
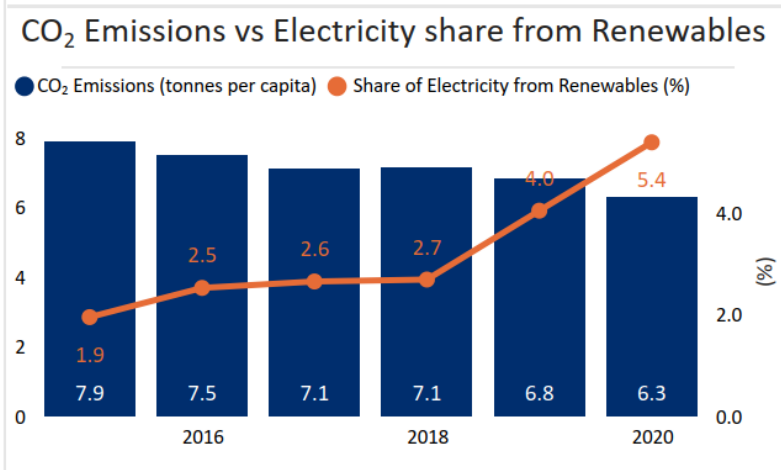
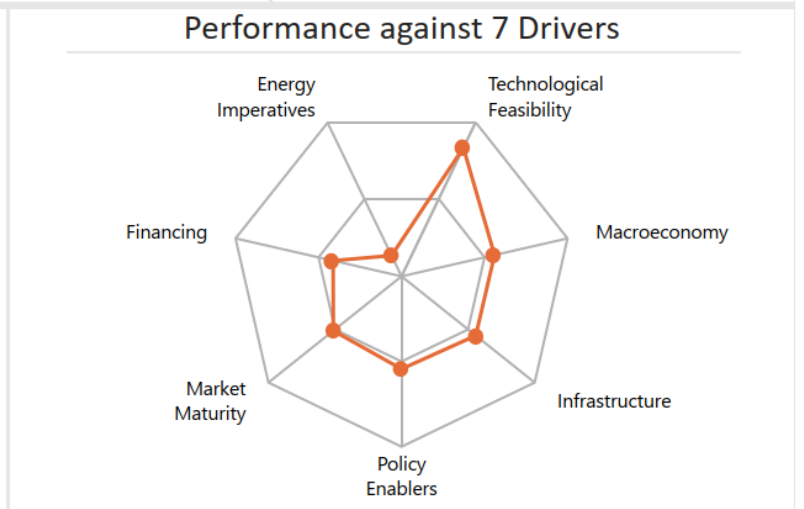
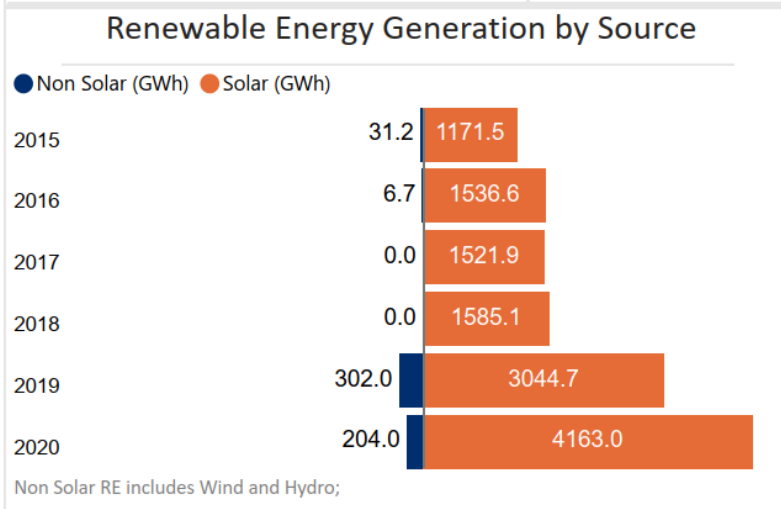
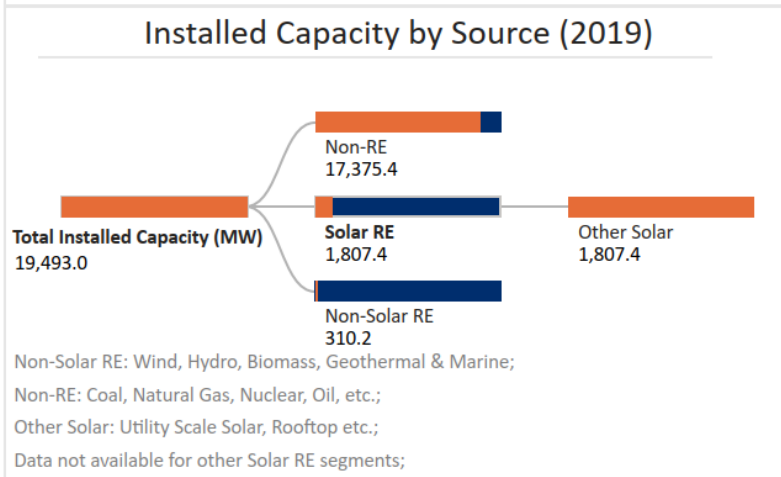
	<b>Israel</b>	Ease of doing Solar classification
	Europe and others	 <b>Achiever</b>
Electricity Consumption in kWh/capita (2020) <b>7910.1</b>	Average PVout in kWh/kWp/day (2020) <b>5.1</b>	Cumulative Solar Capacity in MW (2021) <b>2313.3</b>
Getting Electricity Score (2020) <b>76.2</b>	NDC Target by 2030 in % (base year 2015) <b>27.0</b>	Human Development Index (2021) <b>0.9</b>



### Fiscal Incentives & Public Financing for Renewables (2020)

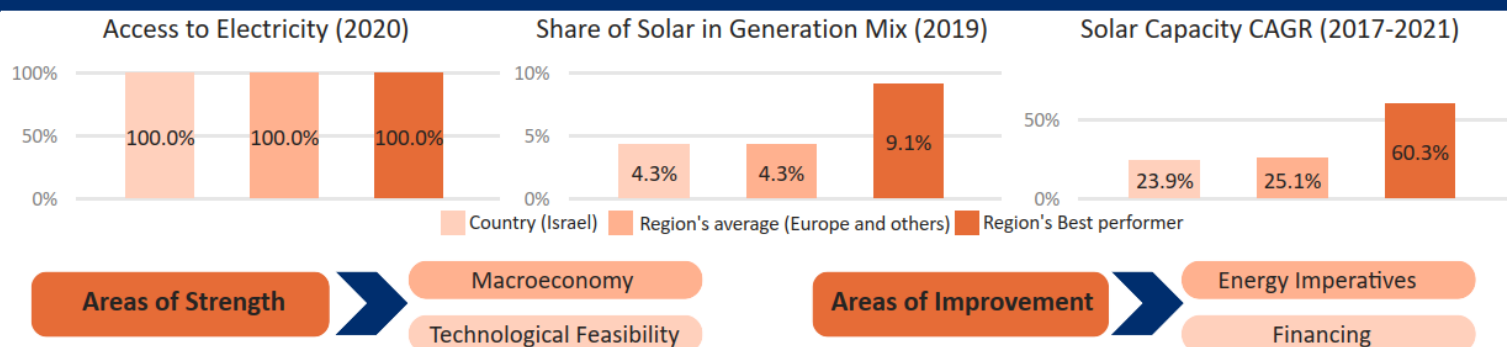
- Investment or production tax credits? **No**
- Public investment, loans, grants, capital subsidies or rebates? **Yes**



### Support for Renewables (2020)

- Feed-in-Tariffs for renewable energy supply to the grid? **Yes**
- Net metering/Gross metering policies and regulations? **Yes**
- Renewable Energy Certificates? **No**
- Renewable Purchase Obligation? **Yes**

## Country's regional performance and characteristics



## Key Insights

### Drivers

### Insights



Macroeconomy

- Israel is a high-income country with a GDP per capita (PPP) of USD 43,451 in 2021.<sup>1</sup>
- Due to COVID-19 Pandemic, the GDP (Real) had declined by 2.2% in 2020. However, in 2021, the GDP has bounced back with an annual growth rate of 8.2%.<sup>2</sup>
- The inflation rate (CPI) of Israel has increased to 1.5% in 2021 from -0.6% levels in 2020.<sup>3</sup>
- The general government gross debt to GDP has declined to 68.9% in 2021 from 71.7% levels in 2020.<sup>4</sup>



Policy enablers

- Israel launched Israel 2030 Energy Goals, which focusses on the country's plan to stop using coal as an energy source by 2030 and replace it with natural gas and solar with a share split of 70% and 30% respectively.<sup>5</sup>
- In 2018, the Israel government came up with a scheme for rooftop solar under which ~1.6 GW capacity is estimated to be deployed over a period of 3 years with a net metering facility up to 15 KW.<sup>7</sup>



Technological Feasibility

- Israel receives very high levels of solar irradiation (GHI) of 5.7 kWh/m<sup>2</sup>/day and specific yield 5.1 kWh/kWp/day indicating a very strong technical feasibility for solar in the country.<sup>9</sup>
- The BIRD Energy program of Israel and US have awarded a grant to Fright Energy of Hod Hasharon, Israel and Solaria of California, USA to develop a solution to optimize process of energy storage and consumption and trading through local grid.<sup>10</sup>
- Israeli Public Utility Authority had come up with two tenders held in 2020 for solar-plus-storage. The first one was of 168 MW with 672 MWh of battery storage and the other 600 MW with ~2,400 MWh of battery energy storage system.<sup>12</sup>



Market Maturity

- 100% of the population in Israel is having access to electricity since 2020.<sup>13</sup>
- Israel's National Electricity Authority (PUA) regulates the provisions and supervises public services in the field of electricity distribution.<sup>14</sup>
- The Israel Electric Corporation Ltd (IECL) is a public and government-owned company that carries out the generation, transmission, distribution, sale and supply of electricity in the country.<sup>15</sup>



Infrastructure

- In Israel, transmission network comprises of about 760 ckm of 400 kV, 4,525 ckm of 161 kV and about 100 ckm of 115 kV with 147 sub-stations and around 48,100 transformers.<sup>16</sup>
- IECL, in its five-year (2022-2026) procurement plan, is planning to spend USD 2.5 Bn across transformers, switchgear, protection systems, zero-point earthing equipment, D.C. equipment, power cables, towers, insulators etc.<sup>17</sup>



Financing

- Israel's finance and energy ministries are investing about USD 29 Mn to fund energy efficiency and renewable energy projects in government assets.<sup>18</sup>
- The U.S. Department of Energy (DOE) and Israel's Ministry of Energy (MoE) along with the Israel Innovation Authority is planning to invest USD 5.48 Mn in six clean energy projects.<sup>19</sup>
- In 2021, an Israeli venture capital fund launched a USD 100 Mn sustainability fund to meet the SDG goals.<sup>20</sup>



Energy Imperatives

- In 2020, Israel's per capita electricity consumption stood at 7.91 MWh which is more than 2 times higher in comparison to the global average of 3.31 MWh.<sup>20</sup>
- The total installed capacity of Solar PV witnessed a CAGR of 23.9% between 2017-2021 reaching 2,313 MW in 2021 from 982 MW in 2017.<sup>21</sup>
- The peak demand for electricity in the country has increased to 68.43 TWh in 2020 from 67.87 TWh levels in 2019.<sup>22</sup>
- In 2021, the total installed capacity in the country reached 20 GW with a significant share coming from gas (65.98%) and coal (27.44%).<sup>22</sup>
- The cost of electricity per kWh is US Cent 16.6 for households and US Cent 16.9 for business.<sup>23</sup>