

BA4318 - BUSINESS DATA PROCESSING WITH PHYTON

FINAL PROJECT REPORT

Turkey's Natural Gas Consumption Estimation for 2018

We find Turkey's natural gas consumption as **72362727327.70618 Sm³** for 2018. To reach this forecast, we chose residential and non-residential subscribers, natural gas price for both household and non-household users, weather average and Turkey's population. Eventhough there are more variables that effect natural gas consumption, adjusted R-squared, which came 0.971, shows us that our variables are sufficient enough for this forecast.

First of all, we found data sets of our variables. Since 2018 data of variables have not announced yet, we looked at between 2010-17. With this data sets, we estimated 2018 values for all variables. Then, we made an ordinary least squares (linear) regression analysis with previous data. Finally, we used coefficients of variables and estimated values of variables forecasted natural gas consumption for 2018.

Below table, there are values of our variables for 2017 and our estimations for 2018.

	2017	2018	% of Change
Population	80810525	84823796	0.049662726
Residential Subscriber	13571092	17874424	0.317095485
Non-Residential Subscriber	551988	688220	0.246802467
Average Household Price	0.1033	0.093	-0.099709584
Average Non-Household Price	0.08495	0.0831	-0.021777516
Average Weather	11.885	12.117	0.019520404
Consumption	53857140000	72362727328	0.343605088

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