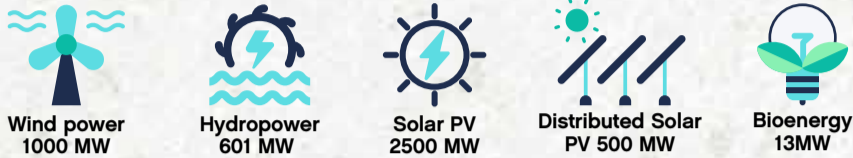


APPLICATION OF A PHASE MODEL FOR THE SUSTAINABLE TRANSFORMATION OF LEBANON'S SYSTEM

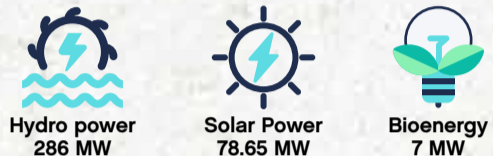
RENEWABLE ENERGY IN NUMBERS

In 2009, Lebanon pledged to reach a target of **12% Renewable Energy by 2020**;
 In 2018, the target was updated to **30% by 2030**;

The IRENA 2030 Outlook for Lebanon has set the following targets to reach the **30%**:

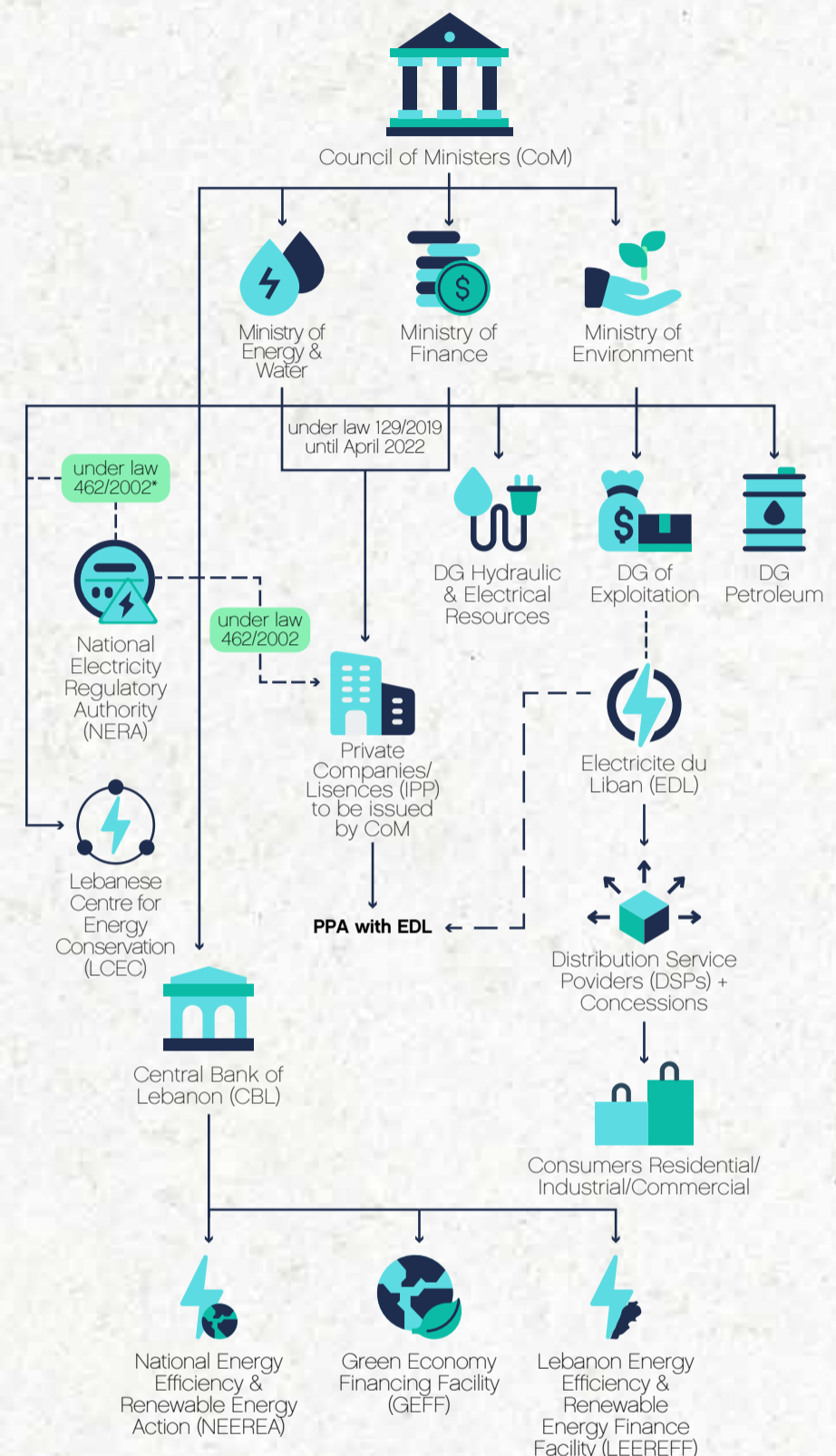


Installed renewable energy capacities 2019:
 (IRENA 2030 Outlook for Lebanon Report, 2020/LCEC 2019 Solar Status Report)



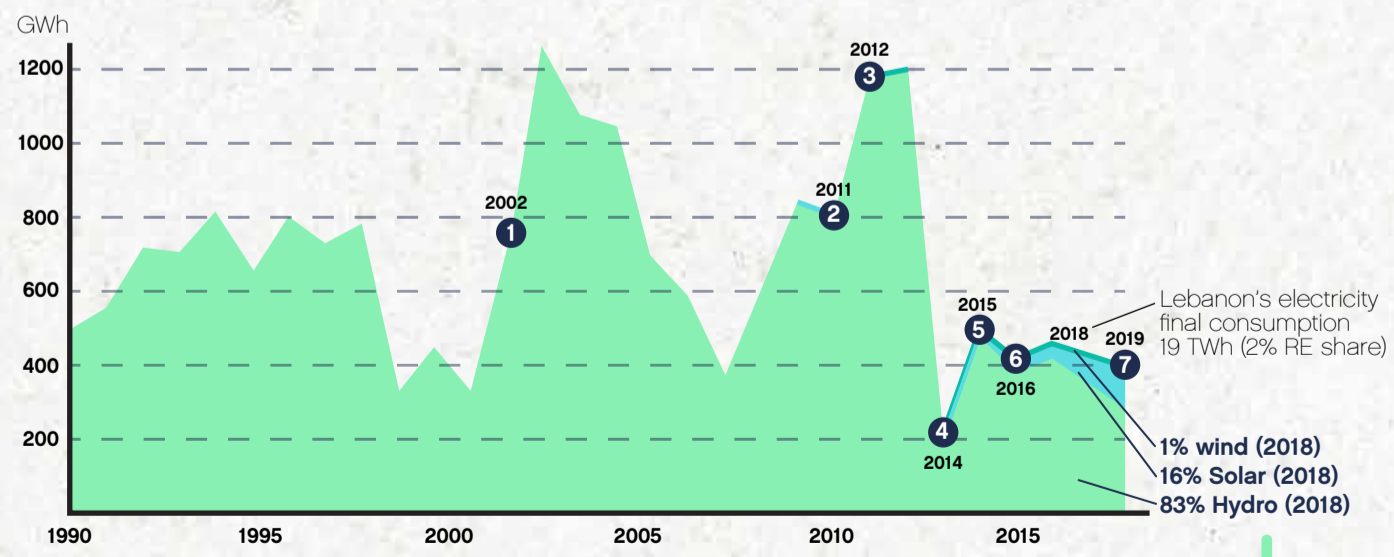
Operational Hydro Power Plants	
Site	Markaba, Awali, Joun Chouane, Yahchoch, Fitri Bechare, Mar Licha Blaouza II, Abu-Ali Al Bared 1, Al Bared 2 Richmaya-Safa
River	Litani/Awali rivers Nahr Ibrahim river Kadisha valley Nahr Al Bared Safa spring
Installed Capacity (MW)	199 32 21 17 13
Operational Solar Power Plants (CSP & PV)	
Site	Beirut River Solar Snake project Zahrani Oil installations Other distributed projects in the region of less than 1 MW
Type	PV PV PV
Installed Capacity (MWp)	1.08 1 ≈75
Planned Solar Plants (CSP & PV)	
Site	Beirut River Solar Snake project (second phase) Zahrani Oil installations 12 distributed farms of 15 MW each 3 utility-scale farms with storage
Installed Capacity (MW)	7 3 180 3*100 MWp & 70 MWh of storage
Status	launched launched launched
Planned Wind Power Plants	
Site	Akkar (3 wind farms)
Installed Capacity (MW)	226
Status	under development

INSTITUTIONAL FRAMEWORK



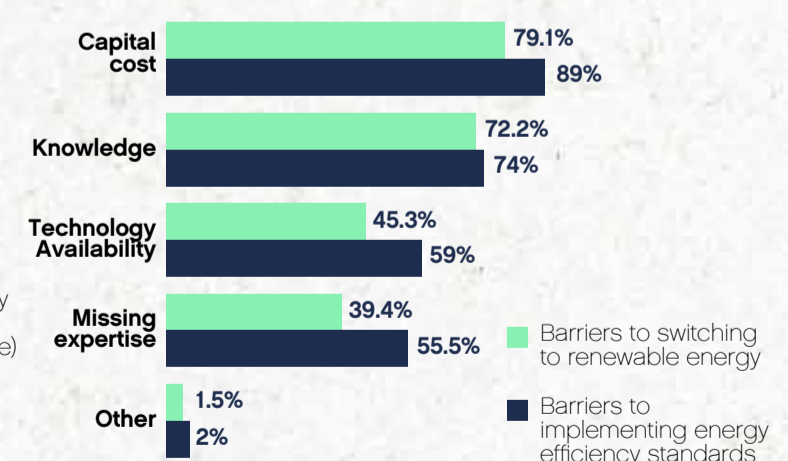
*Law 462/2002 is the umbrella law for regulating Lebanon's electricity sector and when implemented, law 129/2019 will not exist anymore, as the latter is an amendment of law 462/2002

RENEWABLE ENERGY FRAMEWORK



- 1** 2002: Law 462: Regulation of the Electricity Sector
- 2** 2011: Introduction of Net metering mechanism (decision no. 318-32)
- 3** 2012: National Energy Efficiency & Renewable Energy Action Plan (NEEAP, 2011-2015); National Energy Efficiency & Renewable Action (NEEREA)
- 4** 2014: Law 288: temporary amendment of law 462
- 5** 2015: Law 54: extension of law 228
- 6** 2016: NEEAP (2016-2020); National Renewable Energy Action Plan (NREAP 2016-2020)
- 7** 2019: Law 129: amendment of Law 228; Law 115: 20% renewables target by 2030; Energy Efficiency Law (to be approved); Distributed Renewable Energy Law (to be approved)

BARRIERS - PEOPLE'S PERCEPTION



* Survey conducted in May/June 2021 with around 100 participants

