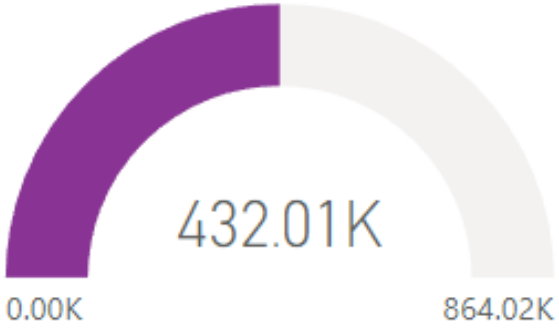
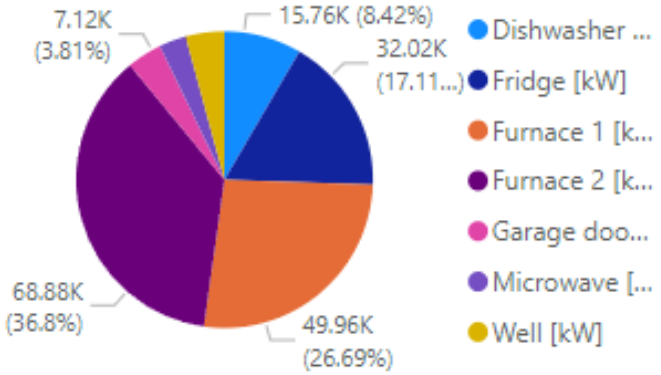
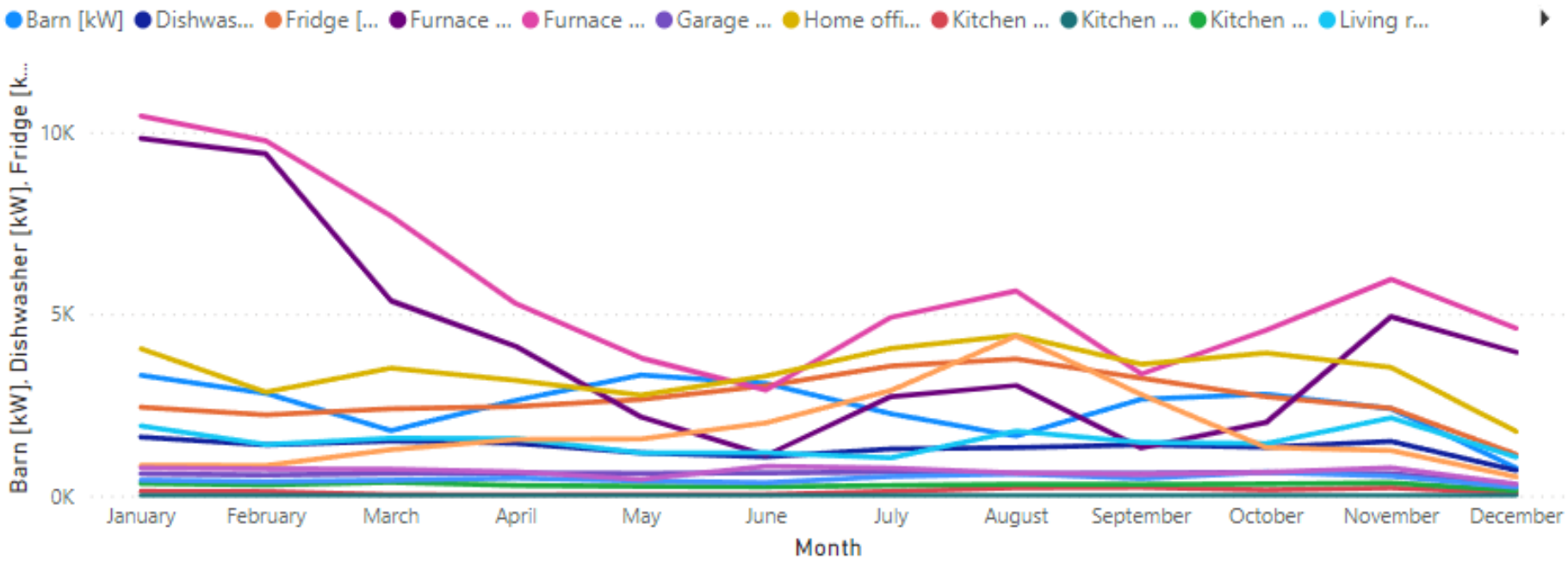
Total Electricity Consumption in [kW]



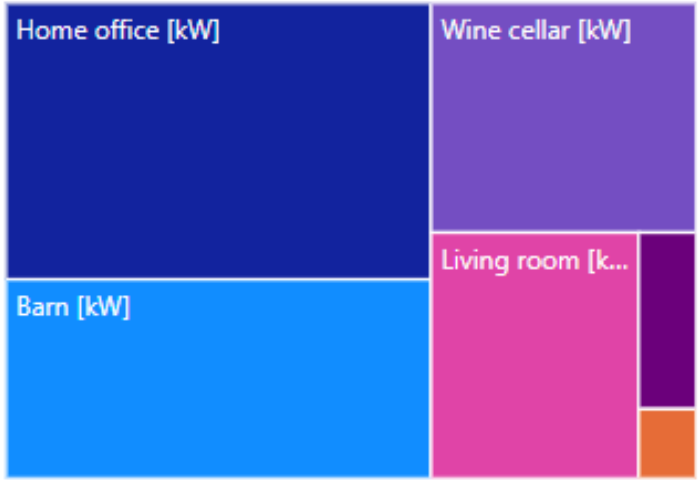
Consumption by all the appliances



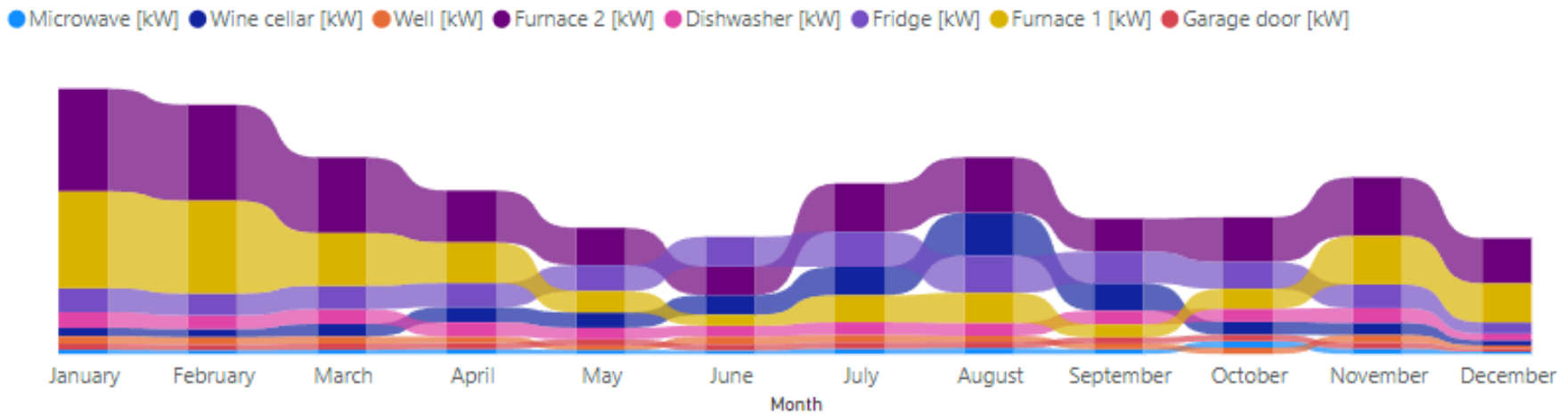
Consumption of all categories Across MONTHS



Total Electricity consumption by Rooms



Elelctricity consumption by appliances Across Months



Analysis of Dashboard: Appliance Consumption(1/2)

- The dashboard summarizes the following analysis from the given data:
- Visualizes the electricity consumed by all the categories throughout different months of 2016 (Line Chart).
- Demonstrates how much electricity is consumed by every appliance throughout 2016, this visualization also compares the consumption of appliances and shows the trends over different seasons/times. (Ribbon Chart).
- Shows how much of the total consumption is taken by each appliance in the form of a Pie chart.

Analysis of Dashboard: Appliance Consumption(2/2)

- Shows how much of the total consumption is taken by each appliance in the form of a Pie chart.
- Shows how much electricity is consumed in each room and how much each room takes up from the total electricity consumption. (Treemap)
- Shows the total kilo-Watts electricity consumed in 2016.

Month

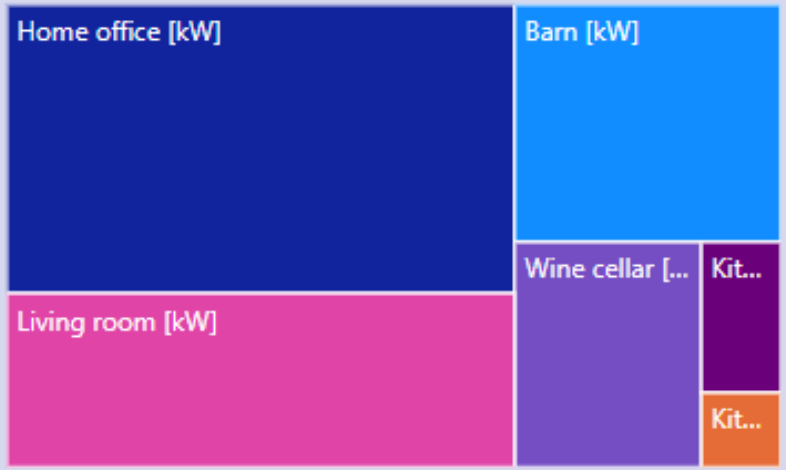
- July
- August
- September
- October
- November
- December

Quarter

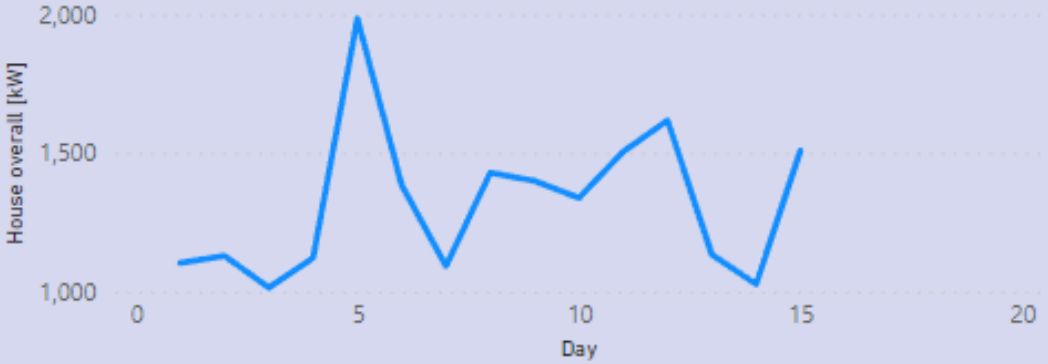
- Qtr 4

0 15

Total Electricity consumption by Rooms



Electricity Consumed [kW] by Day

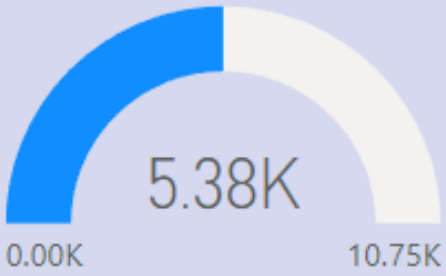


kW Electricity Consumed

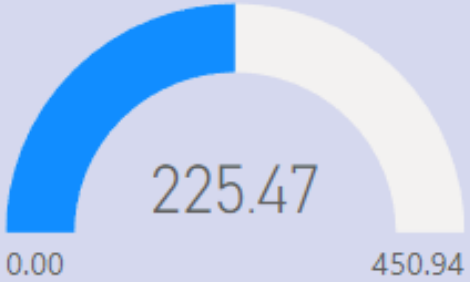
19.79K

House overall [kW]

Cost spent on Electricty in PKR

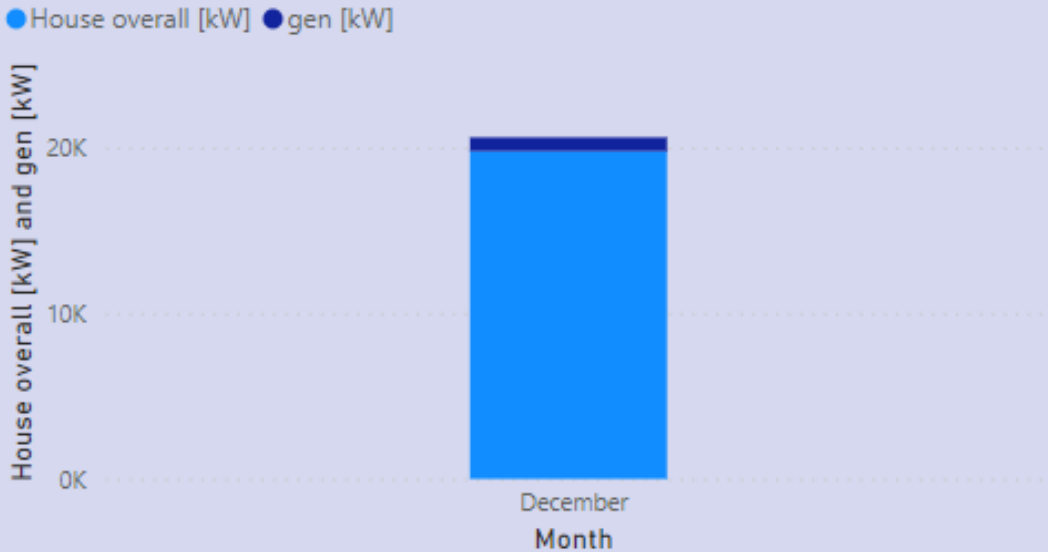


Cost saved on Electricity in PKR

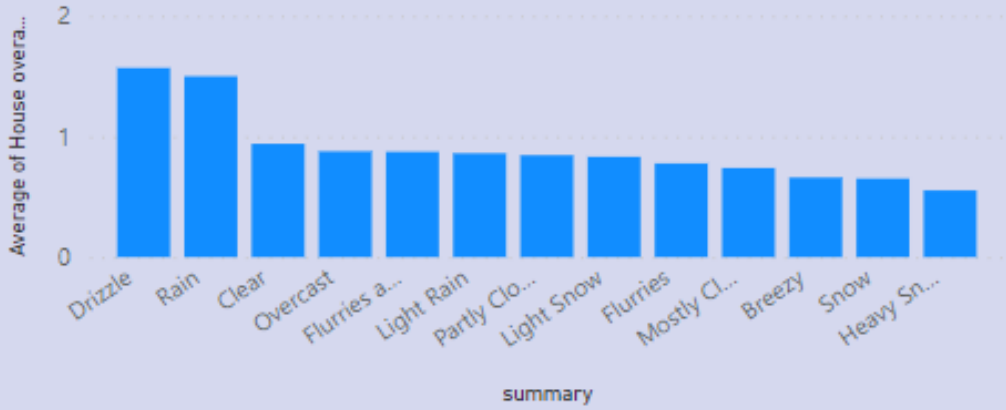


Cost of Electricity by Days

House overall [kW] and gen [kW] by Month



Average consumption [kW] in different weather conditions



1.98

Min of temperature

28.60

Average of temperature

Analysis of Dashboard: Custom Time Period (1/2)

- The dashboard summarizes the following analysis from the given data:
- We provide a custom time period from the total time covered in this dashboard, which then produces the visualization based on data retrieved from those dates/times.
- The dashboard tells us the electricity generation in kW during the time period as well as the cost in PKR during our provided time period.
- Compares the electricity generation and consumed during this period through gauges and a stacked bar chart so we see the numbers and its visualization at once.

Analysis of Dashboard: Custom Time Period (2/2)

- Describes the usage of electricity in rooms during this time period,
- Shows the average electricity consumption in different weather conditions during our chosen time period,
- Shows the total kilo-Watts electricity consumed in this time,
- Shows us the minimum temperature during this time as well as the average temperature during the duration of this time period.

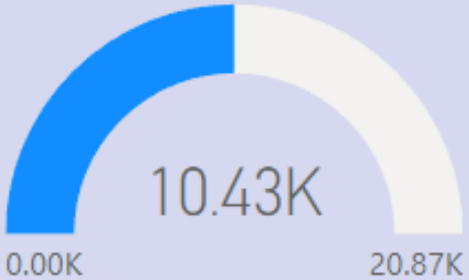
kW Electricity Consumed

432.01K

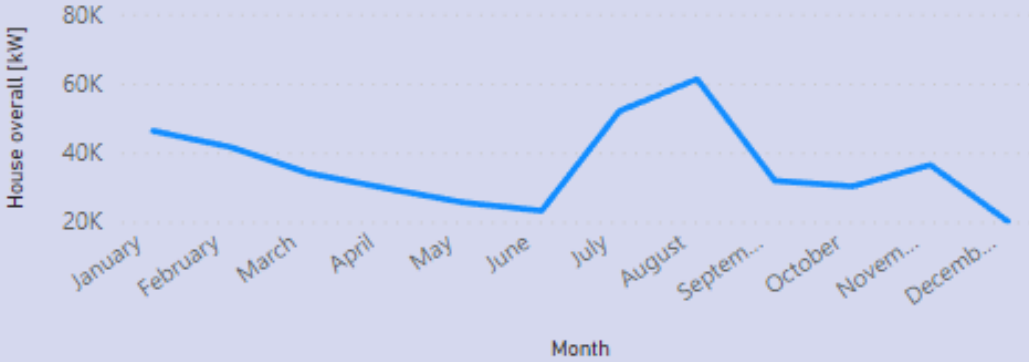
House overall [kW]

Cost spent on Electricty in PKR

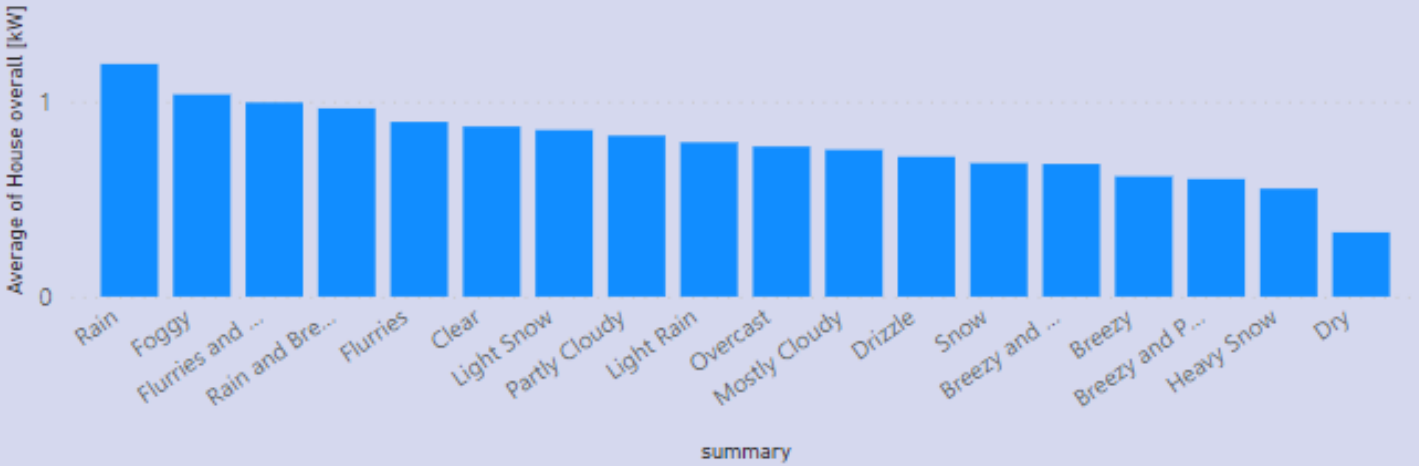
Cost saved on Electricity in PKR



House overall [kW] by Month

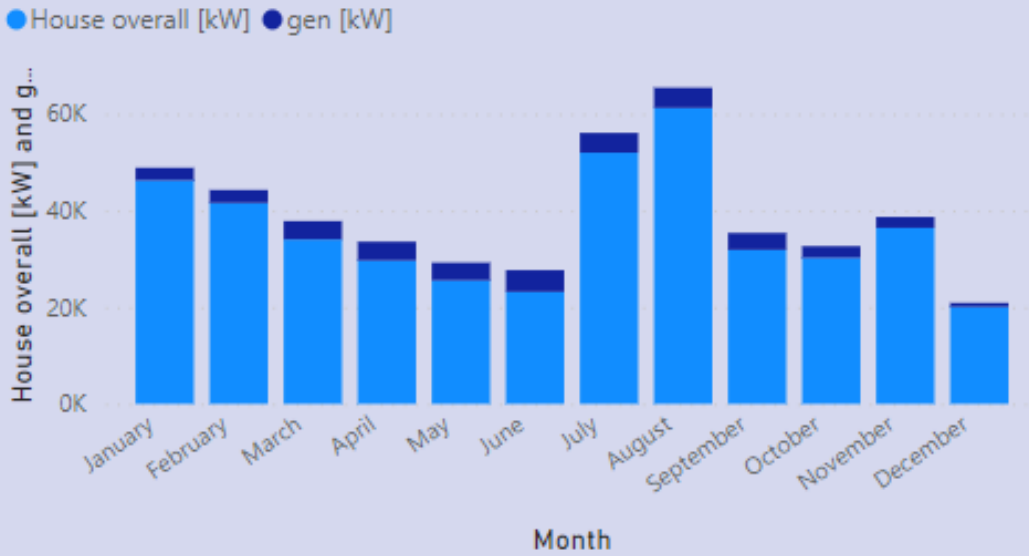


Average consumption [kW] in different weather conditions

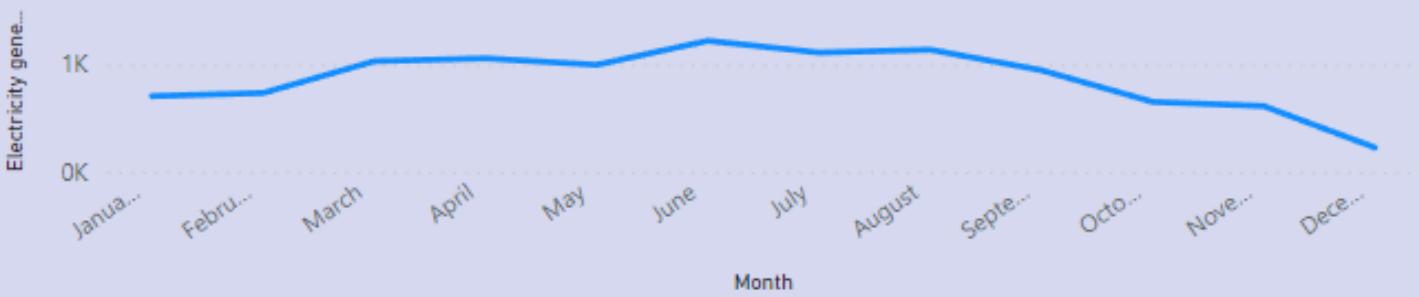


Cost Electricity by Month

House overall [kW] and gen [kW] by Month



Electricity generated by Month



Analysis of Dashboard: Electricity Utilization(1/2)

- The dashboard summarizes the following analysis from the given data:
- Demonstrates how the electricity is consumed in the house during different months.
- Demonstrates how much the electricity costs throughout the year in different months.
- The average consumption, in kilo-Watts, during different types of weather conditions such as rainy, dry, etc.
- Since we are also generating electricity by using solar power, it shows how much electricity we are able to generate using solar power.

Analysis of Dashboard: Electricity Utilization(2/2)

- Compares the generation and consumption and visualizes ot in the form of a stacked bar chart.
- Shows the cost spent, in PKR, on the consumption of electricity in the year 2016.
- Shows the cost, in PKR, saved as a result of electricity generation.
- We weren’t initially given the costs of electricity in the dataset. We have used the KE kW/minute rates in 2016 to calculate these measures and added it to our data.