

## Project Initialization and Planning Phase

Date	15 July 2024
Team ID	xxxxxpx
Project Name	Predicting The Energy Output Of Wind Turbine Based On Weather Condition
Maximum Marks	3 Marks

### Define Problem Statements (Customer Problem Statement Template):

Wind energy is a rapidly growing source of renewable energy, contributing significantly to the reduction of greenhouse gas emissions. Efficient management and operation of wind turbines are crucial for optimizing energy production and ensuring the reliability of the power supply. However, the energy output of wind turbines is highly dependent on various weather conditions, such as wind speed, wind direction, temperature, humidity, and atmospheric pressure.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS: How can wind farm operators predict wind turbine energy output more accurately to optimize energy production and reduce operational costs?	Wind farm operators	Trying to fetch an energy output of wind mill	Higher Operational Costs	inefficient scheduling and increased reliance	Operational efficiency