

# Small-Scale Renewable Energy in Jordan



Workshop on “small-scale RE technologies and applications in rural areas in Jordan”

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# Key Figures of Jordan Energy Sector 2019



**Cost of consumed energy  
(~ 10% of GDP)**



**High dependency on imported  
energy (91%)**



**Annual growth of electricity  
demand (2.37%)**

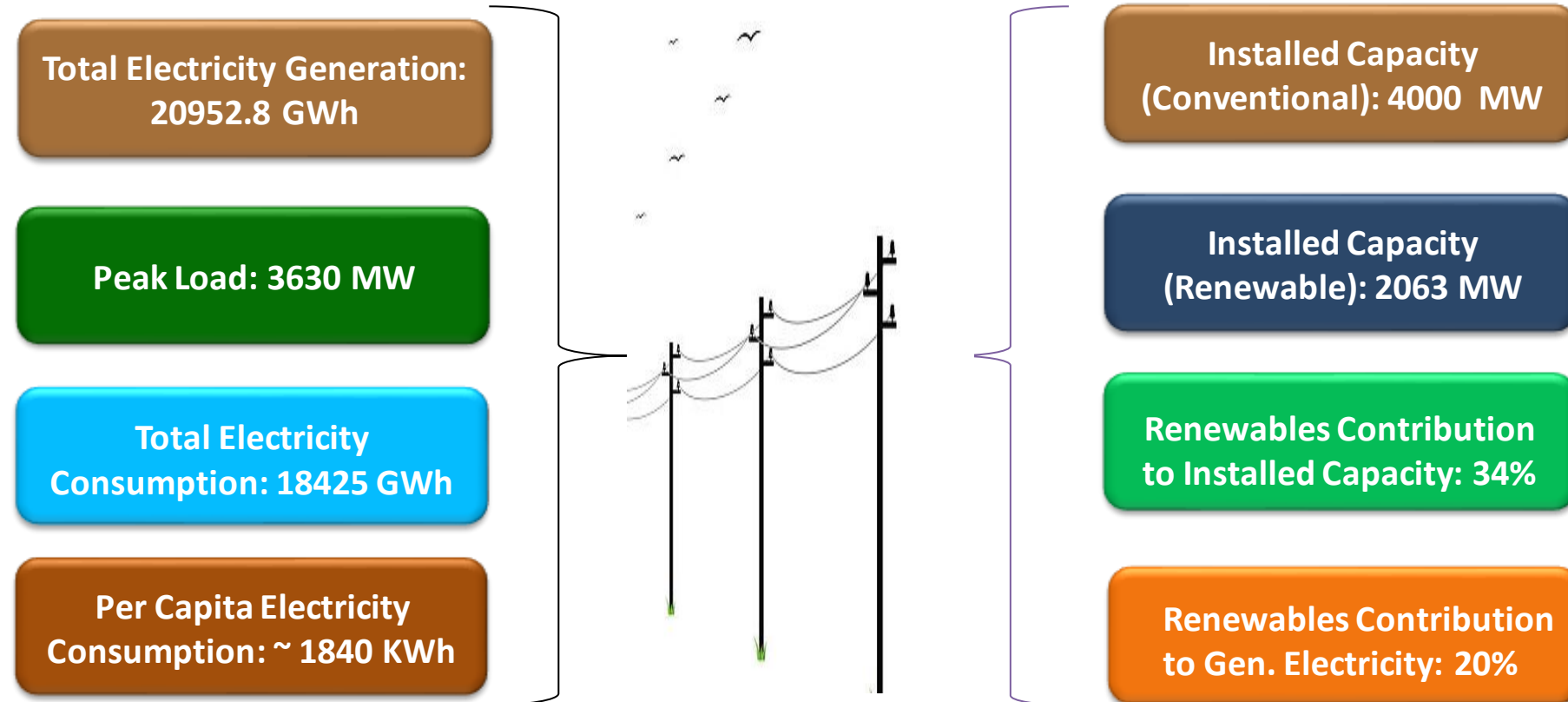


**Annual growth of primary  
energy supply (3.75%)**





# Key Figures of Jordan Electricity Sector 2020





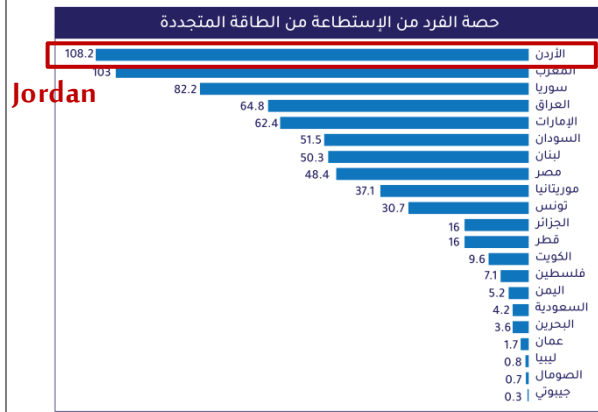
# The Global Energy Indicators Achieved by Jordan

Per Capita Share of Renewable Energy Capacities (RCREEE)

Jordan

1

Arab Countries



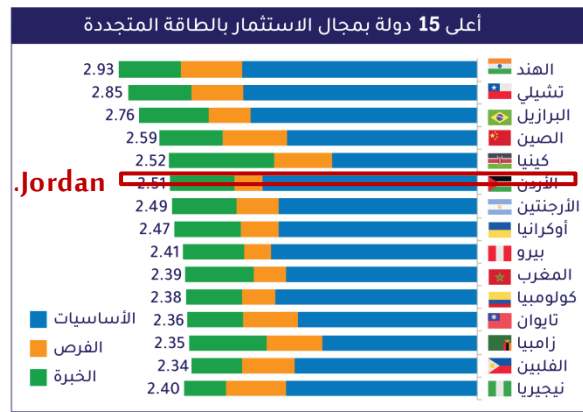
Investment conditions for clean energy (Climatescope2019)

Jordan

6

1

MENA region



Delivery of electricity For residents on Global Competitiveness Index

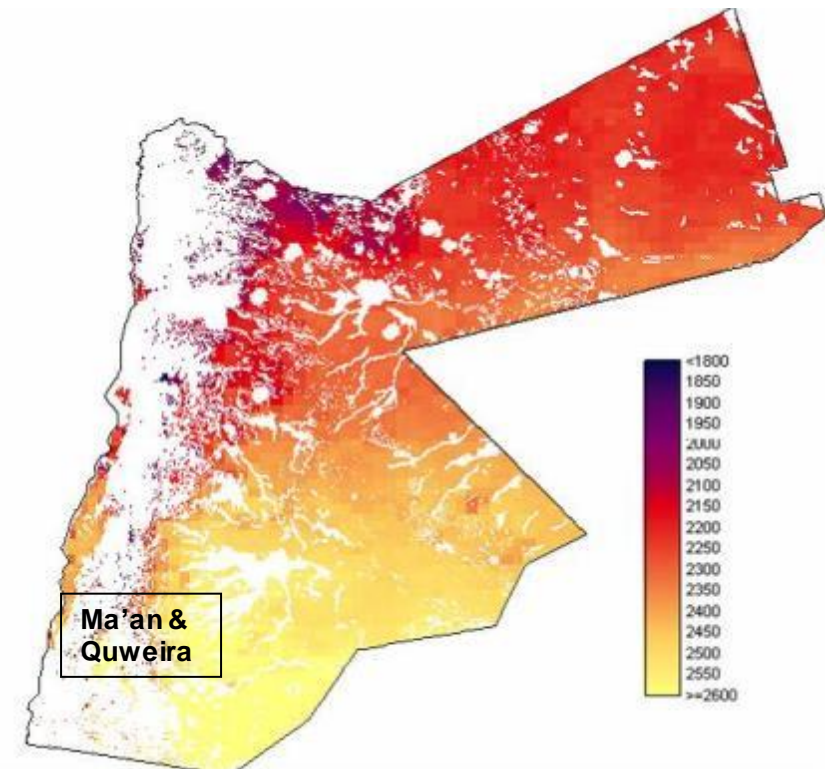
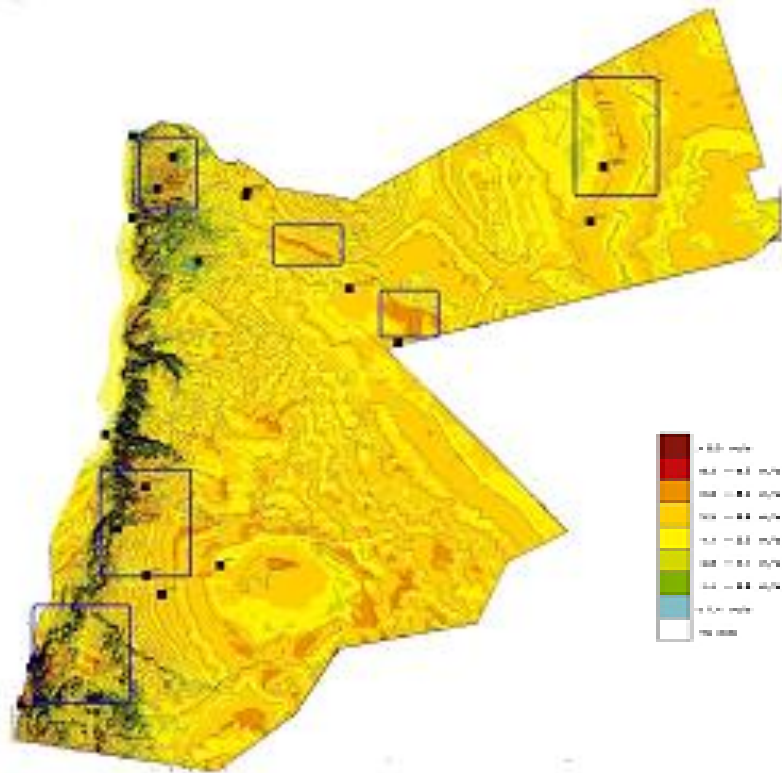
Jordan

1



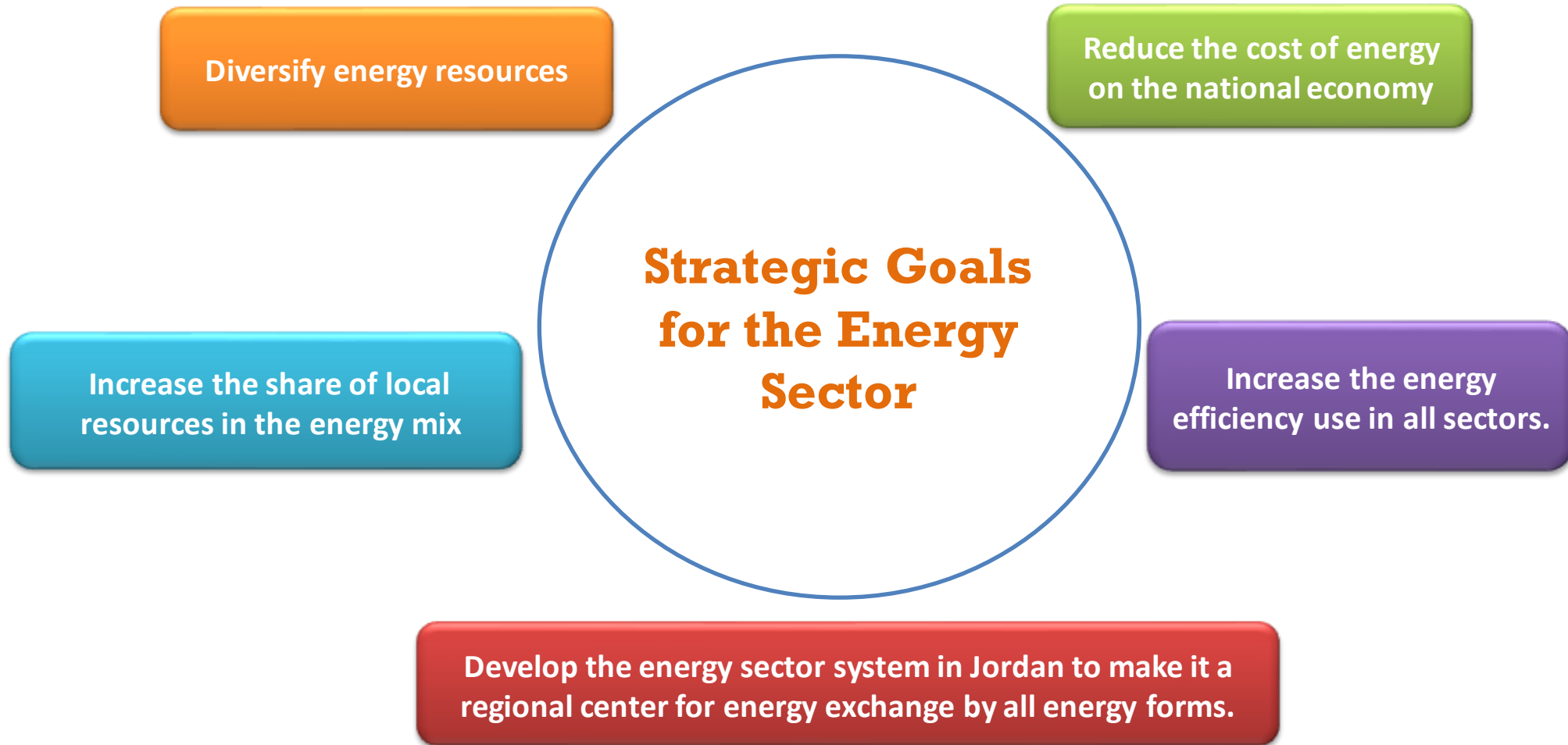
# Jordan enjoys world class quality Solar and Wind Energy

- Wind speeds reach more than 8.0 m/s in some places.
- Wind projects are site specific, feasible and competitive without further concessional support
- High solar radiation figures of 4 – 7 kWh/m<sup>2</sup> per day with about 300 sunny days per year.
- PV is very mature compared to CSP and CPV.





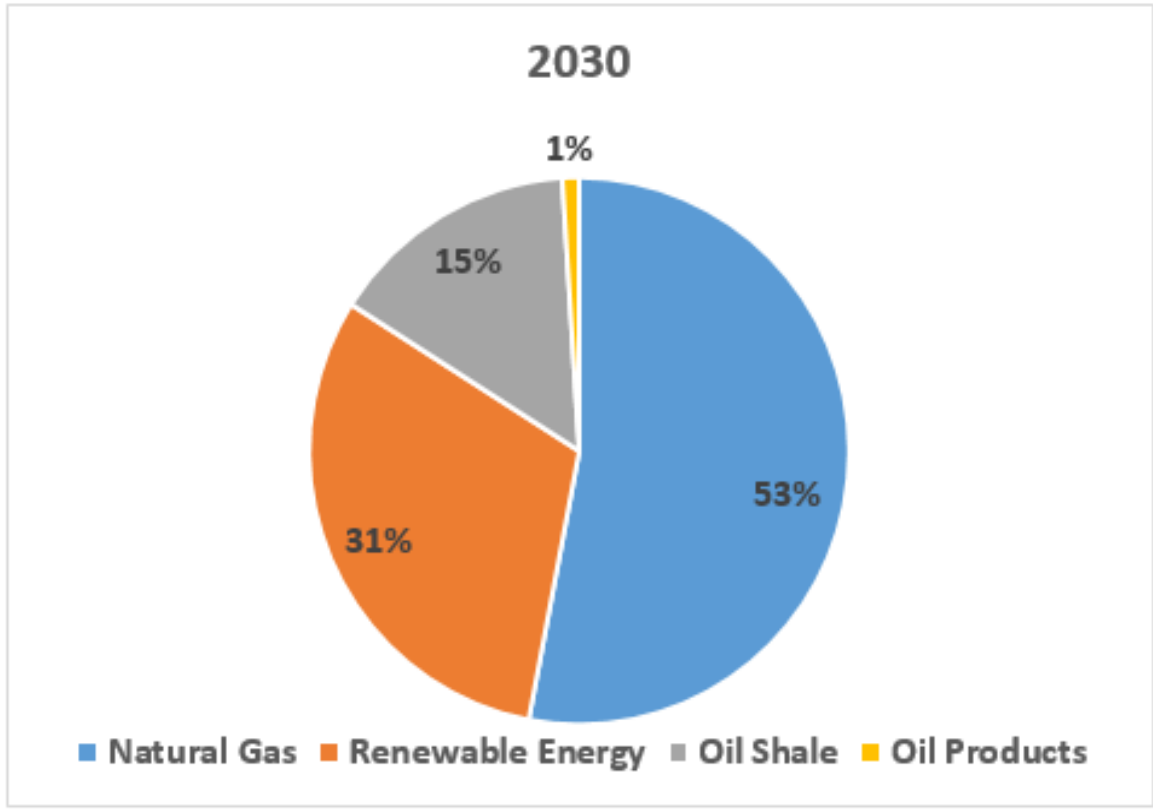
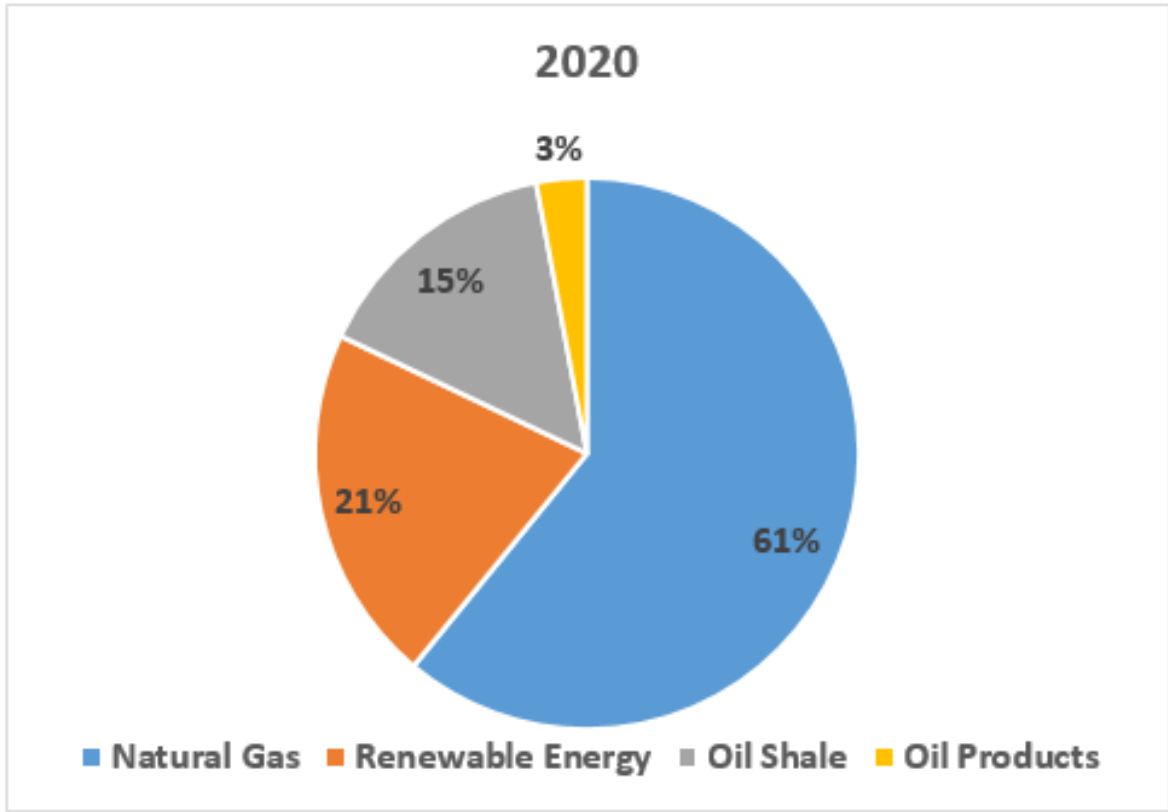
# Energy Strategy (2020 – 2030) Main Goals





# RE Target in the Energy Strategy 2020-2030

**31% RE Contribution in the generated electricity by 2030**





# RE Target in the Energy Strategy 2020-2030

**2021-2025**

**200 MW for  
consumers  
projects**

**2025-2030**

**200 MW for  
consumers  
projects**

**2025-2030**

**200 MW on  
commercial  
basis,  
According to  
NEPCO  
Master Plan**

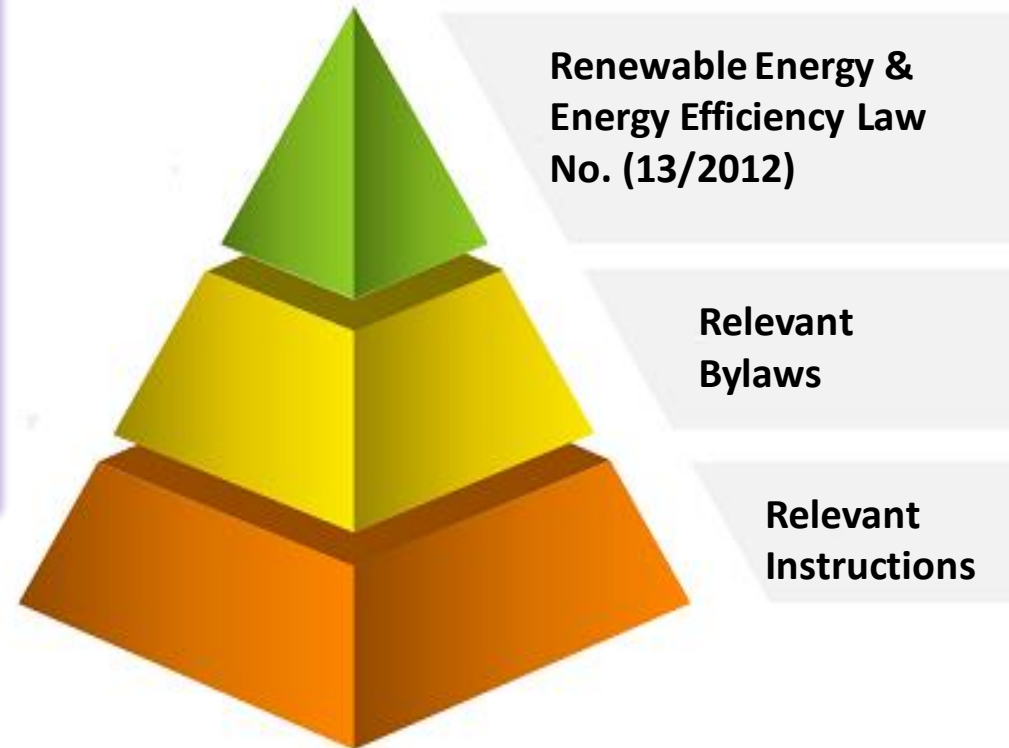






# Regulatory Framework

**The Renewable Energy and Energy Efficiency Law (REEEL) – Law No. (13/2012) was passed as a permanent Law in 2012 and amended in 2014.**





# Regulatory Framework

## Renewable Energy & Energy Efficiency Law

**1**

This law allows for the development of grid-connected electricity production projects through the so called direct proposal submission.



-Direct Proposal Bylaw No. 50/2015  
-Ceiling Price list set by EMRC

**2**

The law allows consumers to cover their demand of electricity through RE sources with fixed purchase prices for excess power



Instruction for Net Metering & Wheeling  
"Issued by EMRC"

**3**

Tax Incentives Regime



Bylaw No. 10 of 2013





# Regulatory Framework

## Renewable Energy & Energy Efficiency Law

**4**

Establishing the Jordan Renewable Energy and Energy Efficiency Fund (JREEEF).

Bylaw No. (49) of 2015

**5**

regulating procedures & means of conserving energy & improving its efficiency.

Bylaw No. (73) of 2012





# Renewable Energy Development Schemes

We follow a policy of 4-tracks-approach to develop renewables:

- Direct Proposal scheme
- Competitive Bidding
- EPC Turn-Key projects
- Small Scale RE Schemes (Net Metering)



# On-grid RE Projects for Consumers

This covers consumers from different sectors like residential, industrial, commercial, agricultural...etc.

Small scale consumers has been given the opportunity to generate their own electricity and sell the extra (if any) to the distribution utilities at a fixed tariff.

By the end of 2020, more than 723 MW installed capacity by Net-Metering and Wheeling.

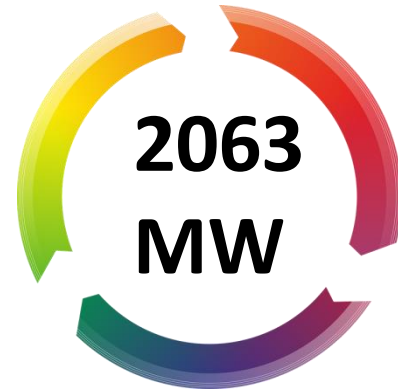


More than 24,000 Systems so far on DisCos.





# RE Projects in Jordan – Dec 2020



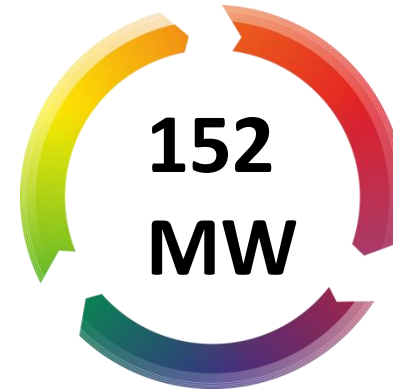
**Total  
Operational**



1545 MW



518 MW



**Total Under  
Construction\***



50 MW



102MW

\*- Excluding under-construction Net-metering and Wheeling Projects

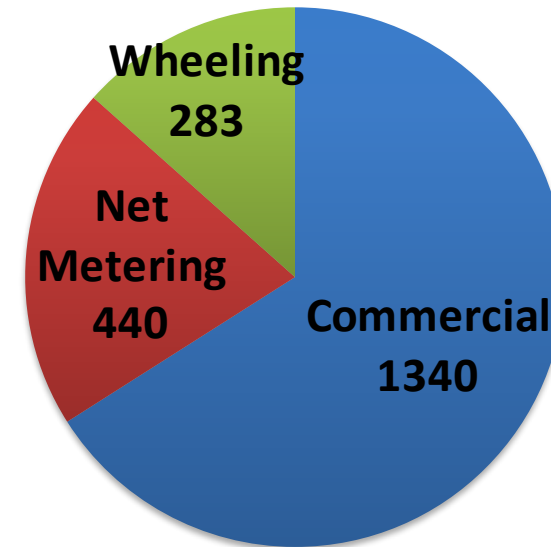




# RE Projects in Jordan – Dec 2020

Operational RE Capacities per Contract Type

Contracting Type	Capacity (MW ac)
Commercial	1340
Net Metering	440
Wheeling	283
<b>Grand Total</b>	<b>2063</b>



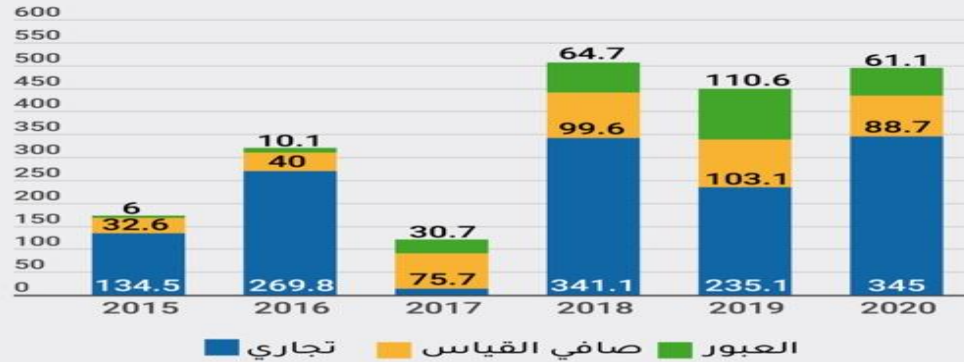
# RE Projects in Jordan - Dec 2020



## عدد واستطاعات الأنظمة المركبة من مصادر الطاقة المتجددة خلال الأعوام 2015 - 2020

### 2063 ميغاوات في 2020

استطاعات مشاريع الطاقة المتجددة المركبة بحسب النوع / ميغاوات



### الاستطاعة التراكمية

الاستطاعة التراكمية لمشاريع الطاقة المتجددة بحسب السنة/ ميغاوات



### عدد أنظمة الطاقة المتجددة المركبة بحسب السنة

عدد الأنظمة المركبة نهاية 2020 (24458) نظام







Thank You

