

**Project Design Phase-I**  
**Proposed Solution**

Date	02-11-2022
Team ID	PNT2022TMID42592
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	2 Marks

**Proposed Solution :**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The main aim of this project is to predict the accurate output energy of a wind turbine based on weather condition using the Machine Learning (ML) algorithms and collection of data about the input values of wind energy. The project should take parameters related to wind speed, wind direction, temperature, pressure, and humidity as inputs.
2.	Idea / Solution description	By using this model, The Energy Output of a wind turbine can predict accurately.
3.	Novelty / Uniqueness	The accuracy of the prediction by using the input values such as wind speed, wind direction, temperature, pressure, and humidity as inputs.
4.	Social Impact / Customer Satisfaction	If the meteorologist wants to know the energy that produces by the wind, It predicts the exact output to the forecasters or the meteorologist.
5.	Business Model (Revenue Model)	It helps meteorologist and the forecasters to predict the accurate output by remotely without any incorrect values.
6.	Scalability of the Solution	Using Stored data and machine learning approaches, this project proposed a scalable framework for predicting values of wind energy for different weather condition.