

Arab Future Energy Index (AFEX)



RCREEE
Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



RCREEE

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

Eng. Rawad Rizk
Sustainable Energy Specialist
20/2/2018

Content

1. What is AFEX?
2. Regional Energy Overview
3. Energy Pricing
4. Policy Framework
5. Institutional Capacity
6. Utility
7. Final Scores

What is AFEX?

- AFEX is the first Arab index dedicated to monitoring and analyzing sustainable energy competitiveness in the Arab region **(20 countries)** and offers both quantitative and qualitative analysis on key renewable energy and energy efficiency markets.
- Based on **28 indictors** covering four categories
- Launched in 2013 (3rd publication)

AFEX – Renewable Energy	AFEX – Energy Efficiency
Market Structure	Energy Pricing
Policy Framework	Policy Framework
Institutional Capacity	Institutional Capacity
Finance and Investment Climate	Utility



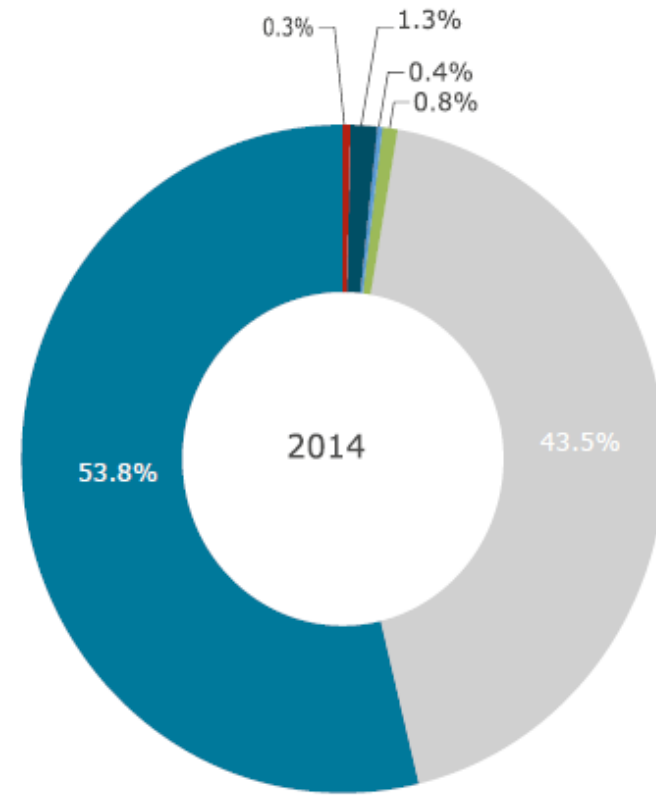
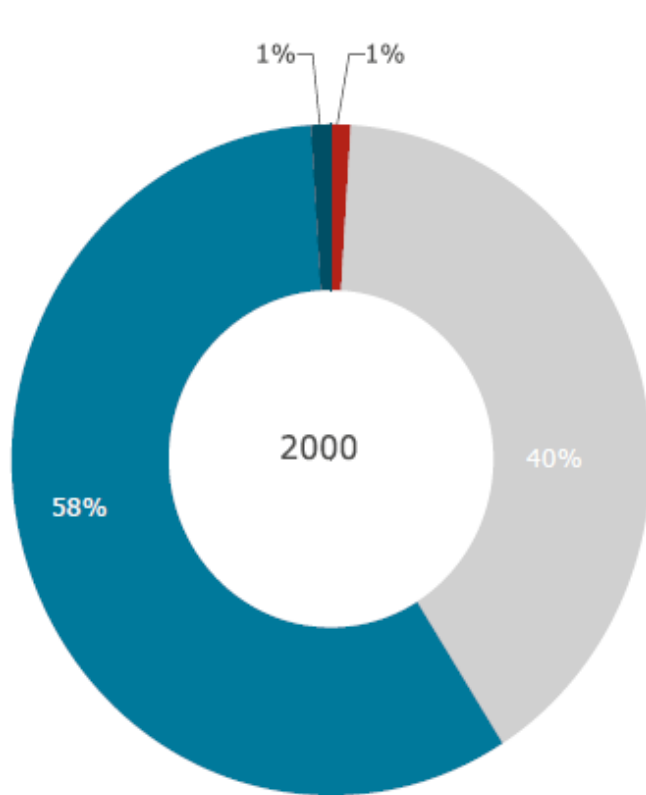
Regional Energy Overview



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

Primary Energy Consumption



Natural gas



Oil products



Hydroelectricity



Primary Electricity
(imported electricity)

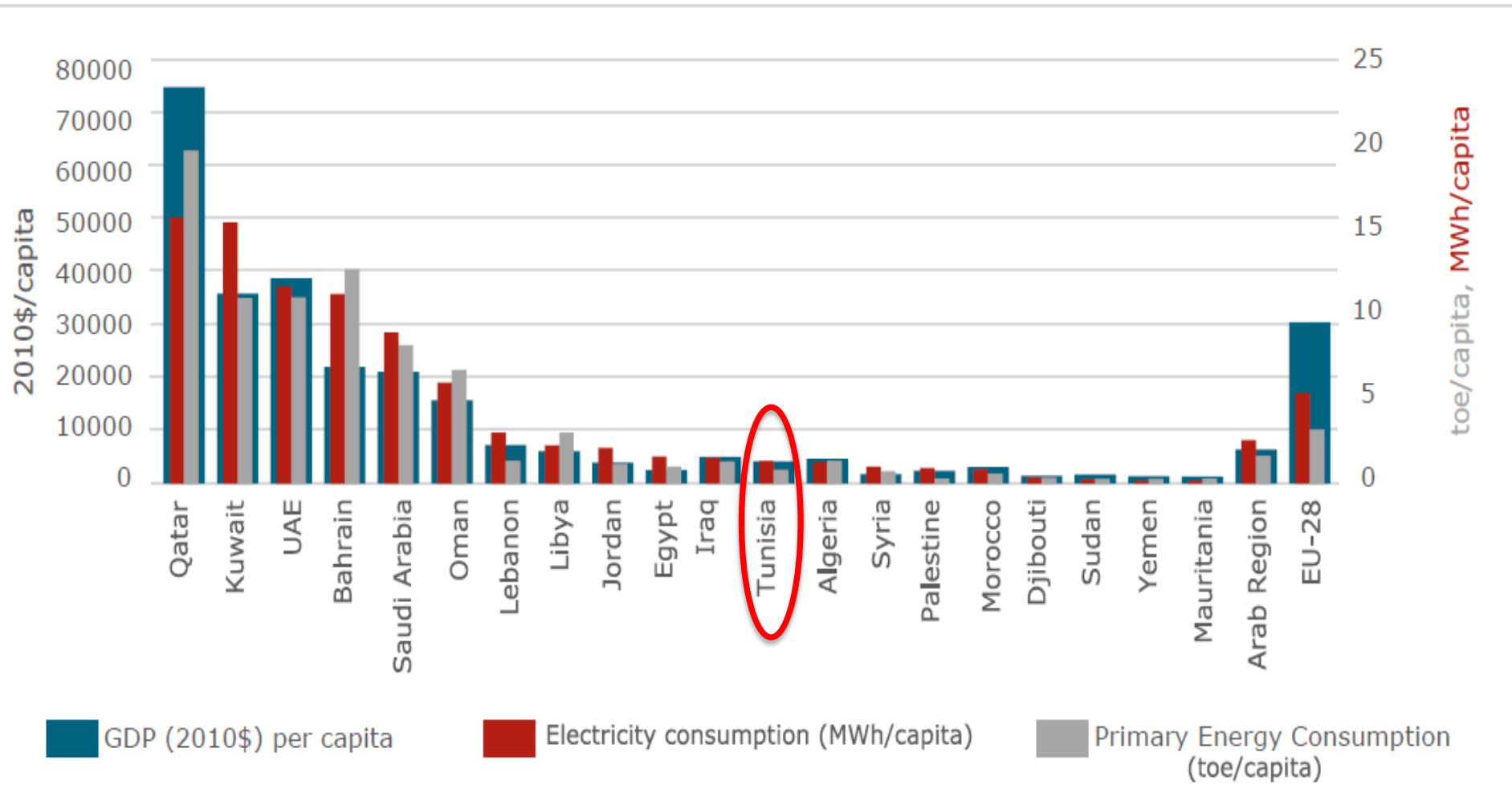


Coal

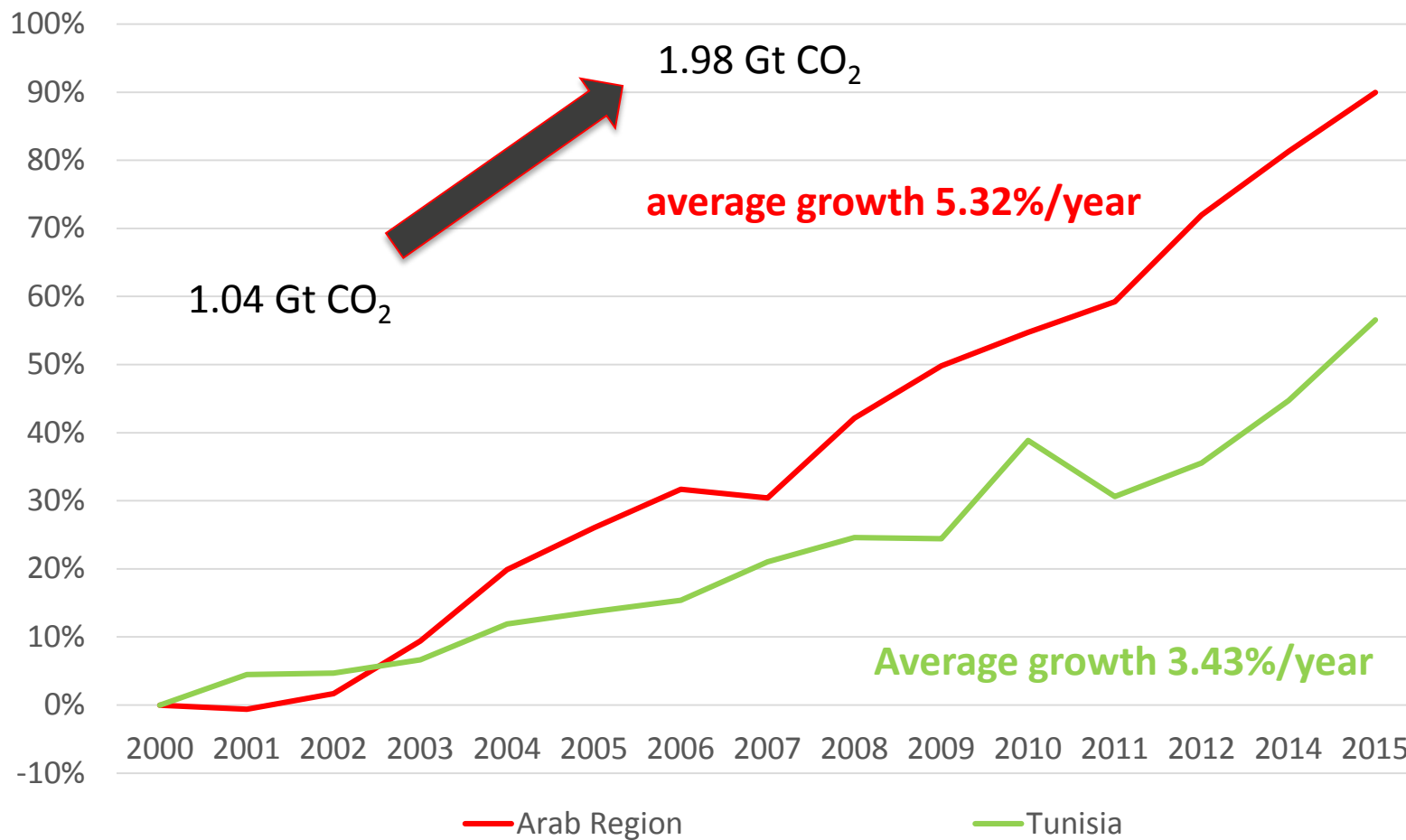


Other Renewable Energy

Per Capita Primary Energy Consumption, Electricity Consumption and GDP



CO2 Emissions



Energy Pricing



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

Pre-tax Subsidies

\$ 168 Billion

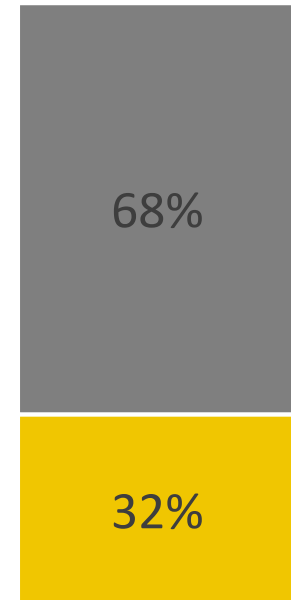


2013

\$ 92 Billion
(28% World Subsidies)

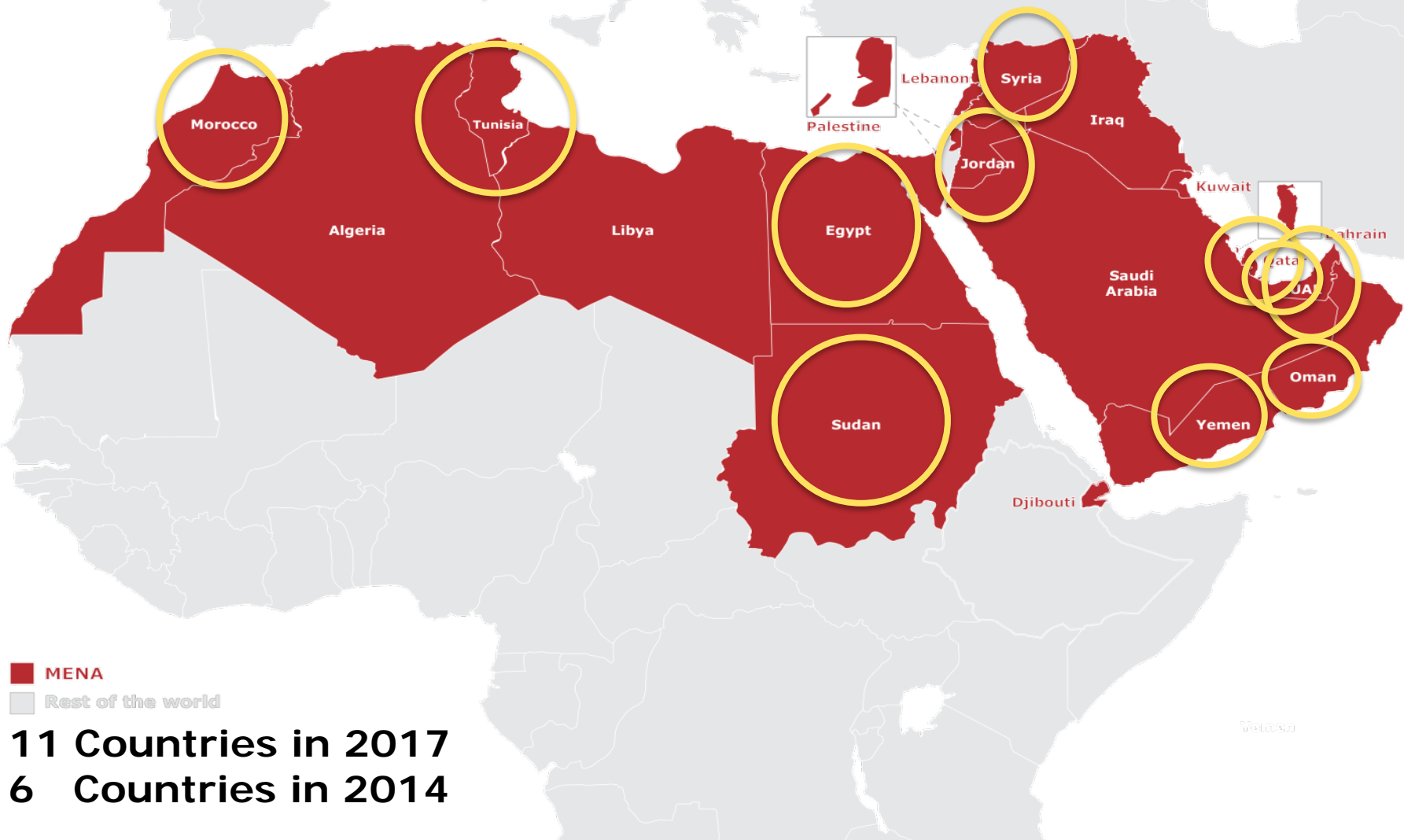


2015

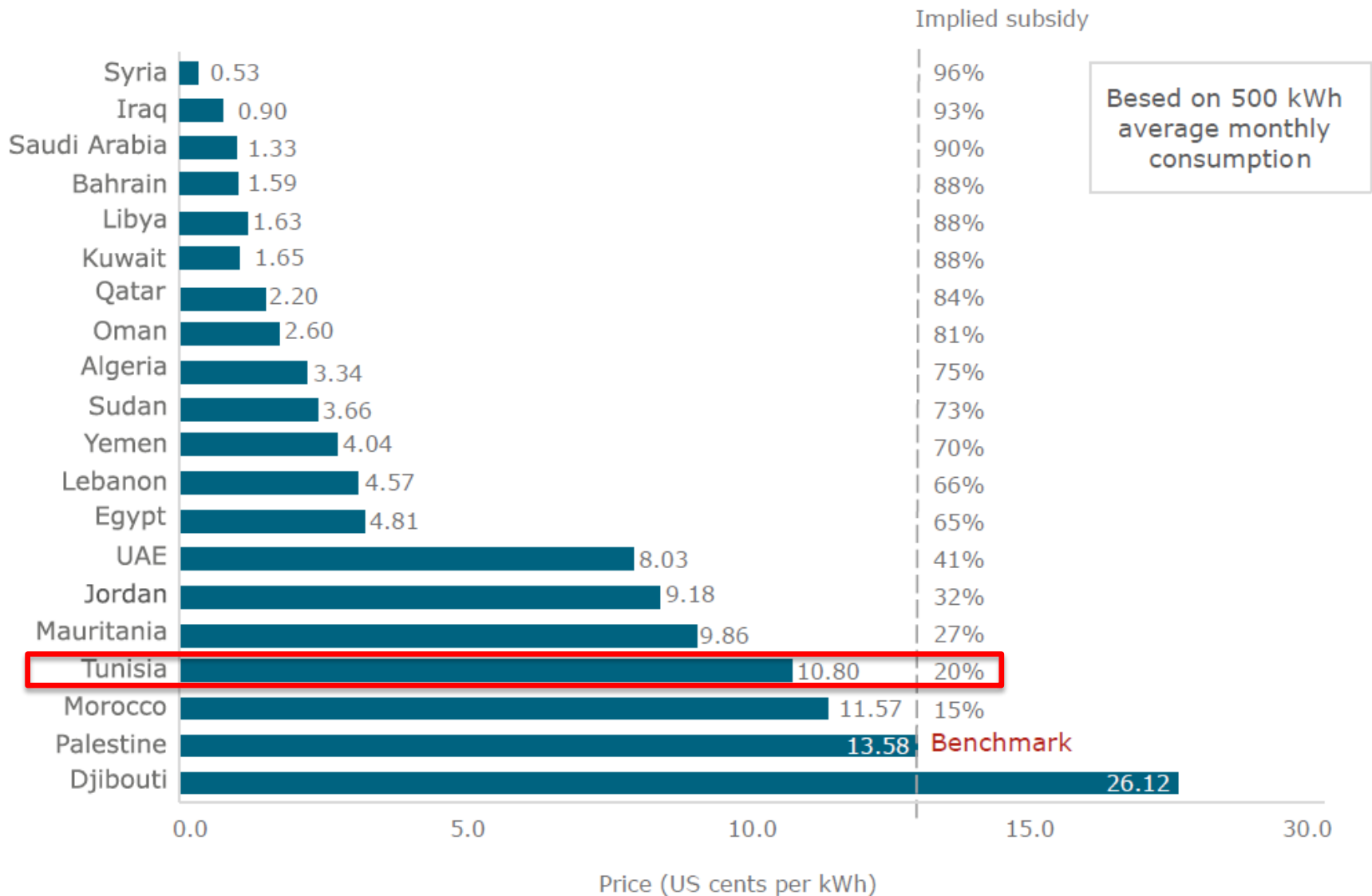


■ Oil exporting countries
■ Oil importing countries

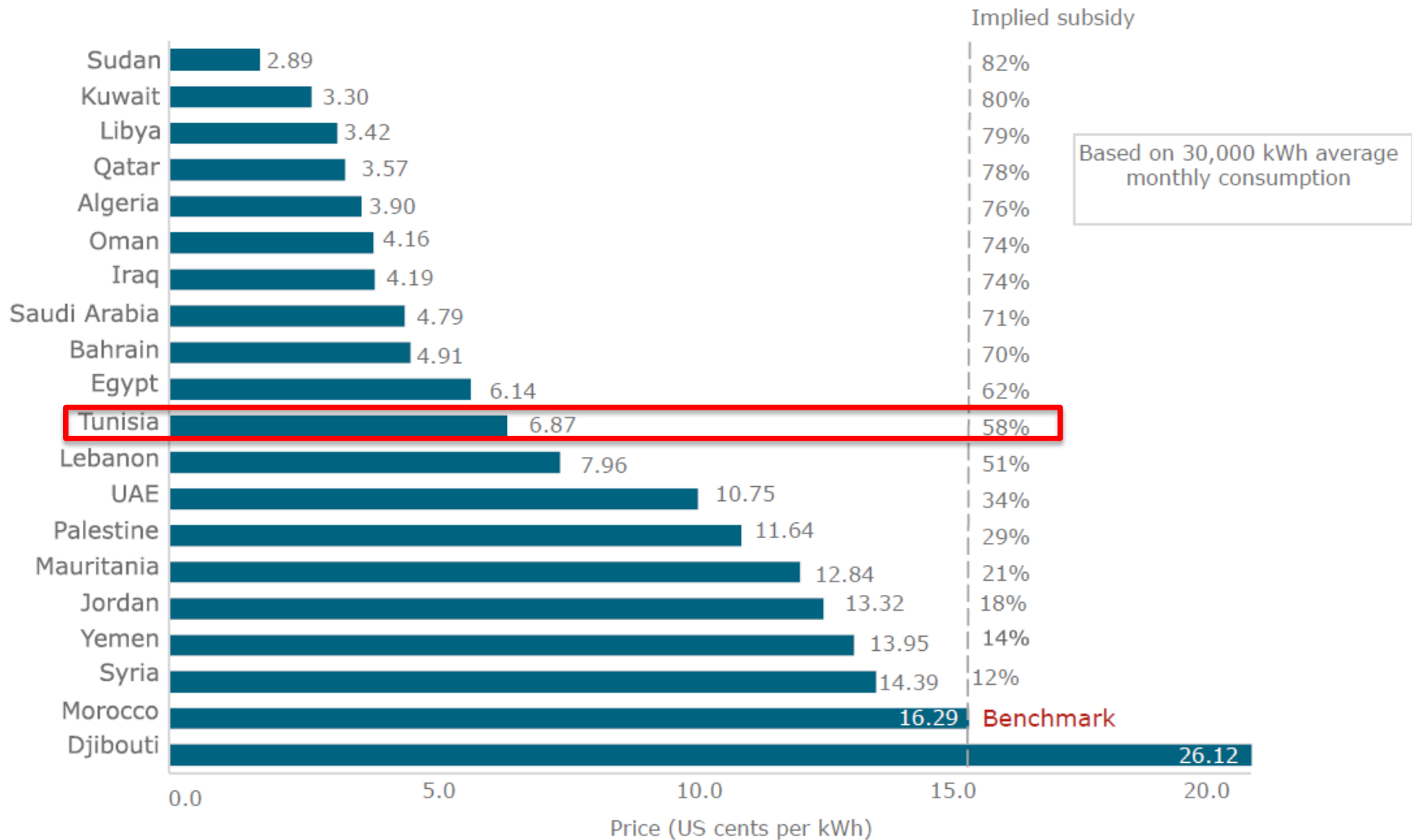
Energy Subsidy Reforms 2016



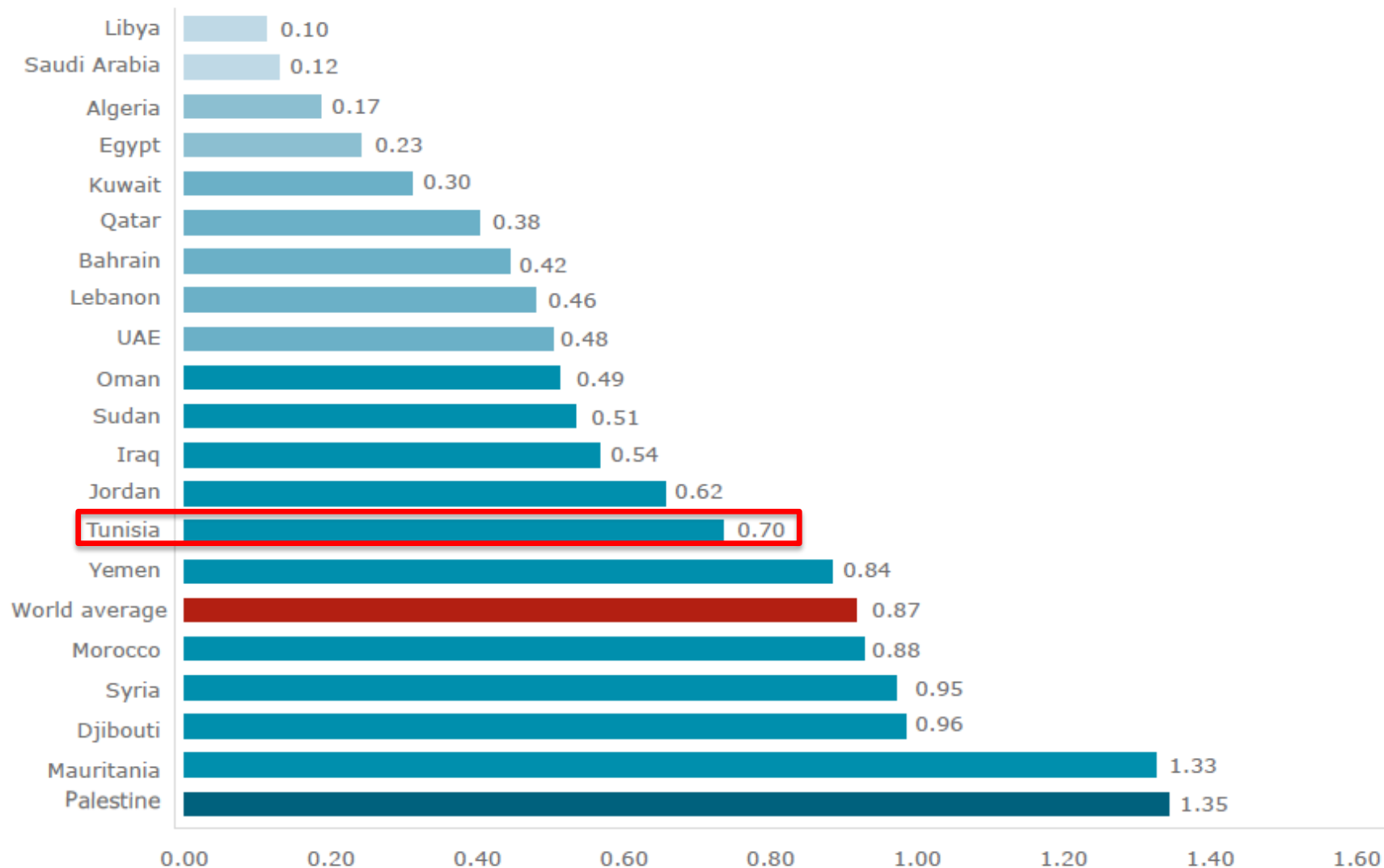
Residential Electricity Prices



Industrial Electricity Prices



Diesel Prices (USD/Liter)



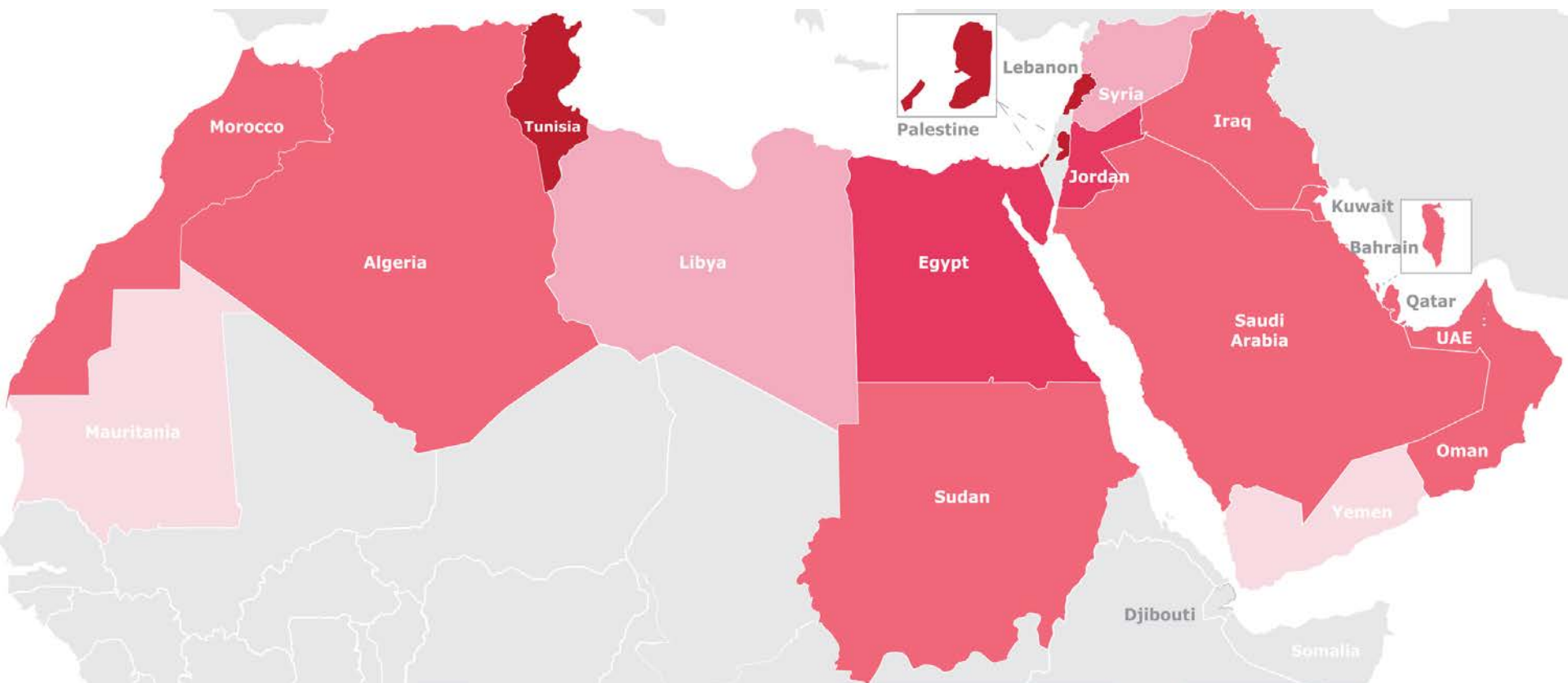
Policy Framework



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

NEEAPs



■ Implementing 2nd NEEAP (3)

■ Implementing 1st NEEAP (10)

■ Preparing first NEEAP (2)

■ Preparing 2nd NEEAP (2)

■ 1st NEEAP still a draft (2)

■ No NEEAP (1)

Tunisia EE targets

Sector	Target	Target year
 Building	49% or 8Mtoe	2020
 Industry	26% or 4.4 Mtoe	2020
 Transport	25% or 4.1 Mtoe	2020

Tunisia EE Policies

General EE Law: Law No. 2004-72 (2004) on Energy Efficiency, amended by law No.7 (2009) is adopted.

For industrial establishments with annual energy consumption exceeding 800 toe

- Mandatory and periodic energy audits
- Mandatory dedicated energy manager
- Mandatory energy reporting system every year

For establishments belonging to the residential, transport and tertiary sectors whose total projected energy consumption exceeds 500 toe

- Mandatory energy audits





For new industrial projects or expansion of existing industrial facilities whose total projected energy consumption exceeds 7,000 toe

- Prior authorization from the ministry in charge of energy

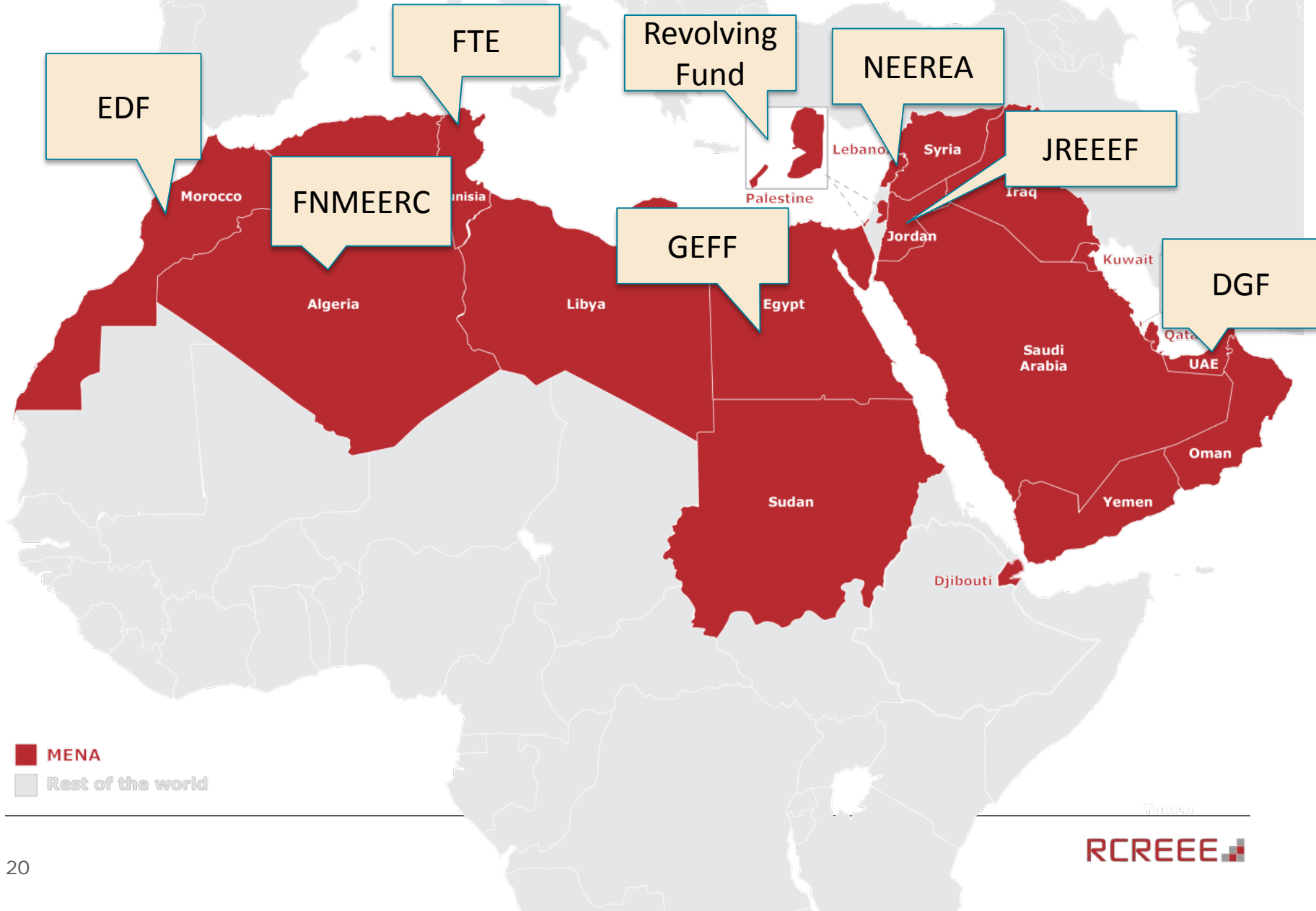
The sale of incandescent light bulbs with power superior or equal to 100 Watt and voltage superior or equal to 100 Volt is banned



■ MEPS and Labeling

	MEPS	Comparative Labeling
	9	10
	4	9
	7	9
	2	3

Examples of Sustainable Energy Public Funds



Tunisia Energy Efficiency funds and incentives

Energy Transition Fund (FTE) previously FNME

- Subsidy to energy audit (70%)
- Subsidy to EE projects (20%)
- Cogeneration (20%)
- Subsidy to gas switch
- Investment subsidy to SWH (~ 35 €/m²) within PROSOL mechanism that includes loan paid through the electricity bill

Exemption from VAT tax and reduction of customs duty to for EE equipment

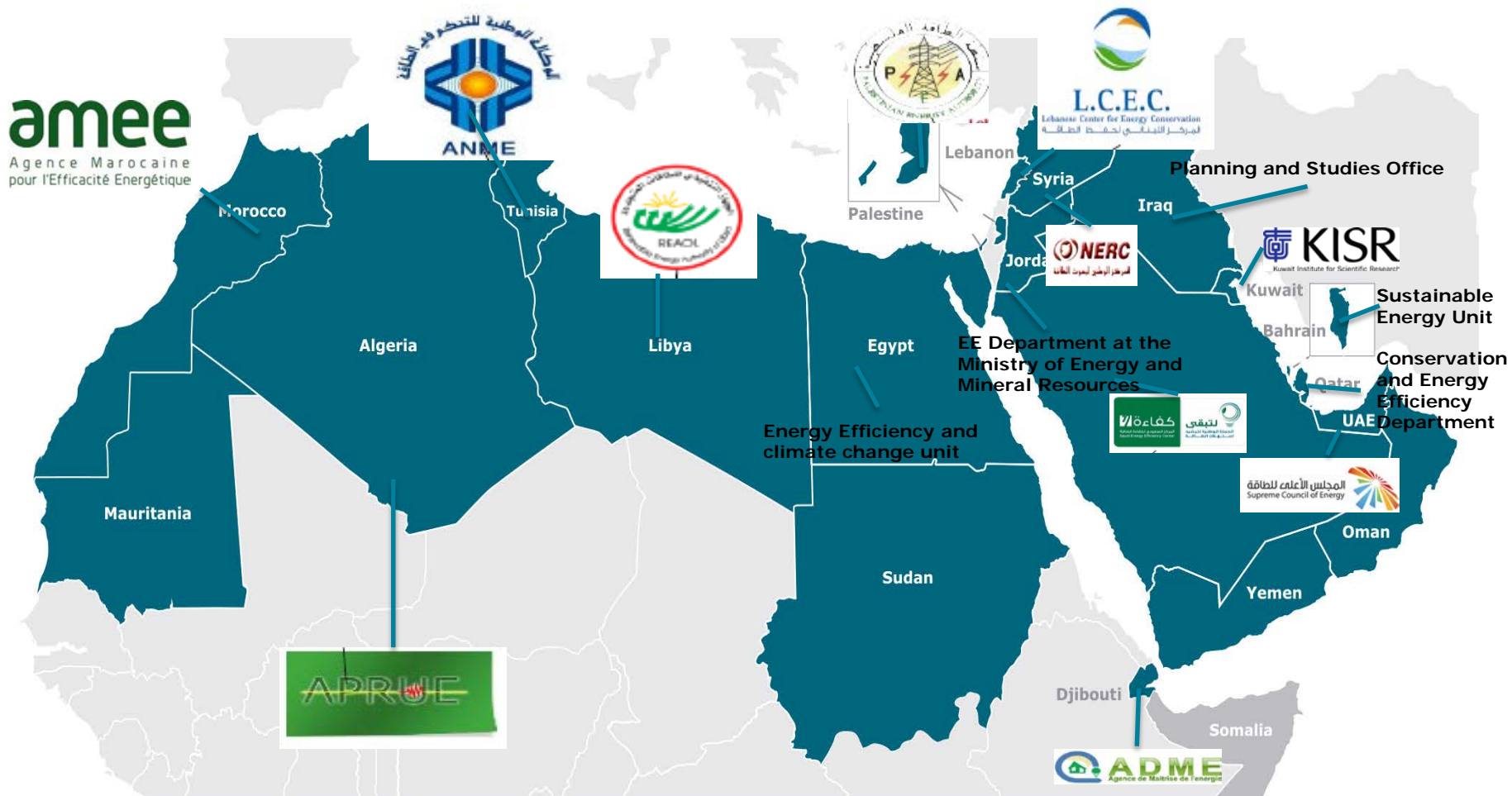
Institutional Capacity



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

EE Agencies and Units



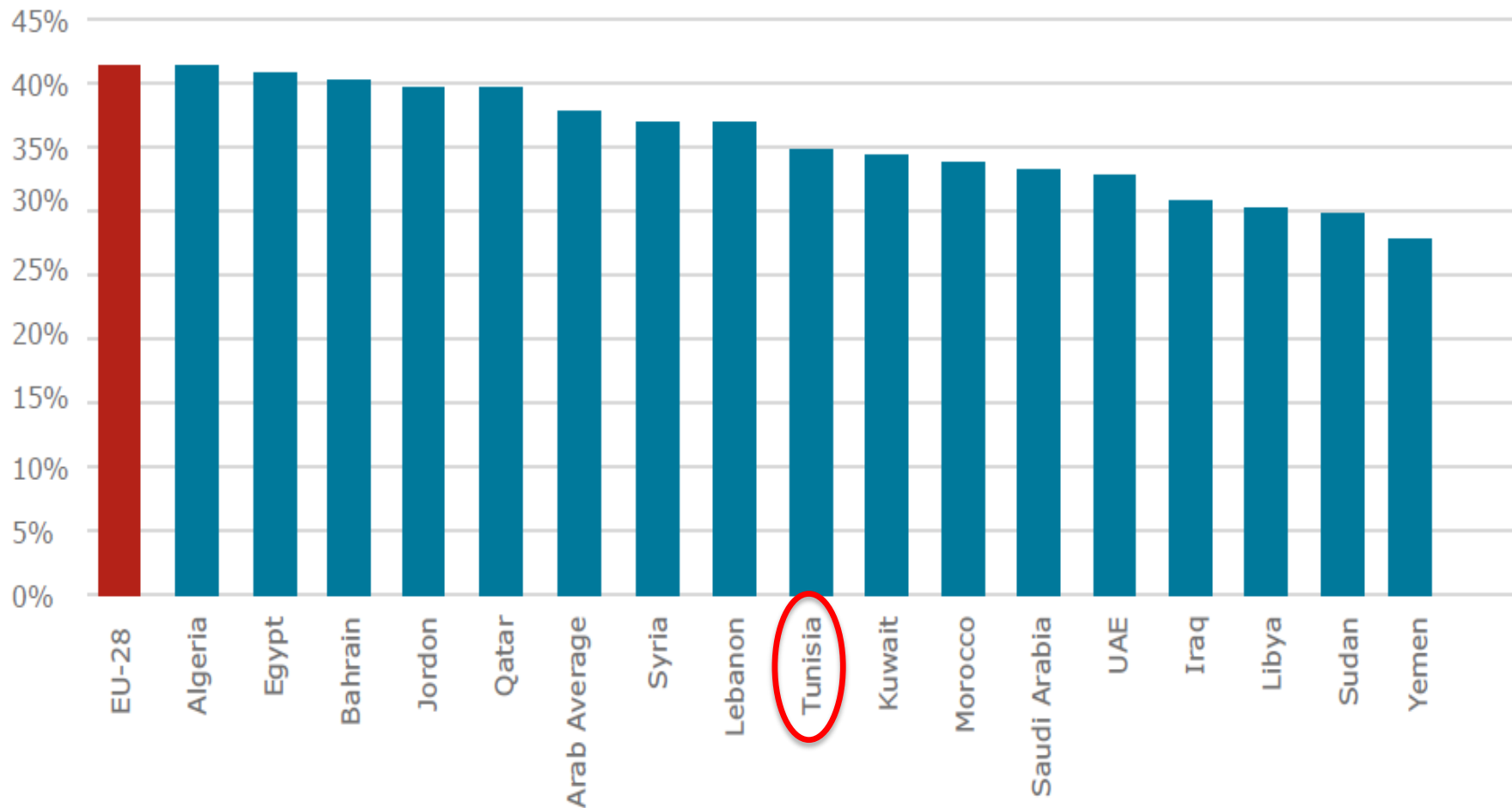
Utility



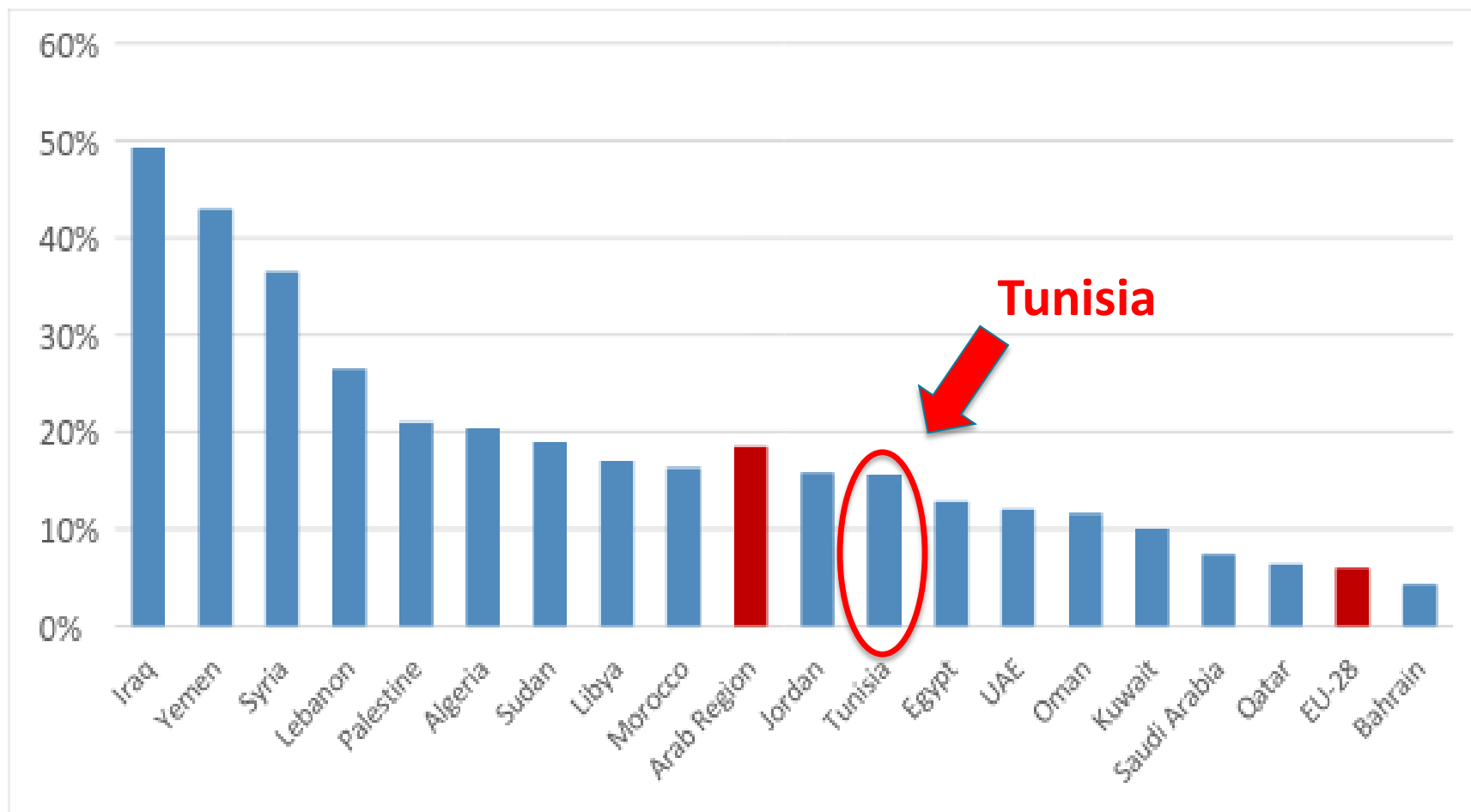
RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

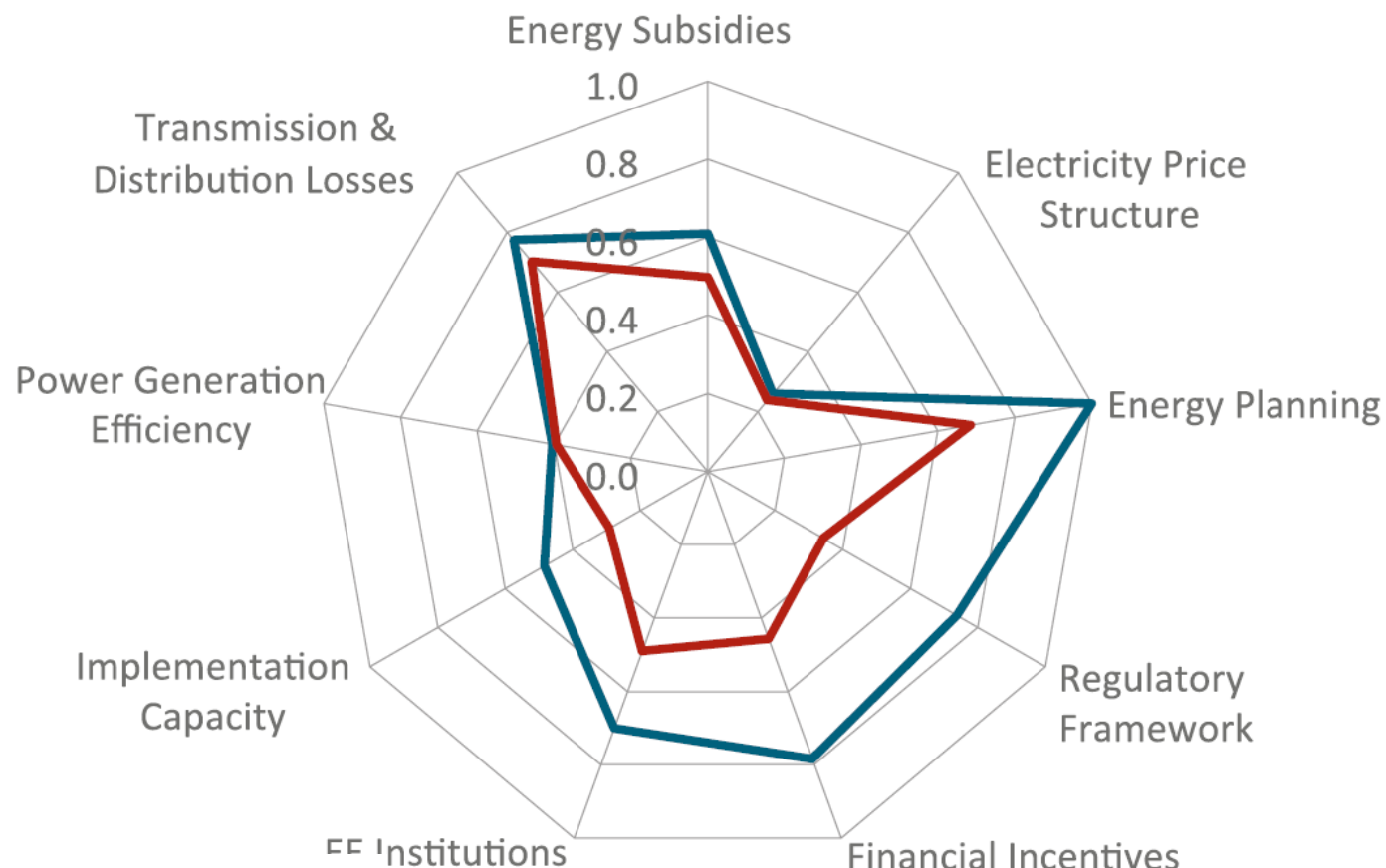
Generation efficiency



Transmission and distribution losses



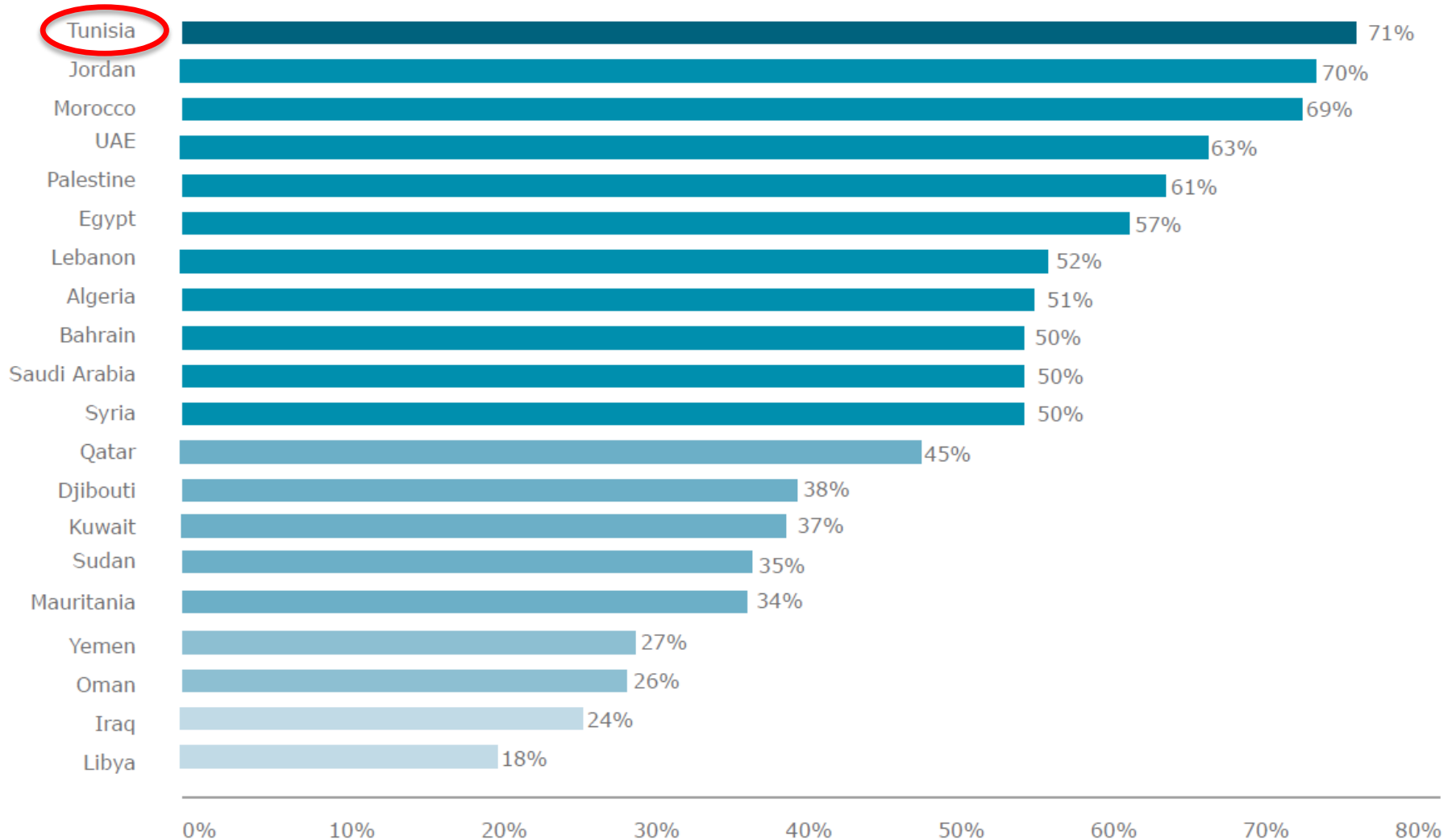
Country Specific Results (Tunisia)



■ Country

■ Regional average (2017)

AFEX Energy Efficiency 2017 Results



Thank you!

