



Carbon markets in the Paris Agreement Civil society priorities for the future

Learning from the CDM

Engaging the private sector with new mechanisms

Prof Ali AGOUMI, GERERE/Morocco

COP22 Side Event

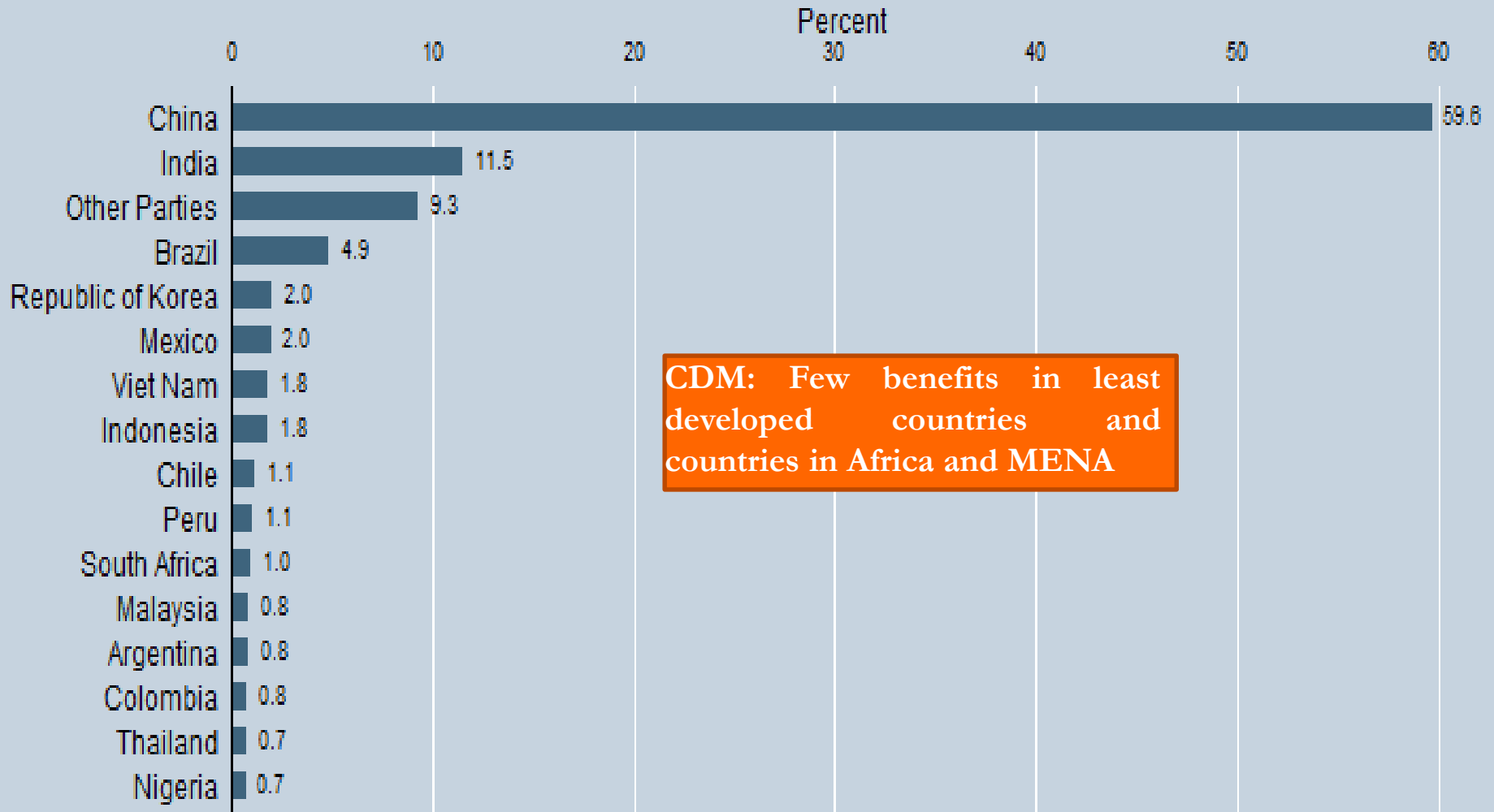
Tuesday 8 November 2016, Room Pacific (150)

Time: 15.00-16.30



Distribution of expected CERs from registered projects by Host Party

Total expected CERs is the sum of each projects average annual reductions: 1,000,740,068 t CO₂e



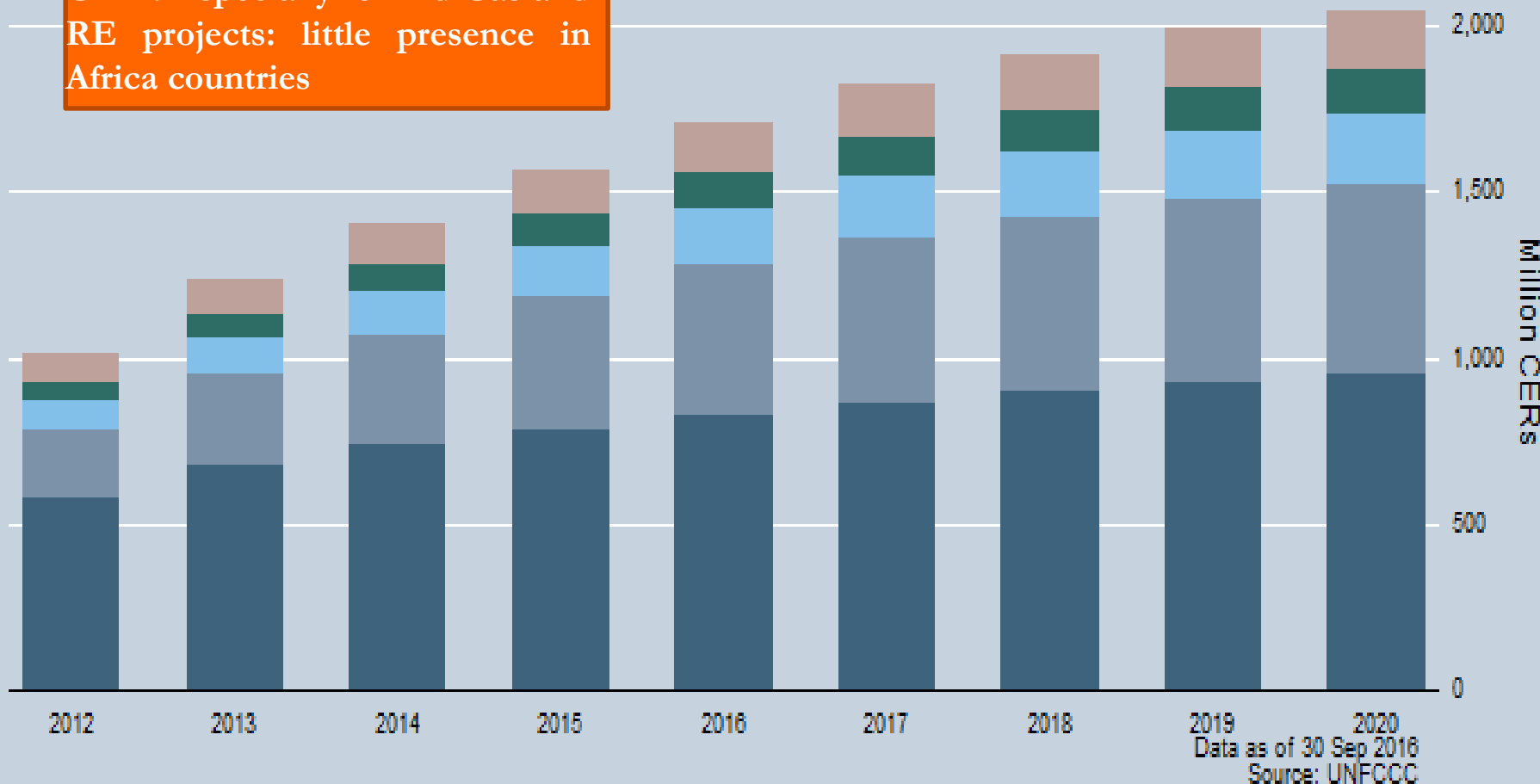
CDM: Few benefits in least developed countries and countries in Africa and MENA

Data as of 30 Sep 2016
Source: UNFCCC

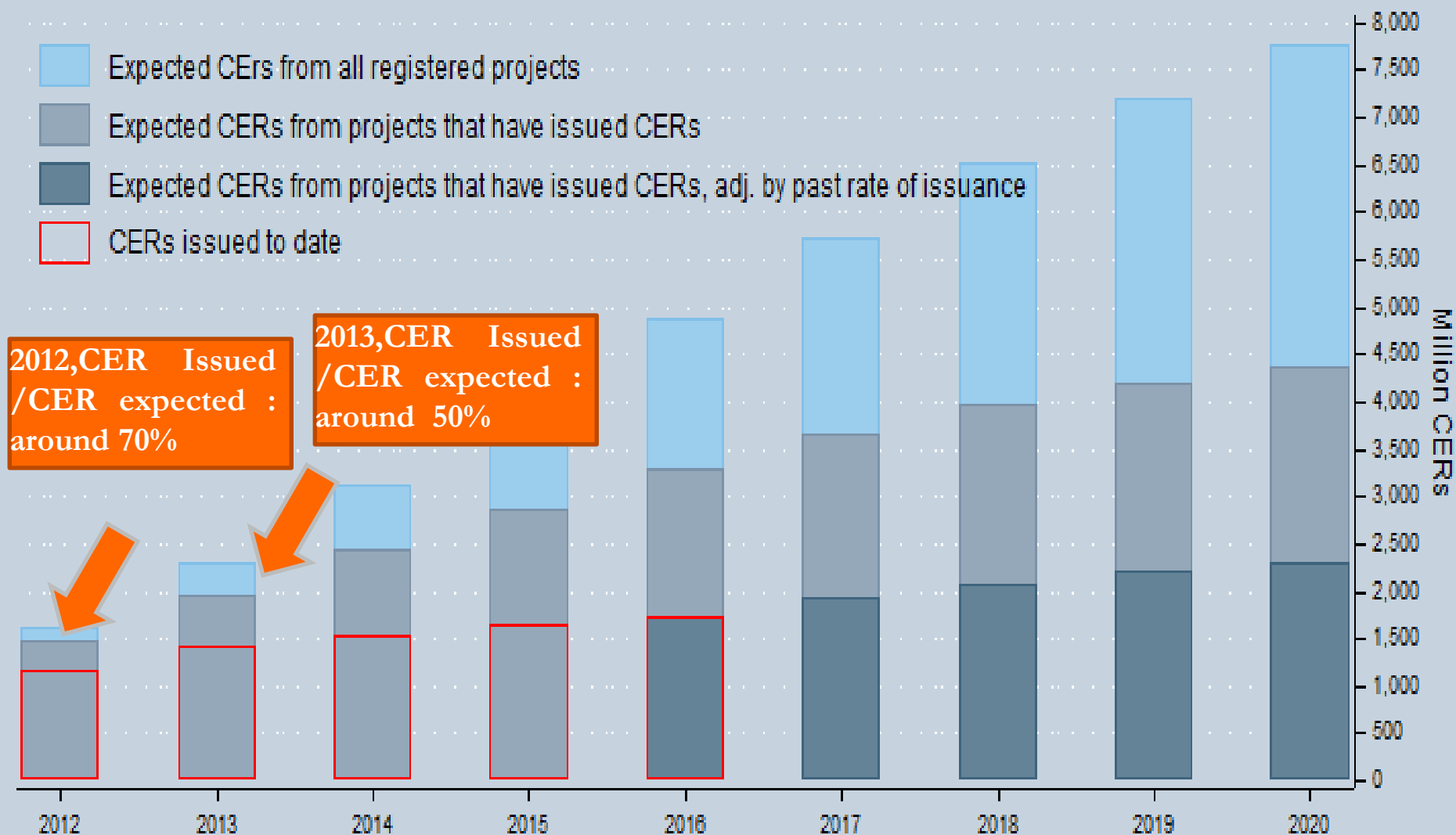
Distribution of expected CERs from projects that have issued CERs, adj. by past rate of issuance

by project type

CDM: Especially for Ind Gas and RE projects: little presence in Africa countries



Total potential supply of CERs from end KP 1st CP to 2020



Data as of 30 Sep 2018
Source: UNFCCC

CDM Morocco experiences

| B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|--|-------------------|-------------------------|-------------------------|------|--------------|---------------------|---------------------|---------------------|-----------|-----------|-------------------|-------------------|------------|-------------------|---------------------|-------------------|
| Title | Type | 1st period ktCO2e/yr | 2nd period ktCO2e/yr | yrs. | Credit start | Expected accumu- | Expected accumu- | Expected accumu- | kCERs CP1 | kCERs CP2 | Total issuance | First issuance | Until | Expected kCERs | Issuance success | Issuance delay |
| Essaouira wind power project | Wind | 156 | | 10 | 01-janv-07 | 936 | 1560 | 1560 | 549 | | 549 | 22-avr-10 | 31-déc-12 | 937 | 59% | 40 |
| Tétouan Wind Farm Project for Lafarge Cement Plant | Wind | 29 | 23 | 7 | 01-oct-05 | 208 | 387 | 517 | 175 | | 175 | 23-juil-07 | 30-sept-12 | 201 | 87% | 22 |
| "Photovoltaic kits to light up rural households in Morocco" | Solar | 39 | | 10 | 01-janv-07 | 227 | 386 | 386 | | | | | | | | 119 |
| QULJA Landfill gas recovery and flaring | Landfill gas | 32 | | 7 | 06-nov-07 | 189 | 428 | 682 | | | | | | | | 109 |
| Surac Bagasse Plant Project | Biomass energy | 32 | | 7 | 22-juin-09 | 131 | 365 | 665 | | | | | | | | 89 |
| Haouma Wind Farm Project, developed by NAREVA HOLDING | Wind | 134 | | 7 | 31-déc-12 | 134 | 1077 | 2422 | | | | | | | | 46 |
| Akhfenrir Wind Farm Project - Morocco. | Wind | 265 | | 7 | 01-févr-13 | 199 | 2097 | 4746 | | | | | | | | 45 |
| Tanger wind power project. | Wind | 334 | | 10 | 01-juil-11 | 501 | 3177 | 3341 | | | | | | | | 64 |
| Marrakesh Wastewater Treatment Plant (w/WTP) with biogas recovery for cogeneration | Methane avoidance | 62 | | 10 | 01-janv-13 | 0 | 500 | 625 | | | | | | | | 46 |
| Wind farm extension project for Lafarge's cement plant in Tétouan | Wind | 50 | | 7 | 01-janv-13 | 0 | 399 | 898 | | | | | | | | 46 |
| Fuel oil to vegetable biomass switching at Lesieur Cristal Limited Corporation | Biomass energy | 11 | | 10 | 31-déc-12 | 0 | 89 | 111 | | | | | | | | 46 |
| Quarzazate I Concentrated Solar Power Project | Solar | 279 | | 10 | 01-janv-16 | 0 | 1394 | 2787 | | | | | | | | 9 |
| Jbel Sendouq-Khalladi ("Khalladi") wind farm project in Morocco | Wind | 144 | | 7 | 01-mai-14 | 0 | 961 | 2401 | | | | | | | | 30 |
| Heat recovery and fuel switch from natural gas to biomass residues implemented at Renault Tanger Méditerranée (RTM) plant - Melloussa, Morocco | Biomass energy | 10 | | 10 | 01-janv-14 | 0 | 73 | 105 | | | | | | | | 34 |
| Fes New Landfill Gas Recovery Reuse and Flaring Project - Fes, RAMSA - Biogas recovery and electricity generation from M'zar Wastewater treatment plant, | Landfill gas | 119 | | 10 | 12-mars-15 | 0 | 689 | 1186 | | | | | | | | 19 |
| | Methane avoidance | 44 | | 4 | 01-juil-18 | 0 | 194 | 531 | | | | | | | | -21 |

8 Projects with expected CER 2012

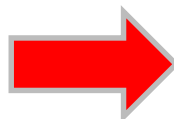
16 registered projects :

- 7 Wind
- 2 Solar
- 3 biomass energy
- 2 landfill gas
- 2 Methane avoidance

CDM Morocco's Portfolio

CERs until 2012

Morocco Expected
accumulated CER 2012:
• **2754 kTCO₂e**



Morocco Total issuance 2012:

- **706 kTCO₂e: 25.6%**
- **2 Project from 8**

Source : www.CD4CDM.org

1st October 2016



GERERE

Handicaps for CDM project proponents in Africa and least developed countries

- The complexity of the CDM process
- Lack of local expertise to succeed in this process
- Lack of data to complete this process properly
- High transaction costs for the project proponent
- Need for the proponent to advance the necessary funds without guaranty to access CERs
- The market price has fallen from 32 Euros to 0.5 Euros between 2008 and 2016
- Lack of lawyers to assist project developers in drafting their sale contracts to carbon corporations
- Most of these corporations found a way (Major Force) not to meet their commitments when the market plunged after 2009 !!!!

What is needed in the design of a new carbon market mechanism for Africa ?

- Simplified mechanism with simple safeguards
- Removal of additionality demonstration for RnE & EE projects
- Technical & financial support for projects proponents to go through the process including setting contracts with carbon credits buyers
- Capacity Building for African experts to develop and monitor the eligible projects
- Floor price for carbon credits