

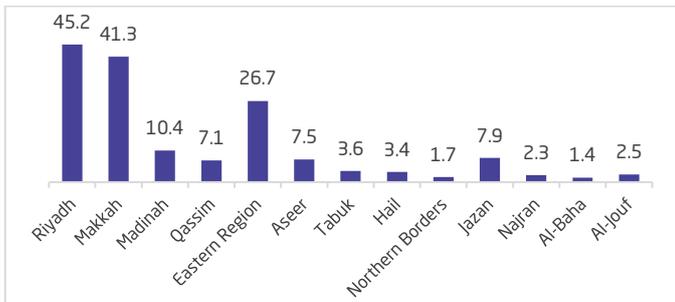
Electricity consumption in the residential sector reaches 161,207 GWh in 2024

Household Energy Statistics 2024 revealed that total electricity consumption in the residential sector across the Kingdom of Saudi Arabia reached 161,207 gigawatt-hours (GWh). Statistics also indicated that 100% of population benefits from electricity services.

Annual electricity consumption in the residential sector

Statistics showed that Riyadh Region recorded the highest electricity consumption at 45.2 thousand GWh, followed by Makkah Region with 41.3 thousand GWh. In contrast, Al-Baha Region recorded the lowest consumption at 1.4 thousand GWh, followed by Northern Borders Region with 1.7 thousand GWh (Figure1).

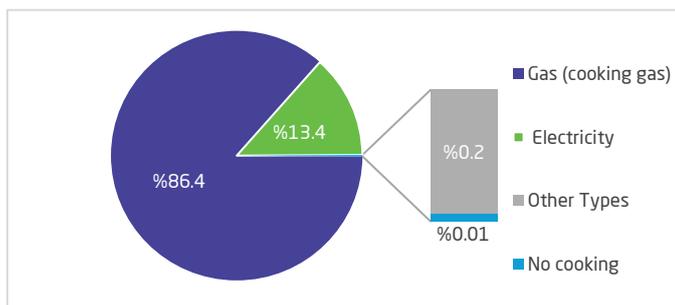
Figure1. Annual electricity consumption in residential sector by administrative region (thousand GWh)



Energy sources used for cooking in dwellings

Data indicated that 86.4% of dwellings use gas for cooking, while 13.4% used electricity. Dwellings using other energy sources for cooking accounted for 0.2% (Figure2).

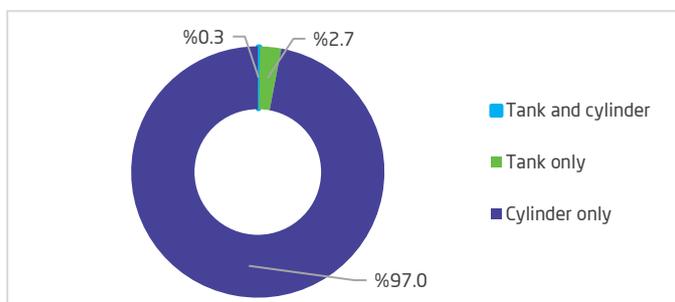
Figure2. Percentage of energy sources used for cooking in the Kingdom (%)



Use of gas cylinders and tanks in dwellings

Statistics revealed that among housing units using gas, 97.0% relied primarily on gas cylinders, while 2.7% used gas tanks. Additionally, 0.3% of dwellings used both cylinders and tanks (Figure3).

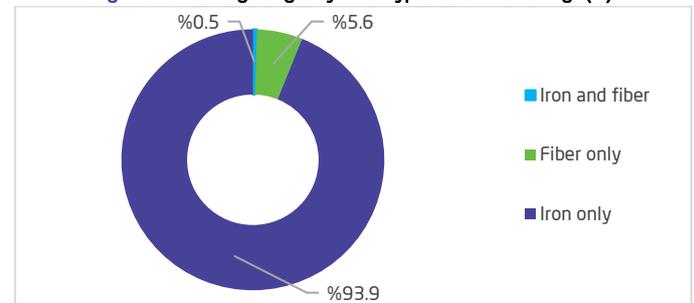
Figure3. Percentage of gas cylinder and tank usage in the Kingdom (%)



Use of gas cylinders in dwellings

Statistics indicated that most dwellings in the Kingdom relied on iron gas cylinders, accounting for 93.9% followed by fiber cylinders at 5.6%, while dwellings using both types represented 0.5% (Figure4).

Figure4. Percentage of gas cylinder types used in dwellings (%)



Percentage of dwellings with thermal insulation

Data showed that 45.8% of dwellings are equipped with thermal insulation, while 24.4% do not have insulation. Additionally, 29.8% of respondents answered "I don't know" regarding the presence of thermal insulation in their dwellings across the Kingdom.

Percentage of households interested in conserving electricity in dwellings

Statistics indicated that 91.5% of households showed a strong interest in conserving electricity, while 91.9% of households followed energy-saving guidelines when using electrical appliances. The results also revealed that 56.6% of households are willing to replace old appliances with more energy-efficient ones, and 40.8% expressed interest in using solar energy as a power source in their homes.

Key indicators of Household Energy Statistics

Indicators	Unit	2024
Total electricity consumption in residential sector across the Kingdom	GWh	161,207
Percentage of households using gas (cooking gas) for cooking	Percentage	%86.4
Percentage of households using electricity for cooking		%13.4
Percentage of households using iron gas cylinders		%93.9
Percentage of households using fiber gas cylinders		%5.6
Percentage of households with thermal insulation		%45.8
Percentage of households highly concerned with conserving electricity		%91.5
Percentage of households applying energy-saving guidelines for electrical appliances		%91.9
Percentage of households interested in using solar energy	%40.8	

Source: Tables.

Methodology and quality

Household Energy Statistics Publication focuses on monitoring key indicators related to energy use in dwellings across the Kingdom of Saudi Arabia. It collects data on the main sources of electricity used in dwellings, as well as aspects related to electricity conservation and the use of various fuels in households. The publication is based on field and telephone surveys conducted by GASTAT, in addition to administrative records provided by relevant entities, such as the Ministry of Energy. [Methodology and Quality Report.](#)