

## *IKI Project Accelerating 0-emission building sector ambitions in the MENA region*

### **REGIONAL WORKSHOP**

*Wednesday 04 – Thursday 05 July 2018, Mövenpick Hotel, Beirut*

**Session : NDC and National Strategy Integration**

*Regional status of NDCs*

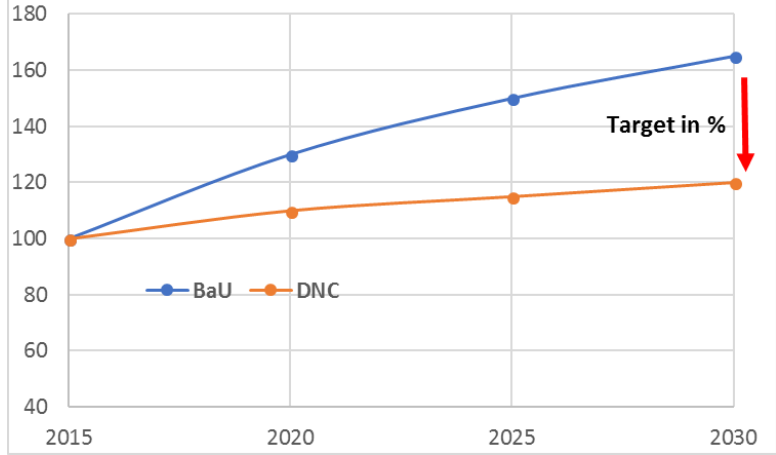
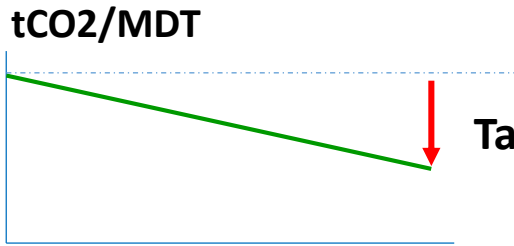
**Dr. Rafik Missaoui, Alcor**

# Content

- **Benchmark of NDCs targets in the region**
- **Role of energy sector and building in NDCs targets**
- **Some exemplary initiatives in the region**
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# Benchmark of NDCs targets in the region

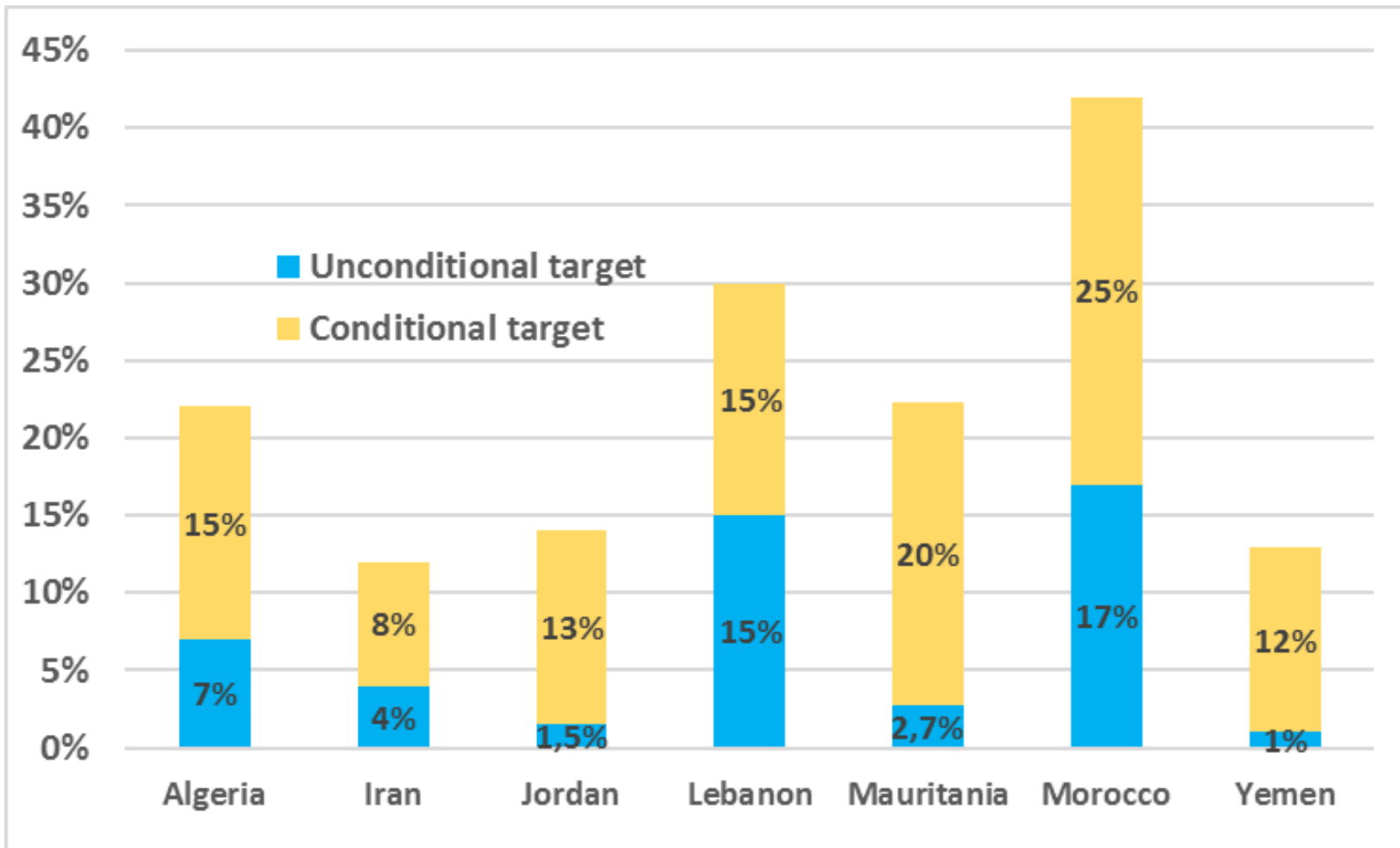
## Type of targets in the region

Countries	Type of objectives	Illustrations															
<p>Algeria Morocco Mauritania Jordan Lebanon Yemen Iran</p>	<p>% of reduction of GHG emission compared to BaU in 2030</p>	 <p>The graph plots GHG emissions from 2015 to 2030. The BaU (Business As Usual) scenario, shown in blue, starts at 100 in 2015 and rises to approximately 165 by 2030. The DNC (Dedicated NDC) scenario, shown in orange, starts at 100 in 2015 and rises to approximately 120 by 2030. A red arrow points to the 2030 DNC value, which is labeled 'Target in %'.</p> <table border="1"> <caption>GHG Emissions (Relative to 2015)</caption> <thead> <tr> <th>Year</th> <th>BaU</th> <th>DNC</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>100</td> <td>100</td> </tr> <tr> <td>2020</td> <td>~130</td> <td>~110</td> </tr> <tr> <td>2025</td> <td>~150</td> <td>~115</td> </tr> <tr> <td>2030</td> <td>~165</td> <td>~120</td> </tr> </tbody> </table>	Year	BaU	DNC	2015	100	100	2020	~130	~110	2025	~150	~115	2030	~165	~120
Year	BaU	DNC															
2015	100	100															
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2030	~165	~120															
<p>Tunisia</p>	<p>% of decrease of carbon intensity compared to 2010</p>	 <p>The graph shows carbon intensity (tCO2/MDT) decreasing from 2010 to 2030. A horizontal dashed line represents the 2010 level. A green line shows the intensity decreasing to a lower level by 2030. A red arrow points to the 2030 value, which is labeled 'Target in %'.</p>															
<p>Bahrain / Kuwait Oman / Qatar, Saudi Arabia / UAE Sudan / Iraq</p>	<p>Qualitative objectives</p>	<p>Sectoral measures Vision</p>															

# Benchmark of NDCs targets in the region

## Some targets in the region

NDC targets in 2030 expressed in GHG emission reduction compared to BaU scenario

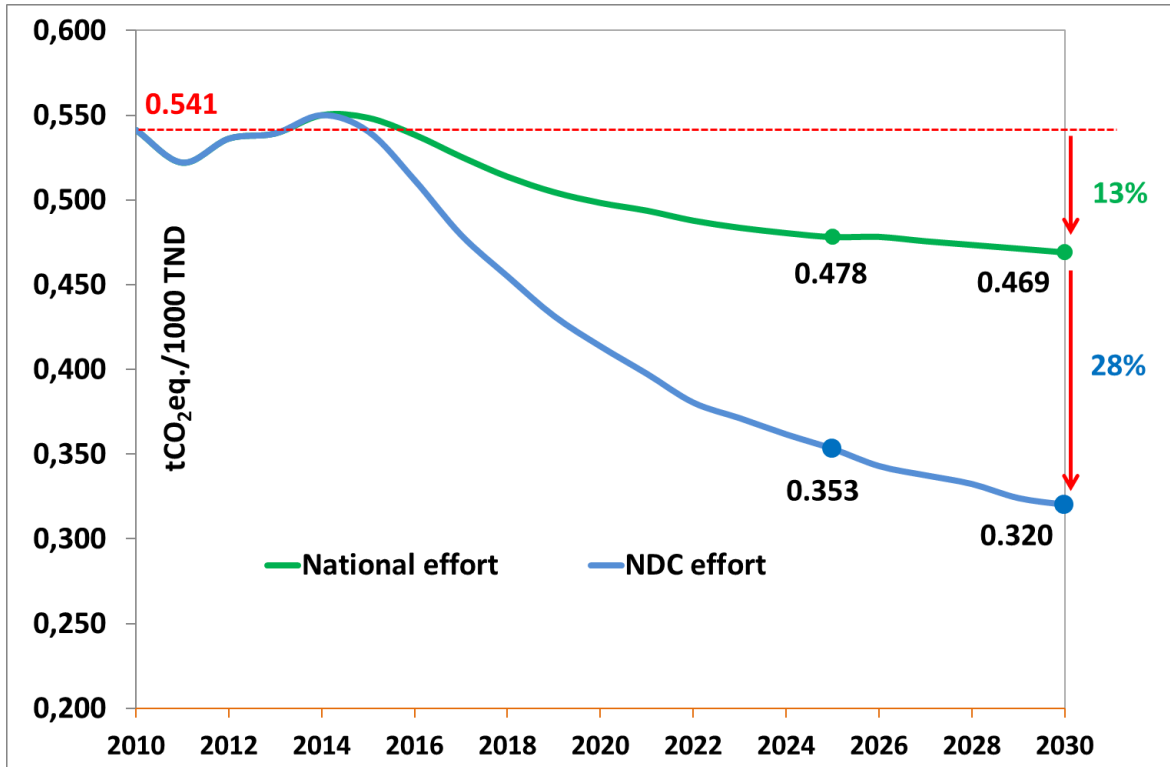


- Conditional objectives are higher than unconditional ones
- The objective of some countries are highly ambitious
- The real emissions reductions will depend from **the BaU and from the economic scenario**

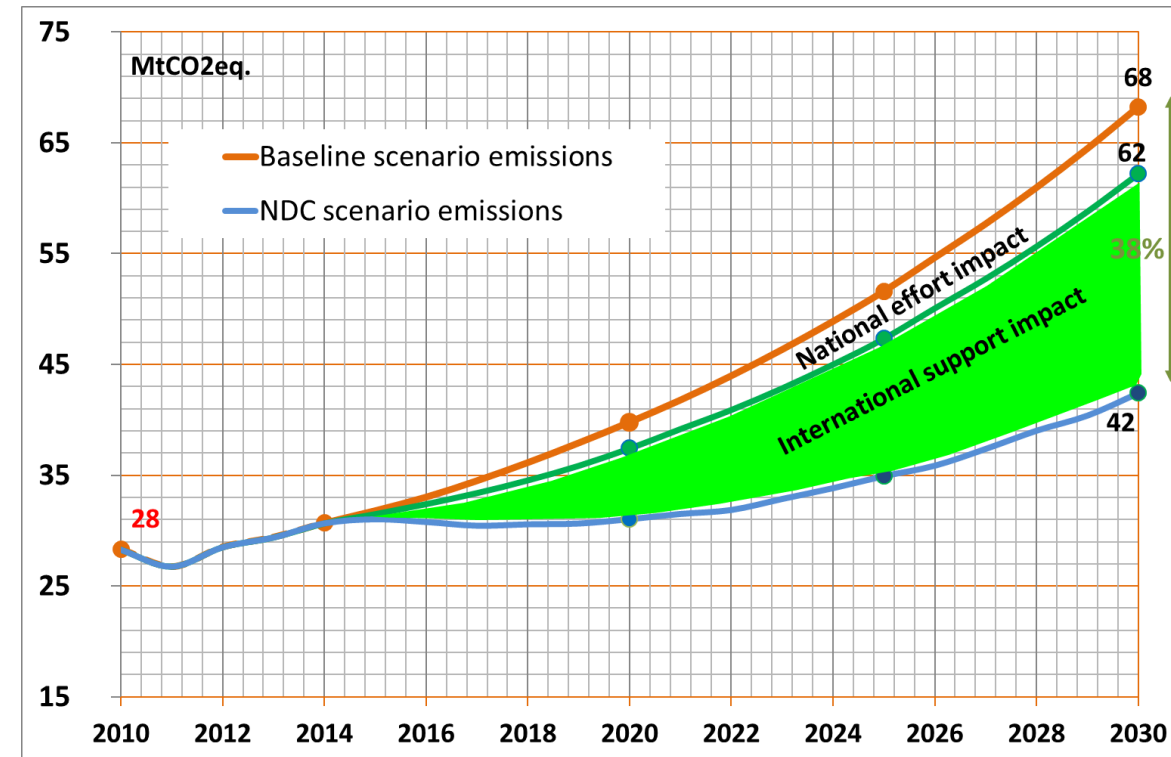
# Benchmark of NDCs targets in the region

## Target in Tunisia

NDC targets in 2030 of Tunisia  
expressed in carbon intensity reduction



Equivalent target in emission reduction  
compared to BaU in 2030



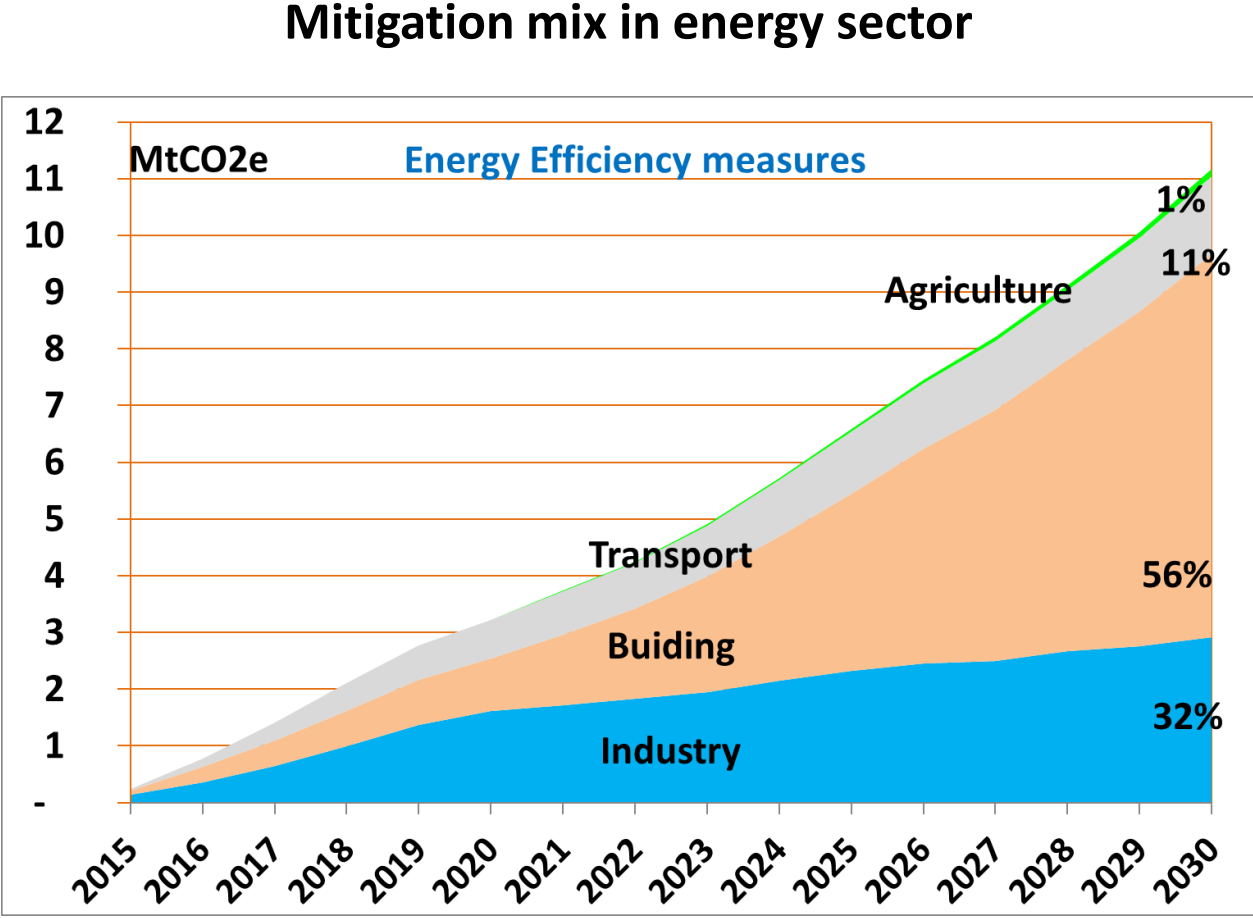
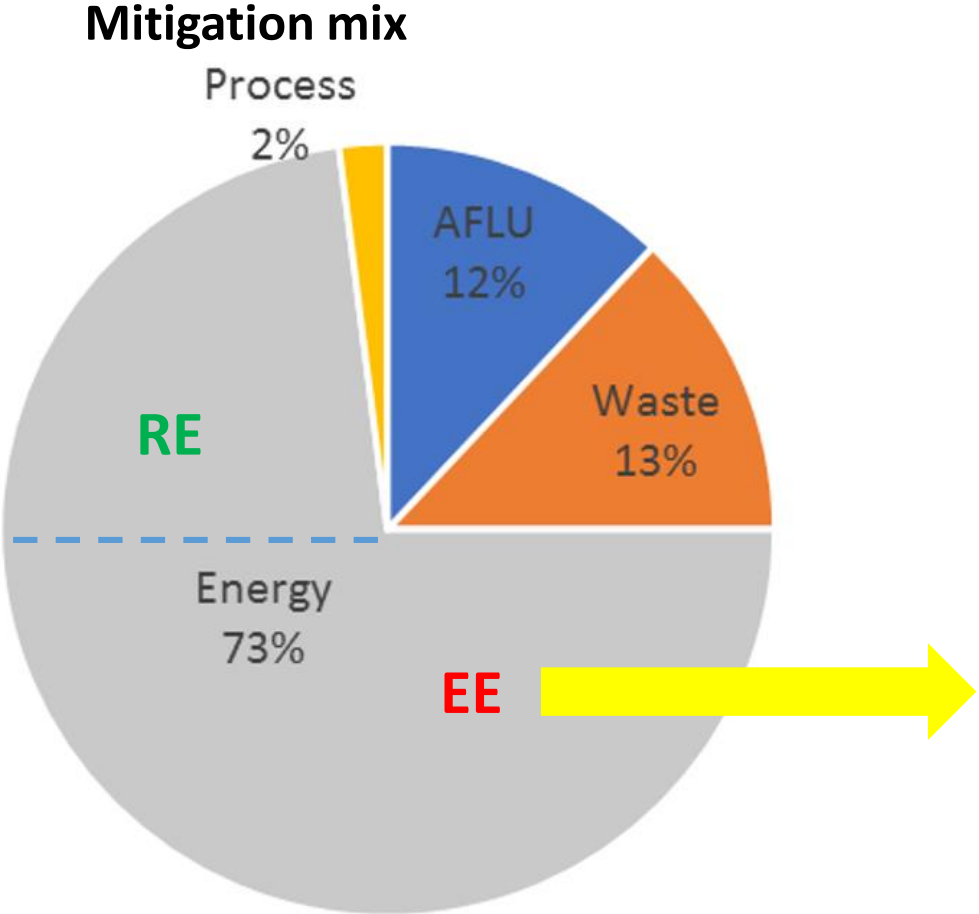
# Role of energy sector and buildings in NDCs targets

## Building is part of mitigation measures of all countries

	Main sectors covered by mitigation in Energy	Main mitigation measures in Building sector
<b>Algéria</b>	Generation – transport – <b>building</b> – industry – oil and gas	Generalization of efficient lighting Thermal insulation (21-30)
<b>Morocco</b>	Generation – <b>building</b> – transport – industry	Building code – solar water heater – lighting – EE appliances
<b>Tunisia</b>	Generation – transport – industry – <b>building</b>	Solar water heater – EE appliances – thermal insulation in existing building – EE lighting
<b>Lebanon</b>	Generation – transport – industry – <b>building</b>	Solar water heater – EE appliances – lighting – building code
<b>Egypt</b>	Generation – oil and gas – industry – transport – agriculture – <b>building</b>	Solar water heater Energy efficiency
<b>Jordan</b>	Generation – industry – <b>building</b> – water pumping - transport	Solar water heater Building Green code Solar cooling – lighting – EE appliances

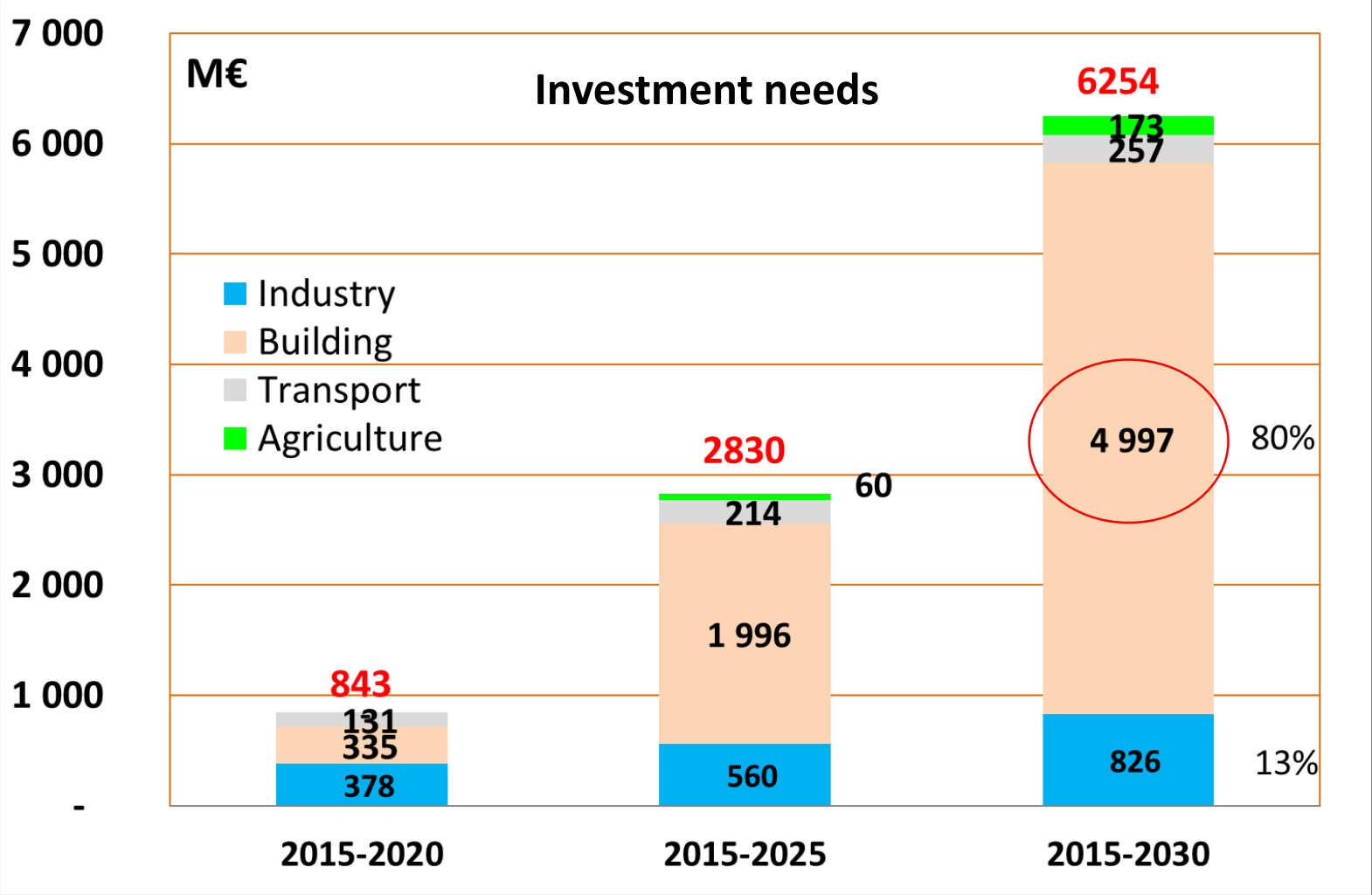
# Role of energy sector and buildings in NDCs targets

## Case of Tunisia



# Role of energy sector and building in NDCs targets

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## Some exemplary initiatives in the region

Countries	Initiatives and programs
<b>Tunisia</b>	Prosol for SWH Prosol Elec for rooftop PV Promo-Isol for rooftop insulation
<b>Jordan</b>	SWH and PV rooftop with JREEEF Financing
<b>Lebanon</b>	NEEREA for EE and RE in building and industry
<b>Morocco</b>	Green platform to create capacities (FORMABAT, etc.) Promasol for SWH

# Some conclusions

1. Energy efficiency in building is a large mitigation potential in the region
  - Main energy consumer sector
  - Demand is increasing very fast particularly electricity
  - Large stock of low efficient building
2. Building is at the heart of the energy transition process
  - Energy efficiency
  - End user RE (SWH, rooftop PV, etc.)
3. High potential co-benefits
  - Investment optimization in power sector
  - Energy independence
  - Economic growth
  - Job creation
  - Energy poverty fighting

# Some conclusions

## 4. Target also existing building

- High potential
- Thermal insulation
- Accelerate appliances stock renewal

## 5. Need for innovative financial mechanisms

- Coupling smart subsidy and loans based on win-win situation
- Concessional Financial resources
- Quality control
- **Support to supply side including capacity building**

## 4. Climate financing can help

- Green Climate Fund
- Carbon Market Mechanisms

Thanks

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