

Trend Analysis

Week of the month vs Avg Actual Energy

Week_Number	AVERAGE of Cleaned_Actual_Energy
1	16.65
2	16.82
3	16.86
4	16.79
5	16.73

District-wise abnormal usage by week

SUM of Abnormal_Usage	Week_Number	1	2	3	4	5
District						
Alappuzha		296	310	331	315	90
Ernakulam		478	444	439	446	123
Thiruvananthapuram		331	341	338	360	97

Comparison Analysis

District-wise Average Energy Consumption

District	AVERAGE of Cleaned_Expected_Ene	AVERAGE of Cleaned_Actual_Ene
Alappuzha	16.11	16.99
Ernakulam	15.53	16.47
Thiruvananthapuram	16.03	16.96

Dwelling Type vs Actual Energy vs Usage Deviation

Dwelling_Type	AVERAGE of Usage_Deviation(%)
Apartment	5.55%

Independent House	5.99%				
Villa	5.75%				

Temperature category VS Usage_Deviation

Temparature_category	AVERAGE of Usage_Deviation(%)
<25	5.36%
>30	6.37%
25-30	5.12%

Distribution Analysis

Applied Score VS Energy Load Distribution

COUNTA of Meter_Id(prefix removed)	Load_category(labeled)			
Appliance_Score_Grouped	1	2	3	
High		270	1410	2370
Low		360	1080	2010
Medium		150	1380	1770

Occupants vs Actual Energy Consumption

Num_Occupants	AVERAGE of Cleaned_Actual_Energy	AVERAGE of Connected_Load		
1	13.75	5.45		
2	14.91	5.07		
3	15.96	5.46		
4	17.93	5.47		
5	18.48	5.21		
6	19.40	5.20		

Correlation analysis

Load Category VS actual energy

Load_category(labeled)	AVERAGE of Cleaned_Actual_Energy
1	14.74
2	15.73
3	17.69

KPIs

Total Unique Meters

360

Total Abnormal Activities

4739

Average Energy

16.78

District with max abnormal usage

Helper Pivot Table

Ernakulam		District	SUM of Abnormal
		Alappuzha	1342
		Ernakulam	1930
		Thiruvananthapuram	1467
Abnormal activity count for Ernakulam			
1930			
Slicers			
<input type="checkbox"/> Temparature_category	All		
<input type="checkbox"/> Week_Number	All		
<input type="checkbox"/> District	All		
<input type="checkbox"/> Dwelling_Type	All		
<input type="checkbox"/> Num_Occupants	All		
<input type="checkbox"/> District-wise abnormal usage	All		