

Development of electricity consumption in Riyadh (2005–2040)

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RIYADH

Electricity Consumption Overview (2005–2040)

Growth Rate (2005–2022)

112.73%

Growth_2005_2022_%

Electricity Consumption 2005 (Actual, MWh)

88.20M

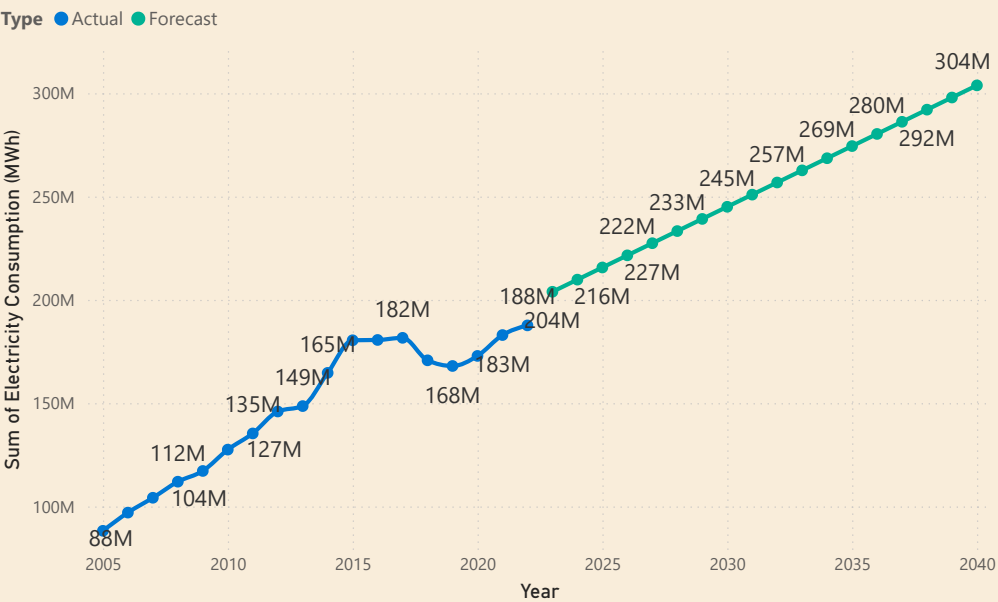
Sum of Electricity Consumption (MWh)

Electricity Consumption 2022 (Actual, MWh)

187.62M

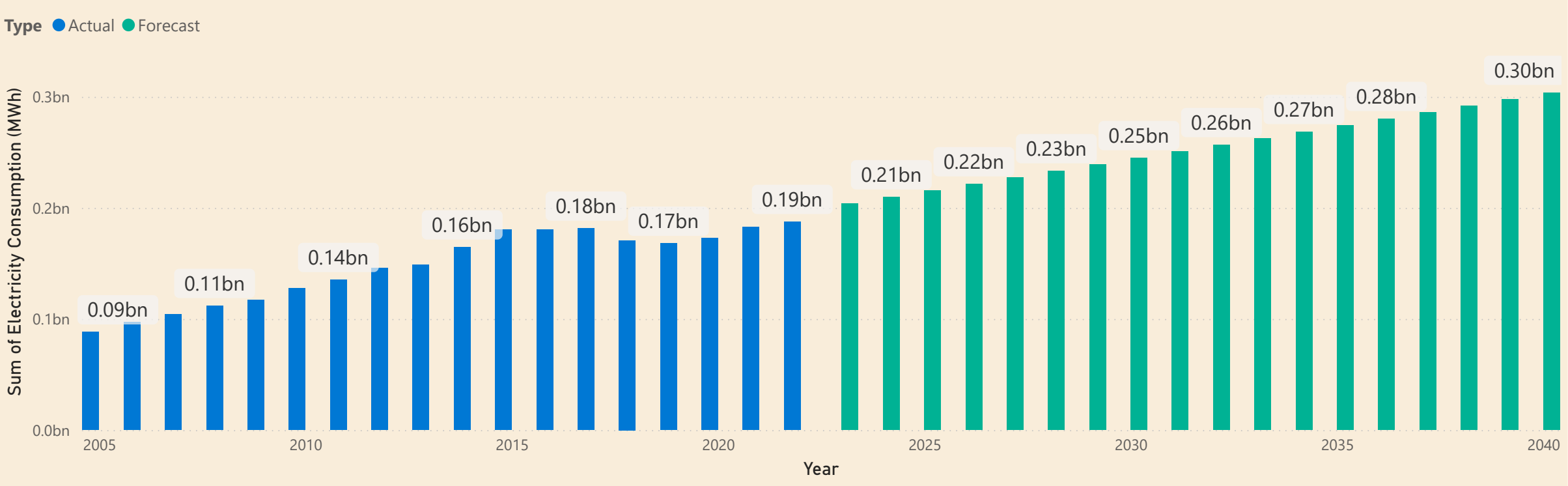
Sum of Electricity Consumption (MWh)

Electricity Consumption Trend (Actual vs Forecast)



Electricity consumption in Riyadh has shown steady growth since 2005, with forecasts indicating continued demand increase through 2040.

Comparison of Actual and Forecast Electricity Consumption (2005–2040)



Last Actual (2022)

187.62M

Sum of Electricity Consumption (MWh)

First Forecast (2023)

203.89M

Sum of Electricity Consumption (MWh)

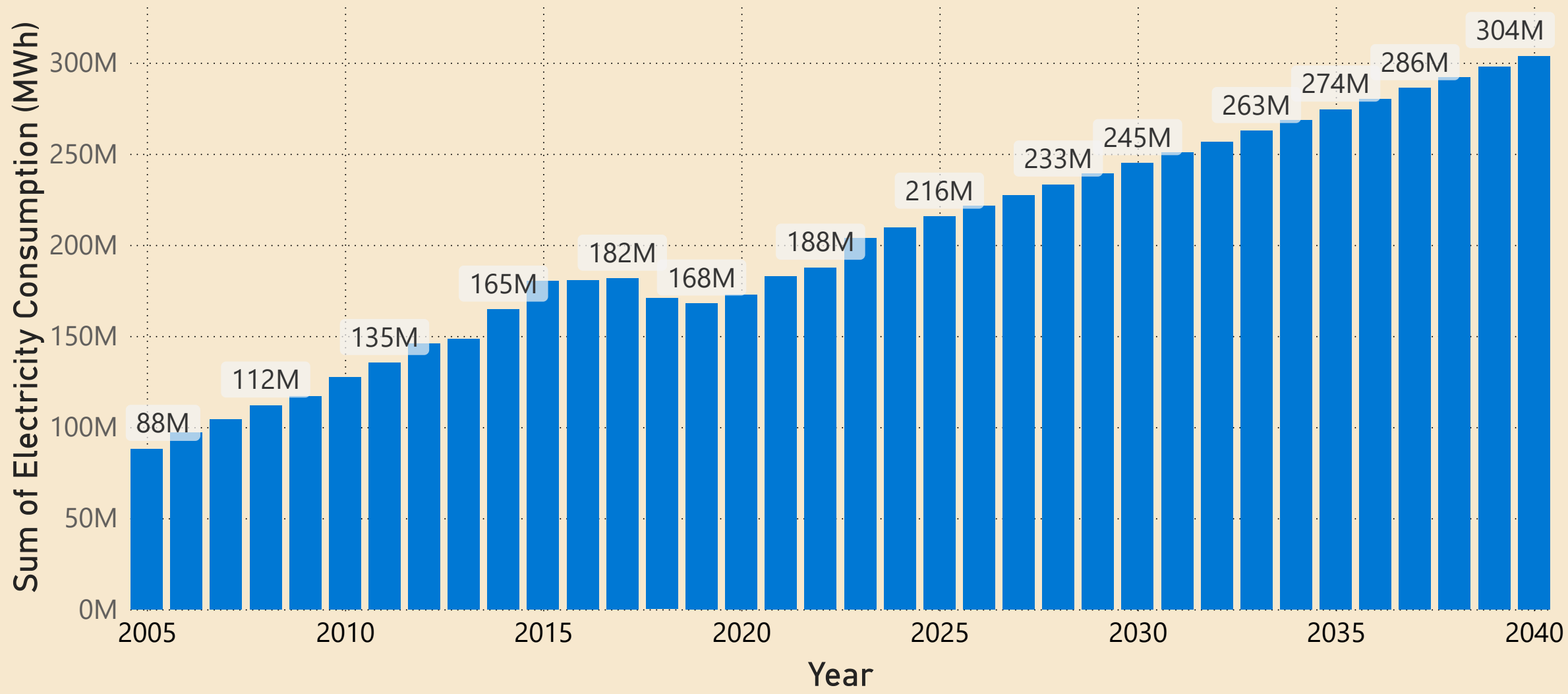
Forecast Growth (2023–2040)

49.0%

Forecast_Growth_2023_2040_%

Yearly Change in Electricity Consumption (2005–2040)

Sum of Electricity Consumption (MWh) by Year



Analysis of electricity consumption trends in Riyadh (2005–2040)

7.23bn

Total Consumption (MWh)

3.6%

Average_Annual_Growth_Percent

2040

Peak_Year

Insights and Recommendations

Insights

- Electricity consumption in Riyadh increased from 88 million MWh in 2005 to a projected 303 million MWh in 2040.
- The compound annual growth rate is approximately 3.6%.
- Growth continued until 2017, then a temporary decline occurred between 2018 and 2020 before resuming its rise.
- Continued increases in consumption until 2040 indicate increased energy demand due to population growth and urban expansion.

Recommendations

- Investing in renewable energy to reduce pressure on the electricity grid.
- Improving energy efficiency in residential and commercial buildings.
- Developing smart grids to improve distribution and reduce losses.
- Studying the causes of the decline between 2018–2020 to avoid them in the future.
- Supporting storage and demand management programs.