

# Mapping of the Intended Nationally Determined Contributions (INDCs) for the Arab countries: Key Issues and Financial Needs

Economic And Social Commission For Western Asia



UNITED NATIONS

الاسكوا  
ESCWA

40  
YEARS

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# Introduction (1)

As requested for COP 21 in Paris on Dec 2015, more than **190 countries** have submitted their post-2020 climate action plans, or INDCs of wh. 157 were submitted before closing COP21-Paris on 12 Dec 2015, & the remaining 4 countries between 15 Dec 2015 & 4 Feb 2016.

Total **Arab INDCs were submitted by 19 countries**, 3 missed INDCs (Libya, Palestine & Syria). All the 19 INDCs were submitted between 5 June 2015 (MOR) & 25 Nov 2015 (KUW).

# Introduction (3)

Based on a Matrix developed on the Arab INDCs

- *What the Arab countries will do for mitigation and adaptation ?*
- *it's important to understand what their different INDC choices mean.*

## 2- Submission date of the 19 Arab INDCs

<b>Countries</b>		<b>Date of Submission</b>
<b>1</b>	<b>Morocco</b>	<b>6/5/2015 19:41</b>
<b>2</b>	<b>Tunisia</b>	<b>9/16/2015 16:05</b>
<b>3</b>	<b>Comoros</b>	<b>9/17/2015 13:08</b>
<b>4</b>	<b>Lebanon</b>	<b>9/30/2015 9:39</b>
<b>5</b>	<b>Mauritania</b>	<b>9/30/2015 11:27</b>
<b>6</b>	<b>Jordan</b>	<b>9/30/2015 11:29</b>
<b>7</b>	<b>Algeria</b>	<b>10/1/2015 19:25</b>
<b>8</b>	<b>Oman</b>	<b>10/19/2015 13:53</b>
<b>9</b>	<b>UAE</b>	<b>10/22/2015 16:25</b>
<b>10</b>	<b>Djibouti</b>	<b>10/28/2015 11:09</b>
<b>11</b>	<b>Saudi Arabia</b>	<b>11/10/2015 8:06</b>
<b>12</b>	<b>Sudan</b>	<b>11/10/2015 10:08</b>
<b>13</b>	<b>Iraq</b>	<b>11/12/2015 9:18</b>
<b>14</b>	<b>Egypt</b>	<b>11/16/2015 14:54</b>
<b>15</b>	<b>Somalia</b>	<b>11/17/2015 12:12</b>
<b>16</b>	<b>Qatar</b>	<b>11/20/2015 11:19</b>
<b>17</b>	<b>Yemen</b>	<b>11/23/2015 15:08</b>
<b>18</b>	<b>Bahrain</b>	<b>11/24/2015 10:41</b>
<b>19</b>	<b>Kuwait</b>	<b>11/25/2015 8:52</b>

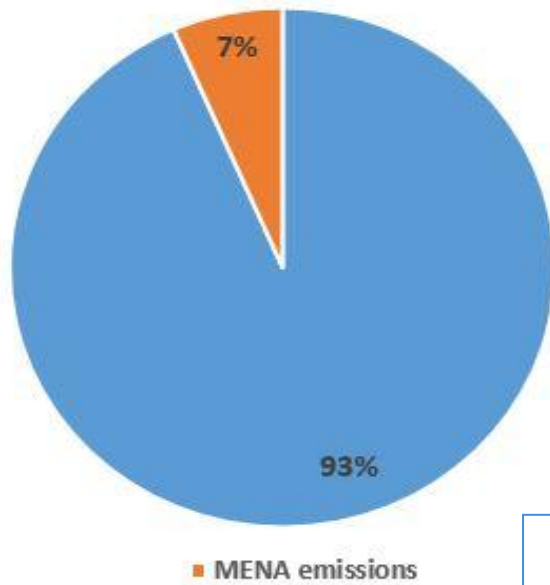
**19 Arab countries\* over 190 countries (161 Parties)**

**Total GHG Emissions  
including or excluding  
Land-Use Change & Forestry  
– LCUF  
(MtCO<sub>2e</sub>)**

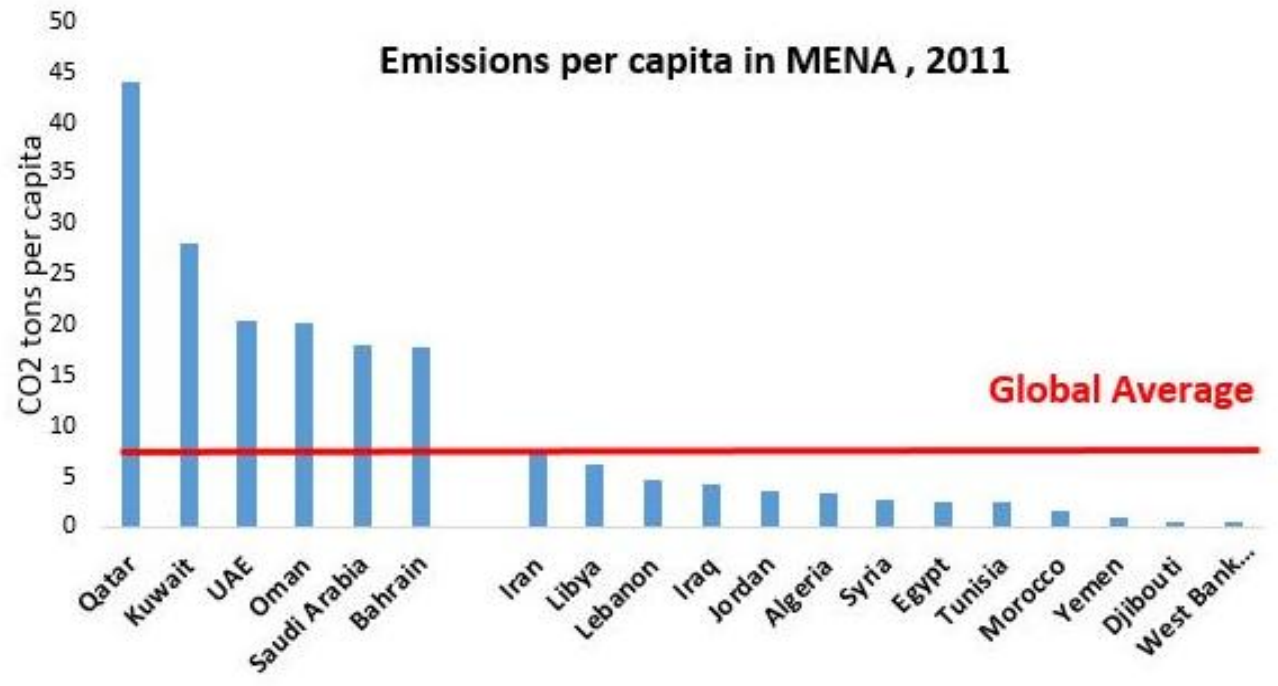
	<b>Party</b>	<b>GHGs excl. LUCF 2012 (MtCO<sub>2e</sub>)</b>	<b>GHGs incl. LUCF 2012 (MtCO<sub>2e</sub>)</b>	<b>Year</b>
1	Morocco	71.44	72.51	2012
2	Tunisia	31.53	30.7	2012
3	Comoros	0.4	0.6	2012
4	Lebanon	24.34	24.3	2012
5	Mauritania	10.64	11.16	2012
6	Jordan	27.42	27.42	2012
7	Algeria	187.33	189.08	2012
8	Oman	109.32	109.32	2012
9	UAE	216.26	216.04	2012
10	Djibouti	2.58	2.58	2012
11	S. Arabia	526.97	526.97	2012
12	Sudan	148.62	177.35	2012
13	Iraq	257.09	256.44	2012
14	Egypt	288.19	287.97	2012
15	Somalia			
16	Qatar	85.25	85.25	2012
17	Yemen	29.84	29.84	2012
18	Bahrain	33.25		2012
19	Kuwait	202.5	202.47	2012
20	Libya	130.6	130.6	2012
21	Palestine			
22	Syria	73.76	72.5	2012
	<b>19 countries</b>	<b>2457</b>	<b>2453</b>	
	<b>WORLD</b>	<b>44816</b>	<b>47599</b>	
		<b>5.5%</b>	<b>5.2%</b>	

# Share of the Arab countries Emissions

Annual global CO<sub>2</sub> emissions



Emissions per capita in MENA , 2011



# 3- Mitigation contribution type

INCD contribution type could take different forms: **GHG targets, Non-GHG targets, Actions** or a combination of targets and actions:

- **11 countries are fixed GHG target** contributions framed as targeted outcomes in GHG terms.
- **7 countries are fixed a Non-GHG targets** in their contributions in terms of specific, quantifiable, desired outcomes in energy efficiency, renewable energy, forestry or other sectors, & that are not expressed in terms of GHG emissions or emission reductions.
- **7 countries are submitted Actions** in their contributions that include intent to implement specific means of achieving GHG reductions, such as policies and projects.



# 2012 Total GHG Emissions (MtCO<sub>2</sub>e) source: WRI-CAIT & Mitigation target in the Arab INDCs

Country	Date Submission	GHGs 2012 (MtCO <sub>2</sub> e)		Year	Mitigation Target		Target year	Implementation period	Baseline year
		GHGs excl. LUCF	GHGs incl. LUCF		Unconditional	Conditional			
1 Morocco	6/5/2015 19:41	71.44	72.51	2012	-13%	-32%	2030	2020-2030	BAU
2 Tunisia	9/16/2015 16:05	31.53	30.7	2012	-13% of CI	-41% Carbon Intensity	2030	2015-2030	2010
3 Comoros	9/17/2015 13:08	0.4	0.6	2012	-	-84%	2030	2020-2030	BAU
4 Lebanon	9/30/2015 9:39	24.34	24.3	2012	-15%	-30%	2030	n/a	BAU
5 Mauritania	9/30/2015 11:27	10.64	11.16	2012	-2.7%	-22.3%	2030	2020-2030	2010
6 Jordan	9/30/2015 11:29	27.42	27.42	2012	-1.5%	-14%	2030	until 2030	BAU
7 Algeria	10/1/2015 19:25	187.33	189.08	2012	-7%	-22%	2030	2021-2030	BAU
8 Oman	10/19/2015 13:53	109.32	109.32	2012	-	-2%	2030	2020-2030	BAU
9 UAE	10/22/2015 16:25	216.26	216.04	2012	a share of 24% clean energy (sectoral target)		2021	n/a	n/a
10 Djibouti	10/28/2015 11:09	2.58	2.58	2012	-40%	-60%	2030	n/a	BAU
11 S. Arabia	11/10/2015 8:06	526.97	526.97	2012	-130 MtCO <sub>2</sub> (annually)		2030	2021-2030	BAU
12 Sudan	11/10/2015 10:08	148.62	177.35	2012	Pledges not quantified; INDC mentions sector		2030	2025-2030	n/a
13 Iraq	11/12/2015 9:18	257.09	256.44	2012	-1%	-15%	2035	2020-2035	BAU
14 Egypt	11/16/2015 14:54	288.19	287.97	2012	Pledges not quantified; INDC mentions sectoral targets		2020-2030		n/a
15 Somalia	11/17/2015 12:12				Pledges not quantified; INDC mentions actions & 9 projects		n/a		n/a
16 Qatar	11/20/2015 11:19	85.25	85.25	2012	Pledges not quantified; INDC mentions policies & actions		2021-2030		n/a
17 Yemen	11/23/2015 15:08	29.84	29.84	2012	-1%	-14%	2030	2016-2030	BAU
18 Bahrain	11/24/2015 10:41	33.25		2012	Pledges not quantified; INDC mention sectora		2035	2020-2035	
19 Kuwait	11/25/2015 8:52	202.5	202.47	2012	To avoid increasing CO <sub>2</sub> emission				BAU
20 Libya	NO	130.6	130.6	2012					
21 Palestine	NO								
22 Syria	NO	73.76	72.5	2012					
<b>19 Arab countries*</b>		<b>2457</b>	<b>2453</b>						
<b>WORLD</b>		<b>44816</b>	<b>47599</b>						
		5.5%	5.2%						

# 4- Sectors covered

The target fixed in the contribution covers All sectors excluding LULUCF, or including LULUCF) or Partial sectors :

1. Seven countries (Algeria, Jordan, Kuwait, Lebanon, Mauritania, Morocco & Tunisia) are covered All sectors including Land-Use, Land-Use Change & Forestry (LULUCF).
2. Three countries (Djibouti, Egypt & Iraq) are covered All sectors excluding LULUCF.
3. Six countries covered Partial Sectors.
4. Two countries (Bahrain & UAE) didn't specify any sector.

# 5- Gases coverage

- ✓ One country (Jordan) covers **six Kyoto greenhouse gases**.
- ✓ Eleven countries (Algeria, Comoros, Djibouti, Iraq, Lebanon, Mauritania, Morocco, Oman, Sudan, Tunisia & Yemen) indicate **Partial gases** covered by their INDCs.
- ✓ Seven countries (Bahrain, Egypt, KSA, Kuwait, Qatar, Somalia & UAE) **didn't specify any gas** covered by their contributions.

# 6- Conditionality of the INDCs

✓ **Ten Arab** countries (Algeria, Djibouti, Iraq, Jordan, Lebanon, Mauritania, Morocco, Sudan, Tunisia & Yemen) have submitted **both Conditional & Unconditional** measures (including mitigation/adaptation measures) while **five from them** (Bahrain, Comoros, Egypt, Oman & Qatar) have submitted **only Conditional measures**.

✓ **Three countries didn't specify** any Conditionality or Unconditionality (as Kuwait, UAE and Somalia).

# 7- Planned use of International market mechanisms

- ✓ **Six countries (Egypt, Lebanon, Mauritania, Morocco, Sudan & Tunisia) will possibly use the international market mechanisms in their INDCs.**
- ✓ **One country (Jordan) declare no use of the international market mechanisms.**
- ✓ **Other remaining twelve countries didn't specify any statement.**

# Adaptation component of the INDC

*In their adaptation components, Parties referred to actions in virtually every sector and area of the economy. **First three priority areas were WATER, AGRICULTURE and HEALTH.***

***In a few cases, quantitative targets & goals were included** as part of the description of the actions and measures.*

# ***ADAPTATION Component***

***A total of about US\$21 billion estimation***

***Seven countries quantified their financial needs for their adaptation measures included in their INDCs:***

***Morocco, Tunisia, Comoros, Djibouti, Sudan, Mauritania and Jordan.***

# ***Adaptation component/ Priority areas***

**In their adaptation components, Arab countries referred to actions in virtually every sector and area of the economy.**

**First three priority areas were **water, agriculture & health** as indicated in the Matrix.**



## ***9- Reference to SDGs***

**A few Parties referred to the UN MDGs & subsequent SDGs in defining their national goals.**

**Only 3 countries (EGY, JOR & SUD) mentioned the SDGs in their INDCs**

## 10- Losses & Damage (Cost impacts linked to CC effects)

- ✓ Losses and damage associated with past and projected impacts of climate variability and change were reported by some Parties (Comoros, Djibouti, Yemen, ...).
- ✓ Projected loss & damage have been quantified by two Parties, for example in the form of absolute costs or annual loss of GDP. **In Comoros**, without ambitious measures, cost of impacts is estimated to 836 M\$ by 2050 representing of 130% of the present GDP.
- ✓ Another Party (Djibouti) provided details on projected costs of CC impacts & how intended adaptation measures are expected to reduce the projected costs of impacts, leaving some residual damage, thus clearly making an economic case for investing in adaptation and disaster risk reduction (**Djibouti**: annual cost of the impacts linked to CC events is estimated depending on the scenario. It's likely to exceed 5 b\$ excluding natural catastrophes (in the case of an optimistic climate or 2C scenario) or 9b\$ (in the case of 4-5C scenario). Implementing adaptation measures would make it possible to anticipate the effects of CC. An investment of close to 1 b\$ would enable a reduction of the total costs of the impact by two, account taken of residual damage).

## **11- Estimation of the cost for implementation of the Adaptation/ mitigation measures in the Arab INDCs (in million \$)**

**9 countries** estimate Cost of the implementation of the measures in their INDCs (Conditional & Unconditional measures)

**Total cost of US\$ 186 billion** for the 9 countries of which **US\$ 168 billion** for conditional measures (missed 5 countries ALG, LEB, IRQ, BAH & OMA)

*While 9 Parties quantified their financial needs, others are missed or in the process or are planning to do so. Needs for finance were expressed either :*

- as total quantified financial needs to implement mitigation & adaptation actions (with individual needs from \$79 million (SOM) to over \$73 billion (EGY).*
- or as specific adaptation finance needs: 9 Parties reported specific financial needs for adaptation (with individual needs from \$300 million (Comoros) to over \$9.4 billion (Mauritania).*

## Estimation cost for implementation of the adaptation/mitigation measures (in 1000 US\$)

Country		Estmation cost** (x1000\$)	of which conditional	Adaptation	Mitigation
1	Morocco	45000	35000	2500	42500
2	Tunisia	19338	17596	1916	17422
3	Comoros	675	608	300	375
4	Lebanon	Not specified			
5	Mauritania	18695	17577	9377	9318
6	Jordan	9878	5157	4178	5700
7	Algeria	Not specified			
8	Oman	0	0	0	0
9	UAE	0	0	0	0
10	Djibouti	6400	6300	1000	5400
11	S. Arabia	0	0	0	0
12	Sudan	12880	12880	1200	11680
13	Iraq	Not Specified			
14	Egypt	73040	73040	Not specified	Not specified
15	Somalia	79	79	Not specified	Not specified
16	Qatar	0	0	0	0
17	Yemen	Not specified			
18	Bahrain	0	0	0	0
19	Kuwait	0	0	0	0
<b>Total of the Arab countries*</b>		<b>185985</b>	<b>168237</b>	<b>20471</b>	<b>92395</b>

# **MITIGATION**

***A total estimation of about \$93 billion.***

***SEVEN*** countries quantified their financial needs for their ***mitigation measures in their INDCs*** :

***Morocco, Tunisia, Comoros, Mauritania, Jordan, Djibouti & Sudan.***

# 12- INDCs revisable before 2020?

*Six Arab countries mentioned in their INDCs to reserve the right to further elaborate on their INDCs and make additional submissions to account for their contributions before 2020 :*

- 1. Algeria to be adjusted when ratification*
- 2. Comoros reviewable for improvement*
- 3. Djibouti could be reevaluated in a dynamic process.*
- 4. Mauritania envisaged to be update.*
- 5. Morocco possibly to revise the scenario by 2020.*
- 6. KSA reserve the right for further elaborate its INDC.*

**Morocco,  
Wind Farm Tangiers**



**UAE, Shams-1 CSP  
First Collector Installed**



**UAE 100 MW Shams-1 started operation in 2013**

**Algeria, Solar PP Hassi R'Mel in 2011**



**Morocco\_Noor 1\_Ouarzazate  
160 MW in operation Jan 2016**



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**ALGERIA, PV in the South**



40  
YEARS