**Abstract**

 Electricity plays a very important role among energy sources. Electricity consumption is important for every national authority when making energy policy. An energy policy has a great impact on industrial development in a country. This paper predicting energy consumption to analyze the consumption of the electrical energy among the various industries.The machine learning technique namely pycharm is used to predict the electrical energy consumption by using the linear regression model. This paper presents a machine learning approach for predicting electrical energy consumption whether the electrical energy is increase or not. The electrical energy consumed by various industries during the year 2008 to 2018 was used for analysis. Using liner regressionmodelithaspredictedthatthe energy consumption will increase by 11 % in the year 2019 and 1% in the year 2020.