

Capacity of renewable energy projects operated reaches 6,551 MW by the end of 2024

The results of renewable energy statistics showed that five solar energy projects were commissioned in 2024, with a total capacity of 3,751 megawatts. By the end of 2024, the total number of commissioned renewable energy projects reached ten, nine of which were solar energy projects with a combined capacity of 6,151 megawatts, in addition to one wind energy project with a total capacity of 400 megawatts (Figure 1).



Total investment volume in renewable energy projects by the end of 2024

As of the end of 2024, the total investment volume in renewable energy projects reached approximately SAR 19.839 billion. This includes SAR 18.264 billion invested in solar energy projects and SAR 1.575 billion allocated to the wind energy project (Figure 2).





LCOE for renewable energy projects by the end of 2024 The Shuaiiba 1 Solar Power project recorded the lowest Levelized Cost of Energy (LCOE) in the Kingdom at 3.9 Saudi Halala per kilowatt-hour, compared to (LCOE) of other renewable energy projects, which ranged between 3.9 to 11.18 Saudi halalas per kilowatt-hour (Figure3).

Figure3. Levelized Cost of Energy (LCOE) for renewable energy projects (Saudi Halala per kilowatt-hour)



*LCOE: Levelized Cost of Electricity.

Number of housing units estimated to be supplied with electricity from renewable energy by the end of 2024

By the end of 2024, the number of housing units estimated to be supplied with electricity from renewable energy achieved approximately 1,140,800 housing units. The breakdown for each project is detailed below (Figure 4).

Figure4. Number of housing units estimated to be supplied with electricity from renewable energy (housing units)



Indicators of renewable energy statistics by the end of 2024

Indicators	Unit	Value
Total capacity of renewable energy projects operated	MW	6,551
Total investment volume of renewable energy projects operated	Billion SAR	19.839
Total number of housing units estimated to be supplied with electricity from renewable energy	Housing units	1,140,800
Source: table		,

Methodology and Quality

The renewable energy statistics publication presents data on renewable energy in the Kingdom of Saudi Arabia. The Ministry of Energy is the primary source of this data, which is available as a time series covering 2019-2024. The publication is published annually.

Methodology and Quality Report.