

Project Design Phase-I

Proposed Solution

Template

Date	10 October 2022
Team ID	TEAM ID:PNT2022TMID33245
Project Name	Project - Predicting the energy output of wind turbine based on the wheather conditions
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	During the development of generator part for wind turbine, the analysis of each element need to be criticized so that the specific component used can be known. The details of type of material used also must consider in order determining the production of generator part of wind turbine experiment.
2.	Idea / Solution description	Wind turbines work on a simple principle: instead of using electricity to make wind—like a fan—wind turbines use wind to make electricity. Wind turns the propeller-like blades of a turbine around a rotor, which spins a generator, which creates electricity.
3.	Novelty / Uniqueness	Human civilizations have harnessed wind power for thousands of years. Early forms of windmills used wind to crush grain or pump water. Now, modern wind turbines use the wind to create electricity. Learn how a wind turbine works.
4.	Social Impact / Customer Satisfaction	Among the main positive social impacts of the development of wind power are the creation of job opportunities and promotion of regional development.
5.	Business Model (Revenue Model)	Renewables First are an experienced wind consultant and have a full project capability, from initial feasibility study through to wind consenting and installation. If you are interested in installing a wind turbine, the first step is to Contact us to discuss your requirements and to complete a Wind Turbine Feasibility Study
6.	Scalability of the Solution	In a milestone for renewable energy integration, General Electric (GE) and the National Renewable Energy Laboratory (NREL) operated a common class of wind turbines in grid-forming mode, which is when the generator can set grid voltage and frequency and, if necessary, operate without power from the electric grid.