

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama” Belagavi – 590 018



PROJECT REPORT ON

“SMART PORTABLE WIND TURBINE”

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING IN ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

Name	USN
ABHISHEK C	4AL19EC006
ARUN V DEVAJI	4AL19EC018
AWATI NILESH	4AL19EC021
DHANUSH B A	4AL19EC030

Under the Guidance of
Mrs. Ansha Prathiba
Assistant Professor
Department of E&C Engineering



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A+, Accredited by NAAC & NBA (ECE & CSE)

MOODBIDRI – 574 225.

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ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225

(Affiliated to VTU, BELAGAVI)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "SMART PORTABLE WIND TURBINE" is a bona fide work carried out by

ABHISHEK C

4AL19EC006

ARUN V DEVAJI

4AL19EC018

AWATI NILESH

4AL19EC021

DHANUSH B A

4AL19EC030

in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2022–2023. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.



Signature of the Guide
Mrs. Ansha Prathiba



Signature of the H.O.D
Dr. Siddesh G K

H.O.D.
Dept. Of Electronics & Communication
Alva's Institute of Engg & Technology
Mijar, MOODBIDRI - 574 225

EXTERNAL VIVA



Signature of the Principal
Dr. Peter Fernandes

PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K

Name of the Examiners

1. Dr. SIDDESH G K
2. Sujit S. Pai

Signature with date

Siddesh 26.5.23
Sopai 26/5/23

ABSTRACT

A portable wind turbine is a compact and lightweight device designed to generate electricity from wind power. It is a renewable energy solution that can be used in various applications, including camping, outdoor activities, and emergency situations. The device consists of a rotor, blades, generator, and battery, which work together to harness the energy of the wind and store it in the battery for later use. Portable wind turbines are easy to set up and operate, making them a convenient and sustainable alternative to traditional power sources. This abstract highlights the key features and benefits of portable wind turbines, which have become increasingly popular in recent years due to the growing demand for clean and renewable energy solutions.

This device consists of a compact and lightweight structure, which makes it easy to transport and set up in various environments. The portable wind turbine typically includes a rotor, blades, generator, and battery, which work together to convert wind energy into electrical energy. With a power output of up to 500 watts, portable wind turbines can provide a reliable and sustainable power source for a variety of applications, including camping, outdoor activities, and emergency situations. This abstract highlights the key features and benefits of portable wind turbines, which are becoming increasingly popular due to their efficiency, ease of use, and environmentally friendly nature. The versatility and affordability of these devices make them an excellent choice for individuals and organizations looking for a portable and sustainable power source.

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