PROBLEM STATEMENT

DOMAIN:DATA SCIENCE

Predicting the Energy Output of Wind Turbine Based on Weather Condition

TEAM:

SANDHIYA T -810019106070

SUBALAKSHMI V-810019106080

ELAKKIYA VERSHA M -810019106703

VAISHNAVI M -810019106303

INTRODUCTION

Wind energy plays an increasing role in the supply of energy world-wide. The energy output of a wind farm is highly dependent on the weather condition present at the wind farm. If the output can be predicted more accurately, energy suppliers can coordinate the collaborative production of different energy sources more efficiently to avoid costly overproductions. With energy prediction based on weather data and analyze the important parameters as well as their correlation on the energy output. **Reliable short-term wind speed forecasts play a practical and crucial role in wind energy conversion systems, such as the dynamic control of wind turbines and power system scheduling. A precise forecast needs to overcome problems of variable energy production caused by fluctuating weather conditions. Power generated by wind is highly dependent on the wind speed. Though it is highly non-linear, wind speed follows a certain pattern over a certain period of time. We exploit this time series pattern to gain useful information and use it for power prediction.**

PROBLEM STATEMENT

- Noncommunicable illnesses are the leading cause of early death, and CKD is the leading noncommunicable disease.
- Chronic Kidney Disease is a major concern for the global health care system.
- People with CKD must focus on implementing proven, cost-effective therapies to as many people as possible while taking into consideration restricted needs, human and financial resources.
- Chronic kidney disease (CKD) is now wreaking havoc on society and is spreading at an alarming rate.
- Various efforts have been undertaken to advance early therapy to prevent the condition from progressing to chronic disease.
- Recent research suggests that some of the negative outcomes can be avoided with early identification and treatment.