The aim of this research was to conclude which factors affect household electricity consumption. In slide number 4 you can see the factors which we have found to have the most impact on electricity consumption.

For the first 4 plots, we used the LOWESS (Locally Weighted Scatterplot Smoothing) method. This approach is mostly visual and it can help to see relationships between [variables](http://www.statisticshowto.com/variable/). The disadvantage of that method is that it can't confirm significance.

The first plot confirmed that electricity consumption grows in larger houses. This relationship is the only one that got R square 0.47 in linear analysis. From the sixth plot, we can conclude that detached houses are bigger then apartments and due to that we expect that households that live in detached houses will consume more electricity. Plot number 5 showed that households with a higher income level consume more electricity. Here too we assume that households with a higher income reside in detached houses.

Electricity consumption tends to rise when a household has more residents, but when we consider electricity consumption per capita we can see it is more efficient to live with four people than alone.

The Multivariate regression showed each time high adjusted R-square but we can see from the summary of the linear models that in most cases the p-value is not good enough and there is no good result from the regression.

Although the plots show good visual influence on electricity the significance of the data is not high. We assume that if there were more households that participated in the study we could see better results and use more methods of statistical analysis. For further research, we recommend to gather more data for the analysis.