

## **Problem statement**

Date : 21 October 2022  
Team ID : PNT2022TMID12095  
Project Name : Predicting the energy output of wind turbine based on weather conditions

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. Therefore, analysis must be done in order to know the strength and weakness of making the generator part in order to produce the output voltage

The ongoing project involves the design of a wind turbine energy conversion system that can be integrated to electrical power grid in the coover hall power lab. It also includes a display system to indicate the output power from the wind turbine. The generator is rated around 400W. The wind turbine will be installed on the roof of the coover hall. All the protection and control aspects of the conversion system become part of the design. The extension of the project includes the design requirements to supply stand alone load in conjunction with the grid supply.