

ARDUINO ENERGY METER FOR SMALL WIND TURBINE

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ABSTRACT

People in rural areas are often having difficulties where frequent power cut is very common. It hampers life of everyone. This project explored on how we could provide pollution-free electric power at a reasonable price in an environmentally sound way, with a display that monitor the power produced. We created an energy meter for a small wind turbine that are able to monitor the voltage, current, and power produced by the wind turbine accurately. The electricity produced by the small wind turbine will be used to switch on the electric appliances for a single household. Charging electronic devices such as mobile phone and mp3 also can be included. It would be so much useful for the people who is living outside of the city, that are limited to the electricity sources.

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CHAPTER 1

INTRODUCTION

1.1. Background Study:

Wind power has been a valuable resources for centuries, and in recent years this resource has become even more useful as a source for electrical power. It has many advantages over traditional fossil fuel power sources, releasing no greenhouse gasses during energy production and having very low impact on the local environment while doing so.

1.2. Problem Statement:

Develop a small wind turbine that is able to produce enough power to the load and also to develop a mechanism that is able to monitor the current, voltage, power and energy produced by the small wind turbine.