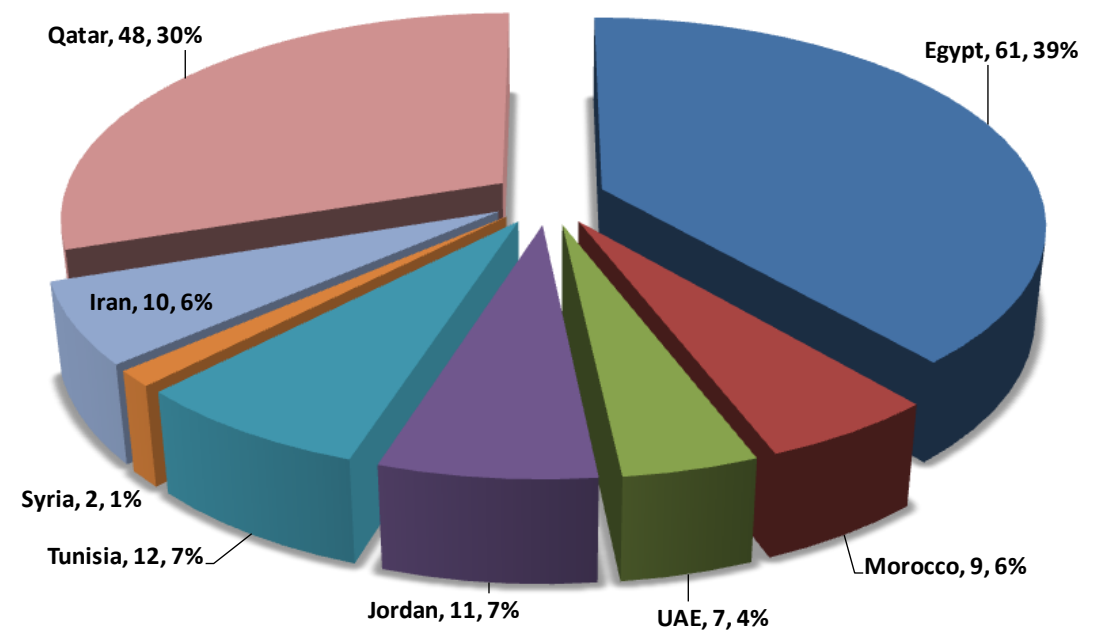
# Expected Emission Reductions Million Ton CO2e





**Number of projects**

**Volume of CERs**

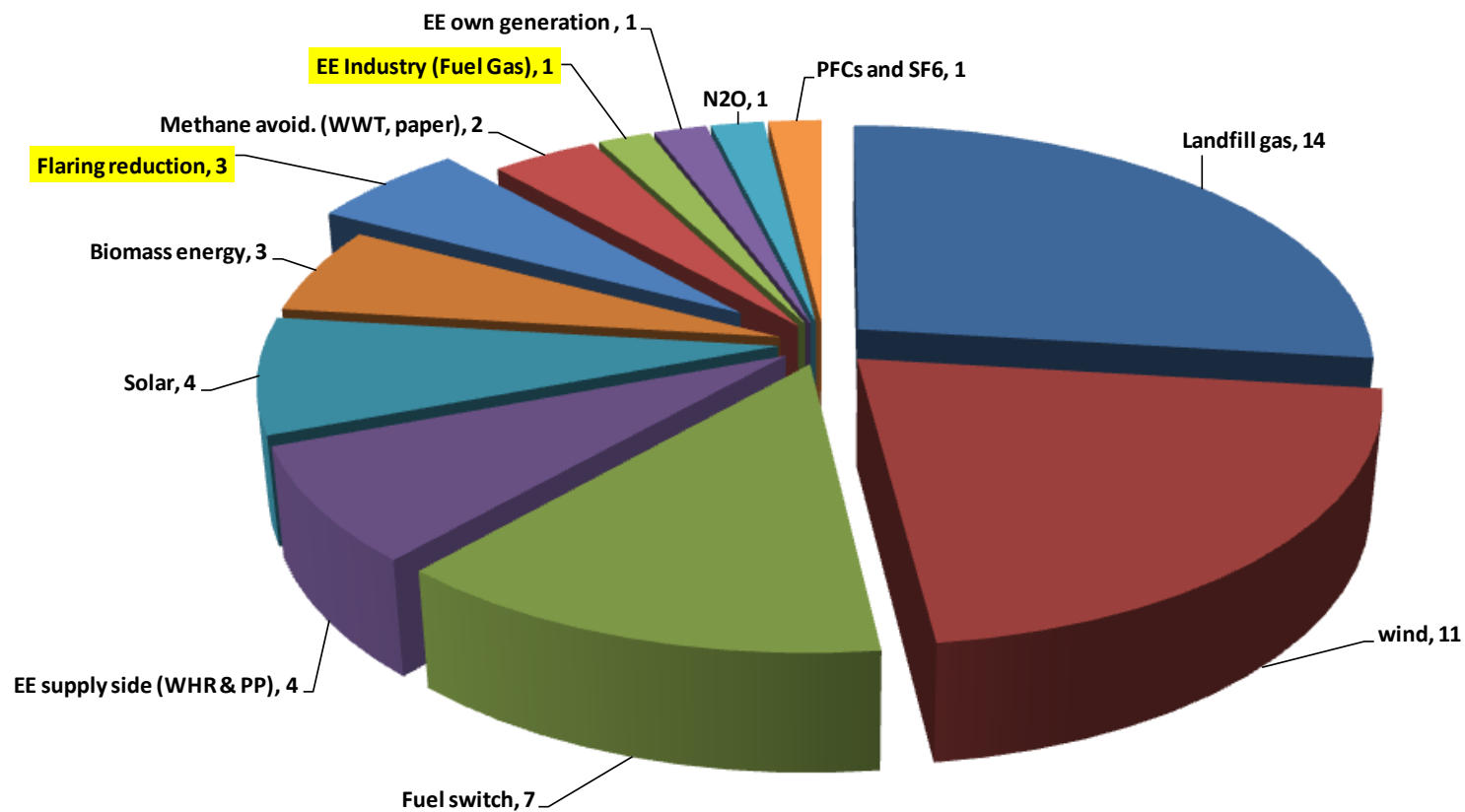


# Number of Projects per Type

	Projects		Renewable Energies			Energy Efficiency				Fugitive emissions and gases				
	Total projects	Registered	Solar	wind	Biomass energy	EE supply side (WHR & PP)	EE Industry (Fuel Gas)	EE own generation	Fuel switch	Flaring reduction	Methane avoid. (WWT, paper)	Landfill gas	N2O	PFCs and SF6
Egypt	14	5		4(2)	1	1		1 (1)	3			3(1)	1(1)	
Morocco	12	5	1(1)	6(2)	2 (1)						1	2(1)		
UAE	8	4	2(2)			1 (1)	1			1	1	1(1)		1
Jordan	4	2							3 (1)			1(1)		
Tunisia	4	2	1	1								2(2)		
Syria	2	2										2(2)		
Iran	4	1				1			1	1 (1)		1		
Qatar	2	1				1				1 (1)				
<b>Total</b>	<b>50</b>	<b>22</b>	<b>4(2)</b>	<b>11(4)</b>	<b>3(1)</b>	<b>5(1)</b>	<b>1</b>	<b>1(1)</b>	<b>7(1)</b>	<b>3(2)</b>	<b>2</b>	<b>12(8)</b>	<b>1(1)</b>	<b>1</b>

Number of projects : total(registered)

# Number of Projects per Type

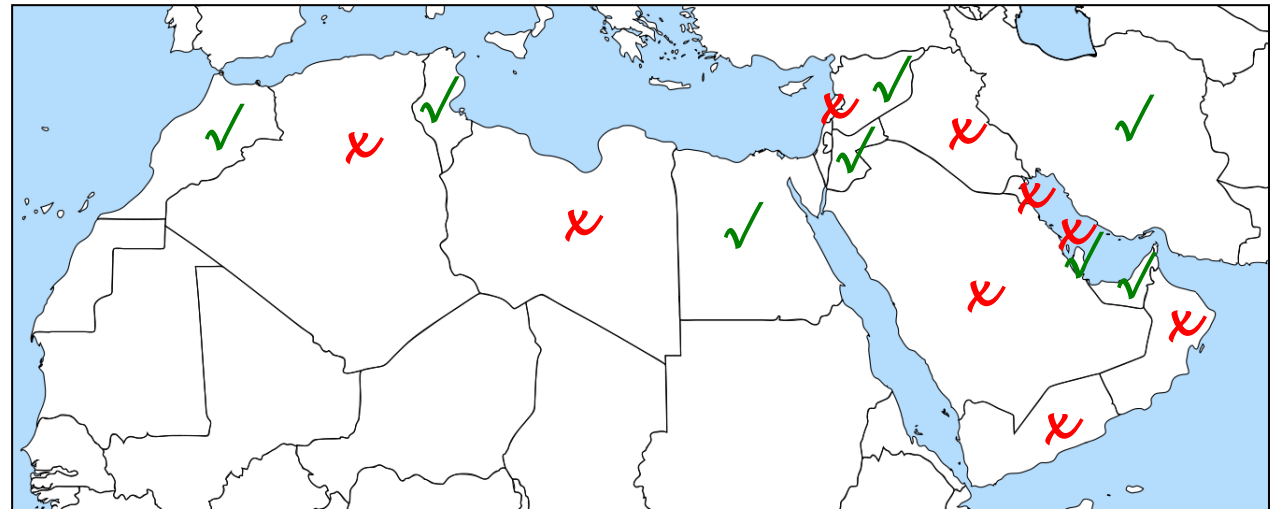


# Gas flaring projects in MENA

ID	Title	Host country	Status	Sub-type	Methodology	yrs.	2012 ktCO <sub>2</sub> e	2020 ktCO <sub>2</sub> e	Validator	PDD Consultant	Date of registration
CDM4 138	Soroosh & Nowrooz Early Gas Gathering and Utilization Project	Iran	Registered	Oil field flaring reduction	AM9	7	1,438	5,146	SGS	Carbon Limits	23-Nov-09
CDM1 092	Al-Shaheen Oil Field Gas Recovery and Utilization Project	Qatar	Registered	Oil field flaring reduction	AM9	7	13,748	34,002	DNV	Eco Securities	29-May-07
CDM6 257	ADGAS Recovery and utilization of flare waste gases	UAE	At Validation	Oil and gas processing flaring	AM55	10	303	1,514	TÜV-Nord	MASDAR	
CDM3 640	Implementing energy efficient measures to reduce fuel gas consumption at GASCO	UAE	At Validation	EE Industry	AMS-II.D.	10	36	86	SGS	MASDAR	

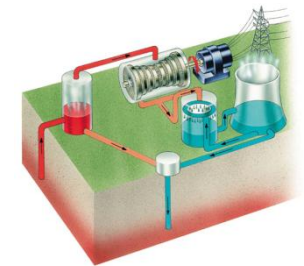
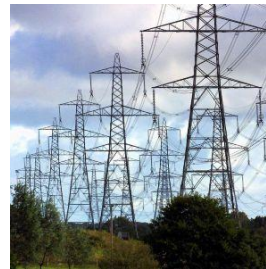
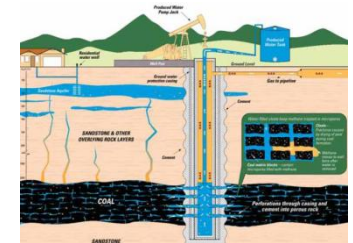
# MENA Region Countries with no CDM Projects in the pipeline

- Saudi Arabia
- Libya (no DNA)
- Algeria
- Kuwait
- Bahrain
- Oman (no DNA)
- Lebanon
- Yemen
- Iraq (no DNA)



# Project types not developed in MENA Region

- Afforestation / Reforestation
- Agriculture
- Cement
- CO<sub>2</sub> Capture
- Coal bed/mine methane
- Energy distribution
- EE demand side
- Geothermal
- HFCs
- Hydro
- Transport



# Barriers

- CDM related barriers
  - Uncertainty on Post-2012 regime
  - Volatile CER prices
  - Increasing transaction Costs (PDD development, Validation, Registration, Verification...)
  - No “low hanging fruits”
  - Registration process at the CDM-EB takes time.
  - DOEs overloaded
  - Expectations of banking CERs for future commitments
  - Lack of interest in CDM due to low Capacity building
- Regulatory barriers
  - DNA not existent or not active
  - Lack CDM promotion activities done by DNAs
  - Lack of dedicated staff in the DNAs
  - Regulatory framework should promote energy efficiency, Highly subsidized electricity prices make a difficult case for EE projects, specially on demand side
  - Taxes to CDM projects by local DNAs
  - Lack of incentives that promote CDM (e.g. tax exemptions, fiscal benefits, etc.)

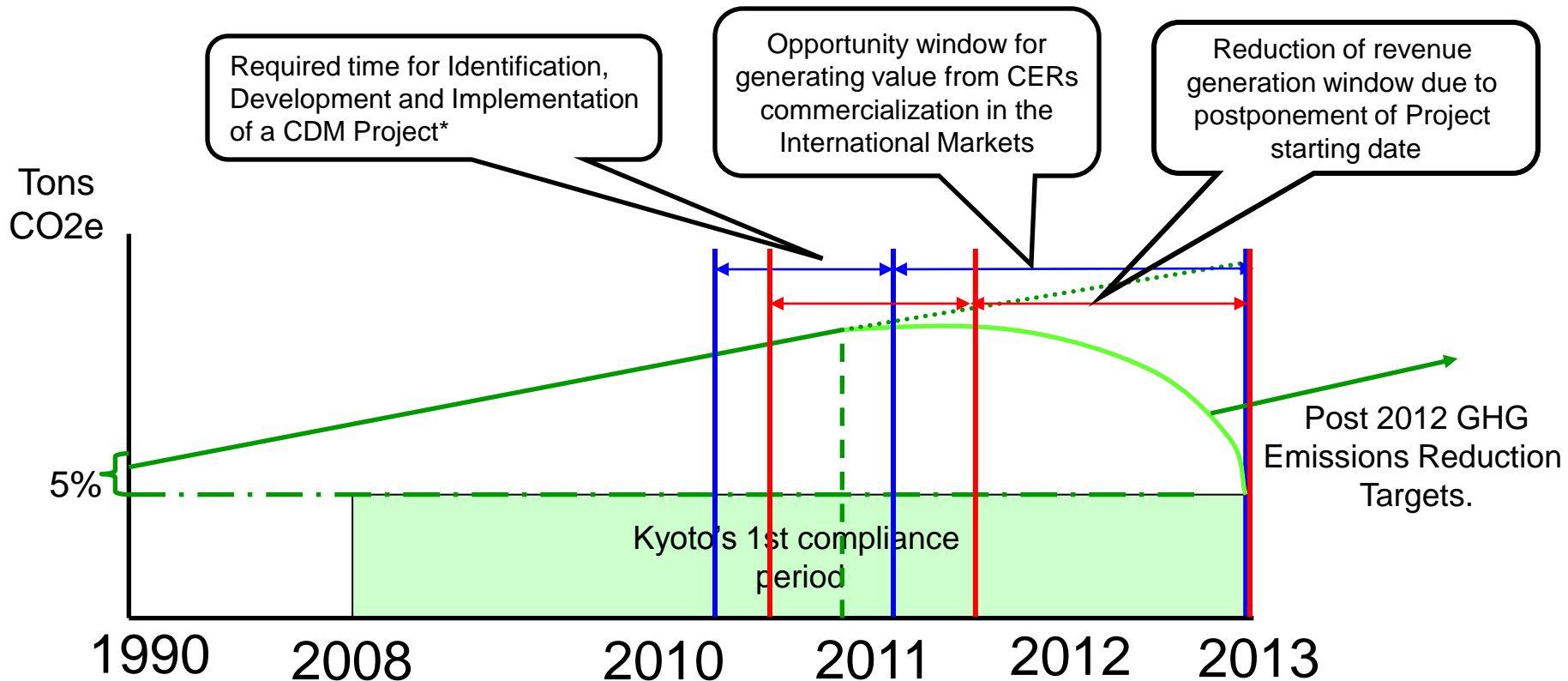
# Barriers

- Project related barriers
  - Registered projects that have not been physically implemented (Out of 22 Registered projects, only 3 have actually issued CERs)
  - Complicated Tender processes
  - Additionality criteria
  - Late consideration of projects as CDM
  - Projects with low CERs (not attractive)
  - High CAPEX, high risk
  - Delays in decision making, loss of additionality or profitability
  - Lack of investors

# Opportunities

- Large Oil and Gas activities (12 countries : 8/12 OPEC countries + 4 non OPEC countries (Bahrain, Syria, Egypt and Tunisia)).
- Large oil and gas reserves
- Large Power / Water desalination sector
- Large Renewable Energy Potential
- Proximity of large energy consumers (Europe, South east Asia).
- Fast growing region
- Need to reduce the GHG per capita
- Political will to develop CDM project
- Availability of CDM developers
- Availability of funding (private sector).

# Opportunity window



\*Average development time of a CDM Project: between 12 to 18 months.

**Thank you for your attention**



**Redouane Haddadji**

**EE/CDM Implementation Project Manager**

**Masdar (www.masdar.ae )**

**rhaddadji@masdar.ae**