



Energy consumption

And the factors that influence it...

Workflow

1. Datasets

- Source: Kaggle
- Timeframe: Nov 2011 - Feb 2014
- Smart meters in London
- Weather in London
- ACORN groups

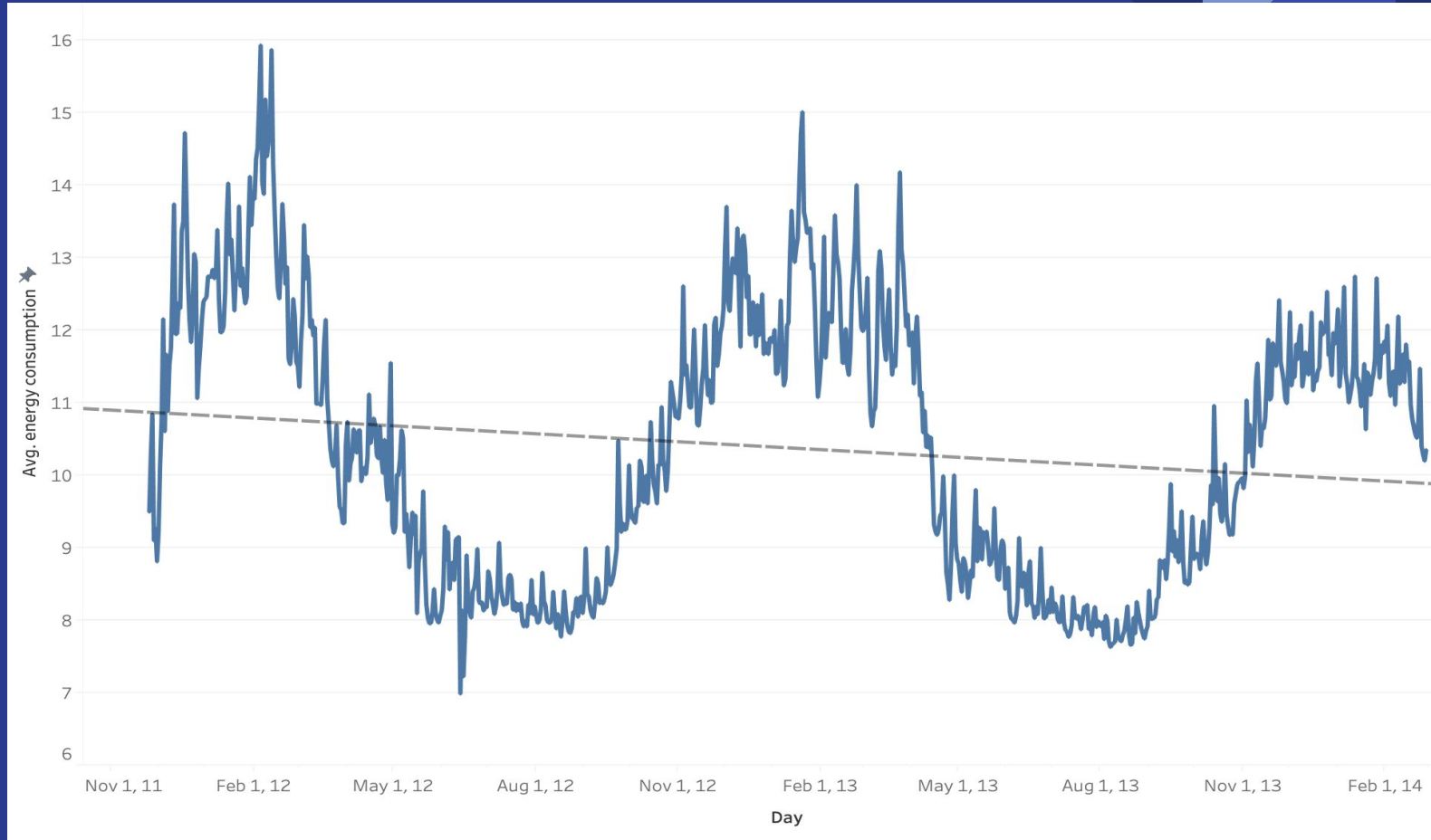
2. Analysis

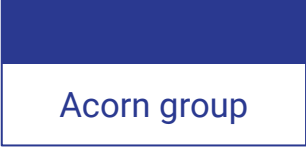
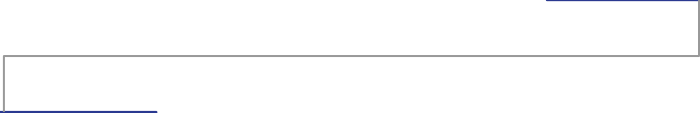
- Clean data
- Merge datasets
- Check for correlation
- Make a regression models
- Check statistical relevance

3. Visualization

- Tableau
- Gives a better overview

Avg. Energy consumption per day in London





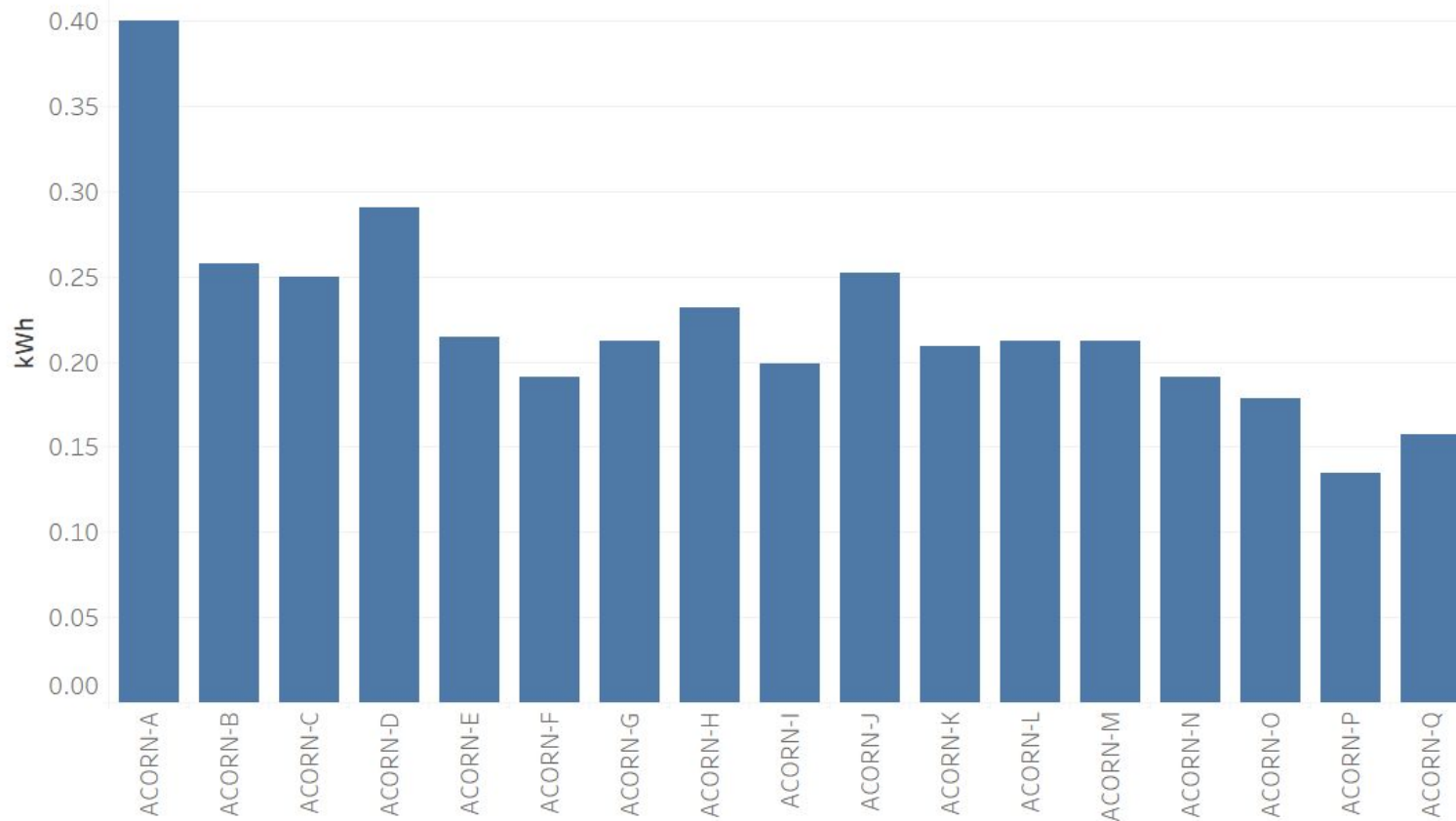
Consumer demographic

ACORN - segmentation tool which categorises the UK's population into demographic types using social factors and population behaviour.

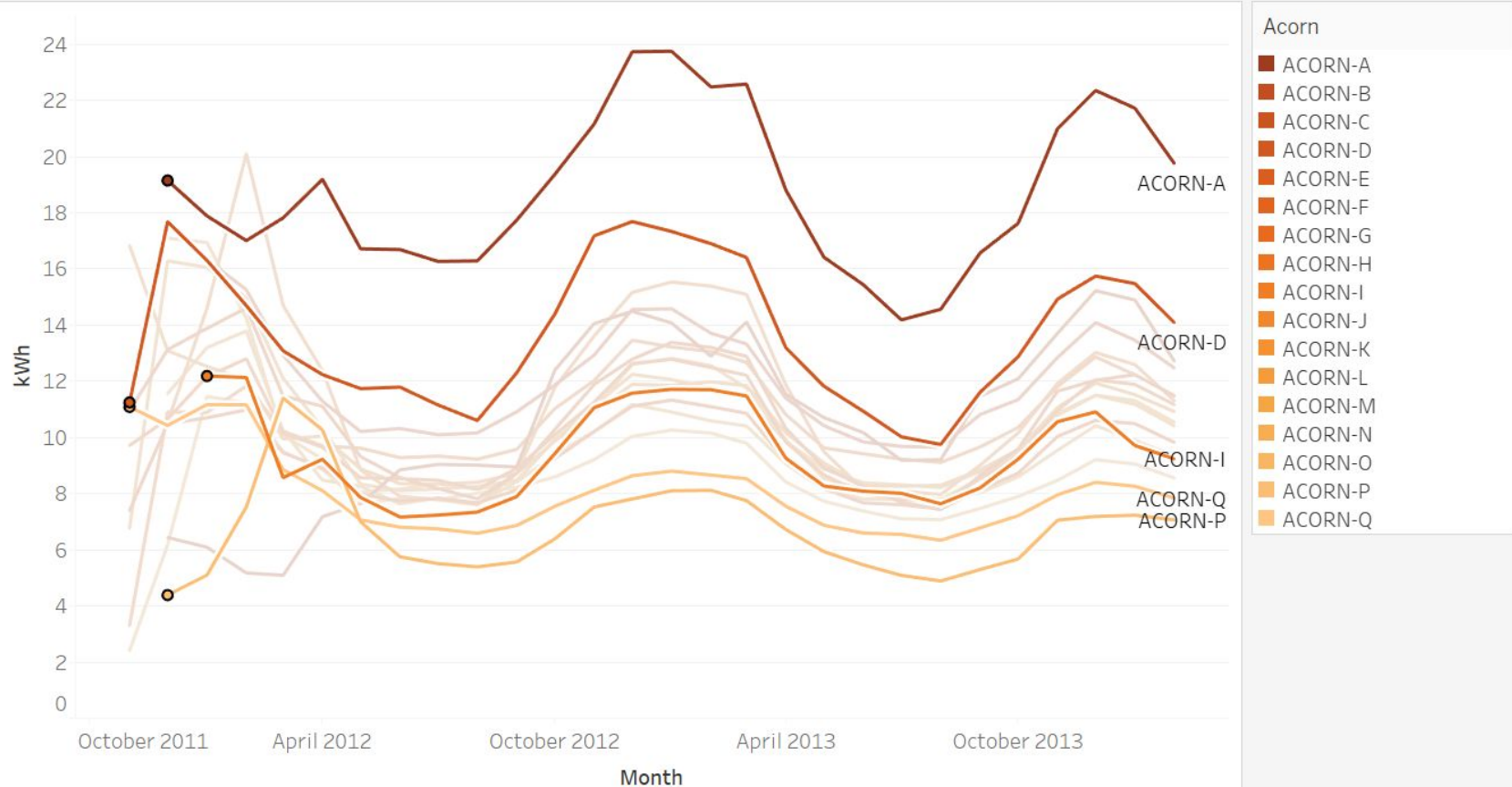
ACORN segments households, postcodes and neighbourhoods into 6 categories, 18 groups and 62 types - for this analysis we looked at the Acorn groups:

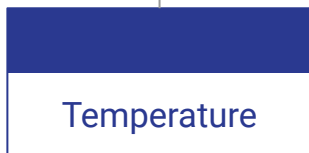
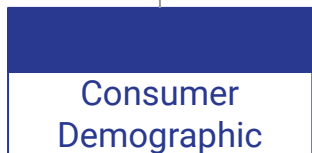
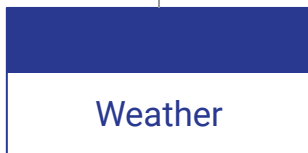
ACORN A-C	Affluent Achievers
ACORN D-E	Rising Prosperity
ACORN F-J	Comfortable Communities
ACORN K-N	Financially Stretched
ACORN O-Q	Urban Adversity
ACORN R	Not Private Households

Avg. daily energy consumption by ACORN group

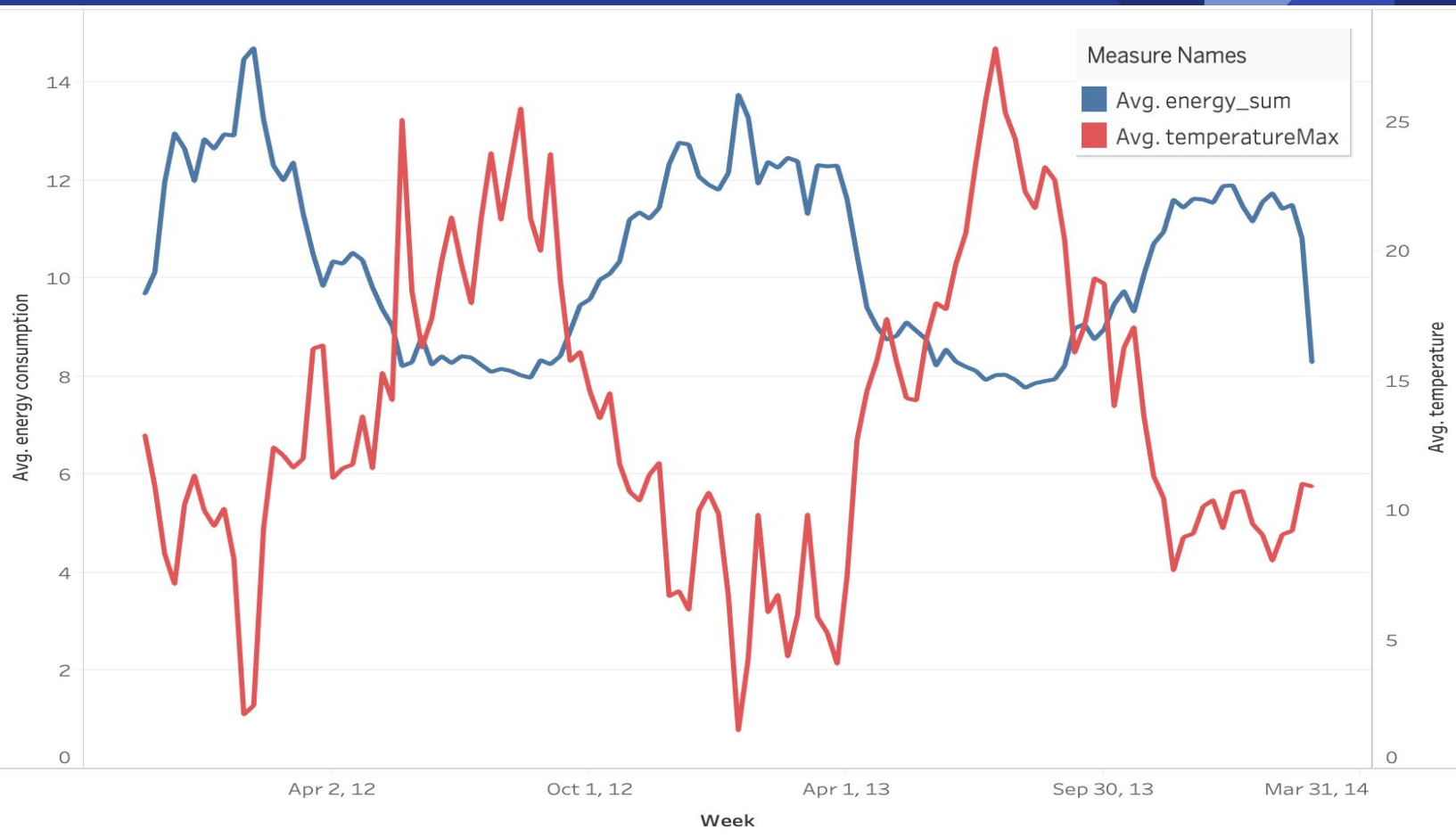


Average monthly energy consumption by ACORN group

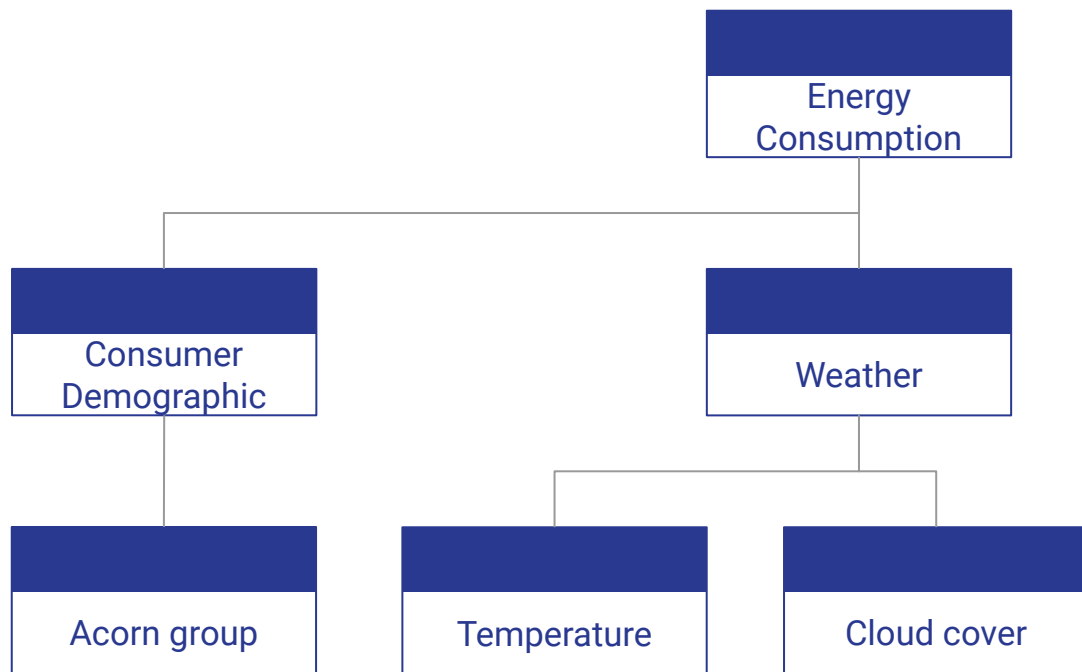




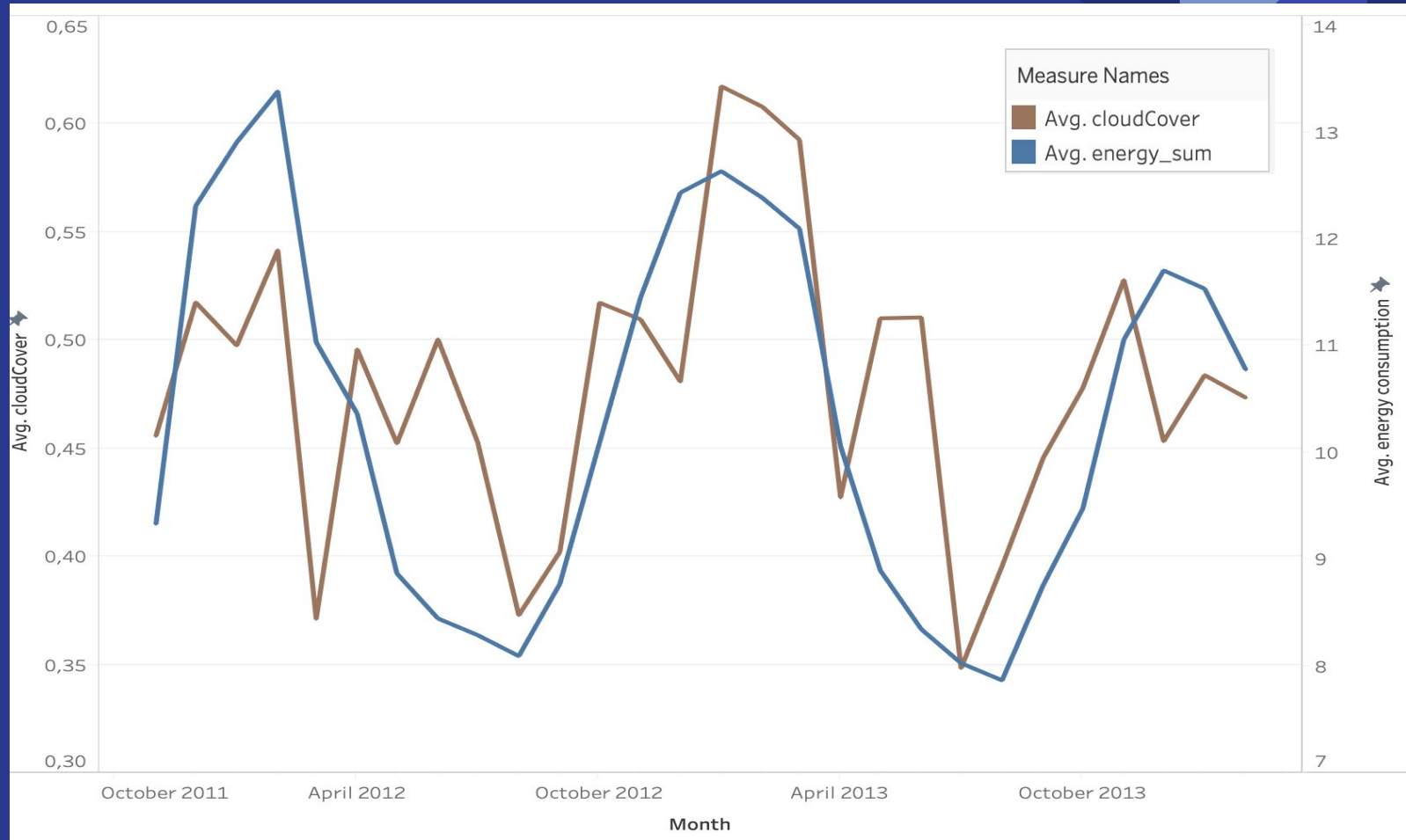
Weather



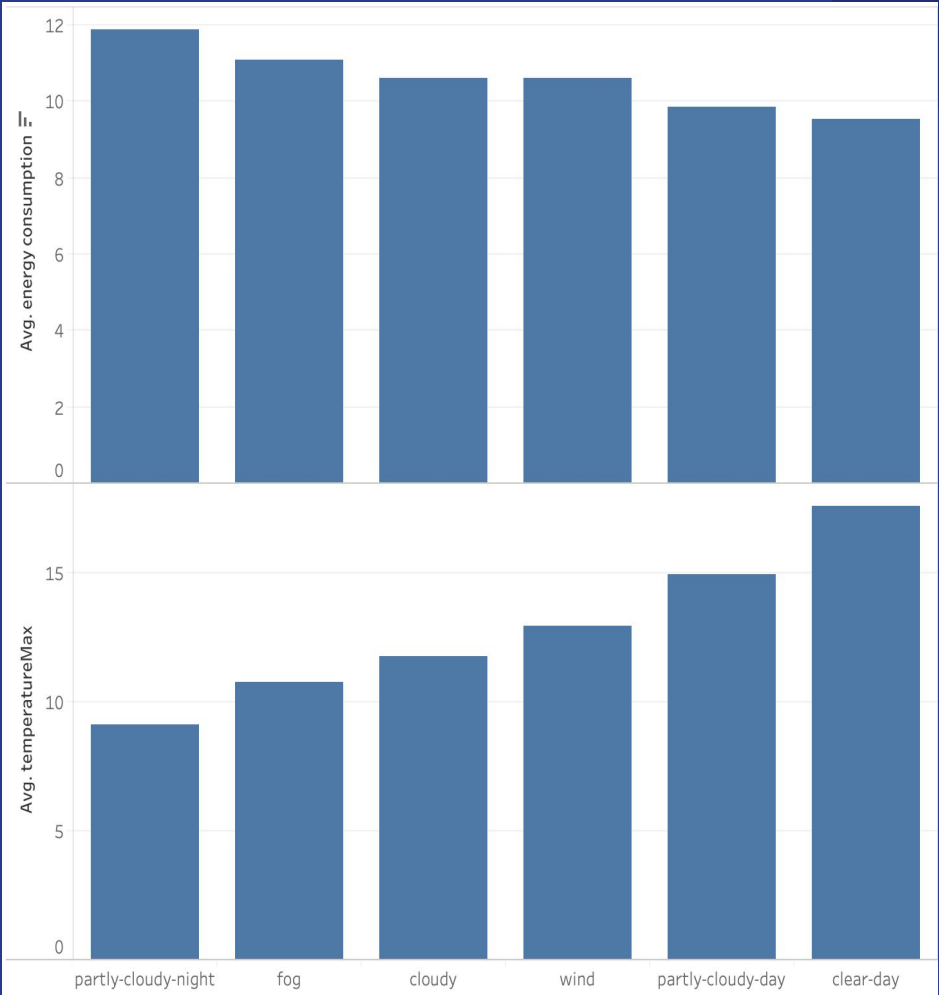
Final overview



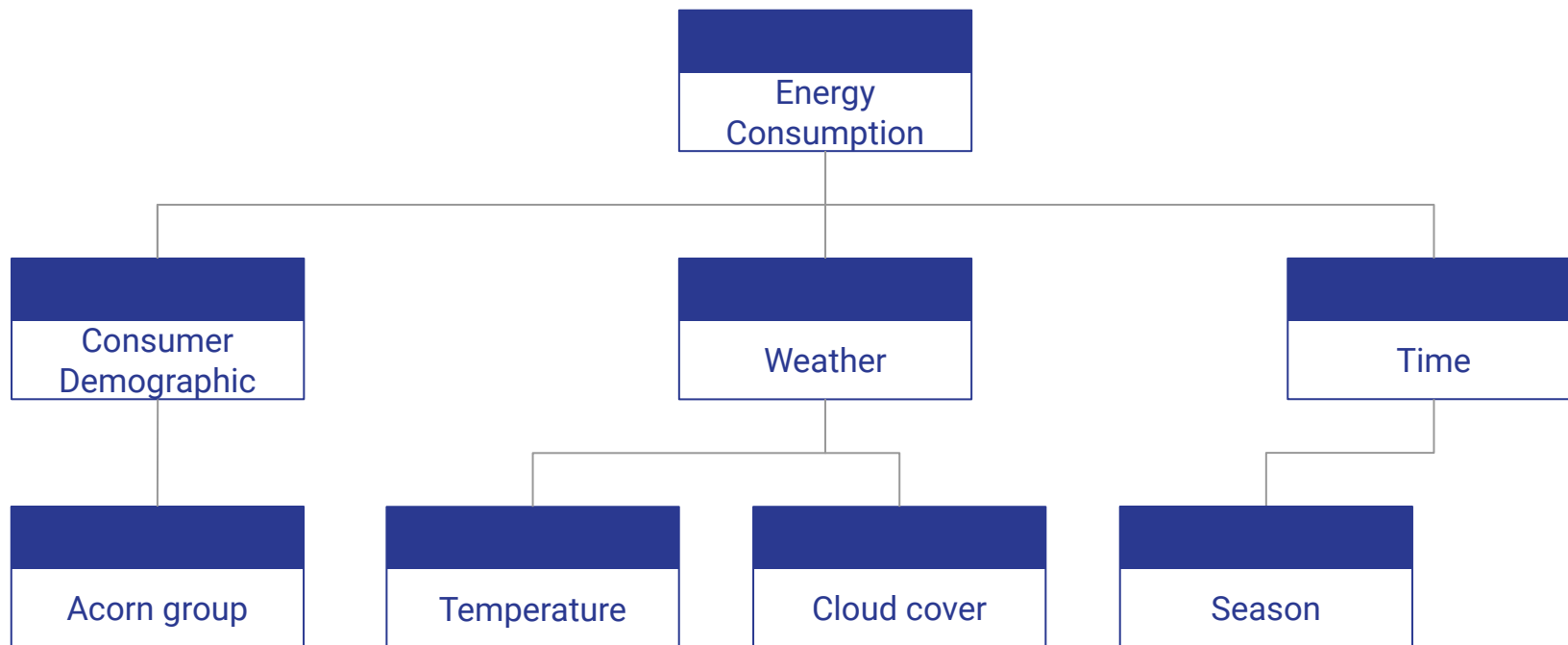
Weather



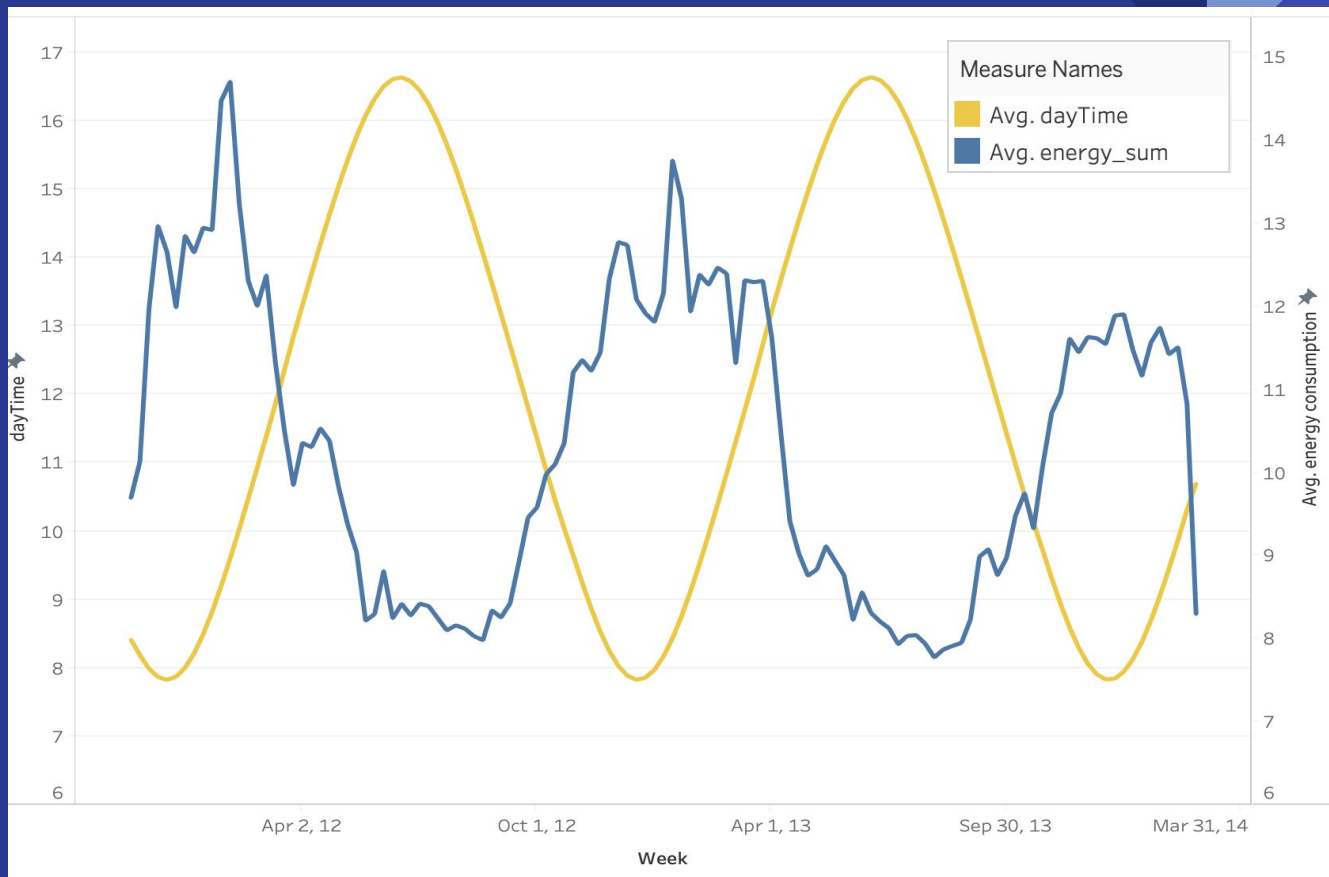
Weather



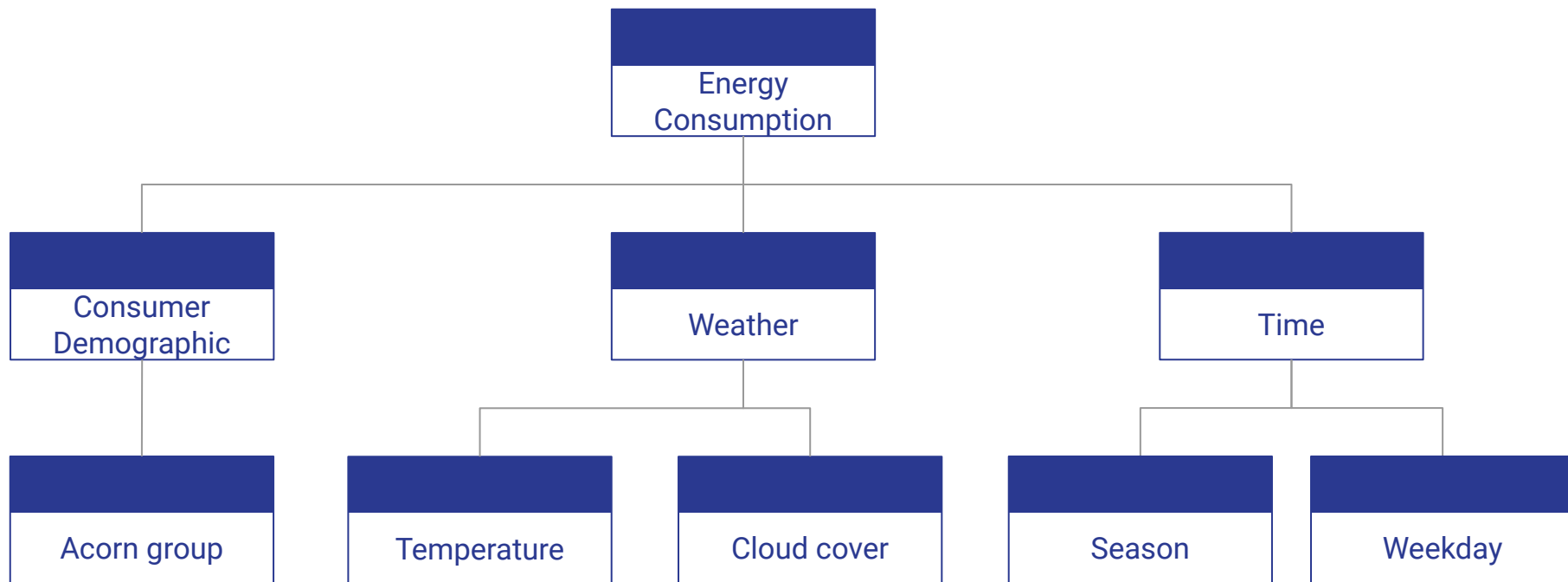
Final overview



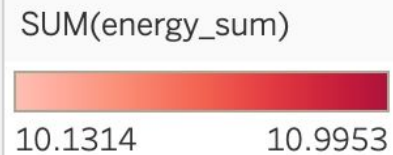
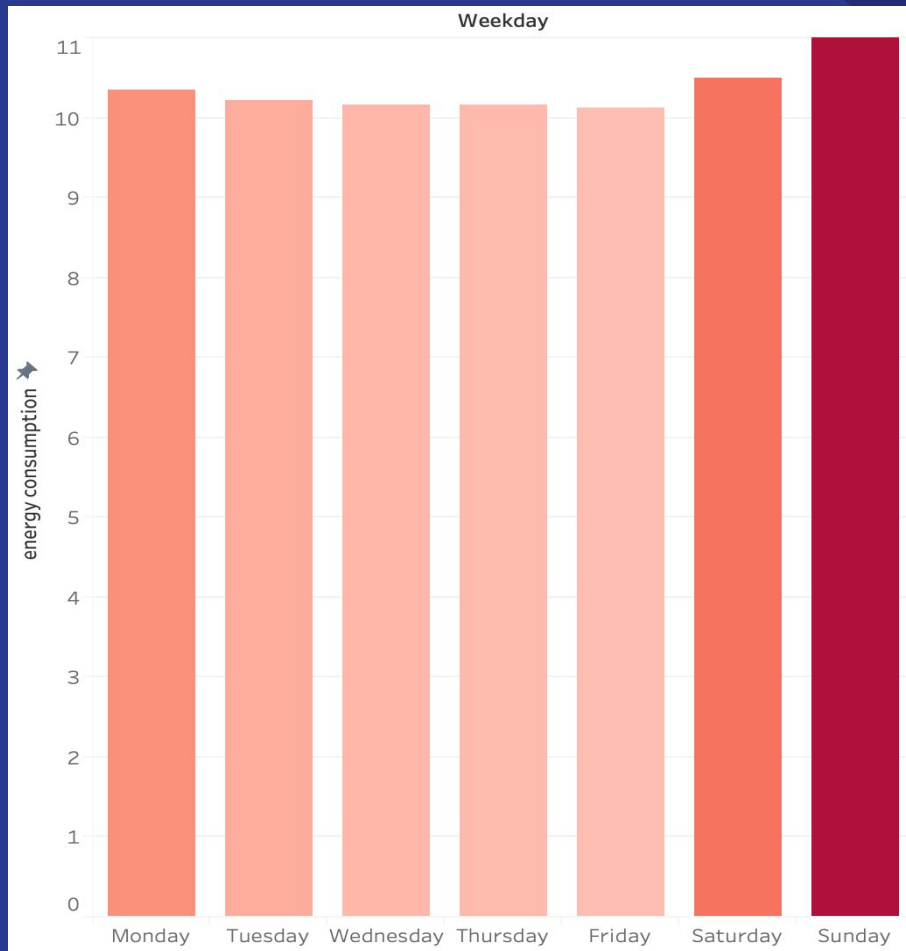
Seasonality



Final overview



Weekday





Any questions?