

Greater usage of clean and renewable energy sources in houses in 2021

The Household Energy Statistics, compiled by the General Authority for Statistics, revealed that the Kingdom population benefiting from electricity services reached 100% through various electricity sources. 99.33% of houses are connected to public electricity network, 0.55% are connected to private network, and 0.11% benefit from electricity services using private generator as a source of electricity, the remaining 0.01% of houses use other sources of electricity. As for the usage of solar energy, the statistics show that around 2.02% of households across the Kingdom use solar energy in their houses. In terms of cooking fuel, the statistics revealed that around 81.93% of households use gas as their primary cooking fuel, 17.14% use electricity as their primary cooking fuel, and just 0.26% use firewood as their primary cooking fuel, while 0.67% of households use other sources of fuel used for cooking.

Private electricity meters are more common in the Kingdom

85.61% of households use private electricity meters, whereas 14.39% use shared electricity meters. For some households, an electrical regulator is also required to keep the energy supply steady at home. According to the findings, the percentage of households using an electrical regulator at home is around 20.33% at the Kingdom level.

Consumption and use of fuel for household sector

Household consumption of fuels such as diesel (fuel oil), kerosene, and gas (butane) in all regions of the Kingdom increased in 2021 compared to previous years. Gas (butane gas) accounted for the biggest part of the total household fuel consumption, representing 98.62% of the total fuel consumption in 2021. The volume of diesel (fuel oil) consumption was the lowest, representing 0.23% of the total fuel consumption in 2021. Consumption of gas (kerosene) reached about 1.15% of the total fuel consumption in 2021.

Given that, the percentage of households which answered yes to using gas (butane) was around 91%. While the percentage of households which answered yes to using gas (kerosene) was around 1.29%. 0.5% of households use diesel (fuel oil) in their houses.

Electricity consumption in household sector

The household sector consumed 177,328.89 gigawatts/hour in 2021, which represents households' consumption of electrical energy for household purposes. This consumption also includes households whose homes are located in various neighborhoods that are served by electric service owing to industrial, commercial and government sectors.

More than 63% of households are interested in rationalizing electrical energy consumption

The Kingdom government has placed a high priority on reducing energy consumption. 63.94% of households utilize electrical energy saving devices in their houses, while 57.55% of households would want to spend some money on electricity rationalization devices. The percentage of households in the Kingdom that wish to use solar (PV) energy in their houses is around 52.42%. 35.25% of houses in the Kingdom have thermal insulation.

5.21% of households use biomass products at home

The results showed that the use of biomass products (firewood, charcoal, agricultural residues) in houses across the Kingdom, whether for heating or cooking, amounted to 5.21%, with firewood being used by 2.23% of households. 2.88% of households use charcoal, and 0.10% agricultural residues.

S/N	Indicator	%
1	Percentage of households connected to public electricity network	99.33
2	Percentage of households using solar energy at home	2.02
3	Percentage of households using gas for cooking	81.93
4	Percentage of households using electricity for cooking	17.14
5	Percentage of households using biomass products (firewood, charcoal and agricultural residues)	5.21
6	Percentage of households using private electricity meter at home	85.61
7	Percentage of households using shared electricity meter with other homes	14.39
8	Percentage of households having an electrical regulator at home	20.33
9	Percentage of households using electrical power saving devices at home	63.94
10	Percentage of households using thermal insulation at home	35.25
11	Percentage of households willing to use solar energy (PV) at home	52.42

Chart 1. Percentage of fuel used in houses for cooking across the Kingdom

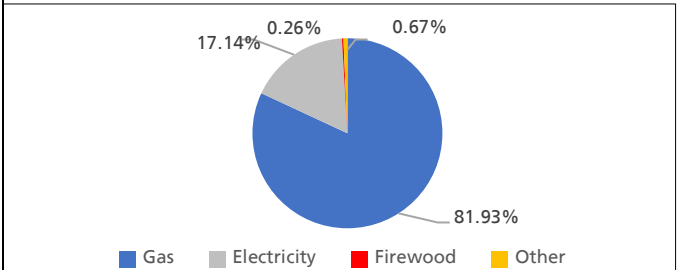


Chart 2. Percentage of electricity source used in houses across the Kingdom

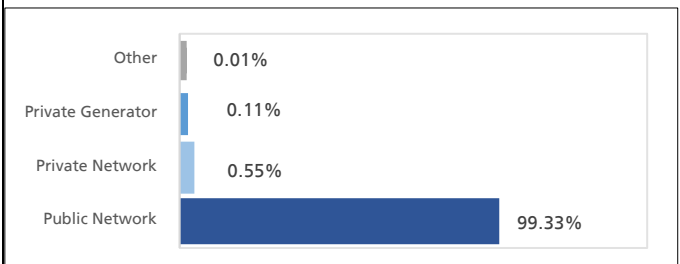


Chart 3. Houses consumption of electricity in the administrative regions

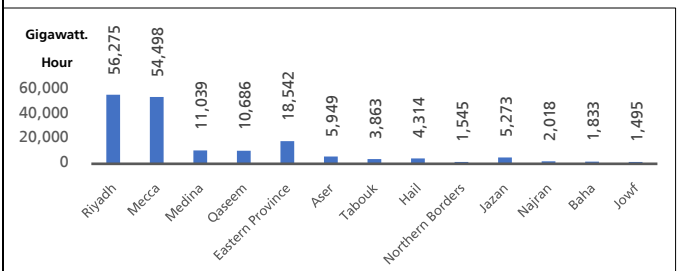
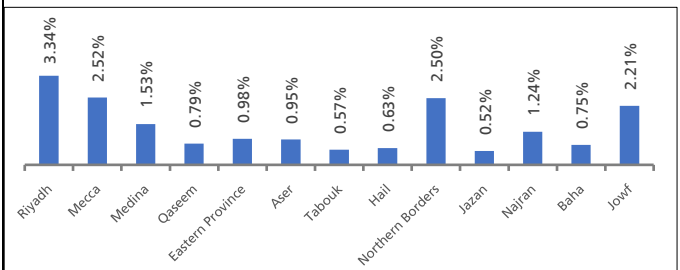


Chart 4. Percentage of houses which use solar energy in the administrative regions



Methodology

The Household Energy Statistics Publication is based on data collected by telephone from a sample representative of all administrative regions across the Kingdom. It provides data on the house and its components that are cooled and heated, electricity sources, fuel usage, consumption rates of various forms of energy and uses in household activities and energy-consuming appliances in the household sector. Through the Publication, it is possible to identify the level of interest of households to use photovoltaic energy at home, uses of biomass and availability of thermal insulation in the house. For more information on the topic, [Methodology](#).